

1 **I OPERATIONS PORTFOLIO CAPITAL OVERVIEW**

2

3 THESL’s Operations Portfolio Capital is made up of the following components:

- 4 • Engineering Capital
- 5 • Worst Performing Feeder Capital
- 6 • Customer Connections Capital
- 7 • Reactive Capital
- 8 • Continuing Projects and Emerging Issues Portfolio Capital

9

10 Table 1 below summarizes THESL’s planned spending by component. A discussion on each of
 11 these components is found in the following section.

12

13 **Table 1: Operations Capital Budget 2012-2014 (\$ M)**

Project Name	2012	2013	2014
Engineering Capital	9.50	9.50	9.50
Worst Performing Feeder	6.10	24.50	24.50
Customer Connections (net of Customer Contributions)	25.80	30.00	30.00
Reactive Capital	27.70	31.90	32.70
Continuing Projects and Emerging Issues Portfolio	52.60	25.70	24.90
TOTAL	121.70	121.60	121.60

14 The proposed Operations Portfolio capital spending is required to meet THESL’s distribution
 15 responsibilities to its growing customer base and address the factors leading to gradually
 16 worsening reliability. THESL continues to address the following issues:

- 17 • A large quantity of aging and deteriorating infrastructure;
- 18 • Legacy assets that are no longer standard due to inherent safety and/or reliability
 19 issues;
- 20 • Cresting retirements of staff in supervisory, engineering, trades and technical positions.

1 THESL's Operations Portfolio Capital contains the capital spending necessary to meet THESL's
2 operations requirements over the 2012-2014 period. Failure to complete the work funded by
3 this spending will lead to a continuing decline in reliability and a lower quality of service to
4 customers.

5

6

7 **II PROJECT DESCRIPTIONS**

8

9 **1. Engineering Capital**

10 Engineering capital represents labour costs that are capitalized although they are not directly
11 attributable to specific distribution system assets or projects. These consist of the labour costs
12 of engineers, technologists, design technicians and power system controllers ("PSCs) for
13 engineering, design and planning work that they perform on distribution assets that are put in
14 service. Such planning and design work is non-discretionary and is critical to THESL's ability to
15 complete capital work in 2012-2014 as it continues its focus on the following key areas: the
16 capital investment program to address aging equipment and legacy infrastructure, development
17 and implementation of new approaches for engineering decision support for creation and
18 optimization of capital programs, and modernization through new technologies and systems.

19

20 Table 2 below presents the planned spending for Engineering Capital for 2012-2014. The
21 amounts are solely for projects within the Incremental Capital Module (ICM) materiality
22 threshold amount. The proposed ICM projects above the threshold have all their required
23 capital funding included within their proposed budgets.

24

25 **Table 2: Engineering Capital Summary (\$ M)**

2012	2013	2014
9.50	9.50	9.50

1 **2. Worst Performing Feeder Capital**

2 The Worst Performing Feeder (WPF) program is part of the effort to improve THESL's overall
3 service reliability by improving service for customers supplied from poorly performing feeders.
4 The program involves the identification of feeders that are experiencing sustained unplanned
5 interruptions and planning, prioritizing and executing work to improve reliability on such
6 feeders. This is a high priority program at THESL given the impact feeder performance has had
7 on key service reliability indicators, System Average Interruption Frequency Index ("SAIFI"),
8 System Average Interruption Duration Index ("SAIDI"). The WPF program identifies feeders that
9 contribute significantly to SAIFI and SAIDI and total system interruptions. The analysis of the
10 performance and inspection of the worst performing feeders identify deficiencies so that
11 corrective actions can be implemented.

12

13 A component of the WPF program is the Feeders Experiencing Sustained Interruptions ("FESI")
14 program which is intended to identify feeders that are experiencing sustained service
15 interruptions, excluding those interruptions due to scheduled outages and those caused by Loss
16 of Supply ("LoS"), Major Event Days ("MEDs"), and station, bus and network outages. The
17 program uses the number of sustained outages experienced over the last 12 months as the basis
18 for categorizing feeders. For example, feeders that have experienced seven or more sustained
19 interruptions within a rolling 12-month period are assigned a classification of "FESI-7."

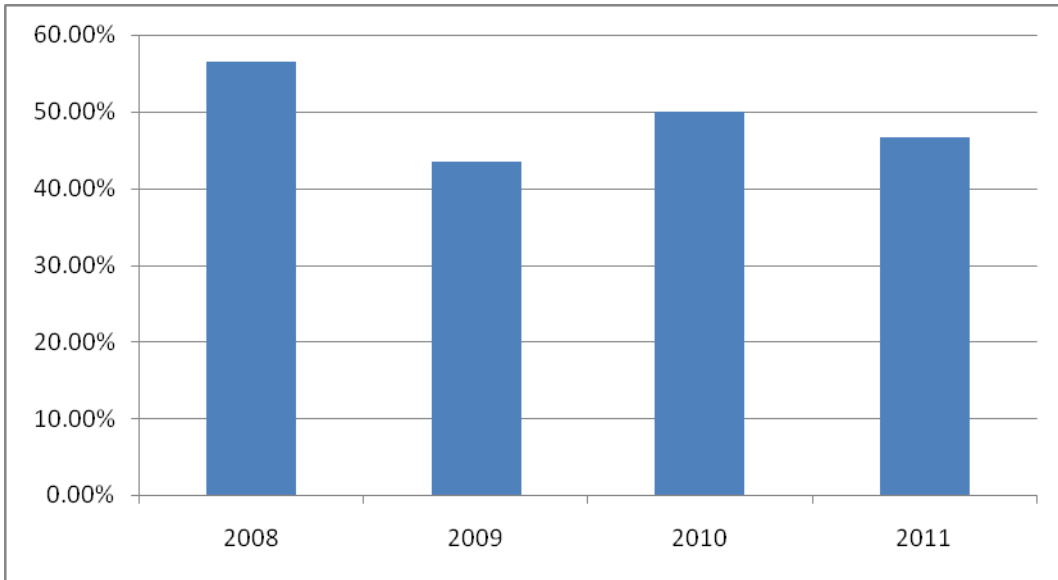
20

21 For 2011, "forced feeder interruptions" or unplanned interruptions on a feeder, constituted 71%
22 of all outages (excluding MEDs). The high percentage indicates that addressing the reasons for
23 the interruptions caused by the failures of feeders (as opposed to other equipment) will likely
24 impact overall reliability more than addressing other reasons for service interruptions.

25

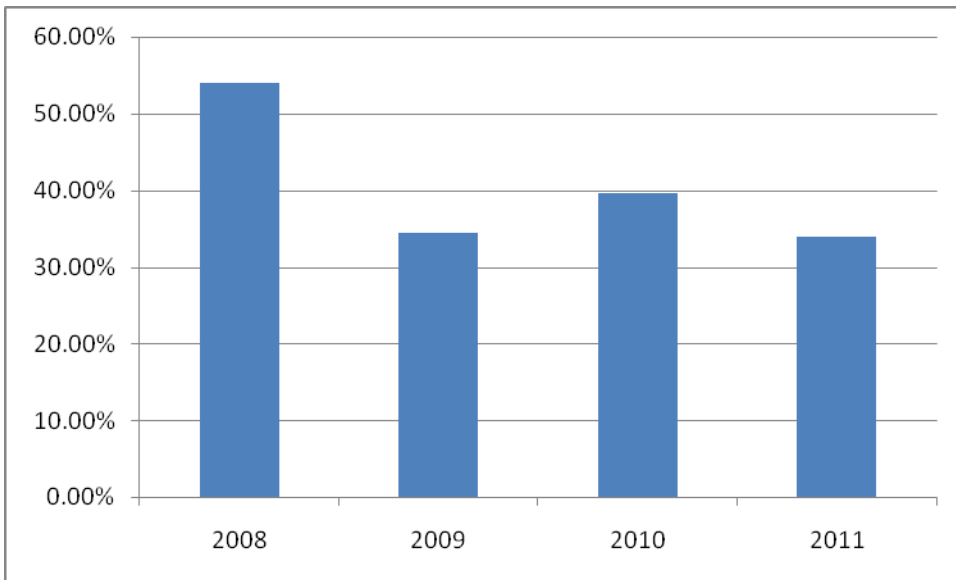
26 In 2011, there were a total of 1,961 outages compared to 2,158 outages in 2010. THESL
27 attributes this improved feeder reliability to the swift and ongoing implementation of its WPF
28 program. THESL must continue its WPF program for the years 2012-2014 as this program is
29 necessary to maintain THESL's service reliability by reducing the impact of FESI-7 feeders on

1 outage statistics. Figures 1 and 2 demonstrate the downward trend in the contribution of FESI-7
2 feeders to system CI and CHI, respectively.
3



4 **Figure 1: Contribution of FESI-7 Feeders to System CI**

5



6 **Figure 2: Contribution of FESI-7 Feeders to System CHI**

1 Table 3 below shows the projected spending for the WPF program.

2

3 **Table 3: WPF Program Capital Summary (\$ M)**

2012	2013	2014
6.10	24.50	24.50

4

5

6 **3. Customer Connections (net of Customer Contributions) Capital**

7 THESL must make all reasonable efforts to connect new customers to its distribution system and
8 perform service upgrades requested by customers in accordance with the provisions of Section
9 3 of its Conditions of Service. Customer connections and upgrades are considered demand
10 work as they are driven by individual customer requests. Individual customers or developers
11 may request new service connections or may request a service upgrade due to an increase in
12 load. Connecting customers therefore constitutes non-discretionary work for the period 2012
13 to 2014.

14

15 The program requires significant capital investment. These investments range from the
16 connection of a single residential or small commercial customer to large commercial
17 connections or residential subdivision(s), and also include distributed generation connections.

18

19 The costs for customer connections, including new and upgrades to existing services, are based
20 on the capital expenditures for the different types of services and the number of each type of
21 customer connection per year. These costs are THESL's gross capital costs to connect customers
22 to existing THESL infrastructure. These costs are then reduced by the amounts of capital
23 contributions from customers to arrive at THESL's net budget for Customer Connections Capital
24 2012 to 2014. These amounts are shown in Table 4.

25

1 **Table 4: Customer Connections Capital Summary (\$ M)**

	2012	2013	2014
Customer Connections Capital (Gross)	57.70	62.00	62.00
Capital Contributions	(31.90)	(32.00)	(32.00)
Customer Connections Capital (Net)	25.80	30.00	30.00

2

3

4 **4. Reactive Capital**

5 Reactive Capital is comprised of capital expenditures necessary to repair defective and failed
 6 equipment. This work is non-discretionary in nature and required to restore power to
 7 customers in the case of outages, to mitigate potential safety risks to the public, to maintain
 8 system integrity, to maintain accurate billing, to perform corrective work to address failed and
 9 defective equipment and/or to address other unexpected events that require immediate action.
 10 Such work and the related capital expenditures are unplanned, but THESL allocates funds for
 11 reactive work based on historical system performance, analyses of failure trends, and the trends
 12 of the number of work requests for reactive capital work over the past five years. Table 5
 13 below presents the projected spending for Reactive Capital.

14

15 **Table 5: Reactive Capital Summary (\$ M)**

Component	2012	2013	2014
Underground Assets	14.70	18.50	18.70
Overhead Assets	11.30	11.70	12.20
Stations and Metering Assets	0.90	0.90	1.00
	0.80	0.80	0.80
Total	27.70	31.90	32.70

1 As a whole, THESL's underground plant has been improving in reliability over the last few years
2 due to increasing capital investment and replacement of assets which are at or beyond end of
3 useful life. Despite this improvement, however, the remaining cables, as they continue to age,
4 will continue to have more faults resulting in the need for more reactive capital funds to address
5 the cable faults. A reduction in the planned spending on reactive capital can only exacerbate
6 the current situation.

7

8 The need for expenditures on Overhead assets is projected to remain stable.

9

10 With respect to meters, THESL is responsible for maintaining the accuracy of all customers'
11 billing and metering. It must address defective meters to be compliant with the Minister of
12 Energy's directive on smart meter installation and the metering requirements set out by
13 Measurement Canada in the Electricity and Gas Act. As part of this program, defective meters
14 are replaced on a reactive basis. THESL forecasts a steady level of spending for these meter
15 replacements.

16

17 **5. Continuing Projects and Emerging Issues Portfolio**

18 The Continuing Projects and Emerging Issues Portfolio consists of projects from 2011 which are
19 being completed in 2012, and emerging projects which arise from issues that are difficult or
20 impossible to anticipate and are likely to require attention within a year. The emerging projects
21 are typically in response to reliability and/or safety issues and projects that have emerged on
22 short notice such as externally- initiated relocations. The projects in the portfolio are non-
23 discretionary and are classified into the following groups:

- 24 • Continuing projects from 2011 into 2012
- 25 • Emerging projects for 2012
- 26 • Emerging projects for 2013 and 2014

27

28 The continuing projects consist of: a) projects that were initiated in 2011 and scheduled to be
29 completed in 2012 and b) projects that were deferred from 2011 to 2012 due to the emergence

1 of higher priority projects. These continuing projects address crucial reliability and/or safety
2 issues, and support the infrastructure-related initiatives of external stakeholders such as the City
3 of Toronto, the TTC, and GO Transit in their infrastructure-related initiatives. The deferral of
4 2012 continuing projects could result in the further deterioration of THESL's service reliability
5 and THESL breaking its contractual commitment to external stakeholders, which may result in
6 THESL facing cancellation penalties from vendors or external entities.

7

8 Emerging projects for 2012 consist of programs which include direct buried cables
9 replacements, overhead rebuilds, and external plant relocations. Emerging projects aim to
10 address pressing issues that require intervention within a year but not immediate attention, in
11 contrast with those that are part of the Reactive Capital portfolio which deals with failed assets
12 and assets that require immediate attention. These projects address many reliability issues
13 (related to both the number of customer outages and the duration of outages) and replace and
14 upgrade old and failing equipment. These projects include those for which THESL has entered
15 into contracts with 3rd parties. The deferral or cancellation of any of these projects may add to
16 the persistence of reliability and safety issues that have emerged in the recent. Work on
17 emerging capital projects has already begun on selected projects to prevent further degradation
18 of reliability of the system, potential safety risks, and uphold THESL's commitment to customer
19 satisfaction.

20

21 The emerging projects for 2013-2014, consist of capital projects that are anticipated to require
22 attention and capital investment within a year of being identified. Based on issues requiring
23 short-term intervention that have surfaced in the past, THESL anticipates that the emerging
24 projects for 2013-2014 will be related to reliability, safety, external plant relocation requests,
25 XLPE (cross-linked polyethylene) cable in duct, underground residential distribution (URD)
26 system, egress cable civil infrastructure, and/or cable chambers. The deferment or cancellation
27 of these projects would likely prevent THESL from addressing the reliability and safety issues
28 that are anticipated to emerge during 2013-2014 and hinder work done by external

1 stakeholders, such as the City of Toronto, TTC, and Go Transit. Table 6 below summarizes the
 2 2012-2014 projected spending in the portfolio.

3

4 **Table 6: Capital Investment Proposed for the Continuing Projects and Emerging Issues (\$M)**

	2012	2013	2014
Continuing Projects from 2011 into 2012	19.50	-	-
Emerging Projects for 2012	33.10		
Emerging Projects for 2013 and 2014	-	25.70	24.90
Total	52.60	25.70	24.90

1 **II INFORMATION TECHNOLOGY CAPITAL**

2

3 The Information Technology (IT) Capital Portfolio for 2012-2014 consists of required hardware
 4 asset replacements, application upgrades and 2011 carryover projects that need to be
 5 completed. The IT Capital Portfolio provides enabling technology to support critical business
 6 processes; Meter-to-Cash, Legal and Regulatory compliance, stakeholder reporting, as well as
 7 power delivery and restoration. A hardware asset failure due to end of life or a critical
 8 application failure due to lack of vendor support would result in substantial and prolonged
 9 disruption to THESL's operations and adversely impact customers. The IT Capital Portfolio is
 10 required to mitigate the risk to THESL's ability to reliably deliver power, restore outages, bill
 11 customers, and comply with Legal and Regulatory requirements including reporting.

12

13 Table 1 below summarizes THESL's planned spending by project for 2012-2014.

14

15 **Table 1: Projects for 2012-2014**

Project Name	2012	2013	2014
Corporate Applications Upgrade	0.69	1.12	0.45
Billing and Regulatory Compliance Systems Upgrade	1.22	2.75	2.14
Geospatial Information System & Outage Management System Upgrade	-	2.63	3.57
Information Technology Hardware Asset Replacement	4.34	8.51	8.85
2011 Carryover Projects	8.75	-	-
TOTAL	15.00	15.00	15.00

16 **1. Corporate Applications Upgrade**

17 THESL must upgrade its Financial Forecasting and Records Management systems to the most
 18 recent versions. The Financial Forecasting system is critical to THESL's financial processes such
 19 as capital/operational budgeting, financial consolidation and regulatory reporting. As part of
 20 THESL's legal and governance framework, the Records Management system is the official core
 21 repository of capital project artifacts including electrical drawings, standards, and Ontario

1 Energy Board filings, etc. Both systems are several versions behind the most current version and
2 are no longer covered by vendor support. As a result of the expired support, these two core
3 systems will no longer receive security upgrades or patches to resolve internal errors and will no
4 longer be certified to work with third party applications where integration would be required.
5 The upgrade is expected to ensure that these core systems are vendor supported thereby
6 mitigating the risk to the Capital planning, budgeting, and forecasting processes.

7

8 **2. Billing and Regulatory Compliance Systems Upgrade**

9 THESL must upgrade technology components of its Meter-to-Cash process to the most recent
10 versions. The Meter-to-Cash process and related technologies are utilized by THESL to collect
11 data from meters as well as validate and compile the data to bill customers. The Meter
12 Automation System (MAS) which enables the Meter-to-Cash process is aging. The system is
13 three versions behind the currently available version and vendor support for some components
14 have either expired or will soon expire. In addition, from time to time, THESL is mandated to
15 comply with regulatory requirements that necessitate changes in its existing policies and
16 systems. These changes are typically mandated through the Independent Electricity System
17 Operator (IESO), Measurement Canada and the Ontario Energy Board (OEB). Some examples of
18 these changes are the OEB's requirements relating to the application of the Ontario Clean
19 Energy Benefit to eligible consumers' bills and the calculation of late payment charges taking
20 into consideration the mode of payment; and Measurement Canada's requirements on the use
21 of register readings for billing. Due to the volume of customer transactions involved, the
22 regulatory changes create a requirement to reconfigure or enhance the technologies as well as
23 related systems that generate bills as part of the Meter-to-Cash process. The upgrade is
24 expected to ensure that the core system is vendor- supported, thereby mitigating the risks to
25 revenue and customer billing.

26

27 **3. Geospatial Information System and Outage Management System Upgrade**

28 THESL must upgrade the Geospatial Information System (GIS) and Outage Management System
29 (OMS) to the most recent versions. These systems are tightly integrated as the Outage

1 Management System relies on the Geospatial information system for connectivity of the electric
2 distribution system and land-based information. The Geospatial Information System stores
3 THESL's electrical distribution information which is used for engineering design, asset/feeder
4 identification and/or locates. It is also used by the City of Toronto for work coordination and by
5 other entities requiring geospatial information such as Bell or Rogers. The Outage Management
6 System is primarily used to dispatch crews and record outage information for reporting
7 purposes such as Police/Fire/Ambulance calls as well as Performance Based Regulatory
8 measures. Both systems are several versions behind and are no longer covered by vendor
9 support. The lack of vendor support for the Outage Management and Geospatial Information
10 Systems exposes THESL to an unacceptable level of risk. Failure of these systems would result in
11 either a substantial and prolonged disruption to the business, or in the worst credible scenario,
12 a significant loss of THESL's physical/logical electrical plant data. As such, THESL faces a risk to
13 its ability to reliably deliver power, restore outages and comply with regulatory reporting
14 requirements.

15

16 **4. Information Technology Hardware Asset Replacement**

17 THESL needs to replace its IT hardware assets which have reached their end of useful life. These
18 assets include Servers, Storage and Backup, Network and Telephony, Printers and Plotters, User
19 Endpoints (e.g., desktops, laptops etc.), and Security Appliances (e.g., Firewall System,
20 Enterprise Data Warehouse etc.). The biggest detriment to the reliability of any hardware asset
21 is usage of the asset beyond its useful life thereby increasing business continuity risk. THESL has
22 developed and implemented a risk based asset model driven by standards aligned with industry
23 best practices. These standards allow THESL to proactively identify and replace high risk assets.
24 These asset replacements are necessary in order to mitigate the risk of interruptions to core
25 business operations as all software systems rely on IT hardware assets to operate. Failure of IT
26 hardware assets leads to disruptions in THESL's ability to reliably deliver and restore power, bill
27 customers and comply with legal and regulatory reporting requirements.

1 **5. 2011 Carryover Projects**

2 THESL must complete the projects which were previously approved as part of the 2011 Cost of
3 Service Electricity Distribution Rates (EDR) filing. THESL evaluated the projects contained in the
4 2011 EDR application submission from a cost-benefit perspective and proceeded to execute
5 once approval was granted.

6

7 These projects consist of the following:

- 8 • Customer Care and Service Area Enhancements – projects to meet the growing needs
9 and expectations of tech savvy customers and improve online presence. THESL is
10 enhancing customer experience via self serve features (such as customer profile
11 creation/change/deletion and access to Time of Use Rate Information). The project also
12 implements solutions to address changing regulatory requirements mainly the use of
13 ‘register’ data instead of ‘interval’ data for Time-Of-Use billing and suite meter
14 automated reading.
- 15 • Planned Work Automation Enhancements and Warehouse Management - includes the
16 development of reports and analytics to support the distribution of work to field crews.
17 The solution automates the customer service order process which enables crews to
18 generate and report on reactive work in the field. The Warehouse Management project
19 enables barcode scanning technology to minimize data entry errors and reduce input
20 time. The project also enables asset inventory tracking as well as analytical reporting via
21 Integration with THESL’s enterprise resource planning system.
- 22 • Logging, Data Loss Prevention and Governance Risk Console – The project delivers a
23 security and event information management solution consisting of log aggregation,
24 event correlation, analytics and reporting. It also focuses on creating clearly defined
25 technical rules (technology system policies) which are monitored from a security
26 perspective and evaluated via incidents where necessary actions would be identified.
- 27 • Time and Attendance - implements a unified time and attendance system providing
28 improved controls, better governance and accurate reporting. The project automates

1 timekeeping data entry, approval, verification, processing, storage and reporting as well
2 as exceptions, such as vacation or other absences.

3

4 The projects identified above are greater than 60% complete and deferral/cancellation of any of
5 these projects may have negative consequences as follows:

- 6 • Inability of THESL to realize the value of the investment including defined operational
7 benefits,
- 8 • Potential additional costs under existing vendor contracts, licence agreement
9 cancellations, and project wrap-up costs,
- 10 • Given the relatively short (three to five years) lifecycle of the technology assets,
11 additional investment may be required to finish the carry over projects at a later date
- 12 • Write-off of already incurred capital expenditures to OM&A.

1 **III FLEET CAPITAL**

2

3 THESL’s Fleet is currently composed of 749 motor vehicles, including cars, pickups, bucket trucks
 4 and other vehicles (such as sweepers, backhoes and forklifts). The fleet capital spending
 5 proposed for 2012 to 2014 is to acquire new vehicles to replace those existing vehicles that have
 6 reached the end of their service lives and where further repairs and maintenance would not be
 7 appropriate or cost effective.

8

9 Table 1 below outlines THESL’s forecast of vehicles requiring replacement, the type of
 10 replacement vehicle to be acquired and the pre-tax cost of replacement in each of 2012, 2013,
 11 and 2014. The projected fleet costs are roughly 20% of THESL’s historic total fleet budget in
 12 recent years given that the focus is only those vehicles that must be replaced in the 2012-2014
 13 period.

14

15 **Table 1: Vehicle Replacements for 2012-2014**

Vehicle Description	2012		2013		2014	
	Number	Cost	Number	Cost	Number	Cost
Car/Light Truck	5	0.14	-	-	-	-
Derrick	2	0.35	-	-	-	-
Water Truck	2	0.21	-	-	-	-
Forklift	1	0.11	-	-	-	-
Bucket Truck (Various Designs)	-	-	4	1.00	6	1.69
Cube Van	11	1.19	10	1.01	3	0.31
Total	21	2.00	14	2.00	9	2.00

16 End-of-life vehicle replacement is non-discretionary and must occur during the test year period
 17 if THESL is to have the adequate number and quality of vehicles required to accomplish its
 18 distribution function. THESL’s vehicle fleet must be safe, reliable and operate at reasonable
 19 cost. As a result, THESL must replace vehicles that exhibit one or more of the following
 20 conditions:

- 21 • are not consistently reliable and directly adversely impact THESL’s ability to provide an
 22 acceptable level of reliable customer service;

- 1 • incur maintenance costs that are consistently significantly greater than, or escalating at a
- 2 faster rate than a comparable peer vehicle within the fleet;
- 3 • demonstrate potential safety risks; and
- 4 • fail to meet THESL's functional needs or performance requirements (such as with a change
- 5 in long term Capital Plan work mix increasing the number of transformer installations, and
- 6 requiring the capacity, reach, and cargo-carrying capability of a material handling bucket
- 7 truck, as opposed to that of an autocrane-equipped truck that is planned for replacement).

8

9 In addition, prior to replacement, THESL generally reviews its vehicle requirements to determine
10 whether there is an ongoing need for a certain vehicle, and if so, whether this need is best met
11 by a vehicle in the same or an alternate class. This practice assists in enabling THESL to
12 prudently adjust its fleet and equipment complement to adapt to emerging or changing work
13 requirements. For example, in some projects, a cube van can be replaced by a sprinter van.
14 Sprinter vans have lower cargo carrying capacity than cube vans but have a lower capital cost,
15 are more manoeuvrable and more fuel efficient. If a sprinter van's specifications meet THESL's
16 needs, then it may be chosen to replace a cube van.

1 **IV BUILDINGS AND FACILITIES CAPITAL**

2

3 THESL's buildings and facilities include operating centers (500 Commissioners, 60 Eglinton, 6
4 Monogram, 601 Milner); administrative buildings (14 Carlton, 5800 Yonge); and various
5 electrical sub-stations located throughout the City of Toronto.

6

7 The Facilities and Asset Management capital plan for 2012-2014 consists of specific non-
8 discretionary projects required to prudently maintain THESL's facilities at an adequate level of
9 repair and maintain compliance with the Canadian Standards Association, Ontario Building
10 Code, Fire Protection and Prevention Act, and various Ontario Regulations of the Ontario Health
11 and Safety Act (OHSA)¹. Many of the planned initiatives focus on replacing components that are
12 either failing or have reached their end-of-life wherein repairs or additional maintenance is not
13 cost effective or appropriate, where THESL workers are exposed to potential safety risks that
14 must be remedied, or where upgrades are mandatory in order for THESL to be able to carry out
15 its distribution service in a reliable, safe, and cost effective way. In 2009, Pinchin Environmental
16 Ltd. carried out a comprehensive building condition assessment ("the Pinchin Report") for
17 THESL and released its report on the assessment in 2010. This Report identified several
18 elements of the building envelope, structural, electrical and mechanical systems past their life
19 cycle with recommendations for replacement. It has been filed with the Board as part of an
20 interrogatory response in EB-2010-0142 as Exhibit R2, Tab 3, Schedule 3 dated February 23,
21 2011².

22

23 Similarly, in 2011, Genivar Consultants carried out a Designated Substances and Hazardous
24 Materials Survey of the sixth floor of the THESL building on 14 Carlton Street which identified a
25 number of elements having Asbestos Containing Material which must be removed prior to any

¹ Ontario Regulations 851, 213 and 278/05

² The report is over a thousand pages long. It is available at the Board's website at http://www.rds.ontarioenergyboard.ca/webdrawer/webdrawer.dll/webdrawer/rec/251690/view/THESL_IRR_AcctgUpdate_20110223.PDF and in THESL's external website at http://www.torontohydro.com/sites/electricsystem/Documents/2011EDR/Tab3BOMA_AccountingUpdateIRs_20110223.pdf.

1 work being performed on these assets. The consultant’s report is provided in Tab 4, Schedule
 2 D6. In planning its Facilities capital plan, THESL relies on the recommendations and findings of
 3 these reports. THESL’s planned spending on Facilities capital projects for 2012-2014 is less than
 4 half of actual historical spending in recent years, given that proposed expenditures are limited
 5 to the highest-priority, non-discretionary items only.

6
 7 Table 1 below summarizes THESL planned spending by project. The details of each project are
 8 further summarized below.

9
 10 **Table 1: Buildings and Facilities Budget 2012-2014 (\$ M)**

Project Name	2012	2013	2014
14 Carlton Street	3.18	1.03	1.62
500 Commissioners Street	0.69	1.62	0.97
6 Monogram Place	0.06	0.21	0.11
60 Eglinton Ave W	0.15	-	-
601 Milner Avenue	0.13	0.12	0.40
Card Access Security System	0.75	1.97	1.90
Installation of Backflow Preventer	0.04	0.06	-
TOTAL	5.00	5.00	5.00

11 **1. 14 Carlton Street**

12 Work at THESL’s Head Office at 14 Carlton involves a number of priority maintenance initiatives,
 13 as well as several larger initiatives where THESL believes that further postponement and delay is
 14 not a viable option. Notably, THESL plans to refurbish the existing sixth floor to retrofit the
 15 cooling/heating fan coil units which are well past their life cycle and have started to fail. THESL
 16 cannot risk allowing multiple failures of these coils since accessing them would involve
 17 disturbing asbestos wrapping. The sixth floor also has a number of Asbestos Containing
 18 Materials which were an integral part of the building construction. In accordance with the OHSA
 19 and regulations, the Asbestos Containing Materials must be removed prior to any work being
 20 performed on these assets. THESL also plans to install a new drainage pipe in the building, to

1 replace the current pipe which was installed in 1932 and is showing obvious signs of structural
2 deterioration and corrosion. Similarly, THESL proposes to replace the outer layers of brick wall
3 on the north side of the building and also replace and secure loose stone slabs where necessary.
4 The cladding of the building was last refurbished in 1992 and (as stated in the 2009 Pinchin
5 Report) there are visible signs of erosion in the panels with the danger that some slabs
6 (measuring 6ft x 6ft) could come loose and fall off, posing a potential safety risk. Also, as a
7 designated historical heritage building, its external façade must be preserved.

8

9 THESL also plans to continue with the installation of two backup power generators, which are
10 required to ensure that emergency power is available to the building during emergency
11 situations or system power failures. This initiative was started in 2008 with the purchase of two
12 generators and associated switchgear. The multi-phase process has been ongoing since then,
13 with expected completion in 2012.

14

15 **2. 500 Commissioners Street**

16 THESL's efforts at its main work centre at 500 Commissioners Street primarily involve the
17 reconstruction and replacement of assets that have been failing and are already beyond their
18 life expectancy. This work is mostly focussed on the replacement of life safety systems (such as
19 corroded sprinkler system lines and malfunctioning associated pumps, control panels and
20 valves) and various elements of the ventilations system (such as cracked heat exchangers,
21 malfunctioning control systems and failed compressors in HVAC units). The consequences of
22 not correcting these problems is a potential safety risk. THESL also plans to continue with the
23 program of reconstruction of deteriorated internal concrete floors and external paved surfaces
24 which began in 2010. In addition, THESL plans to complete the installation of a 1500kW Back Up
25 Generator (which had begun in 2009 and is scheduled to be completed in 2012) to ensure that
26 the work centre can continue to fully operate during emergency and power outage situations.

1 **3. 6 Monogram Place**

2 The 6 Monogram location is THESL's main work centre for the western part of Toronto. Within
3 this building, THESL must build a well-equipped Local Incident Command Centre (LICC) with
4 sufficient work space, efficient I.T. equipment, reliable communication networks, grid status
5 displays and workforce accommodations to effectively manage emergency events for west
6 Toronto. The LICC is an integral part of the THESL's emergency management unit (EMU) and
7 must be at a state of readiness to centralize and coordinate planning and communications
8 during an emergency event which could impact THESL's operations, employees, and customers.
9 Currently, 6 Monogram does not have a command centre that meets THESL's EMU
10 requirements. The issue has been a concern since THESL occupied the building in 2007 and was
11 highlighted in February 2009 when as part of the company's emergency response to contact
12 voltage incidents in the city, a level III emergency³ was declared at THESL and a makeshift
13 incident command centre was set up for the 23-day duration of the emergency management
14 operations. During that period, while the emergency was safely dealt with, the inadequacies of
15 the location as a emergency command centre were highlighted such as unreliable cellular
16 phone coverage, insufficient number of telephone landlines, insufficient space to accommodate
17 all of the personnel required to be in the command centre and lack of monitors to display the
18 status of outages. Since then, upgrades to the LICC have been undertaken and THESL needs to
19 continue enhancements to the physical space and the I.T. infrastructure.

20

21 **4. 60 Eglinton Avenue West**

22 At 60 Eglinton Avenue West, THESL must replace 3 failing HVAC units and a failing central chiller
23 plant which are all well past their 15-year lifespan, the current units are 25 years old. The
24 building currently houses THESL's backup Control Room and is unmanned. The upgrades to the
25 heating and cooling system need to be made so that in an emergency situation, such as the
26 occurrence of a catastrophic event that would disable THESL's main control room, the backup
27 Control Room will be in a state of readiness.

³ A severe emergency management situation which requires the deployment of all resources of the company to appropriately respond to it.

1 **5. 601 Milner Avenue**

2 Planned work at this location involves a number of required upgrades, particularly to security
3 and building automation. In addition, THESL plans to construct a vehicle wash-bay to allow for
4 the proper cleaning and maintenance of fleet vehicles at this location. The wash bay is required
5 to clean overhead line bucket trucks which have a bucket on hydraulic booms. Maintaining a
6 clean fleet also has important worker safety implications, because all bucket trucks must
7 undergo dielectric testing prior to daily use to ensure they can be used in close proximity to high
8 voltage wires without forming a path to ground. If trucks are covered with dust and salt residue
9 and remain uncleaned, they will not pass the THESL's safety tests (as the residue creates a path
10 for electricity to travel to the ground) and cannot be used as they could result in an electrical
11 flash which may pose a potential safety risk to THESL workers, equipment, and the public. The
12 wash bay must be constructed in a separate space from the garage to avoid damage to the
13 environmental management control systems in the fleet parking garage. Steam and spray from
14 washing trucks within the garage can damage oxygen sensors that activate exhaust fan systems
15 when air quality reaches unacceptable OHS limits while trucks are running or entering/exiting
16 the garage. The 58 oxygen sensor units cost \$1,000 each to replace should they fail.

17

18 **6. Card Access Security System at Substations**

19 Over the last several years THESL began the installation of an electronic security system
20 involving card access and CCTV cameras in its substations throughout the GTA. THESL plans to
21 complete the card access security installations in the remaining 72 stations that currently do not
22 have card access control as well as installing new CCTV cameras in the same 72 stations.
23 Security remains a serious concern for THESL. In 2011 alone there were four incidences of theft,
24 two incidences of trespassing, and one break and enter that had occurred at THESL's
25 substations. In each case there was material theft, potential safety risk to the unauthorized
26 entrants, and potential compromise of the electrical distribution grid. Given the number and
27 nature of incidences that occurred in 2011, THESL must undertake this work over the next three
28 years.

1 **7. Installation of Backflow Preventer**

2 The City of Toronto's Water Supply Bylaw (Municipal Code, Chapter 851) enacted on October
3 22, 2007 states that every commercial building in the City of Toronto is required to have a
4 backflow preventer installed on the City's water main coming in, to protect the City's potable
5 water system. Phase I – the installation of the backflow preventers at the main operating
6 centers was completed in 2011. Phase II is intended to complete the installation at the 45
7 remaining affected stations by 2013. The installation of the backflow preventers is a mandatory
8 by-law requirement.



Toronto Hydro-Electric System Limited

EB-2012-0064

Tab 4

Schedule D1

ORIGINAL (90 pages)



Toronto Hydro-Electric System Limited 2012 Asset Condition Assessment Audit

Kinectrics Inc. Report No: K-418399-RA-0001-R00

May 7, 2012

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Toronto Hydro-Electric System Limited 2012 Asset Condition Assessment Audit

Kinectrics Inc. Report No: K-418399-RA-0001-R00

May 7, 2012

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Revision History

Revision Number	Date	Comments	Approved
R00	May 7, 2012	Initial Version	Yury Tsimberg

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1 Executive Summary

Over the past number of years, Toronto Hydro-Electric System Limited (THESL) has been putting forth considerable efforts to improve its Asset Management practices. In 2006, a full Asset Condition Assessment (ACA) for key distribution assets was conducted by Kinectrics Incorporated (Kinectrics). Between 2006 and 2009, THESL took steps to adopt the recommendations prescribed by the 2006 ACA and to improve the quality of its asset condition data. Further, THESL developed the Health Index Calculator, an application that evaluates the Health Indices of assets based on current and best available inspection data.

Using the Calculator, an ACA was again conducted by THESL in 2009. Kinectrics was engaged to audit the progress that THESL had made between 2006 and 2009, and to compare the results of the 2006 and 2009 ACAs.

Between 2009 and 2010, THESL continued to make improvements and adopt the recommendations from Kinectrics's 2009 audit. In addition, THESL conducted a 2010 ACA of its key assets and had Kinectrics perform a second audit to assess the progress made between 2009 and 2010. A significant change found during this time period was the migration of the Calculator from Microsoft Excel to a web-based, Business Intelligence (BI) platform. The intent of this change was to improve accessibility and visibility of the condition assessment process across the organization, create greater data management and integration capabilities, and to enhance THESL's analytics and reporting tools.

Following the 2010 audit, THESL continued with annual ACAs and systematic reviews of the Calculator. In both 2011 and 2012, condition assessments were conducted internally by THESL. There is continued focus on improving the quantity and quality of asset condition data. The Calculator review process considers both the availability of new data and THESL's increasing knowledge of each asset category, as well as some third party recommendations.

THESL's practice of annual condition assessments and ongoing review of the condition assessment process demonstrate a commitment to continuous improvement. Utilities across North America are recognizing the value of benchmarking asset condition and reassessing at regular intervals to determine not only current asset condition but also to assess the progress made with respect to improving Health Index formulas, data quality, quantity, and collection and integration methods. THESL's processes and procedures are in keeping with such leading practices in Asset Condition Assessment.

Kinectrics has been asked to assess the changes and ACA results between 2011 and 2012. Data and information was provided by THESL and assumed by Kinectrics to be accurate and complete. This report describes the Kinectrics findings.

2 Key Achievements Between 2011 and 2012

The key achievements between 2011 and 2012 are highlighted below:

- Wood Pole data has been fully migrated into Ellipse, THESL's asset registry. Because the BI calculator extracts its data from Ellipse, it can now be used to assess Wood Pole condition
- The BI Calculator is now available for a majority of asset classes. As such, the condition assessment process has better visibility across the THESL organization. Data is updated in near real time and stakeholders have access to a tool that facilitates decision making with respect to capital projects and expenditures
- In order to improve sample sizes, or percentage of population with sufficient condition data for Health Indexing, THESL reports that efforts have been made to increase the data and information collected for many asset categories. Examples of such initiatives are:
 - Continuing the practice of assigning new assets "very good" condition
 - Use of handheld devices that make condition data collection mandatory during inspection. THESL reports that all inspection data are now being collected through personal digital assistants (PDAs) to ensure consistency and completeness of data
 - Implementing a program that tracks inspected assets and ensures that all required condition data have been collected
 - Implementing a program that rejects incomplete maintenance records and forces inspection crews to collect all required data before maintenance records are approved
- THESL has put forth efforts to collect condition data that are of better quality and are more representative indicators of asset degradation. For example:
 - Kinectrics previously recommended that infra-red data be collected for Station Switchgear. THESL has since acquired the data and incorporated this into its Station Switchgear assessment
 - THESL has recently completed a program that involved training inspectors to collect life grade data, or end-of-life conditions, for certain assets. This also involved modifying asset inspection forms. THESL reports that collection of life grade data is well underway for the following:
 - Network Transformers
 - Submersible Transformers
 - Vault Transformers
 - Padmounted Transformers
 - ATSS
 - Wood Poles
 - Remote and Manual Overhead Gang Switches
 - SCADAMATEs
 - Network Vaults
 - Cable Chambers

- THESL has put in place a comprehensive review process for certain asset categories. In 2012, the following 6 asset classes are scheduled for review:
 - Wood Poles
 - Padmounted Switches
 - Submersible Transformers
 - Direct Buried XLPE
 - Transformer Vaults
 - Power Transformers
 - Overhead Transformers

- THESL has made efforts to enhance training of its staff. THESL reports that over the past year, it has created 7 new maintenance training manuals for MST jobs and has provided associated training to all its relevant internal stakeholders.

- While this report focuses on the Asset Condition Assessment portion of the Asset Management process, it is worth noting that THESL has reported that progress has been made with respect to risk assessment, gathering failure statistics, and replacement versus refurbishment analysis. THESL has:
 - Developed failure probability curves (hazard curves) that are a function of asset age.
 - Related Health Index to Probability of Failure. The failure rate of an asset is assumed to be represented by a Weibull distribution that is a function of the Health Index
 - Improved the availability of historical failure data by tracking, for some assets, warehouse inventory and replacement rates.
 - Developed a strategy to estimate the minimum life cycle cost of its assets. The strategy optimizes the benefits and drawbacks between the operating risk cost as an asset degrades, cost of refurbishment, and the cost of replacement
 - Considered asset specific replacement versus refurbishment alternatives for some assets.

3 Comparison of 2011 and 2012 ACA Methodology

Health Index (HI) formulation and results from 2011 and 2012 were compared for the following twenty (20) Asset Categories:

- Stations Power Transformers
- Station Switchgear
- Air Blast Circuit Breaker
- Air Magnetic Circuit Breaker
- Oil Circuit Breaker
- Oil KSO Circuit Breaker

- SF6 Circuit Breaker
- Vacuum Circuit Breaker
- Network Transformers
- Submersible Transformers
- Vault Transformers
- Padmounted Transformers
- ATS
- Cable Chambers
- Wood Poles
- Phase Overhead Gang (Rem.) Switches
- Phase Overhead Gang (Man.) Switches
- SCADAMATE
- Padmounted Switches
- Network Vaults

These 20 asset classes generally belong to one of four categories:

1. Station assets: this group includes Station Power Transformers, Station Switchgear, and Circuit Breakers
2. Network assets: this group includes Network Transformers, Cable Chambers, ATSS, and Network Vaults
3. Underground assets: this group includes Vault, Padmounted, and Submersible Transformers
4. Overhead assets: this group includes Wood Poles and Overhead Switches.

For a majority of the asset categories, the 2012 assessments were made using the BI platform Calculator. Exceptions were made for the following asset categories:

- Station Power Transformers
- Network Vaults

For Station Power Transformers, it was found that the BI business rule for capturing data from the last inspection date did not adequately capture data from multiple inspection periods. As such, this asset class was assessed manually. Network Vaults were assessed manually because the new Health Index formulations developed in the Kinectrics 2010 stand alone network assessment had not yet been incorporated into the BI Calculator. It is also worth noting that while the 2012 Wood Pole assessments were done using BI, the 2011 results were generated using manual spreadsheets.

4 Audit Results

For each Asset Category, the following aspects were compared between 2011 and 2012:

1. Health Index Formulation
2. Granularity within the Asset Category
3. Population and Sample Size
4. Health Index Distribution

4.1 Changes in Health Index Formulation

Between 2011 and 2012, there have been no reported changes with respect to Condition Parameters, Weights, and Condition Criteria.

4.1 Changes in Asset Category Granularity

The assets within each asset category do not represent a homogeneous set of equipment as there are variations in manufacturers, models, types, ratings, installations, environments, etc. All of these factors have impacts on the condition of individual assets and their corresponding Health Index. At the same time, the Health Index approach is most meaningful when looking at the asset categories with substantial number of assets. It is therefore important to establish a right balance between similarity and number of assets in selecting the appropriate granularity for asset categories.

There have been no changes in asset granularity between 2011 and 2012.

Network Protectors, which were introduced as a separate category in the Kinectrics 2010 stand alone network assessment, has not yet been incorporated into the Calculator. THESL reports that the philosophy introduced as part of the 2010 effort is, however, used as a foundation for decision making.

4.1 Changes in Population and Sample Size

Table 1 summarizes the Change Population and in Sample Size between 2011 and 2012. Graphical representations of the data are given on Figure 1 and Figure 2.

Changes in Population

The population has remained steady for approximately half of the asset groups assessed. THESL reports that for some asset classes, population has increased because of capital expenditures to improve system reliability. For other asset classes, THESL reports that decommissioning or changes to asset classification resulted in a decrease in population.

Many Stations assets, namely Station Switchgear, Oil, SF6, and Vacuum Circuit Breakers had population increases of between 7% and 11%.

The decrease in ATS population was expected because this asset group is currently being eliminated from the system.

THESL reports that the decrease in Manual Switches count and increase in both Remote and SCADAMATE Switches can be attributed to changes in classification of overhead switches, decommissioning of Manual Switches, and addition of SCADAMATES to improve sectionalizing capabilities.

The 2011 Wood Pole assessment was conducted using a manual spreadsheet. By 2012, the wood pole data had been migrated to Ellipse so that the BI tool could be used to calculate the Health Index distribution. There was a significantly higher population in Ellipse than in the manual spreadsheet.

Changes in Sample Size

Ideally, condition data should be available for every asset within a population. Failing that, the larger the sample size, or subset of assets with sufficient condition information, the more confidence there is in extrapolating the ACA results over an entire asset population.

The sample size as a percentage of the population remained fairly constant for six out of twenty asset classes. While seven asset groups showed an increase in sample size, a decrease in sample size percentage was observed for the remaining seven asset groups.

A majority of the assets that showed a decline in sample size were Station assets, namely Switchgear, Air Blast, Air Magnetic and Oil Circuit Breakers. The sample sizes for these groups decreased by between 5% and 8%. There was little change for SF6 Breakers. Station Power Transformers and Oil KSO Circuit Breakers both showed increases of approximately 7% and 12% respectively.

There was little change in sample size for Network Vaults and Cable Chambers. Increases of approximately 8% were observed for both Network Transformers and ATSS.

There was minimal change for Vault and Padmounted Transformers but a 4% increase for Submersible Transformers. There was, however an approximate 5% decrease for Padmounted Switches.

For Wood Poles, the sample size decreased by nearly 8%. For Manual Overhead Switches, the sample size remained steady. While the percentage of SCADAMATES with sufficient data increased by 11%, the sample size for Remote Overhead Switches also decreased by 11%.

Generally, a minimum sample size of 10% is required to extrapolate ACA results over an entire population. Manual Overhead Switches, with its sample size of 6%, was the only asset category with a sample size of below 10%. The remaining nineteen asset categories had sample sizes of 24% or higher. Of the nineteen, eleven groups had sample sizes of 50% or higher.

Table 1 Summary Change in Population and Sample Size

Asset		Population		Sample Size		
		Population Count 2011	Population Change from 2011 by %	% Sample Size 2011	% Sample Size 2012	Sample Size Change by %
1	Stations Power Transformers	276	0.00%	81.52%	88.77%	7.25%
2	Station Switchgear	257	10.51%	38.52%	33.45%	-5.07%
3	Air Blast CB	294	-0.68%	50.00%	44.18%	-5.82%
4	Air Magnetic CB	643	-2.02%	54.43%	46.51%	-7.92%
5	Oil CB	371	7.28%	46.09%	40.20%	-5.89%
6	Oil KSO CB	66	-3.03%	18.18%	29.69%	11.51%
7	SF6 CB	223	7.62%	27.80%	26.67%	-1.14%
8	Vacuum CB	501	8.98%	60.68%	65.20%	4.52%
9	Network Transformers	1899	-1.00%	90.36%	98.51%	8.15%
10	Submersible Transformers	9254	-0.05%	86.32%	90.29%	3.97%
11	Vault Transformers	13412	-1.11%	81.08%	82.22%	1.14%
12	Padmounted Transformers	7004	-0.77%	78.87%	77.02%	-1.85%
13	ATS	77	-9.09%	76.62%	84.29%	7.66%
14	Cable Chambers	10896	-0.39%	24.53%	24.30%	-0.24%
15	Wood Poles	106860	17.05%	42.46%	34.91%	-7.56%
16	3φ OH Gang (Rem) Switches	190	38.42%	62.63%	51.71%	-10.92%
17	3φ OH Gang (Man) Switches	1278	-16.35%	6.10%	5.99%	-0.12%
18	SCADAMATE Switches	715	7.27%	49.51%	60.63%	11.12%
19	Padmounted Switches	797	-0.50%	54.83%	50.32%	-4.52%
20	Network Vaults	1066	-0.47%	98.41%	99.62%	1.22%

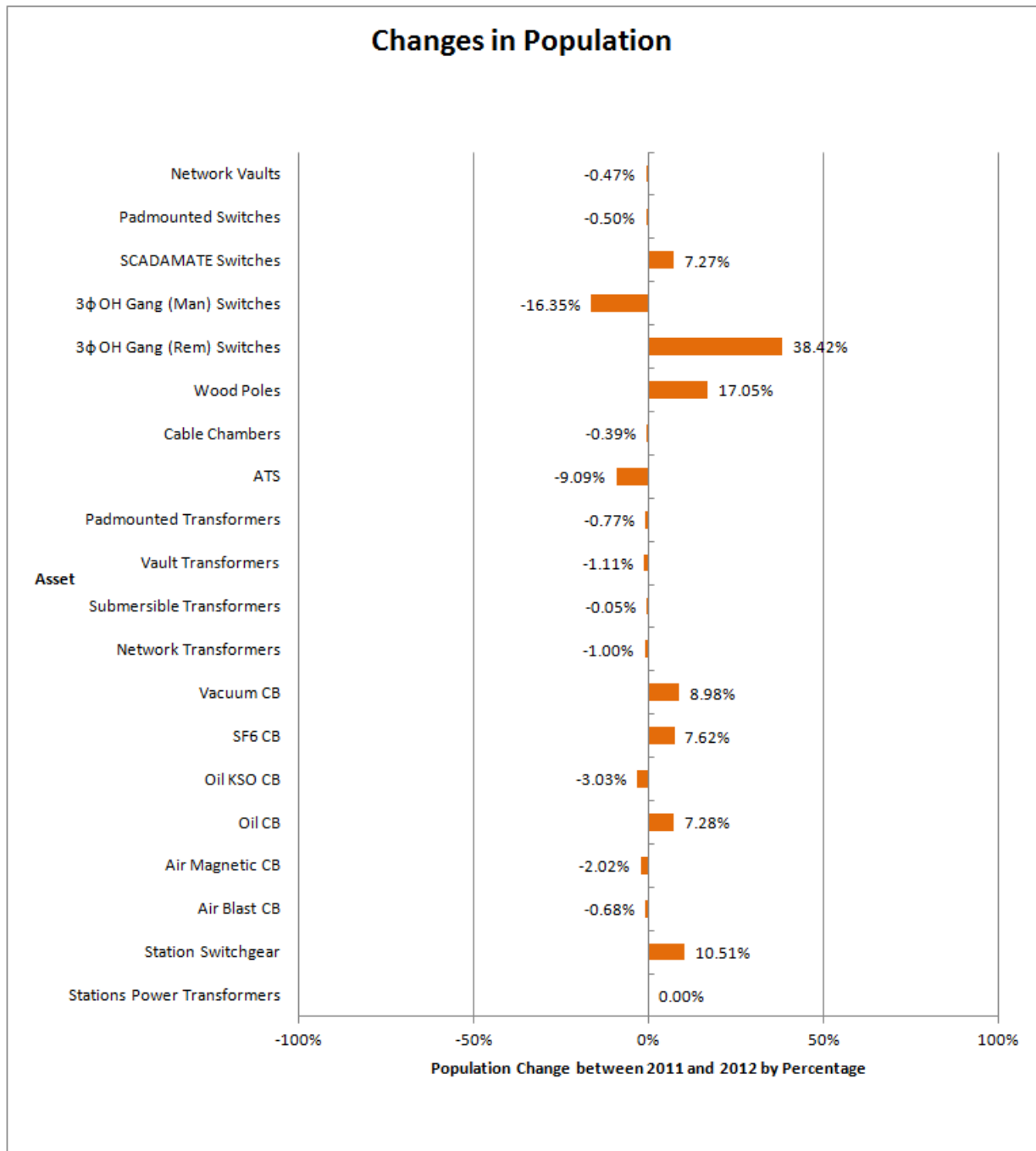


Figure 1 Change in Population

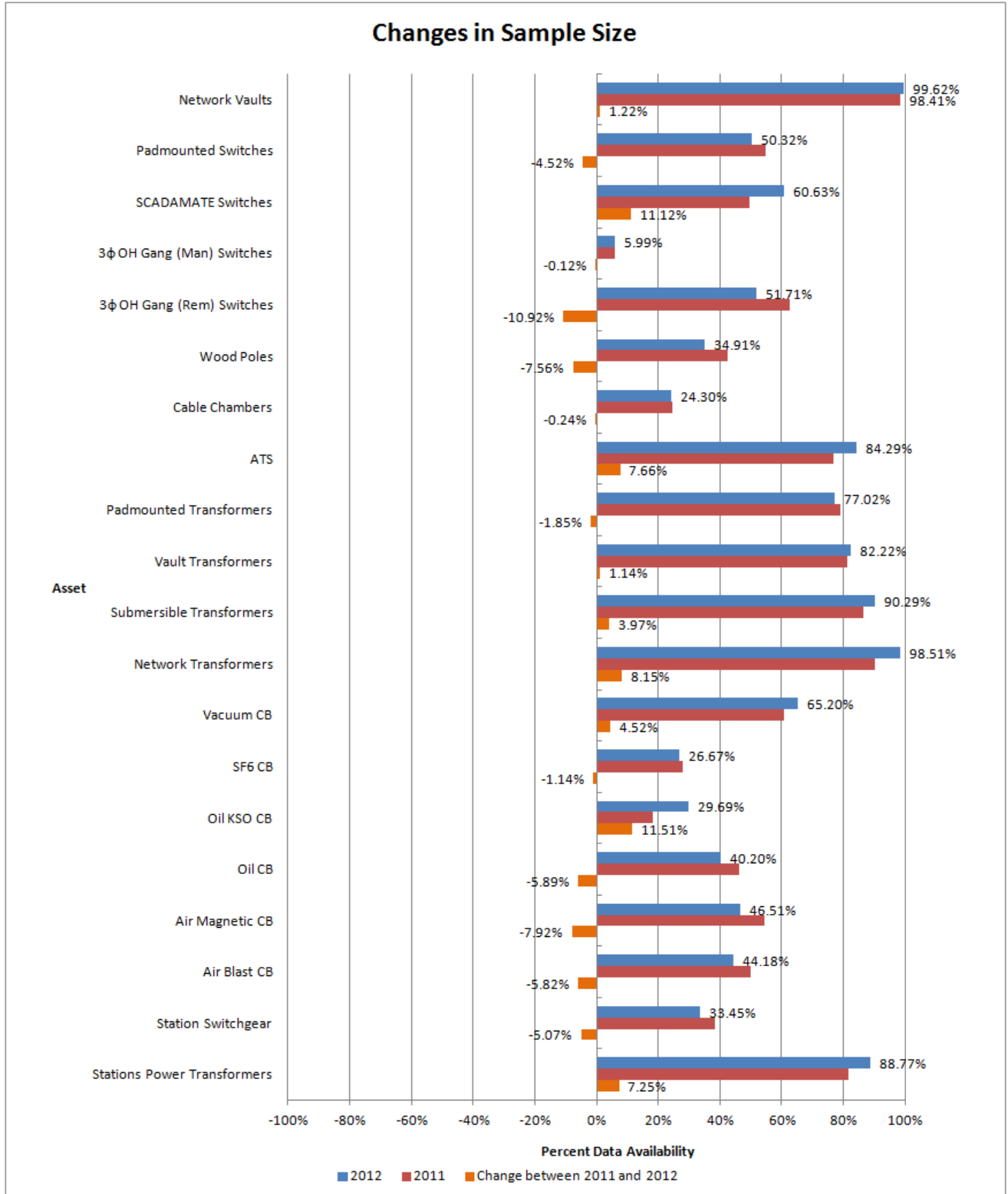


Figure 2 Change in Sample Size

4.1 Changes in Health Index Distribution

The changes in Health Index distribution between 2011 and 2012 are summarized in Table 2 and graphically in Figure 3.

Station Power Transformers: The trend shows an overall improvement in health distribution. There are fewer assets in “very poor” to “fair” conditions and an 11.21% increase of assets in good to very good conditions. Nearly 7% of the samples, however, remain in “poor” or “very poor” condition. Because Substation Power Transformers are a significant asset with high consequences of failure, THESL should plan to replace or refurbish these units in the near future. It is also worth noting that almost 40% are in fair condition and only 54% are classified as “good” or “very good”.

Station Switchgear: There was a slight overall shift away from “good” and “very good” conditions; a total of 2.55% less was classified as “good” or “very good”. It should also be noted that only 37% of the sample size are in “good” and “very good” condition. Approximately 35% were fair and over 28% were in “poor” or “very poor” condition. Because Station Switchgear is a substantial asset class, the significant percentage in “fair” or worse condition is a concern. As with Substation Power Transformers, the “poor” and “very poor” units should be addressed in the near future.

Air Blast, Air Magnetic, Oil, Oil KSO, SF6, and Vacuum Circuit Breakers: An overall improvement in condition was observed for Air Blast, Air Magnetic, SF6, and Vacuum Circuit Breakers. There were fewer samples in “poor” or “very poor” condition or an increase in “fair”, “good”, or “very good” condition.

Oil and Oil KSO Circuit Breakers showed a decline in overall health; there were 3.49% and 12.72% more in “poor” or “very poor” condition for Oil and Oil KSO breakers, respectively.

It is also important to consider the current Health Index distribution of THESL’s Circuit Breakers. While nearly all Vacuum and SF6 breakers are either in “good” or “very good” condition, a majority of the other types of breakers are in no better than “fair” condition; approximately 60% of Air Magnetic, 74% of Oil KSO, 88% of Air Blast, and 93% of Oil Breakers were classified as “fair” or worse. Oil and Oil KSO breakers are of particular concern as approximately 9% and 21% respectively are “poor”/“very poor” condition.

Cable Chambers, ATSS, Network Transformers and Cable Chambers: The Health Index distribution remained fairly steady for Cable Chambers. There was an overall improvement in condition for ATSS, as 10.17% less were found to be in “poor” and “very poor” condition. For Network Transformers and Cable Chambers, 4.04% and 12.30% fewer samples were classified as “very good”, respectively.

While over 90% of Network Transformers and Cable Chambers were in “good” or “very good” condition, a significant percentage of ATSS and Network Vaults were in “fair” or worse condition. Approximately 27% of ATSS are “poor” and “very poor”. About 7% of Network Vaults are “poor” or “very poor”; another 31% are “fair”. Given the challenges associated with Network vault replacement and the consequence of failure of ATSS, there must be appropriate planning to address the declining health of these assets.

Vault Transformers, Padmounted Transformers, Padmounted Switches, and Submersible Transformers: There is an observed decline in the overall health of some underground assets. There were 6.08% and 8.89% less samples in “very good” condition for Vault Transformers and Padmounted Switches respectively.

With 5.48% more samples in the “very good” category, the overall health of Submersible Transformers seems to have improved. For Padmounted Transformers, 5.74% more are in “very good” condition.

The Underground assets are generally in “good” condition. Almost none were found to be in “poor” and “very poor” condition. It should be noted, however, that 19% of vault transformers are in “fair” condition. Because replacements of such transformers pose a challenge to THESL, generally because these transformers are typically the only source of power in the buildings where they are located, appropriate planning must be considered as these assets are expected to further degrade with time.

It is important to note that the Health Index formulation for this Submersible Transformers may be an optimistic representation of asset condition because it does not take into account the known issues with multi-taps. In 2010, multi-taps were the second largest contributor to reliability issues; over 600 units have since been replaced.

Wood Poles: There appears to be an overall decline in Wood Pole condition, with 4.89% less of the assets classified as “good” or “very good”. The Health Index distribution of this asset class is also of concern. Approximately 10% are “poor” and “very poor”; 46% are “fair”. There is a significant quantity, over 125000, of Wood Poles. Replacing the 10% that are “poor” and “very poor” and eventually the 46% that are “fair” will likely pose challenges to THESL.

Overhead Switches: A slight improvement was observed in the overall health of Remote Overhead Switches. With 12.28% more samples in “very good” condition, there was a significant overall improvement in SCADAMATE Switches.

For Manual Overhead Switches, there appears to be a decline in overall health, with 9.66% less in “very good” condition.

Despite the overall decline in Manual Overhead Switch condition, all three types of overhead switches are generally in good condition. Over 93% of all units are classified as “good” or “very good”.

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Table 2 Summary of Health Index Distribution

Asset		Year	Very Poor		Poor		Fair		Good		Very Good	
			% Samples	Change	% Samples	Change	% Samples	Change	% Samples	Change	% Samples	Change
1	Stations Power Transformers	2011	1.3%	-1.3%	12.0%	-5.5%	44.0%	-4.4%	25.8%	11.0%	16.9%	0.3%
		2012	0.0%		6.5%		39.6%		36.7%		17.1%	
2	Station Switchgear	2011	0.0%	0.0%	29.3%	-0.9%	31.3%	3.4%	15.2%	-1.5%	24.2%	-1.1%
		2012	0.0%		28.4%		34.7%		13.7%		23.2%	
3	Air Blast CB	2011	0.0%	0.0%	6.8%	-2.9%	80.3%	3.4%	9.5%	-1.8%	3.4%	1.2%
		2012	0.0%		3.9%		83.7%		7.8%		4.7%	
4	Air Magnetic CB	2011	0.0%	0.0%	4.0%	-0.9%	59.4%	-2.4%	32.6%	2.6%	4.0%	0.8%
		2012	0.0%		3.1%		57.0%		35.2%		4.8%	
5	Oil CB	2011	0.6%	0.7%	4.7%	2.8%	87.1%	-3.4%	7.6%	-0.1%	0.0%	0.0%
		2012	1.3%		7.5%		83.8%		7.5%		0.0%	
6	Oil KSO CB	2011	0.0%	0.0%	8.3%	12.7%	58.3%	-5.7%	25.0%	1.3%	8.3%	-8.3%
		2012	0.0%		21.1%		52.6%		26.3%		0.0%	
7	SF6 CB	2011	0.0%	0.0%	0.0%	0.0%	1.6%	-0.1%	45.2%	-1.4%	53.2%	1.5%
		2012	0.0%		0.0%		1.6%		43.8%		54.7%	
8	Vacuum CB	2011	0.0%	0.0%	0.3%	0.0%	6.9%	-1.0%	13.2%	-3.9%	79.6%	4.9%
		2012	0.0%		0.3%		5.9%		9.3%		84.6%	
9	Network Transformers	2011	0.0%	0.0%	0.0%	0.1%	7.9%	0.1%	30.5%	3.9%	61.6%	-4.0%
		2012	0.0%		0.1%		8.0%		34.4%		57.6%	
10	Submersible Transformers	2011	0.0%	0.0%	0.0%	0.0%	1.2%	0.2%	26.6%	-5.7%	72.2%	5.5%
		2012	0.0%		0.0%		1.3%		20.9%		77.7%	

Asset	Year	Very Poor		Poor		Fair		Good		Very Good	
		%	Change	%	Change	%	Change	%	Change	%	Change
11 Vault Transformers	2011	0.0%	0.1%	0.2%	0.2%	15.5%	3.4%	29.9%	2.5%	54.5%	-6.1%
	2012	0.1%		0.4%		18.8%		32.4%		48.4%	
12 Padmounted Transformers	2011	0.0%	0.0%	0.0%	0.0%	0.8%	-0.3%	15.9%	-5.4%	83.2%	5.7%
	2012	0.0%		0.0%		0.5%		10.5%		89.0%	
13 ATS	2011	10.2%	-6.8%	27.1%	-3.4%	10.2%	1.7%	30.5%	5.1%	22.0%	3.4%
	2012	3.4%		23.7%		11.9%		35.6%		25.4%	
14 Cable Chambers	2011	0.1%	0.0%	1.5%	0.2%	9.0%	0.4%	44.3%	-0.9%	45.0%	0.3%
	2012	0.1%		1.7%		9.4%		43.5%		45.4%	
15 Wood Poles	2011	2.5%	0.0%	8.9%	-1.3%	39.9%	6.1%	13.8%	-4.3%	34.8%	-0.6%
	2012	2.5%		7.7%		46.0%		9.6%		34.2%	
16 3φ OH Gang (Rem) Switches	2011	0.0%	0.0%	0.0%	0.0%	7.6%	-0.9%	64.7%	-1.5%	27.7%	2.4%
	2012	0.0%		0.0%		6.6%		63.2%		30.1%	
17 3φ OH Gang (Man) Switches*	2011	0.0%	0.0%	0.0%	0.0%	6.4%	-1.7%	44.9%	11.4%	48.7%	-9.7%
	2012	0.0%		0.0%		4.7%		56.3%		39.1%	
18 SCADAMATE Switches	2011	0.0%	0.0%	0.3%	-0.3%	1.4%	0.3%	73.2%	-12.3%	25.1%	12.3%
	2012	0.0%		0.0%		1.7%		60.9%		37.4%	
19 Padmounted Switches	2011	0.0%	0.0%	0.7%	0.1%	11.4%	2.3%	28.6%	6.5%	59.3%	-8.9%
	2012	0.0%		0.8%		13.8%		35.1%		50.4%	
20 Network Vaults	2011	1.6%	-0.5%	7.0%	-1.1%	30.7%	0.5%	47.6%	13.4%	13.2%	-12.3%
	2012	1.1%		5.9%		31.2%		60.9%		0.9%	
* Sample Size insufficiently large for Health Index distribution extrapolation over entire population											



Figure 3 Graphical Summary of Health Index Distribution

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5 Conclusions

The changes in ACA results between 2011 and 2012 were assessed based on data and information provided by THESL. Following are the observations:

1. Wood Pole data has been fully migrated into Ellipse. A comparison with the population documented in the manual spreadsheet shows an increase in population in Ellipse. There was, however, a decrease in sample size.
2. A majority of the twenty asset classes considered were assessed in 2012 using the BI Calculator. Manual calculations were still conducted for Stations Power Transformers and Network Vaults. Underground Cables have not been incorporated into the Calculator and, as such, have been excluded in this assessment.
3. There were no changes with respect to asset granularity. Network Protectors, which were introduced as a separate category in the Kinectrics 2010 stand alone network assessment, has not yet been incorporated into the Calculator, however THESL reports that the philosophy introduced as part of the 2010 effort is being used as a foundation for decision making.
4. The population has remained steady for approximately half of the asset groups. For seven asset classes, population has increased. For the remainder of the asset groups, the population decreased.
5. The percentage of the population with sufficient Health Index data, or sample size, remained fairly constant for six out of twenty asset classes. While seven asset groups showed an increase in sample size, a decrease in sample size percentage was observed for the remaining seven asset groups.
 - Four of the seven assets that had a decline in sample size were station assets (Switchgear, Air Blast, Air Magnetic and Oil Circuit Breakers)
 - Additional categories are Padmounted Switches, Wood Poles, and Remote Overhead Switches
6. The sample size of Manual Overhead Switches remains below 10%.
7. Although decreased sample sizes were observed for some asset categories, efforts have been made to improve the sample sizes of many asset categories. Examples of initiatives that improve sample sizes are:
 - Continuing the practice of assigning new assets “very good” condition
 - Use of handheld devices, PDAs, for all inspections to ensure that data collection is consistent, complete, and mandatory during inspection
 - Implementing a program that tracks inspected assets and ensures that all required condition data have been collected

- Implementing a program that rejects incomplete maintenance records and forces inspection crews to collect all required data before maintenance records are approved
8. The overall trend with respect to Health Index distribution was assessed. Assets that showed an increasing percentage of “good” and/or “very good” or a decrease of “very poor”, “poor”, and/or “fair” were classified as having overall improved health distributions. Conversely, asset classes with a decreasing percentage of “good” and/or “very good” or an increasing percentage of “very poor”, “poor”, and/or “fair” were classified as having an overall decline in health.
- The assets observed to have had an overall improvement in health distribution were Stations Power Transformers, Air Blast, Air Magnetic, SF6, and Vacuum Circuit Breakers, ATS, Submersible and Padmounted Transformers, Remote and SCADAMATE Overhead Switches.
 - Assets observed to have had an overall decline in health distribution were Station Switchgear, Oil and Oil KSO Circuit Breakers, Vault Transformers, Padmounted Switches, Wood Pole, and Manual Overhead Switches
 - Very little change was observed for Cable Chambers
9. The change in the Health Index distribution is an indicator of how THESL is responding to overall health of the system; the Health Index distribution itself provides a snapshot of the overall health of the system. As such, in addition to observing the change in Health Index distribution, the actual 2012 Health Index distributions of each asset category was assessed. Asset classes that showed significant quantities in the “very poor”, “poor”, and “fair” categories were flagged for concern.
- Nearly all station assets, with the exception of SF6 and Vacuum Circuit Breakers, had significant percentages in the “very poor” to “fair” categories. Approximately 47% of Station Power Transformers, 63% of Station Switchgear, 88% of Air Blast breakers, 60% of Air Magnetic breakers, 93% of Oil breakers, and 74% of Oil KSO breakers were classified as “fair” or worse. Of particular concern are Station Switchgear where 28% of the units were identified as “poor” or “very poor”
 - Approximately 27% of all ATSS were “poor” or “very poor”; 38% of Network Vaults are fair or worse
 - Although almost no Vault Transformers were found to be “poor” or “very poor”, 19% were found to be “fair”
 - Approximately 46% of Wood Poles were fair; 10% were “poor” or “very poor”

10. THESL has put forth efforts to collect condition data that are of better quality and are more representative indicators of asset degradation. For example:
 - Kinectrics previously recommended that infra-red data be collected for Station Switchgear. THESL has since acquired the data and incorporated this into its Station Switchgear assessment
 - THESL has recently completed a program that involved training inspectors to collect life grade data for certain assets. This also involved modifying asset inspection forms. THESL reports that collection of end-of-life or life grade data is well underway for the following assets: Network Transformers, Submersible Transformers, Vault Transformers, Padmounted Transformers, ATs, Wood Poles, Remote and Manual Overhead Gang Switches, SCADAMATEs, Network Vaults, and Cable Chambers
11. THESL has put in place a comprehensive review process for certain asset categories. The following asset classes are scheduled for review in 2012: Wood Poles, Padmounted Switches, Submersible Transformers, Direct Buried XLPE, Transformer Vaults, Power Transformers, and Overhead Transformers.
12. THESL has made efforts to enhance training for its staff. THESL reports that over the past year, it has created 7 new maintenance training manuals for MST jobs and has provided associated training to all its relevant internal stakeholders.
13. Although this report focuses on the Asset Condition Assessment portion of the Asset Management process, THESL has also made some progress with respect to risk assessment and replacement versus refurbishment analysis. Specifically THESL has:
 - Developed Probability of Failure versus Age curves that are consistent with THESL failure statistics
 - Related Health Index to Probability of Failure using Weibull distribution curves
 - Established a strategy that determines minimum life cycle cost by considering the balance between risk, replacement, and refurbishment costs
14. Asset specific replacement versus refurbishment alternatives is considered. Injection and replacement are options for managing poorly performing underground cable locations.
15. THESL also reports that efforts to gather failure statistics are underway. This is being done through tracking of warehouse inventory and replacement rates for certain assets.

6 Recommendations

In addition to the recommendations presented in past Kinectrics asset condition assessment and audits, additional recommendations that should facilitate the improvement of THESL's Asset Management process are listed below.

1. Validate the Wood Pole data that has been migrated into Ellipse. If required, process the data so that it usable by the BI Calculator.
2. Continue modifications on BI Calculator to:
 - Include Stations Power Transformers by optimizing the inspection window to better capture available inspection data
 - Include revised Health Index formulations for Network Vaults and Network Transformers (as per the Kinectrics 2010 stand alone asset condition assessment of network assets)
 - Include Network Protectors
 - Include Underground Cables
3. Continue to improve the sample sizes for every asset category. Particular attention should be given to assets that have had a decrease in sample size, as well as to Manual Overhead Switches, which has a sample size of less than 10%.
4. Continue with the practices of collecting additional and more complete data for assets. Examples are the use of handheld devices during inspections and programs that effectively force the collection of complete data sets during each inspection.
5. It is recommended that THESL begin short term planning (manpower and expenditures) for assets that have large quantities in poor and very poor condition, as well as long term planning for assets that have large quantities in fair condition. Of particular concern are Station assets, as vast majorities are in no better than fair condition. Additional asset groups that cause concern are ATS, Network Vaults, and Wood Poles. There may be many challenges associated with the assets indentified, including high consequence of failure, reliability issues, or available manpower and capital to address the quantity of units that require replacements. As such, plans to address the declining asset health should be developed.
6. Adopt the recommended Health Index formulations presented in the Kinectrics 2011 Audit and, if required, continue refining the recommend Health Index formulations and determine what is feasible from an operational perspective. At minimum, parameters that have been identified as dominant factors should be incorporated into Health Index assessments. An example are multi-taps for Submersible Transformers.
7. Continue with the progress made related to risk analysis, refurbishment versus replacement analysis, and failure data collection.

7 Appendix A: Audit Results by Asset Class

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1 Station Power Transformers

The following illustrate the changes found for Station Power Transformers.

1.1 Changes in Health Index Formulation

There were no changes within the Calculator with respect to Health Index formulation.

1.2 Changes in Granularity

There were no changes within the Calculator with respect to granularity.

1.3 Changes in Sample Size

A summary of Population and Sample Size information for Station Power Transformers is shown on Table 1-1. "Sample Size" and "Insufficient Data for HI" are given in terms of percentage of the total asset population. This information is graphically represented on Figure 1-1. The population remained steady. The sample size has increased considerably by 7.25%.

Table 1-1 Sample Size Summary

Year	Sample Size		
	Population	Sample Size	Insufficient Data for HI
2011	276	81.52%	18.48%
2012	276	88.77%	11.23%
Change	0.00%	7.25%	-7.25%

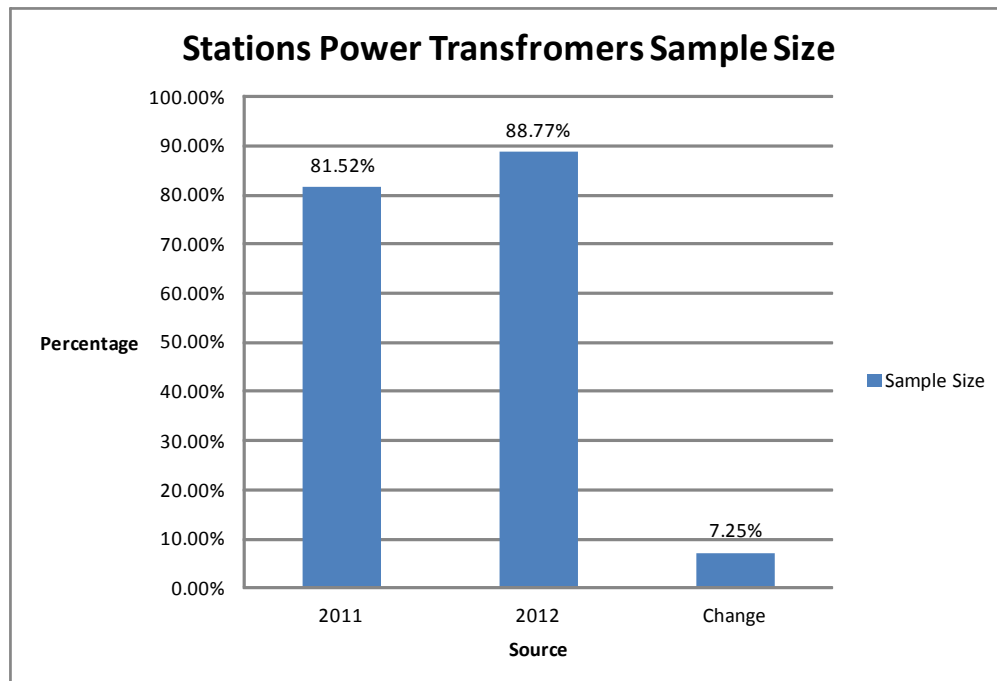


Figure 1-1 Sample Sizes for 2011 and 2012

1.4 Changes in Health Index Classification

A summary of the 2011 and 2012 Health Index distributions for Station Power Transformers are shown on Table 1-2 and graphically represented on Figure 1-2. The results are given in terms of percentage of the total asset population. The trend shows an overall improvement in the health of this asset class. There are fewer assets in very poor to fair conditions and 11.21% increase of assets in good to very good conditions.

Table 1-2 Health Index Distribution Summary

Year	HI Distribution				
	Very Poor	Poor	Fair	Good	Very Good
2011	1.33%	12.00%	44.00%	25.78%	16.89%
2012	0.00%	6.53%	39.59%	36.73%	17.14%
Change	-1.33%	-5.47%	-4.41%	10.96%	0.25%

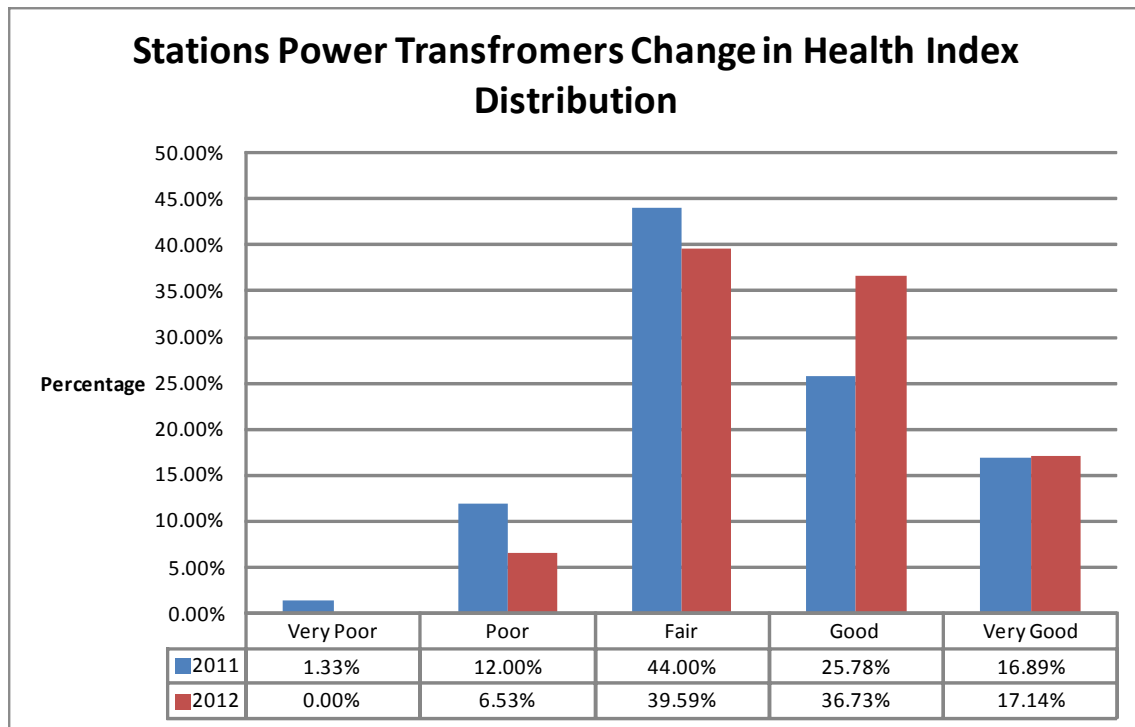


Figure 1-2 Health Index Distribution Comparison

2 Station Switchgear

The following illustrate the changes found for Station Switchgear.

2.1 Changes in Health Index Formulation

There were no changes within the Calculator with respect to Health Index formulation.

2.2 Changes in Granularity

There were no changes within the Calculator with respect to granularity.

2.3 Changes in Sample Size

A summary of Population and Sample Size information for Station Switchgear is shown on Table 2-1. "Sample Size" and "Insufficient Data for HI" are given in terms of percentage of the total asset population. This information is graphically represented on Figure 2-1. There was a 10.51% increase in population but a decrease of 11% in sample size.

Table 2-1 Sample Size Summary

Year	Sample Size		
	Population	Sample Size	Insufficient Data for HI
2011	257	38.52%	61.48%
2012	284	33.45%	66.55%
Change	10.51%	-5.07%	5.07%

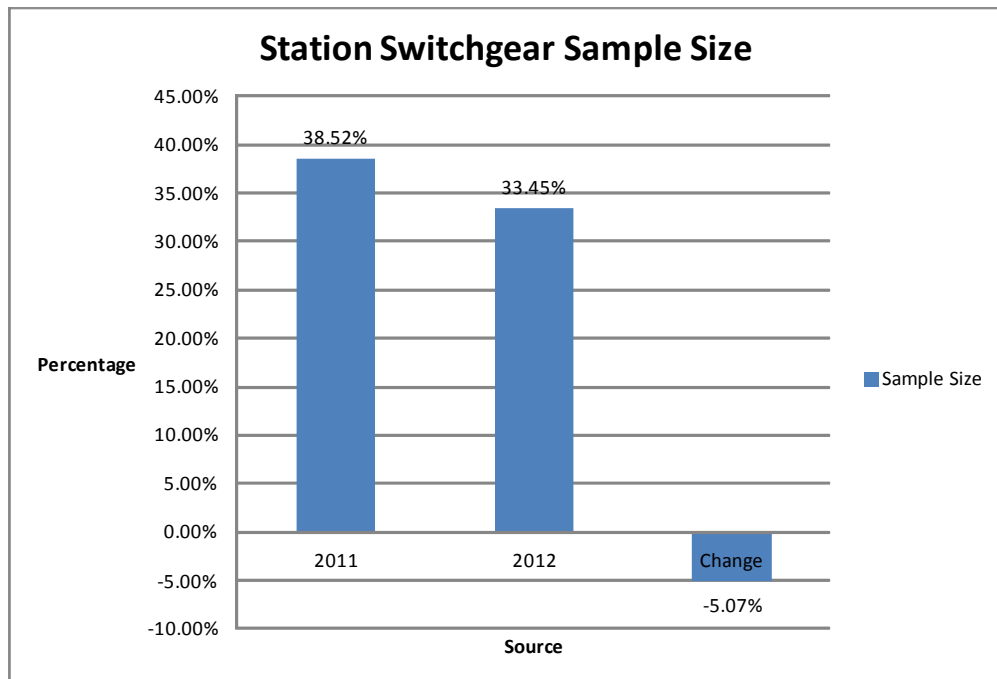


Figure 2-1 Sample Sizes for 2011 and 2012

2.4 Changes in Health Index Classification

A summary of the 2011 and 2012 Health Index distributions for Station Switchgear are shown on Table 2-2 and graphically represented on Figure 2-2. The results are given in terms of percentage of the total asset population. There was an overall shift away from good and very good conditions, with a total of 2.55% less classified as good or very good.

Table 2-2 Health Index Distribution Summary

Year	HI Distribution				
	Very Poor	Poor	Fair	Good	Very Good
2011	0.00%	29.29%	31.31%	15.15%	24.24%
2012	0.00%	28.42%	34.74%	13.68%	23.16%
Change	0.00%	-0.87%	3.42%	-1.47%	-1.08%

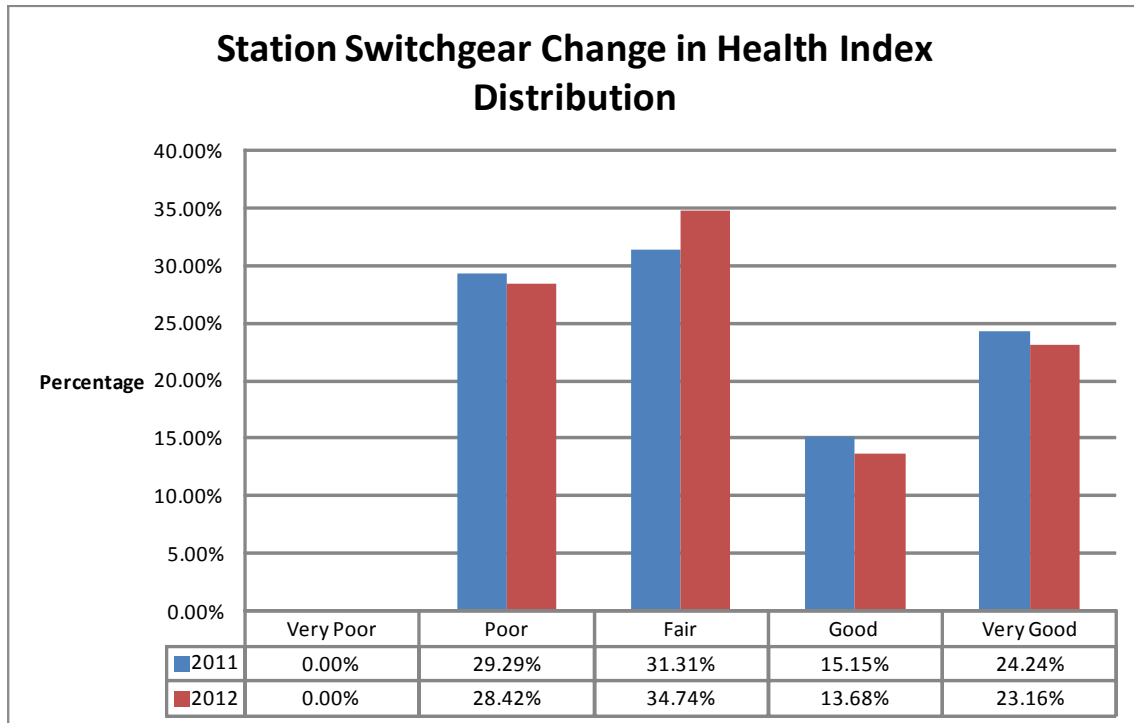


Figure 2-2 Health Index Distribution Comparison

3 Air Blast Circuit Breakers

The following illustrate the changes found for Air Blast Circuit Breakers.

3.1 Changes in Health Index Formulation

There were no changes within the Calculator with respect to Health Index formulation.

3.2 Changes in Granularity

There were no changes within the Calculator with respect to granularity.

3.3 Changes in Sample Size

A summary of Population and Sample Size information for Air Blast Circuit Breakers is shown on Table 3-1. "Sample Size" and "Insufficient Data for HI" are given in terms of percentage of the total asset population. This information is graphically represented on Figure 3-1. Because Air Blast breakers are being replaced by Vacuum breakers, there has been a slight decrease in population. There has, however, also been a decrease of 5.82% in sample size.

Table 3-1 Sample Size Summary

Year	Sample Size		
	Population	Sample Size	Insufficient Data for HI
2011	294	50.00%	50.00%
2012	292	44.18%	55.82%
Change	-0.68%	-5.82%	5.82%

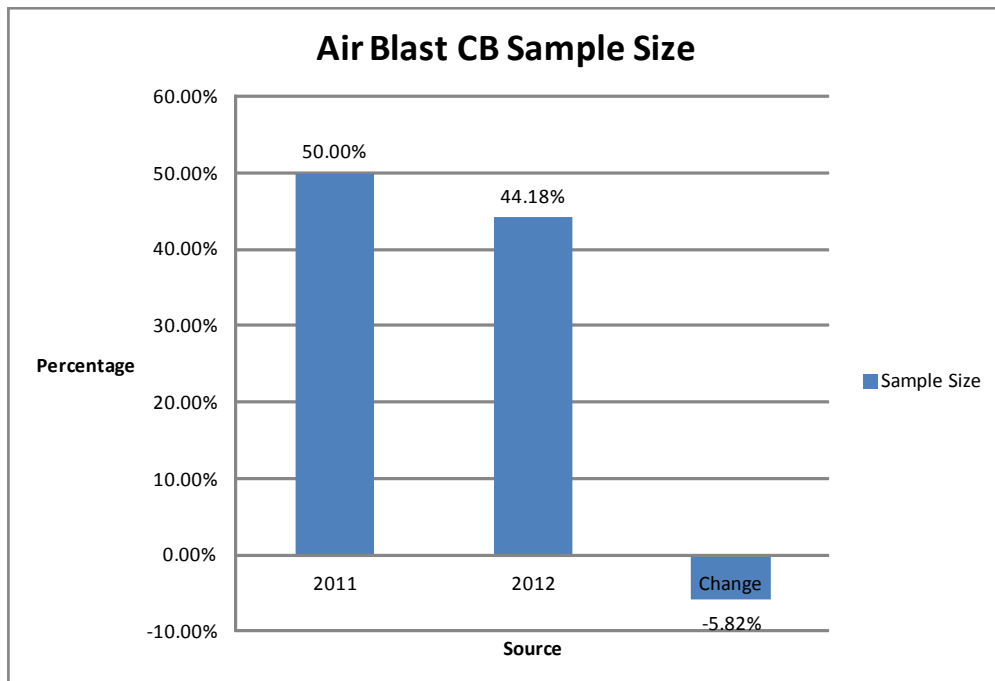


Figure 3-1 Sample Sizes for 2011 and 2012

3.4 Changes in Health Index Classification

A summary of the 2011 and 2012 Health Index distributions for Air Blast Circuit Breakers are shown on Table 3-2 and graphically represented on Figure 3-2. The results are given in terms of percentage of the total asset population. There samples were in better condition, with 2.93% less classified as poor or very poor.

Table 3-2 Health Index Distribution Summary

Year	HI Distribution				
	Very Poor	Poor	Fair	Good	Very Good
2011	0.00%	6.80%	80.27%	9.52%	3.40%
2012	0.00%	3.88%	83.72%	7.75%	4.65%
Change	0.00%	-2.93%	3.45%	-1.77%	1.25%

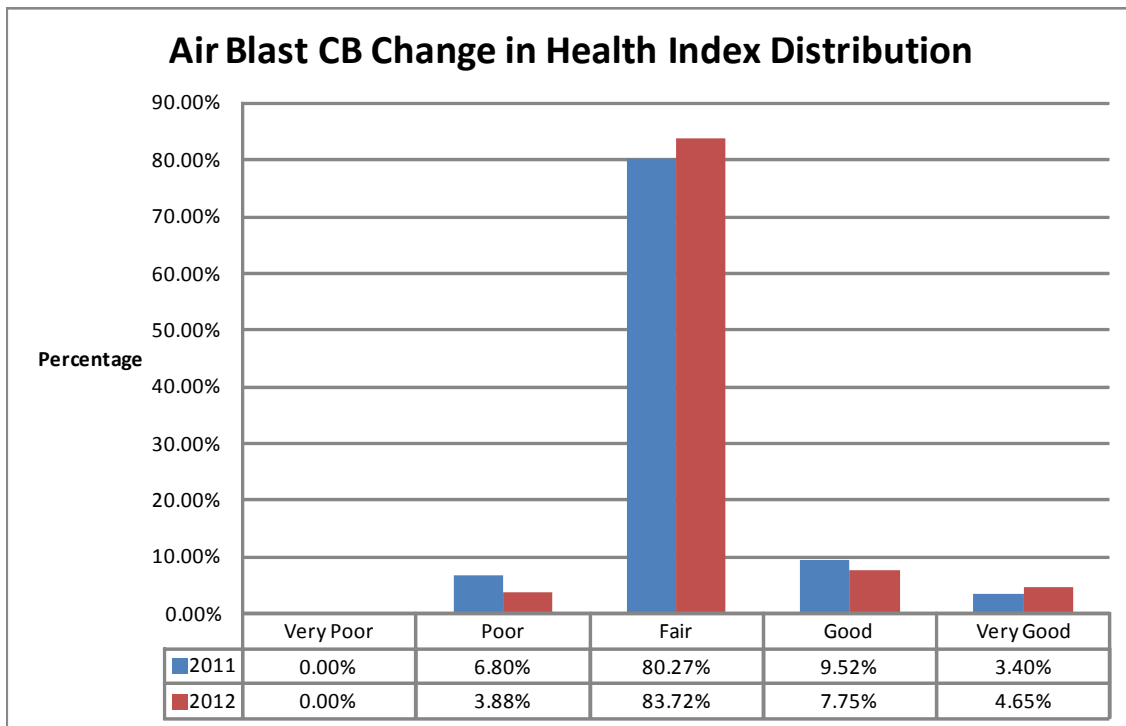


Figure 3-2 Health Index Distribution Comparison

4 Air Magnetic Circuit Breakers

The following illustrate the changes found for Air Magnetic Circuit Breakers.

4.1 Changes in Health Index Formulation

There were no changes within the Calculator with respect to Health Index formulation.

4.2 Changes in Granularity

There were no changes within the Calculator with respect to granularity.

4.3 Changes in Sample Size

A summary of Population and Sample Size information for Air Magnetic Circuit Breakers is shown on Table 4-1. "Sample Size" and "Insufficient Data for HI" are given in terms of percentage of the total asset population. This information is graphically represented on Figure 4-1. There was a 2.02% decrease in population but a 7.92% decrease in sample size.

Table 4-1 Sample Size Summary

Year	Sample Size		
	Population	Sample Size	Insufficient Data for HI
2011	643	54.43%	45.57%
2012	630	46.51%	53.49%
Change	-2.02%	-7.92%	7.92%

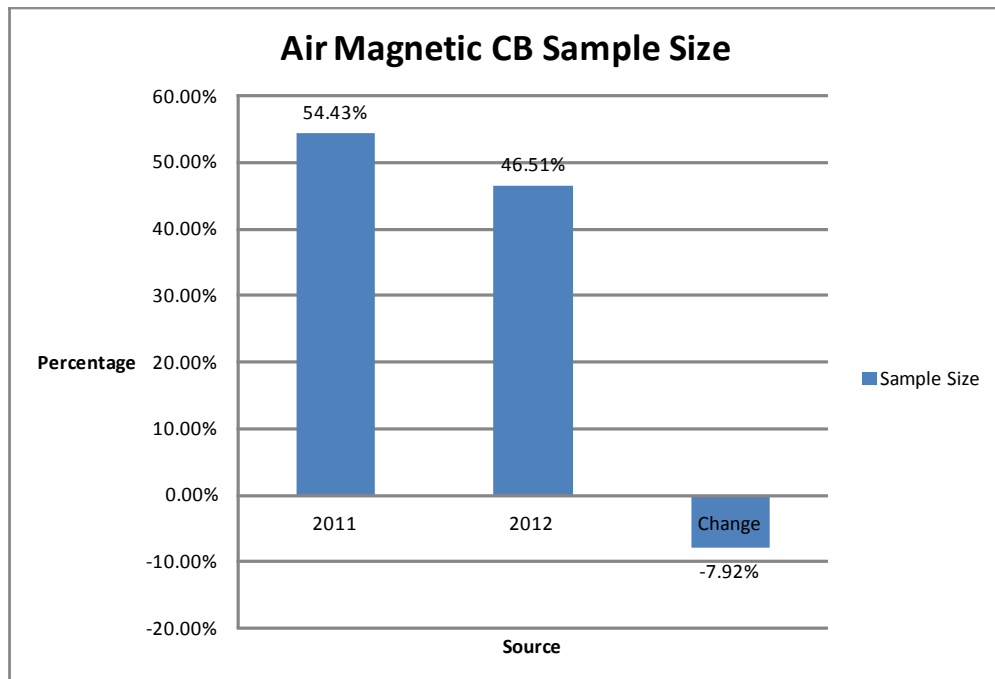


Figure 4-1 Sample Sizes for 2011 and 2012

4.4 Changes in Health Index Classification

A summary of the 2011 and 2012 Health Index distributions for Air Magnetic Circuit Breakers are shown on Table 4-2 and graphically represented on Figure 4-2. The results are given in terms of percentage of the total asset population. The percentage of units in good and very good conditions increased by 3.36%.

Table 4-2 Health Index Distribution Summary

Year	HI Distribution				
	Very Poor	Poor	Fair	Good	Very Good
2011	0.00%	4.00%	59.43%	32.57%	4.00%
2012	0.00%	3.07%	57.00%	35.15%	4.78%
Change	0.00%	-0.93%	-2.43%	2.58%	0.78%

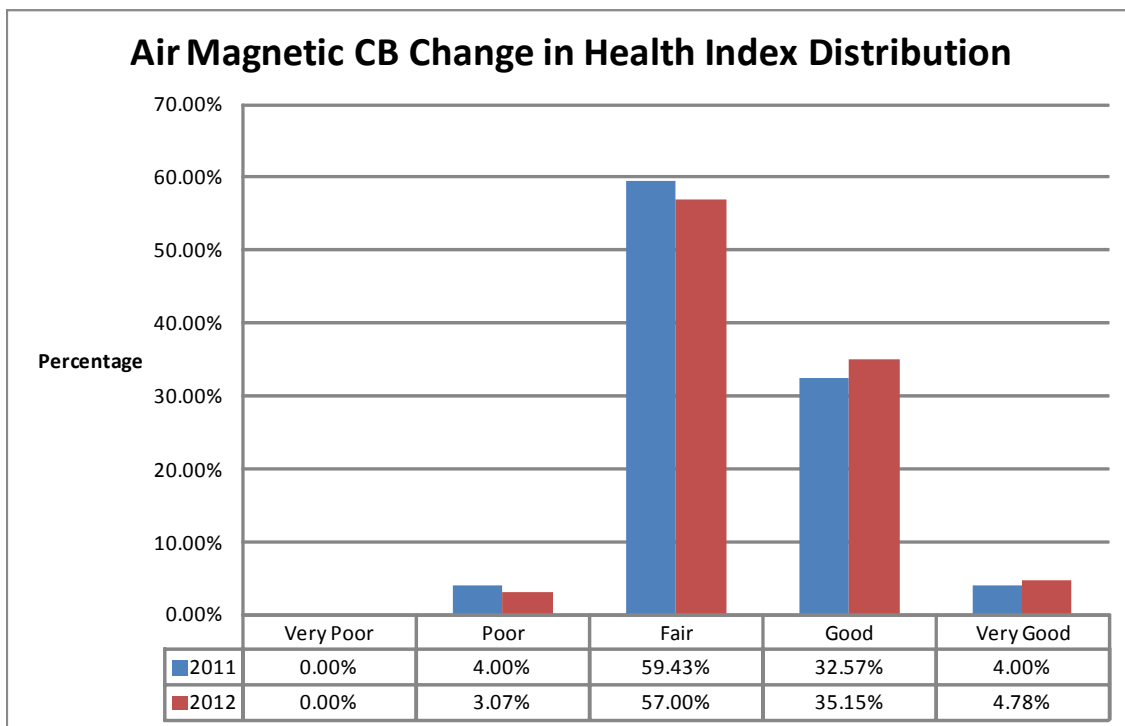


Figure 4-2 Health Index Distribution Comparison

5 Oil Circuit Breakers

The following illustrate the changes found for Oil Circuit Breakers.

5.1 Changes in Health Index Formulation

There were no changes within the Calculator with respect to Health Index formulation.

5.2 Changes in Granularity

There were no changes within the Calculator with respect to granularity.

5.3 Changes in Sample Size

A summary of Population and Sample Size information for Oil Circuit Breakers is shown on Table 5-1 “Sample Size” and “Insufficient Data for HI” are given in terms of percentage of the total asset population. This information is graphically represented on Figure 5-1. There was a significant increase in population, 7.28%; however, there was also a significant, 5.89%, decrease in sample size.

Table 5-1 Sample Size Summary

Year	Sample Size		
	Population	Sample Size	Insufficient Data for HI
2011	371	46.09%	53.91%
2012	398	40.20%	59.80%
Change	7.28%	-5.89%	5.89%

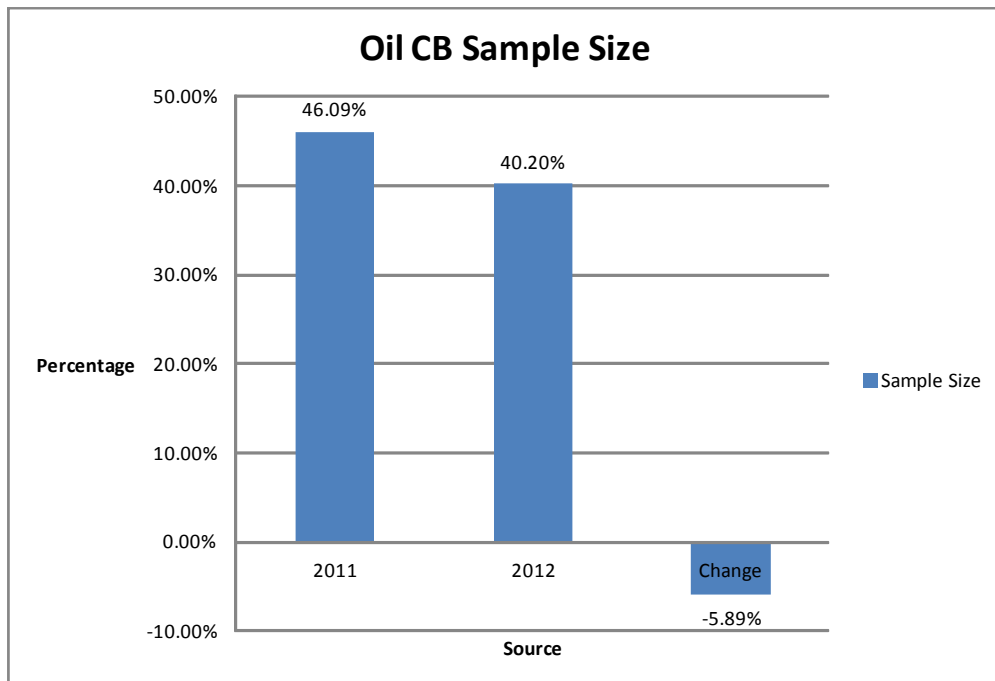


Figure 5-1 Sample Sizes for 2011 and 2012

5.4 Changes in Health Index Classification

A summary of the 2011 and 2012 Health Index distributions for Oil Circuit Breakers are shown on Table 5-2 and graphically represented on Figure 5-2. The results are given in terms of percentage of the total asset population. There were 3.49% more categorized as poor and very poor.

Table 5-2 Health Index Distribution Summary

Year	HI Distribution				
	Very Poor	Poor	Fair	Good	Very Good
2011	0.58%	4.68%	87.13%	7.60%	0.00%
2012	1.25%	7.50%	83.75%	7.50%	0.00%
Change	0.67%	2.82%	-3.38%	-0.10%	0.00%

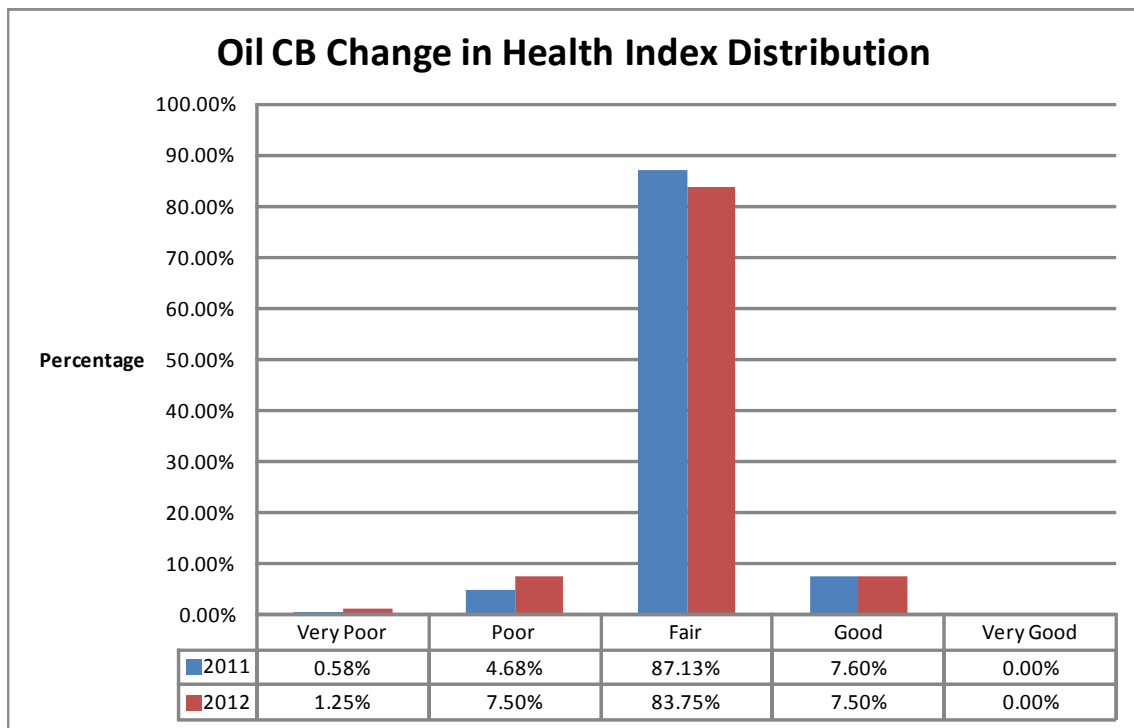


Figure 5-2 Health Index Distribution Comparison

6 Oil KSO Circuit Breakers

The following illustrate the changes found for Oil KSO Circuit Breakers.

6.1 Changes in Health Index Formulation

There were no changes within the Calculator with respect to Health Index formulation.

6.2 Changes in Granularity

There were no changes within the Calculator with respect to granularity.

6.3 Changes in Sample Size

A summary of Population and Sample Size information for Oil KSO Circuit Breakers is shown on Table 6-1. "Sample Size" and "Insufficient Data for HI" are given in terms of percentage of the total asset population. This information is graphically represented on Figure 6-1. There was a decrease in population but a significant, 11.51%, increase in sample size.

Table 6-1 Sample Size Summary

Year	Sample Size		
	Population	Sample Size	Insufficient Data for HI
2011	66	18.18%	81.82%
2012	64	29.69%	70.31%
Change	-3.03%	11.51%	-11.51%

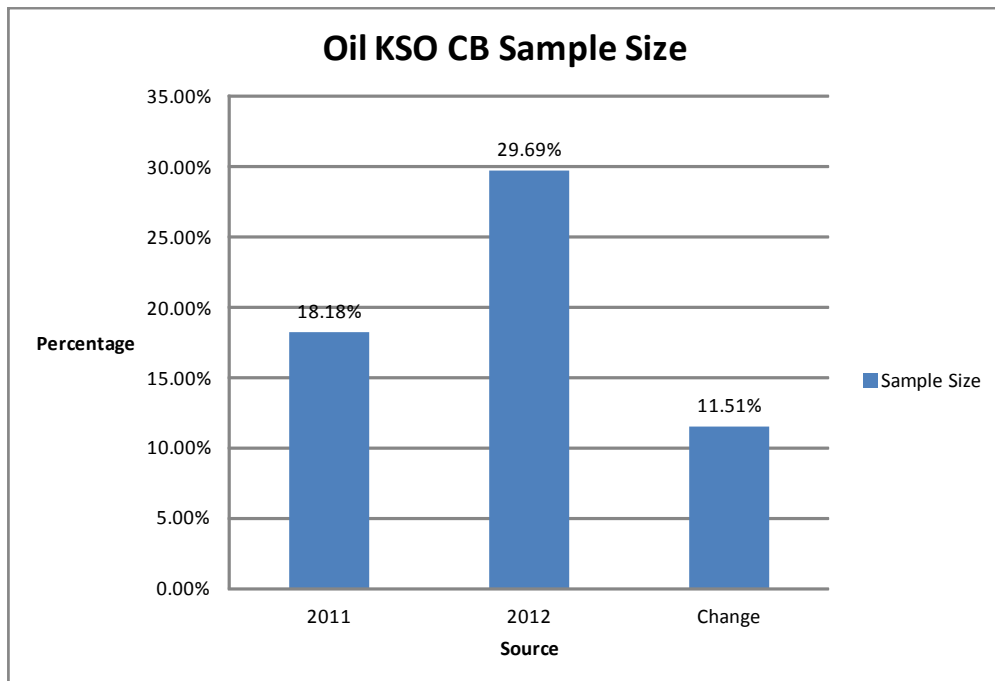


Figure 6-1 Sample Sizes for 2011 and 2012

6.4 Changes in Health Index Classification

A summary of the 2011 and 2012 Health Index distributions for Oil KSO Circuit Breakers are shown on Table 6-2 and graphically represented on Figure 6-2. The results are given in terms of percentage of the total asset population. There was an overall drop of assets in asset health, with 12.72% more classified as poor.

Table 6-2 Health Index Distribution Summary

Year	HI Distribution				
	Very Poor	Poor	Fair	Good	Very Good
2011	0.00%	8.33%	58.33%	25.00%	8.33%
2012	0.00%	21.05%	52.63%	26.32%	0.00%
Change	0.00%	12.72%	-5.70%	1.32%	-8.33%

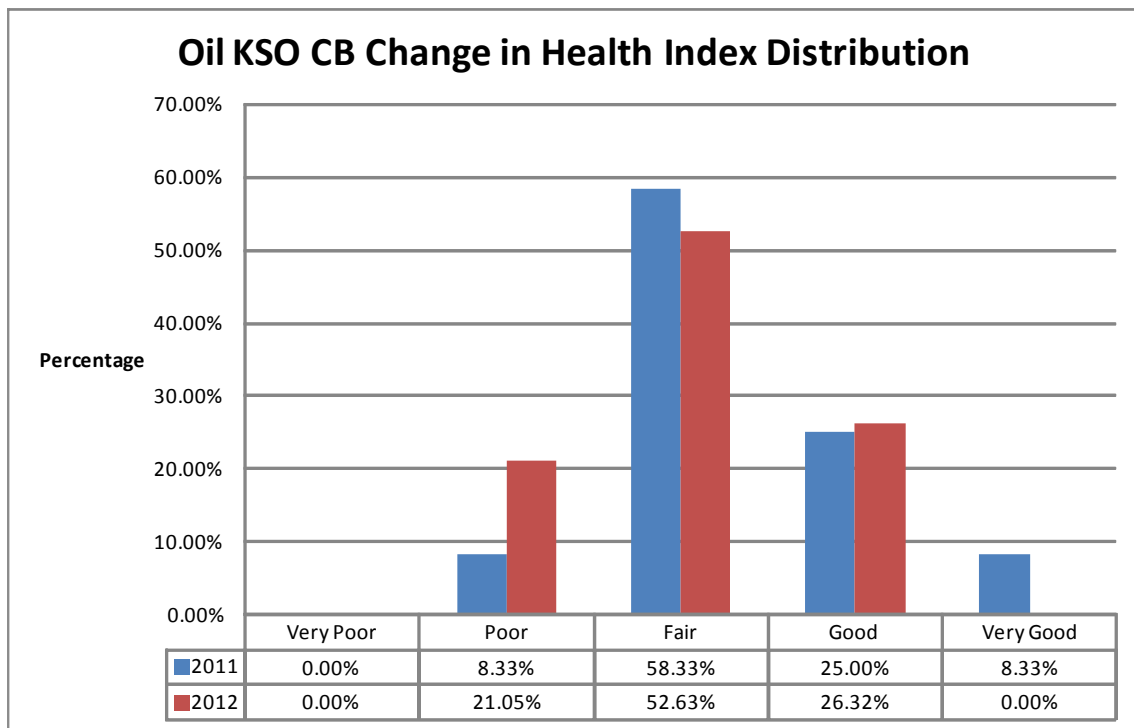


Figure 6-2 Health Index Distribution Comparison

7 SF6 Circuit Breaker

The following illustrate the changes found for SF6 Circuit Breaker.

7.1 Changes in Health Index Formulation

There were no changes within the Calculator with respect to Health Index formulation.

7.2 Changes in Granularity

There were no changes within the Calculator with respect to granularity.

7.3 Changes in Sample Size

A summary of Population and Sample Size information for SF6 Circuit Breaker is shown on Table 7-1. "Sample Size" and "Insufficient Data for HI" are given in terms of percentage of the total asset population. This information is graphically represented on Figure 7-1. There was a 7.62% increase in population and a slight decrease in sample size.

Table 7-1 Sample Size Summary

Year	Sample Size		
	Population	Sample Size	Insufficient Data for HI
2011	223	27.80%	72.20%
2012	240	26.67%	73.33%
Change	7.62%	-1.14%	1.14%

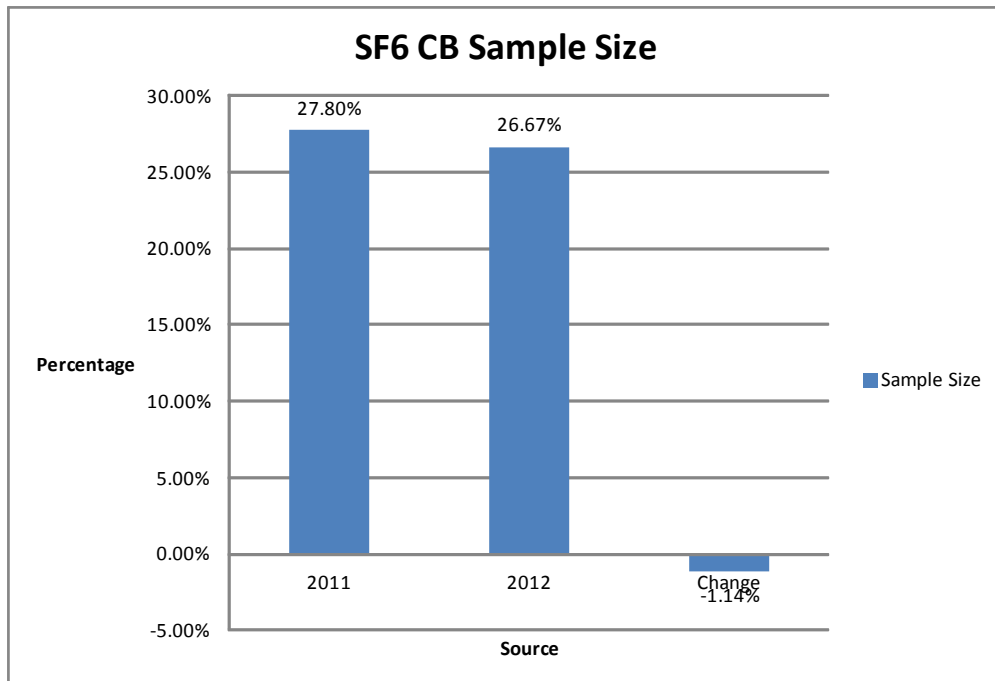


Figure 7-1 Sample Sizes for 2011 and 2012

7.4 Changes in Health Index Classification

A summary of the 2011 and 2012 Health Index distributions for SF6 Circuit Breaker are shown on Table 7-2 and graphically represented on Figure 7-2. The results are given in terms of percentage of the total asset population. There was a slight improvement in the overall health, with 1.46%, more in very good condition.

Table 7-2 Health Index Distribution Summary

Year	HI Distribution				
	Very Poor	Poor	Fair	Good	Very Good
2011	0.00%	0.00%	1.61%	45.16%	53.23%
2012	0.00%	0.00%	1.56%	43.75%	54.69%
Change	0.00%	0.00%	-0.05%	-1.41%	1.46%

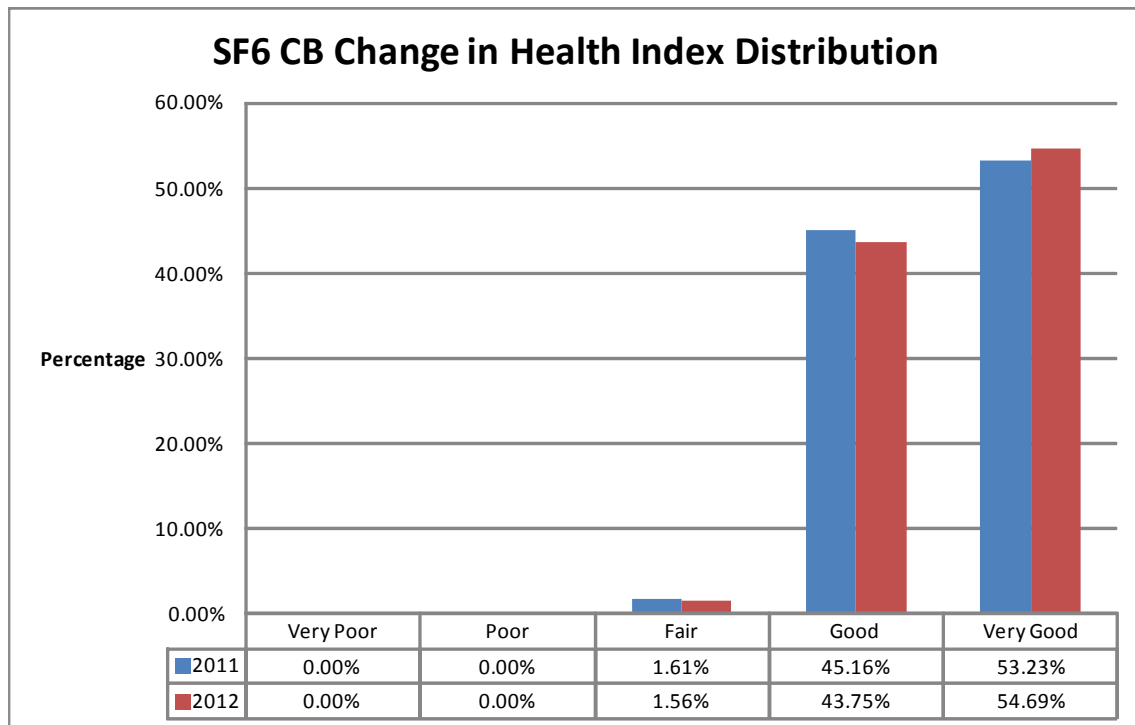


Figure 7-2 Health Index Distribution Comparison

8 Vacuum Circuit Breakers

The following illustrate the changes found for Vacuum Circuit Breakers.

8.1 Changes in Health Index Formulation

There were no changes within the Calculator with respect to Health Index formulation.

8.2 Changes in Granularity

There were no changes within the Calculator with respect to granularity.

8.3 Changes in Sample Size

A summary of Population and Sample Size information for Vacuum Circuit Breakers is shown on Table 8-1. "Sample Size" and "Insufficient Data for HI" are given in terms of percentage of the total asset population. This information is graphically represented on Figure 8-1. The population increased by 8.98%. The sample size has also increased by 4.52%.

Table 8-1 Sample Size Summary

Year	Sample Size		
	Population	Sample Size	Insufficient Data for HI
2011	501	60.68%	39.32%
2012	546	65.20%	34.80%
Change	8.98%	4.52%	-4.52%

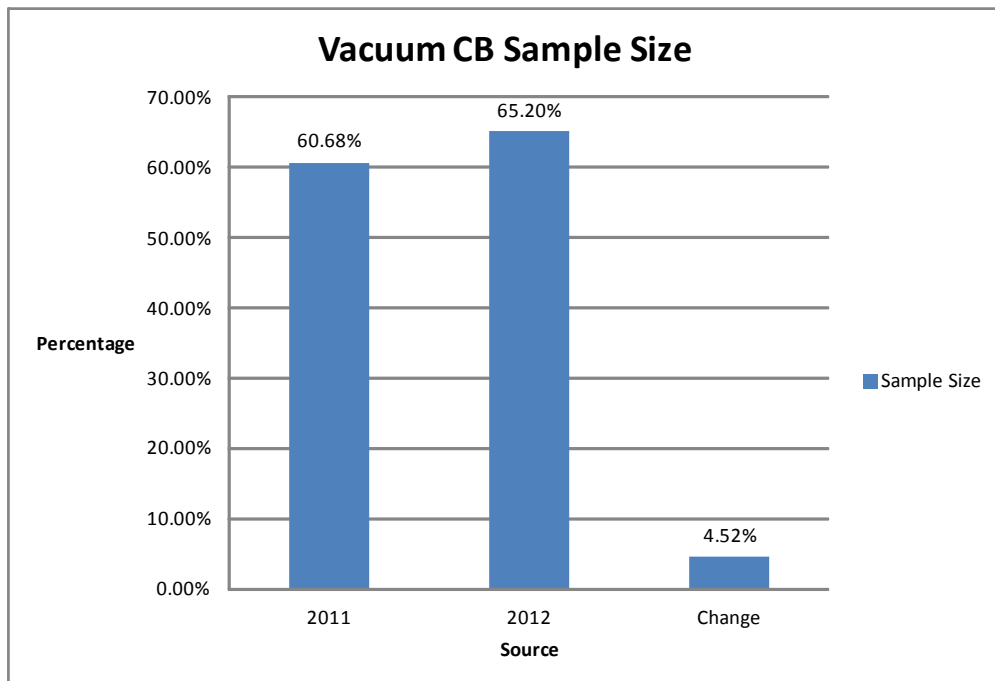


Figure 8-1 Sample Sizes for 2011 and 2012

8.4 Changes in Health Index Classification

A summary of the 2011 and 2012 Health Index distributions for Vacuum Circuit Breakers are shown on Table 8-2 and graphically represented on Figure 8-2. The results are given in terms of percentage of the total asset population. With more newly installed units, there were 4.95% more in very good condition.

Table 8-2 Health Index Distribution Summary

Year	HI Distribution				
	Very Poor	Poor	Fair	Good	Very Good
2011	0.00%	0.33%	6.91%	13.16%	79.61%
2012	0.00%	0.28%	5.90%	9.27%	84.55%
Change	0.00%	-0.05%	-1.01%	-3.89%	4.95%

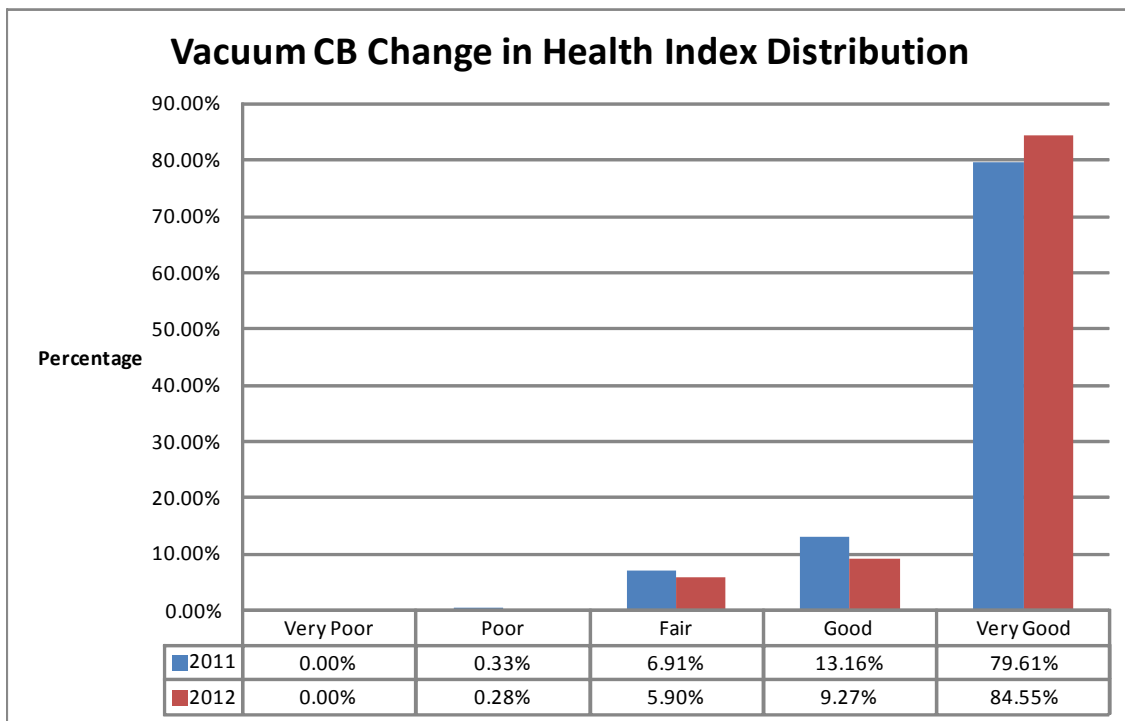


Figure 8-2 Health Index Distribution Comparison

9 Network Transformers

The following illustrate the changes found for Network Transformers.

9.1 Changes in Health Index Formulation

The Health Index Formula remained the same between 2011 and 2012.

9.2 Changes in Granularity

There were no changes in granularity between 2011 and 2012. Unlike the 2010 Kinectrics stand alone network assessment, network protectors were not considered as a separate asset category.

9.3 Changes in Sample Size

A summary of Population and Sample Size information for Network Transformers is shown on Table 9-1. "Sample Size" and "Insufficient Data for HI" are given in terms of percentage of the total asset population. This information is graphically represented on Figure 9-1. There was a slight decrease in population but a significant increase, 8.15%, in sample size.

Table 9-1 Sample Size Summary

Year	Sample Size		
	Population	Sample Size	Insufficient Data for HI
2011	1899	90.36%	9.64%
2012	1880	98.51%	1.49%
Change	-1.00%	8.15%	-8.15%

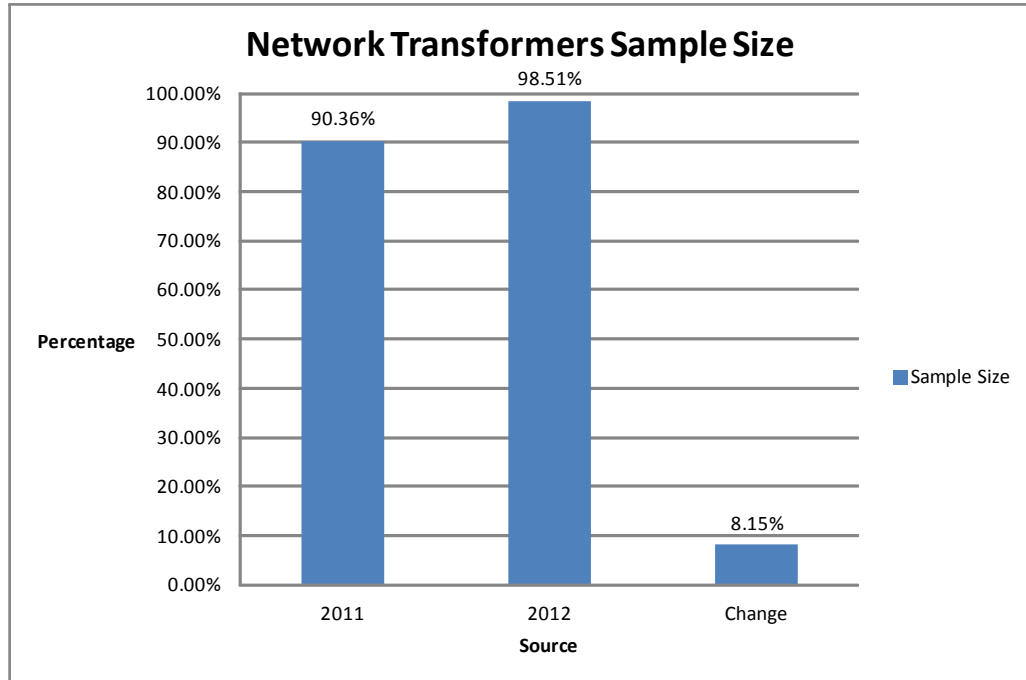


Figure 9-1 Sample Sizes for 2011 and 2012

9.4 Changes in Health Index Classification

A summary of the 2011 and 2012 Health Index distributions for Network Transformers are shown on Table 9-2 and graphically represented on Figure 9-2. The results are given in terms of percentage of the total asset population. There appears to be an overall decline in health, with 4.04% less in very good condition.

Year	HI Distribution				
	Very Poor	Poor	Fair	Good	Very Good
2011	0.00%	0.00%	7.87%	30.54%	61.60%
2012	0.00%	0.05%	7.99%	34.40%	57.56%
Change	0.00%	0.05%	0.12%	3.86%	-4.04%

Table 9-2 Health Index Distribution Summary

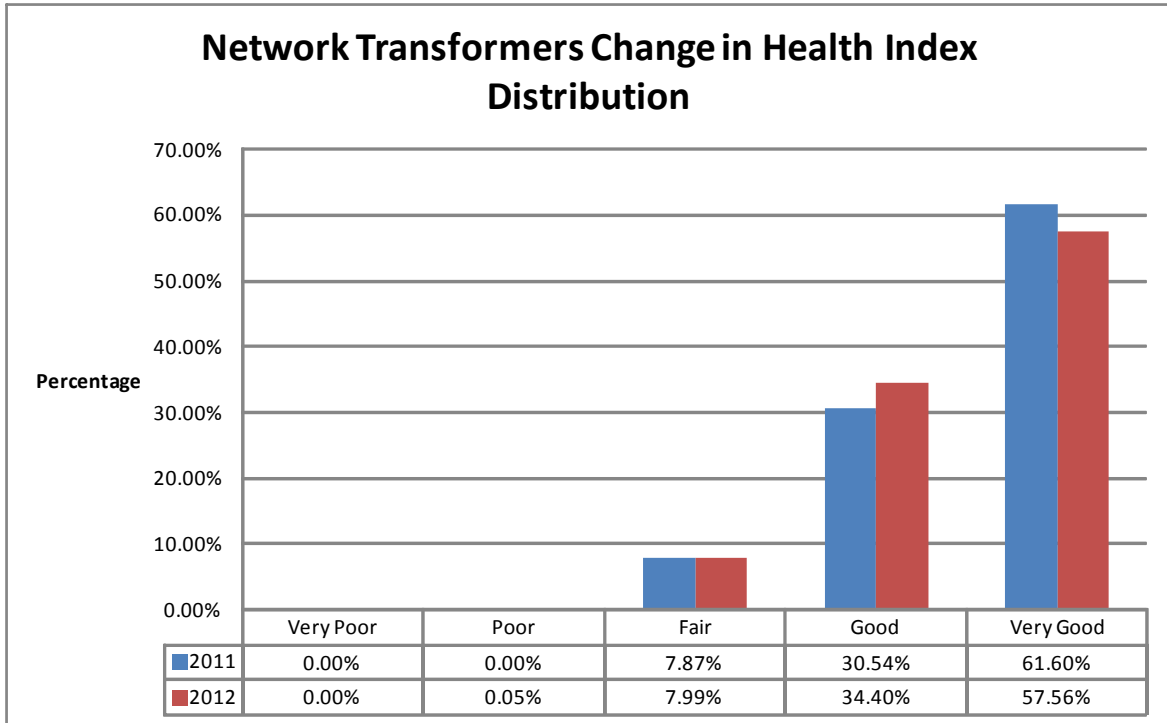


Figure 9-2 Health Index Distribution Comparison

10 Submersible Transformers

The following illustrate the changes found for Submersible Transformers.

10.1 Changes in Health Index Formulation

There were no changes within the Calculator with respect to Health Index formulation.

10.2 Changes in Granularity

There were no changes within the Calculator with respect to granularity.

10.3 Changes in Sample Size

A summary of Population and Sample Size information for Submersible Transformers is shown on Table 10-1. "Sample Size" and "Insufficient Data for HI" are given in terms of percentage of the total asset population. This information is graphically represented on Figure 10-1. The population remained fairly steady but the sample size increased by 3.97%.

Table 10-1 Sample Size Summary

Year	Sample Size		
	Population	Sample Size	Insufficient Data for HI
2011	9254	86.32%	13.68%
2012	9249	90.29%	9.71%
Change	-0.05%	3.97%	-3.97%

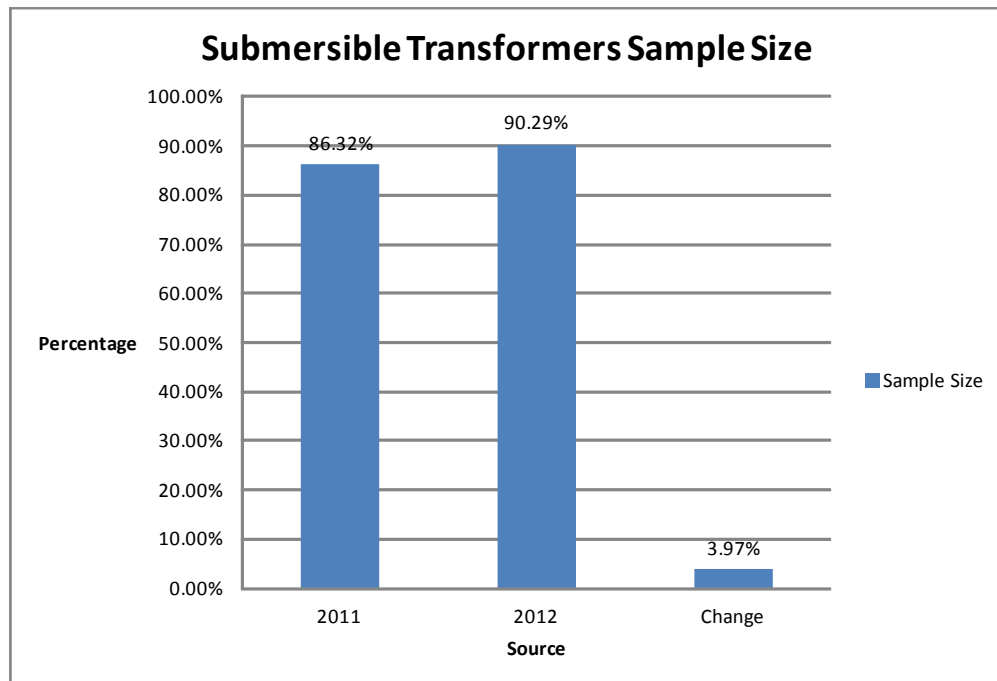


Figure 10-1 Sample Sizes for 2011 and 2012

10.4 Changes in Health Index Classification

A summary of the 2011 and 2012 Health Index distributions for Submersible Transformers are shown on Table 10-2 and graphically represented on Figure 10-2. The results are given in terms of percentage of the total asset population. The overall health of the population improved, with 5.48% more in the very good category. It should be noted, however, that the Health Index formulation may not be a true representation of asset condition as it does not take into account the known issues with multi-taps. In 2010, multi-taps were the second largest contributor to reliability issues; over 600 units have since been replaced.

Table 10-2 Health Index Distribution Summary

Year	HI Distribution				
	Very Poor	Poor	Fair	Good	Very Good
2011	0.00%	0.01%	1.16%	26.59%	72.23%
2012	0.00%	0.02%	1.33%	20.93%	77.72%
Change	0.00%	0.01%	0.16%	-5.66%	5.48%

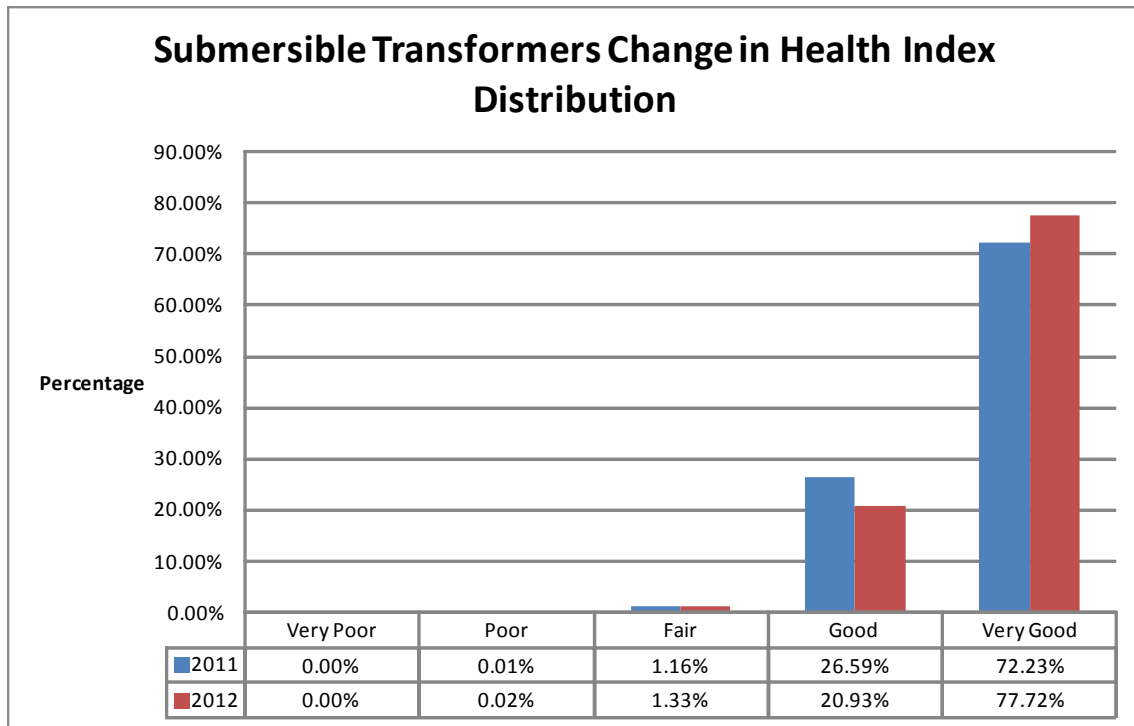


Figure 10-2 Health Index Distribution Comparison

11 Vault Transformers

The following illustrate the changes found for Vault Transformers.

11.1 Changes in Health Index Formulation

There were no changes within the Calculator with respect to Health Index formulation.

11.2 Changes in Granularity

There were no changes within the Calculator with respect to granularity.

11.3 Changes in Sample Size

A summary of Population and Sample Size information for Vault Transformers is shown on Table 11-1. "Sample Size" and "Insufficient Data for HI" are given in terms of percentage of the total asset population. This information is graphically represented on Figure 11-1. There was a slight decrease in population and a slight increase in sample size.

Table 11-1 Sample Size Summary

Year	Sample Size		
	Population	Sample Size	Insufficient Data for HI
2011	13412	81.08%	18.92%
2012	13263	82.22%	17.78%
Change	-1.11%	1.14%	-1.14%

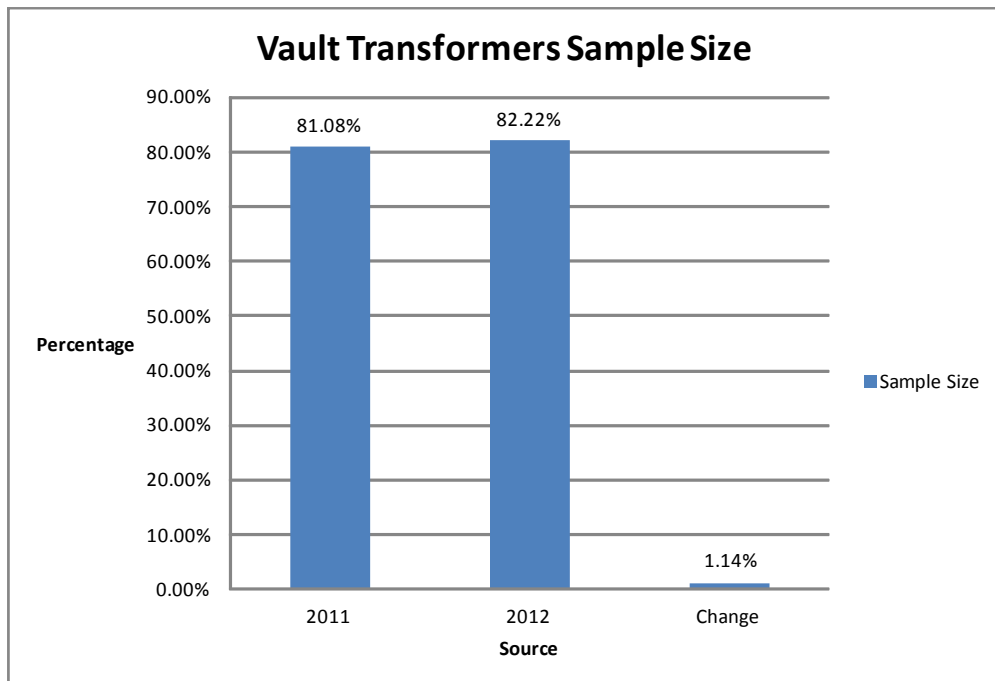


Figure 11-1 Sample Sizes for 2011 and 2012

11.4 Changes in Health Index Classification

A summary of the 2011 and 2012 Health Index distributions for Vault Transformers are shown on Table 11-2 and graphically represented on Figure 11-2. The results are given in terms of percentage of the total asset population. There has been an overall decline in asset condition, with 6.08% less in very good condition.

Table 11-2 Health Index Distribution Summary

Year	HI Distribution				
	Very Poor	Poor	Fair	Good	Very Good
2011	0.00%	0.24%	15.46%	29.85%	54.45%
2012	0.06%	0.39%	18.82%	32.36%	48.37%
Change	0.06%	0.16%	3.36%	2.51%	-6.08%

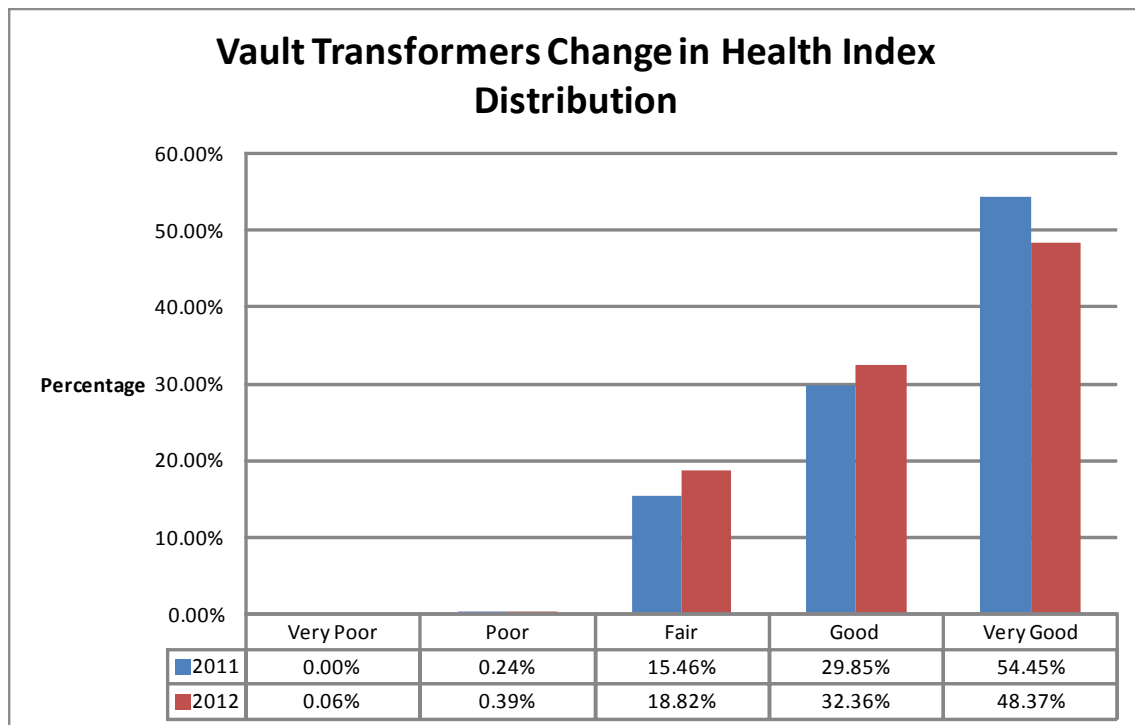


Figure 11-2 Health Index Distribution Comparison

12 Padmounted Transformers

The following illustrate the changes found for Padmounted Transformers.

12.1 Changes in Health Index Formulation

There were no changes within the Calculator with respect to Health Index formulation.

12.2 Changes in Granularity

There were no changes within the Calculator with respect to granularity.

12.3 Changes in Sample Size

A summary of Population and Sample Size information for Padmounted Transformers is shown on Table 12-1. "Sample Size" and "Insufficient Data for HI" are given in terms of percentage of the total asset population. This information is graphically represented on Figure 12-1. There was a minimal decrease in population and a slight, 1.85%, decrease in sample size.

Table 12-1 Sample Size Summary

Year	Sample Size		
	Population	Sample Size	Insufficient Data for HI
2011	7004	78.87%	21.13%
2012	6950	77.02%	22.98%
Change	-0.77%	-1.85%	1.85%

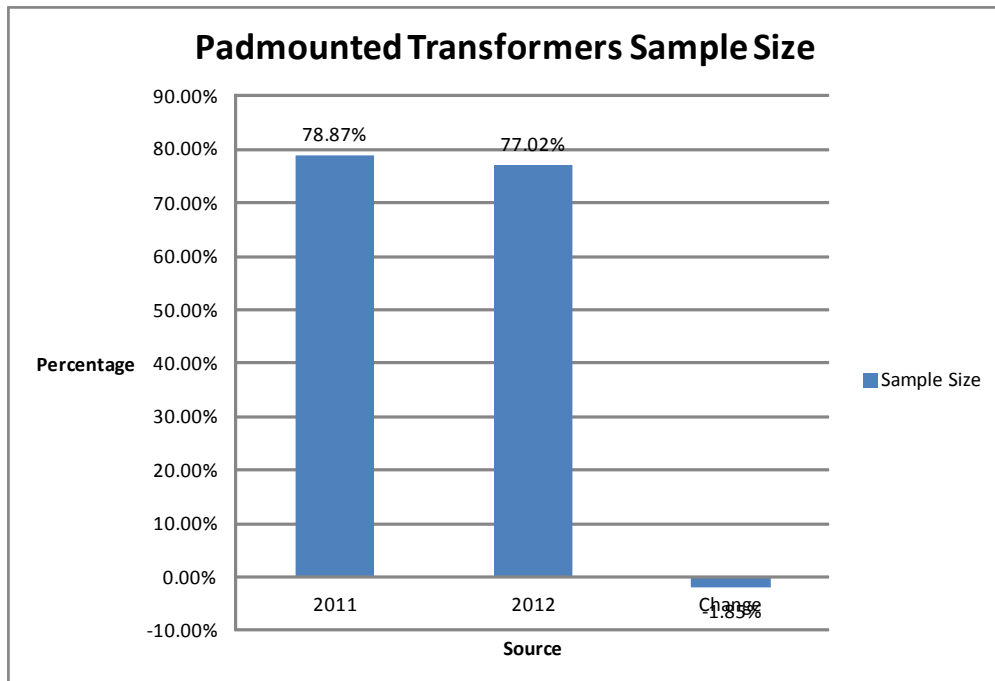


Figure 12-1 Sample Sizes for 2011 and 2012

12.4 Changes in Health Index Classification

A summary of the 2011 and 2012 Health Index distributions for Padmounted Transformers are shown on Table 12-2 and graphically represented on Figure 12-2. The results are given in terms of percentage of the total asset population. There was an overall improvement in condition, with 5.74% more in very good condition.

Table 12-2 Health Index Distribution Summary

Year	HI Distribution				
	Very Poor	Poor	Fair	Good	Very Good
2011	0.00%	0.00%	0.83%	15.95%	83.22%
2012	0.00%	0.00%	0.50%	10.54%	88.96%
Change	0.00%	0.00%	-0.33%	-5.41%	5.74%

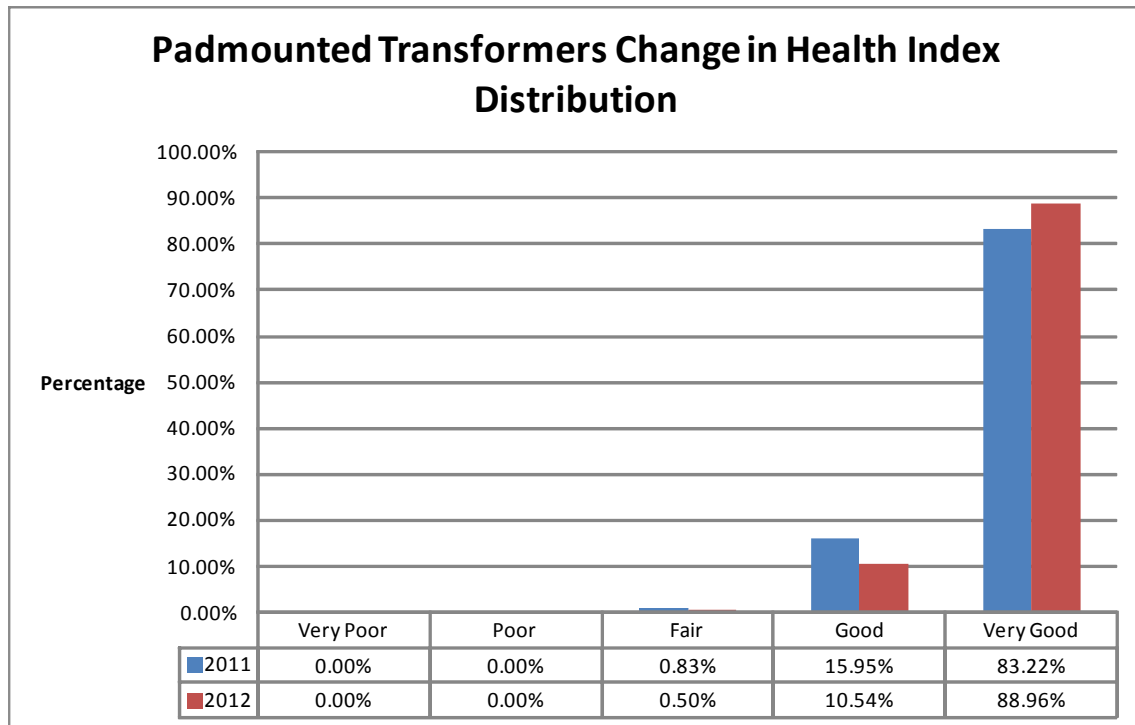


Figure 12-2 Health Index Distribution Comparison

13 Automatic Transfer Switches

The following illustrate the changes found for Automatic Transfer Switches.

13.1 Changes in Health Index Formulation

There were no changes within the Calculator with respect to Health Index formulation.

13.2 Changes in Granularity

There were no changes within the Calculator with respect to granularity.

13.3 Changes in Sample Size

A summary of Population and Sample Size information for Automatic Transfer Switches is shown on Table 13-1. "Sample Size" and "Insufficient Data for HI" are given in terms of percentage of the total asset population. This information is graphically represented on Figure 13-1. There was a large decrease in population. The sample size increased by 7.66%.

Table 13-1 Sample Size Summary

Year	Sample Size		
	Population	Sample Size	Insufficient Data for HI
2011	77	76.62%	23.38%
2012	70	84.29%	15.71%
Change	-9.09%	7.66%	-7.66%

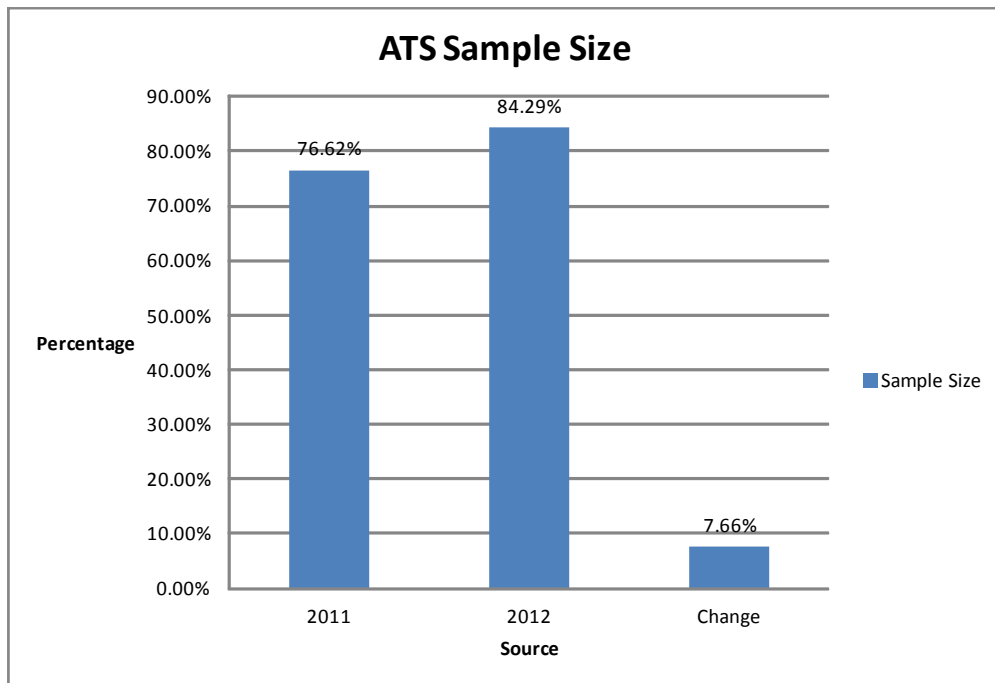


Figure 13-1 Sample Sizes for 2011 and 2012

13.4 Changes in Health Index Classification

A summary of the 2011 and 2012 Health Index distributions for Automatic Transfer Switches are shown on Table 13-2 and graphically represented on Figure 13-2. The results are given in terms of percentage of the total asset population. There was an overall improvement in condition, as 10.17% less were found to be in poor and very poor condition.

Table 13-2 Health Index Distribution Summary

Year	HI Distribution				
	Very Poor	Poor	Fair	Good	Very Good
2011	10.17%	27.12%	10.17%	30.51%	22.03%
2012	3.39%	23.73%	11.86%	35.59%	25.42%
Change	-6.78%	-3.39%	1.69%	5.08%	3.39%

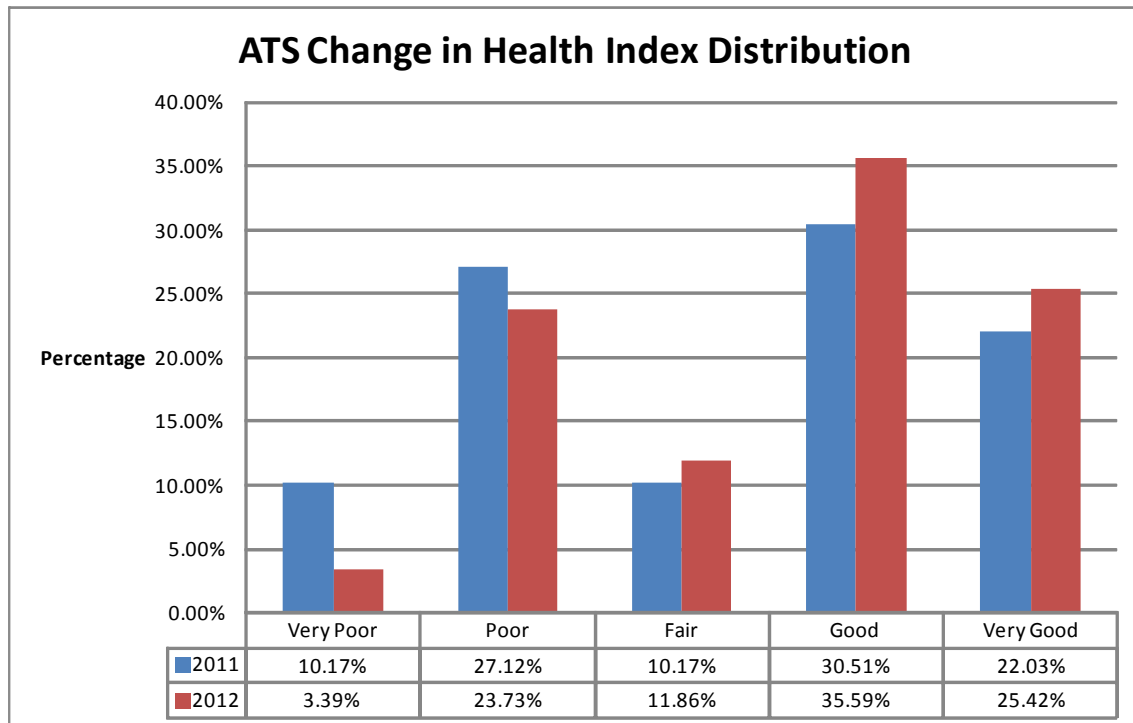


Figure 13-2 Health Index Distribution Comparison

14 Cable Chambers

The following illustrate the changes found for Cable Chambers.

14.1 Changes in Health Index Formulation

There were no changes within the Calculator with respect to Health Index formulation.

14.2 Changes in Granularity

There were no changes within the Calculator with respect to granularity.

14.3 Changes in Sample Size

A summary of Population and Sample Size information for Cable Chambers is shown on Table 14-1. "Sample Size" and "Insufficient Data for HI" are given in terms of percentage of the total asset population. This information is graphically represented on Figure 14-1. There was little change in population and sample size.

Table 14-1 Sample Size Summary

Year	Sample Size		
	Population	Sample Size	Insufficient Data for HI
2011	10896	24.53%	75.47%
2012	10854	24.30%	75.70%
Change	-0.39%	-0.24%	0.24%

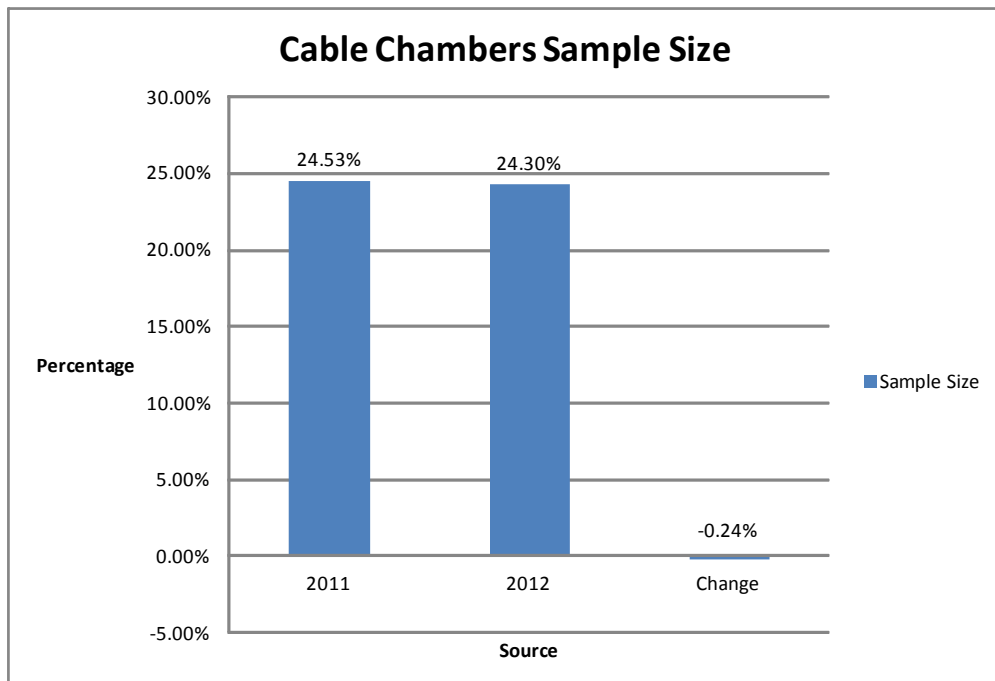


Figure 14-1 Sample Sizes for 2011 and 2012

14.4 Changes in Health Index Classification

A summary of the 2011 and 2012 Health Index distributions for Cable Chambers are shown on Table 14-2 and graphically represented on Figure 14-2. The results are given in terms of percentage of the total asset population. The Health Index distribution remained fairly steady.

Table 14-2 Health Index Distribution Summary

Year	HI Distribution				
	Very Poor	Poor	Fair	Good	Very Good
2011	0.11%	1.50%	9.02%	44.33%	45.04%
2012	0.11%	1.67%	9.40%	43.46%	45.35%
Change	0.00%	0.17%	0.39%	-0.87%	0.31%

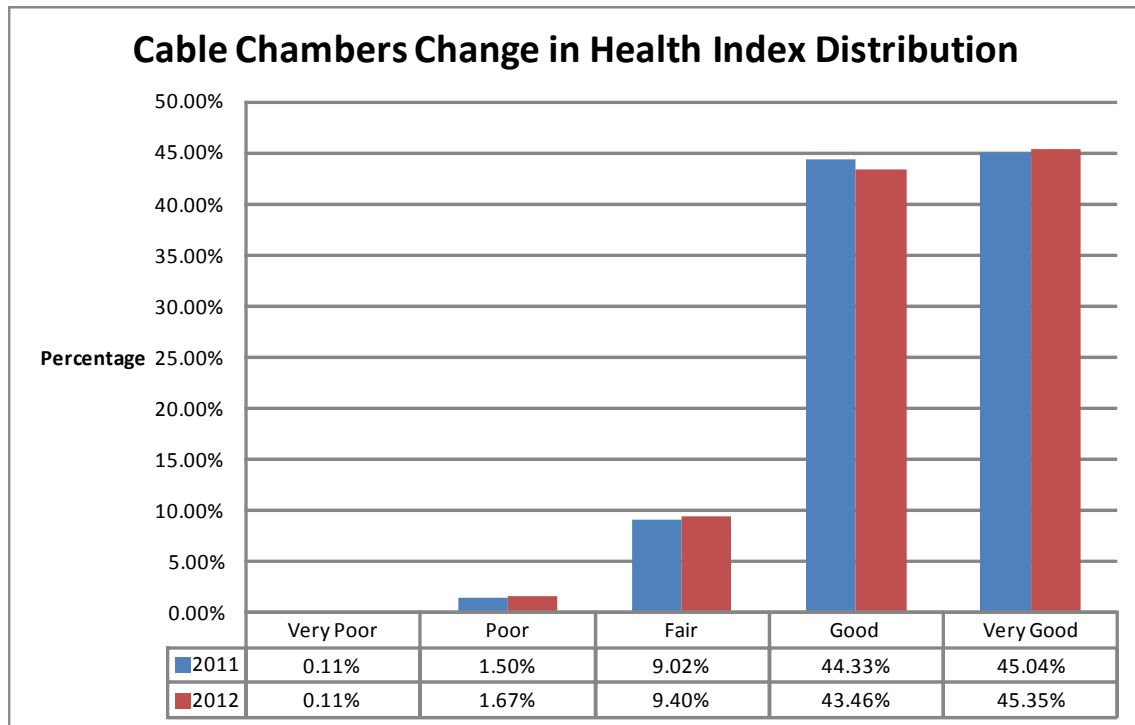


Figure 14-2 Health Index Distribution Comparison

15 Wood Poles

The following illustrate the changes found for Wood Poles.

15.1 Changes in Health Index Formulation

There were no changes within the Calculator with respect to Health Index formulation.

15.2 Changes in Granularity

There were no changes within the Calculator with respect to granularity.

15.3 Changes in Sample Size

A summary of Population and Sample Size information for Wood Poles is shown on Table 15-1. "Sample Size" and "Insufficient Data for HI" are given in terms of percentage of the total asset population. This information is graphically represented on Figure 15-1.

In 2011 assessment was conducted using manual spreadsheets. By 2012, the wood pole data had been migrated to Ellipse and the BI tool could be used to calculate the Health Index distribution.

There was a significant difference, 17.05%, in population between the manual spreadsheet of 2011 and Ellipse data of 2012. Between 2011 and 2012, there was a 7.56% decrease in sample size.

Table 15-1 Sample Size Summary

Year	Sample Size		
	Population	Sample Size	Insufficient Data for HI
2011	106860	42.46%	57.54%
2012	125080	34.91%	65.09%
Change	17.05%	-7.56%	7.56%

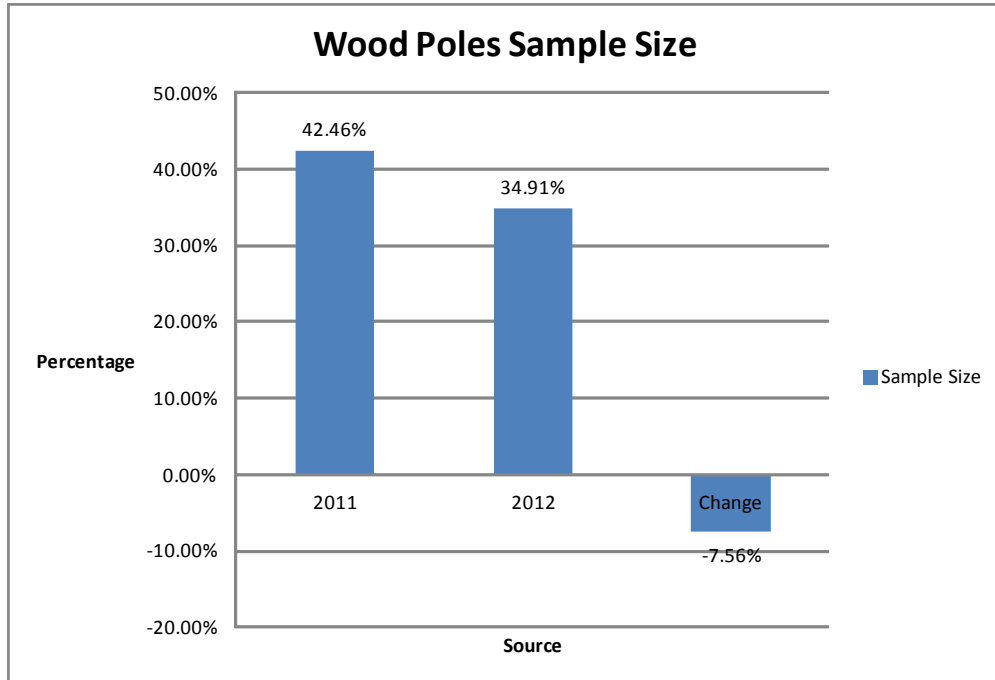


Figure 15-1 Sample Sizes for 2011 and 2012

15.4 Changes in Health Index Classification

A summary of the 2011 and 2012 Health Index distributions for Wood Poles are shown on Table 15-2 and graphically represented on Figure 15-2. The results are given in terms of percentage of the total asset population. There appears to be an overall decline in condition, with 4.89% less of the assets classified as good or very good.

Table 15-2 Health Index Distribution Summary

Year	HI Distribution				
	Very Poor	Poor	Fair	Good	Very Good
2011	2.48%	8.93%	39.92%	13.83%	34.85%
2012	2.52%	7.67%	46.02%	9.57%	34.22%
Change	0.04%	-1.26%	6.10%	-4.26%	-0.63%

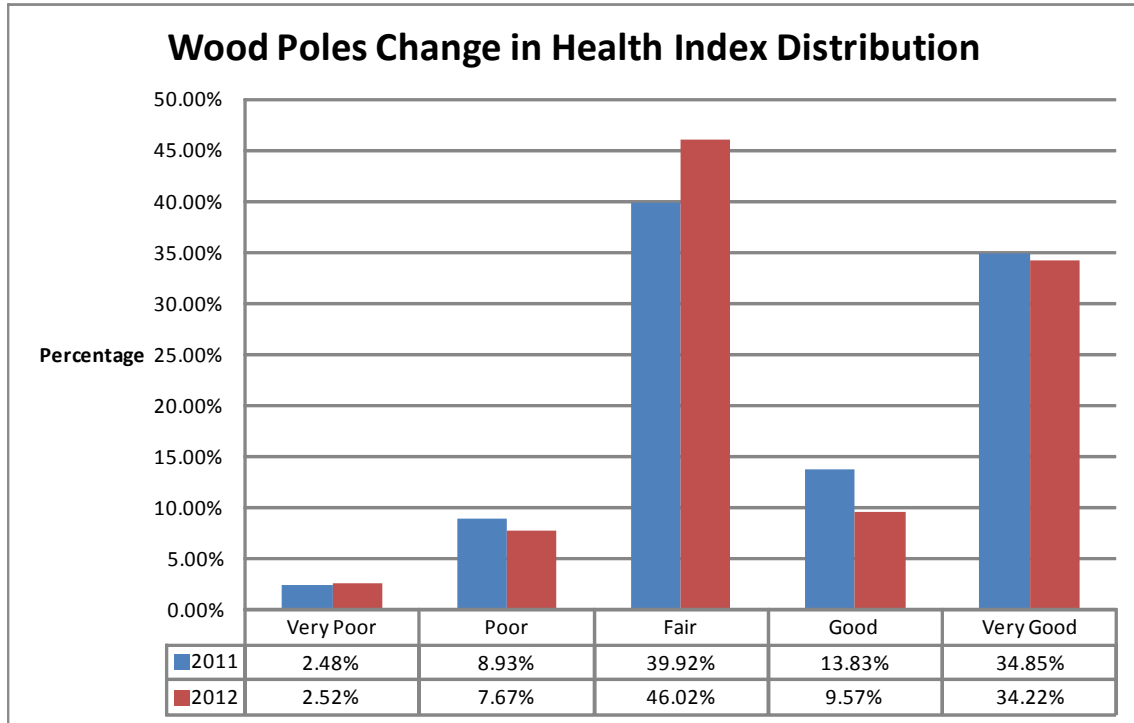


Figure 15-2 Health Index Distribution Comparison

16 Three Phase Overhead Gang (Rem.) Switches

The following illustrate the changes found for Three Phase Overhead Gang (Rem.) Switches.

16.1 Changes in Health Index Formulation

There were no changes within the Calculator with respect to Health Index formulation.

16.2 Changes in Granularity

There were no changes within the Calculator with respect to granularity.

16.3 Changes in Sample Size

A summary of Population and Sample Size information for Three Phase Overhead Gang (Rem.) Switches is shown on Table 16-1. "Sample Size" and "Insufficient Data for HI" are given in terms of percentage of the total asset population. This information is graphically represented on Figure 16-1. There is a significant 38.42% increase in population.

Table 16-1 Sample Size Summary

Year	Sample Size		
	Population	Sample Size	Insufficient Data for HI
2011	190	62.63%	37.37%
2012	263	51.71%	48.29%
Change	38.42%	-10.92%	10.92%

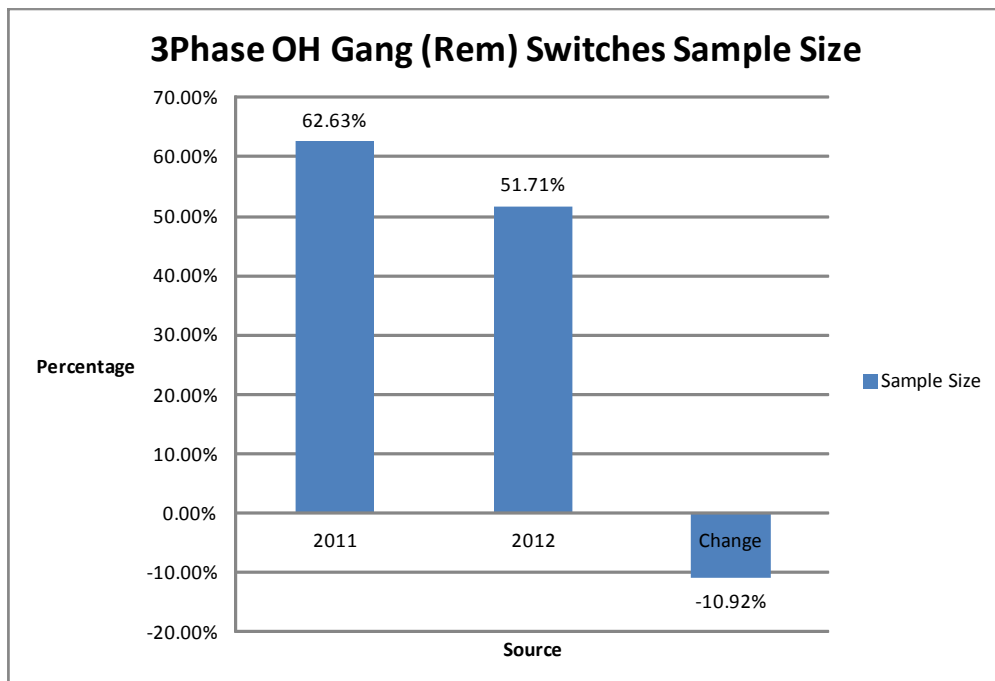


Figure 16-1 Sample Sizes for 2011 and 2012

16.4 Changes in Health Index Classification

A summary of the 2011 and 2012 Health Index distributions for Three Phase Overhead Gang (Rem.) Switches are shown on Table 16-2 and graphically represented on Figure 16-2. The results are given in terms of percentage of the total asset population. There was a slight improvement in overall health; 2.42% more units were in very good condition.

Table 16-2 Health Index Distribution Summary

Year	HI Distribution				
	Very Poor	Poor	Fair	Good	Very Good
2011	0.00%	0.00%	7.56%	64.71%	27.73%
2012	0.00%	0.00%	6.62%	63.24%	30.15%
Change	0.00%	0.00%	-0.95%	-1.47%	2.42%

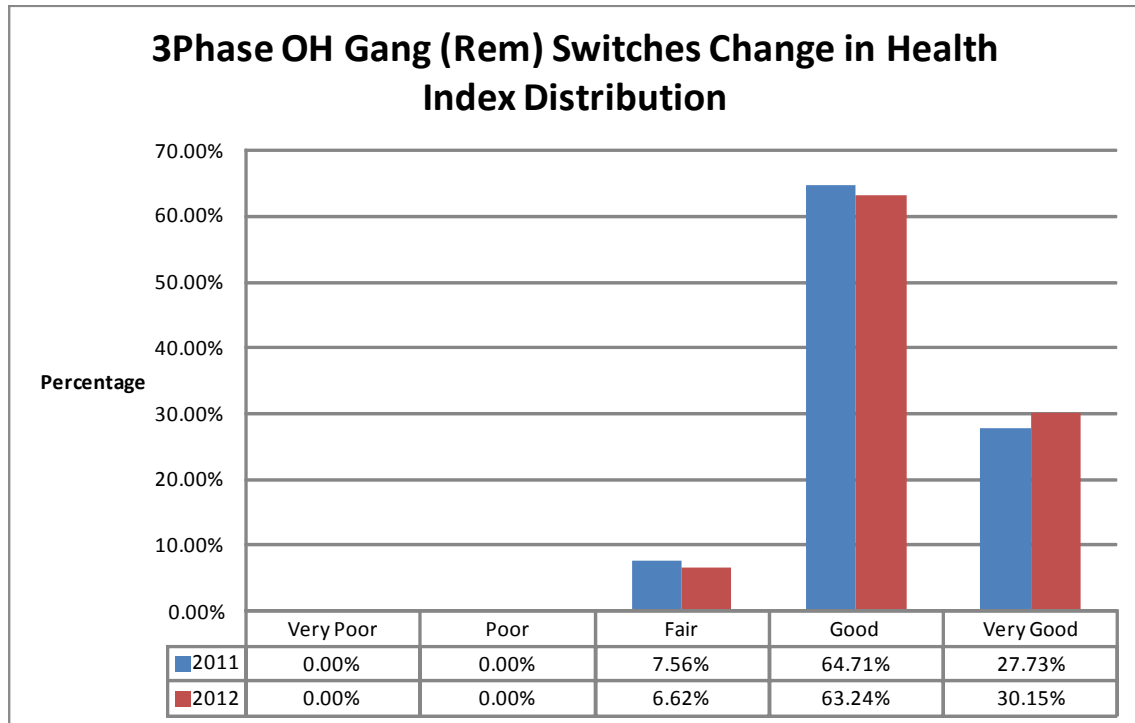


Figure 16-2 Health Index Distribution Comparison

17 Three Phase Overhead Gang (Man.) Switches

The following illustrate the changes found for Three Phase Overhead Gang (Man.) Switches.

17.1 Changes in Health Index Formulation

There were no changes within the Calculator with respect to Health Index formulation.

17.2 Changes in Granularity

There were no changes within the Calculator with respect to granularity.

17.3 Changes in Sample Size

A summary of Population and Sample Size information for Three Phase Overhead Gang (Man.) Switches is shown on Table 17-1. "Sample Size" and "Insufficient Data for HI" are given in terms of percentage of the total asset population. This information is graphically represented on Figure 17-1. The population dropped; sample size remained steady.

Table 17-1 Sample Size Summary

Year	Sample Size		
	Population	Sample Size	Insufficient Data for HI
2011	1278	6.10%	93.90%
2012	1069	5.99%	94.01%
Change	-16.35%	-0.12%	0.12%

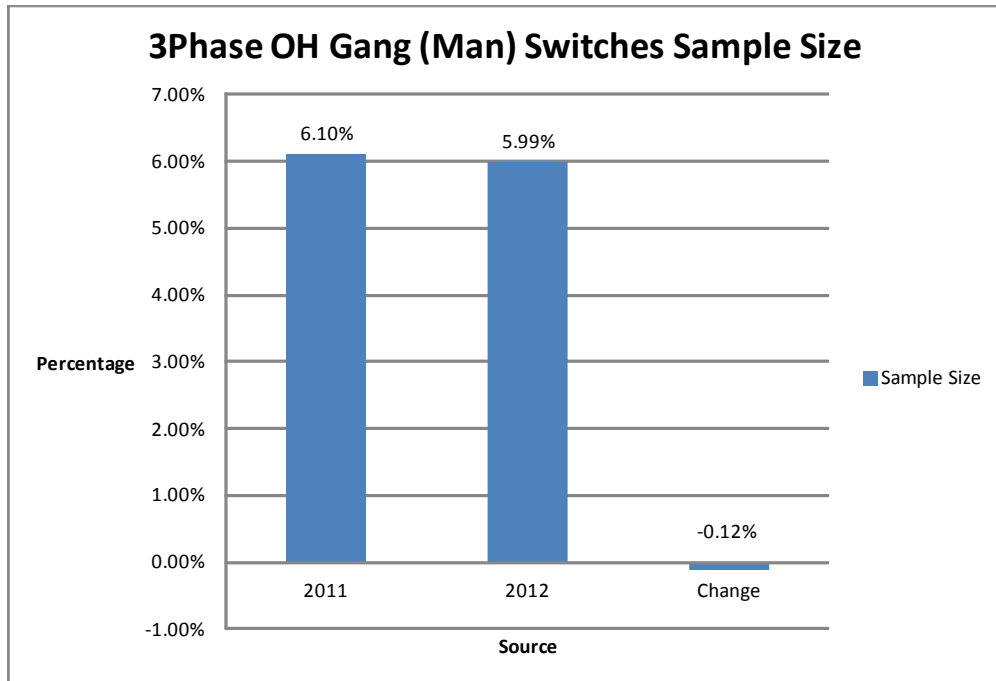


Figure 17-1 Sample Sizes for 2011 and 2012

17.4 Changes in Health Index Classification

A summary of the 2011 and 2012 Health Index distributions for Three Phase Overhead Gang (Man.) Switches are shown on Table 17-2 and graphically represented on Figure 17-2. The results are given in terms of percentage of the total asset population. There appears to be a decline in overall health, with 9.66% less in very good condition.

Table 17-2 Health Index Distribution Summary

Year	HI Distribution				
	Very Poor	Poor	Fair	Good	Very Good
2011	0.00%	0.00%	6.41%	44.87%	48.72%
2012	0.00%	0.00%	4.69%	56.25%	39.06%
Change	0.00%	0.00%	-1.72%	11.38%	-9.66%

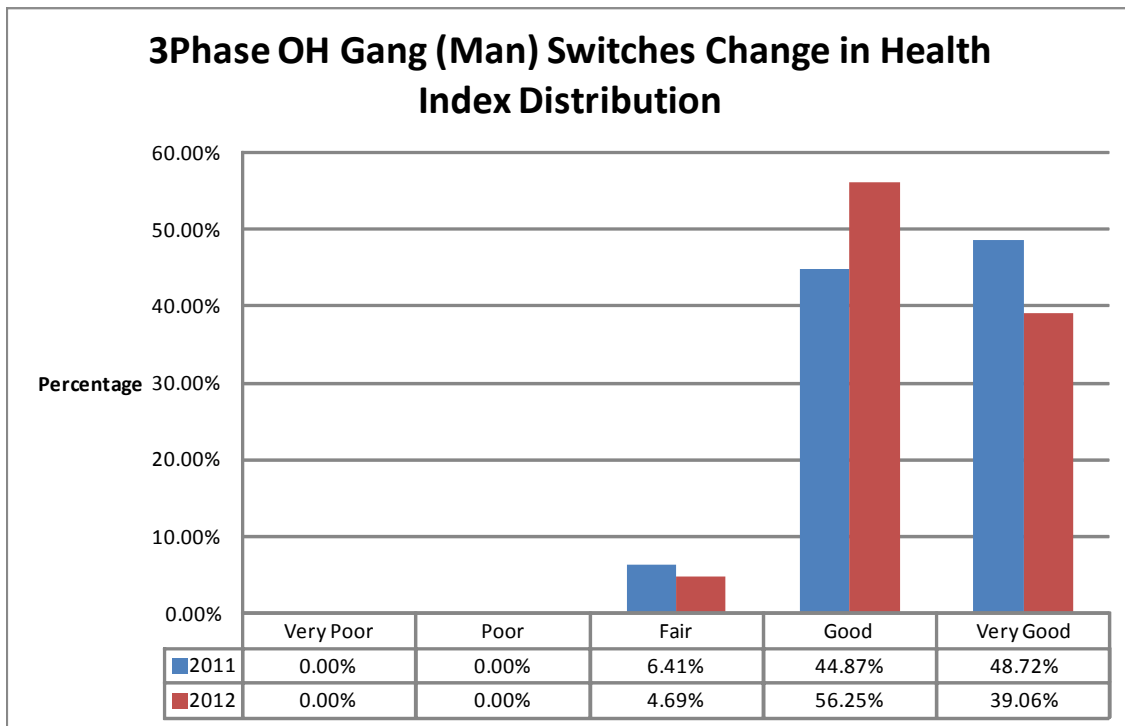


Figure 17-2 Health Index Distribution Comparison

18 SCADAMATE Switches

The following illustrate the changes found for SCADAMATE Switches.

18.1 Changes in Health Index Formulation

There were no changes within the Calculator with respect to Health Index formulation.

18.2 Changes in Granularity

There were no changes within the Calculator with respect to granularity.

18.3 Changes in Sample Size

A summary of Population and Sample Size information for SCADAMATE Switches is shown on Table 18-1. "Sample Size" and "Insufficient Data for HI" are given in terms of percentage of the total asset population. This information is graphically represented on Figure 18-1. The population and sample size increased.

Table 18-1 Sample Size Summary

Year	Sample Size		
	Population	Sample Size	Insufficient Data for HI
2011	715	49.51%	50.49%
2012	767	60.63%	39.37%
Change	7.27%	11.12%	-11.12%

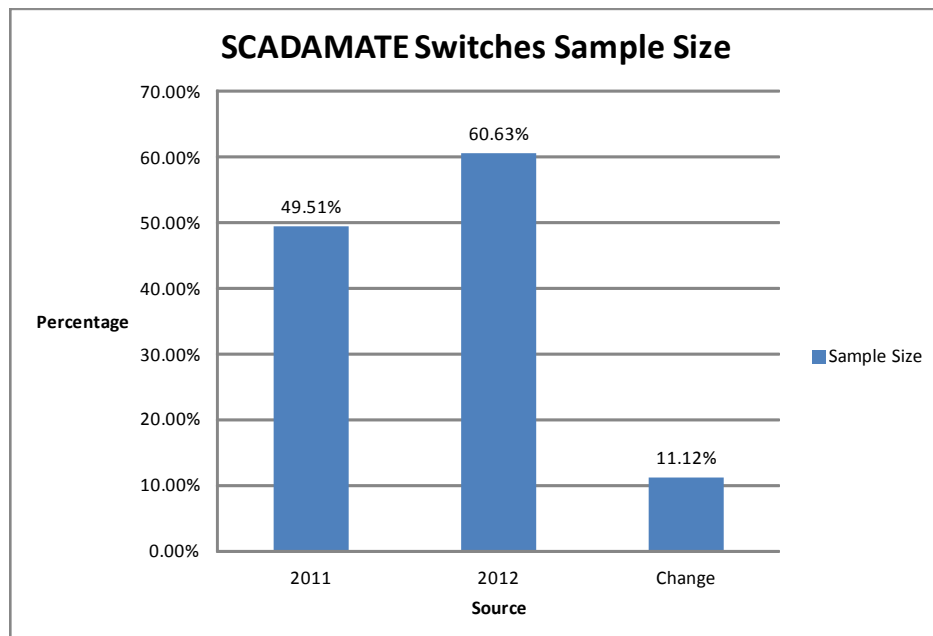


Figure 18-1 Sample Sizes for 2011 and 2012

18.4 Changes in Health Index Classification

A summary of the 2011 and 2012 Health Index distributions for SCADAMATE Switches are shown on Table 18-2 and graphically represented on Figure 18-2. The results are given in terms of percentage of the total asset population. There has been an overall improvement in the health of this asset, with 12.28% more samples in very good condition.

Table 18-2 Health Index Distribution Summary

Year	HI Distribution				
	Very Poor	Poor	Fair	Good	Very Good
2011	0.00%	0.28%	1.41%	73.16%	25.14%
2012	0.00%	0.00%	1.72%	60.86%	37.42%
Change	0.00%	-0.28%	0.31%	-12.30%	12.28%

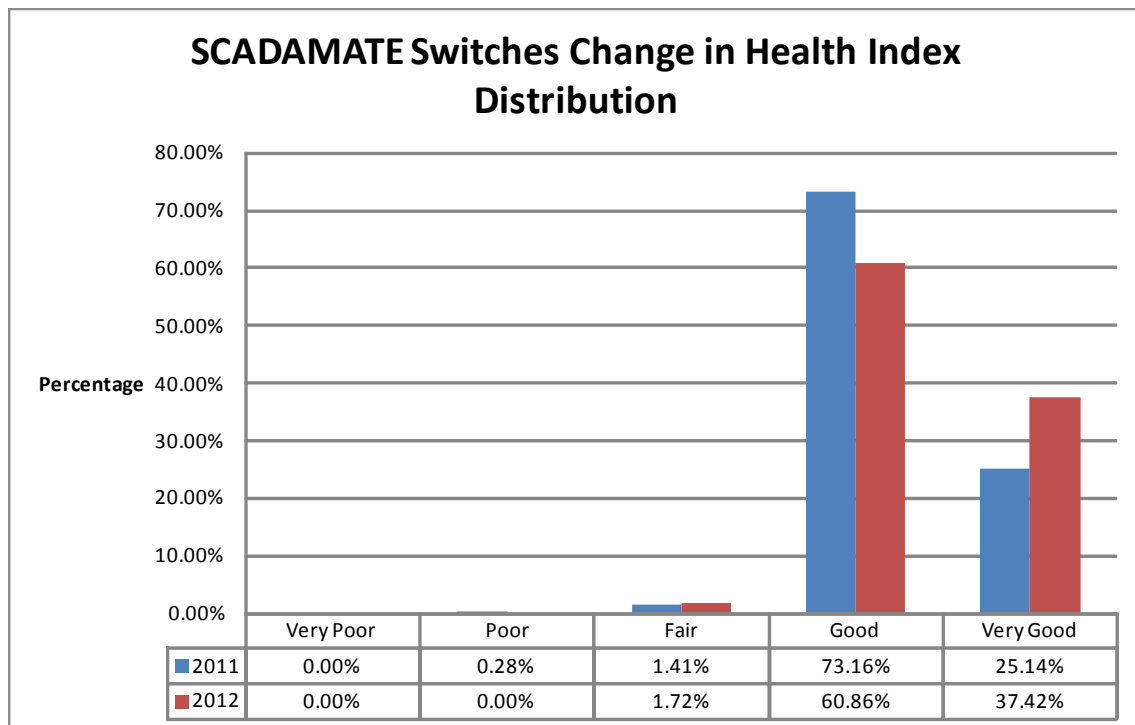


Figure 18-2 Health Index Distribution Comparison

19 Padmounted Switches

The following illustrate the changes found for Padmounted Switches.

19.1 Changes in Health Index Formulation

There were no changes within the Calculator with respect to Health Index formulation.

19.2 Changes in Granularity

There were no changes within the Calculator with respect to granularity.

19.3 Changes in Sample Size

A summary of Population and Sample Size information for Padmounted Switches is shown on Table 19-1. "Sample Size" and "Insufficient Data for HI" are given in terms of percentage of the total asset population. This information is graphically represented on Figure 19-1. The population remained steady, however the sample size decreased slightly by 4.52%.

Table 19-1 Sample Size Summary

Year	Sample Size		
	Population	Sample Size	Insufficient Data for HI
2011	797	54.83%	45.17%
2012	793	50.32%	49.68%
Change	-0.50%	-4.52%	4.52%

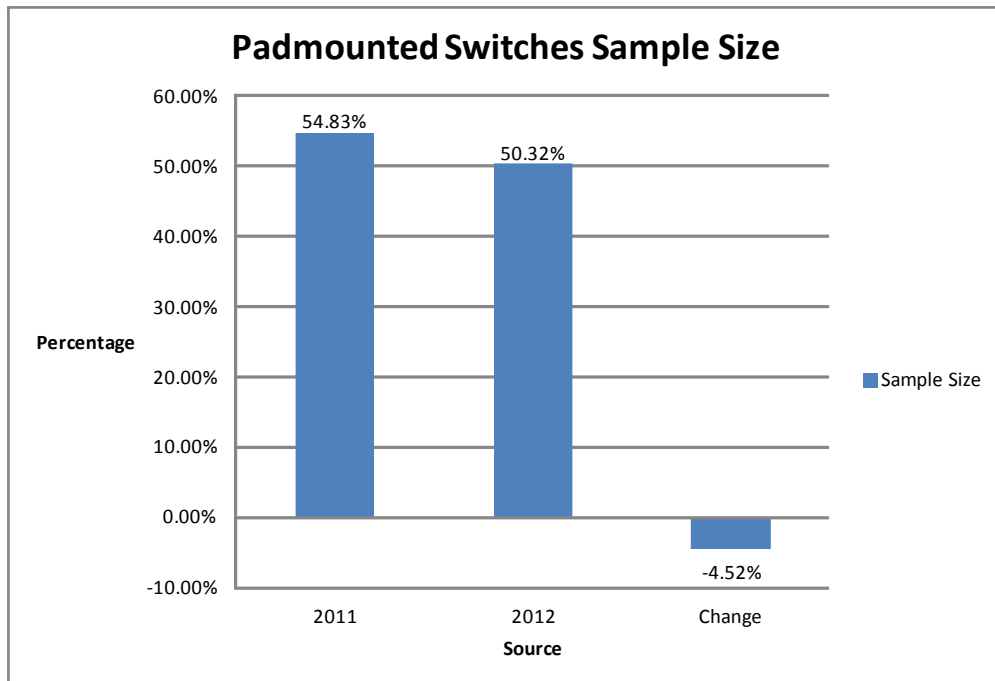


Figure 19-1 Sample Sizes for 2011 and 2012

19.4 Changes in Health Index Classification

A summary of the 2011 and 2012 Health Index distributions for Padmounted Switches are shown on Table 19-2 and graphically represented on Figure 19-2. The results are given in terms of percentage of the total asset population. There appears to be an overall decline in health, as 8.89% less of the samples were found in very good condition.

Table 19-2 Health Index Distribution Summary

Year	HI Distribution				
	Very Poor	Poor	Fair	Good	Very Good
2011	0.00%	0.69%	11.44%	28.60%	59.27%
2012	0.00%	0.75%	13.78%	35.09%	50.38%
Change	0.00%	0.07%	2.34%	6.48%	-8.89%

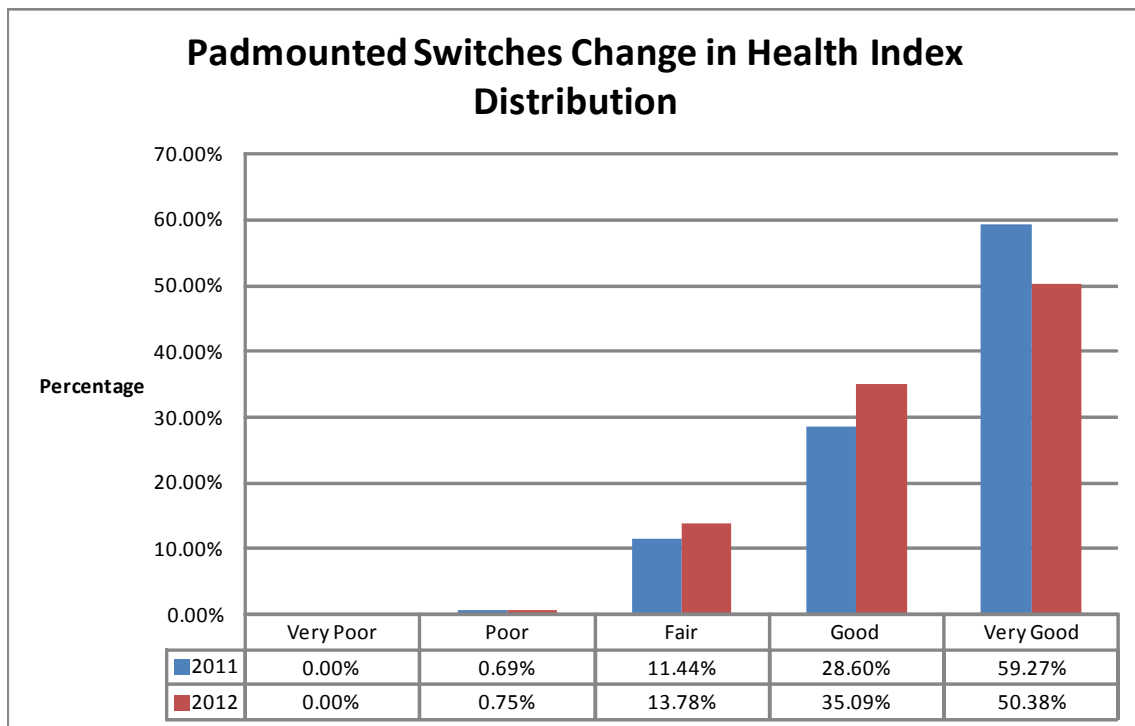


Figure 19-2 Health Index Distribution Comparison

20 Network Vaults

The following illustrate the changes found for Network Vaults.

20.1 Changes in Health Index Formulation

There were no changes in Health Index formulation; both the 2011 and 2012 assessment were conducted using the formula developed for the Kinectrics 2010 stand alone network assessment.

20.2 Changes in Granularity

There were no changes within the Calculator with respect to granularity.

20.3 Changes in Sample Size

A summary of Population and Sample Size information for Network Vaults is shown on Table 20-1. "Sample Size" and "Insufficient Data for HI" are given in terms of percentage of the total asset population. This information is graphically represented on Figure 20-1. The population and sample size remained fairly constant.

Table 20-1 Sample Size Summary

Year	Sample Size		
	Population	Sample Size	Insufficient Data for HI
2011	1066	98.41%	1.59%
2012	1061	99.62%	0.38%
Change	-0.47%	1.22%	-1.22%

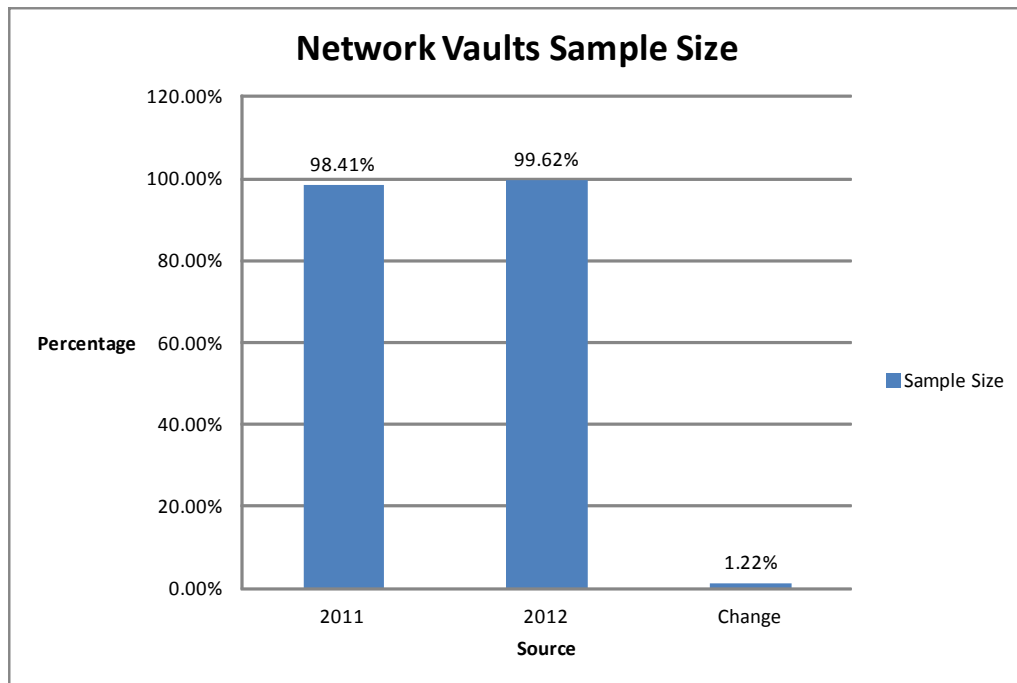


Figure 20-1 Sample Sizes for 2011 and 2012

20.4 Changes in Health Index Classification

A summary of the 2011 and 2012 Health Index distributions for Network Vaults are shown on Table 20-2 and graphically represented on Figure 20-2. The results are given in terms of percentage of the total asset population. There was an overall decline in asset condition. There appears to be a decline in asset health, with 12.30% less classified as very good.

Table 20-2 Health Index Distribution Summary

Year	HI Distribution				
	Very Poor	Poor	Fair	Good	Very Good
2011	1.62%	6.96%	30.70%	47.57%	13.16%
2012	1.14%	5.87%	31.22%	60.93%	0.85%
Change	-0.49%	-1.09%	0.52%	13.36%	-12.30%

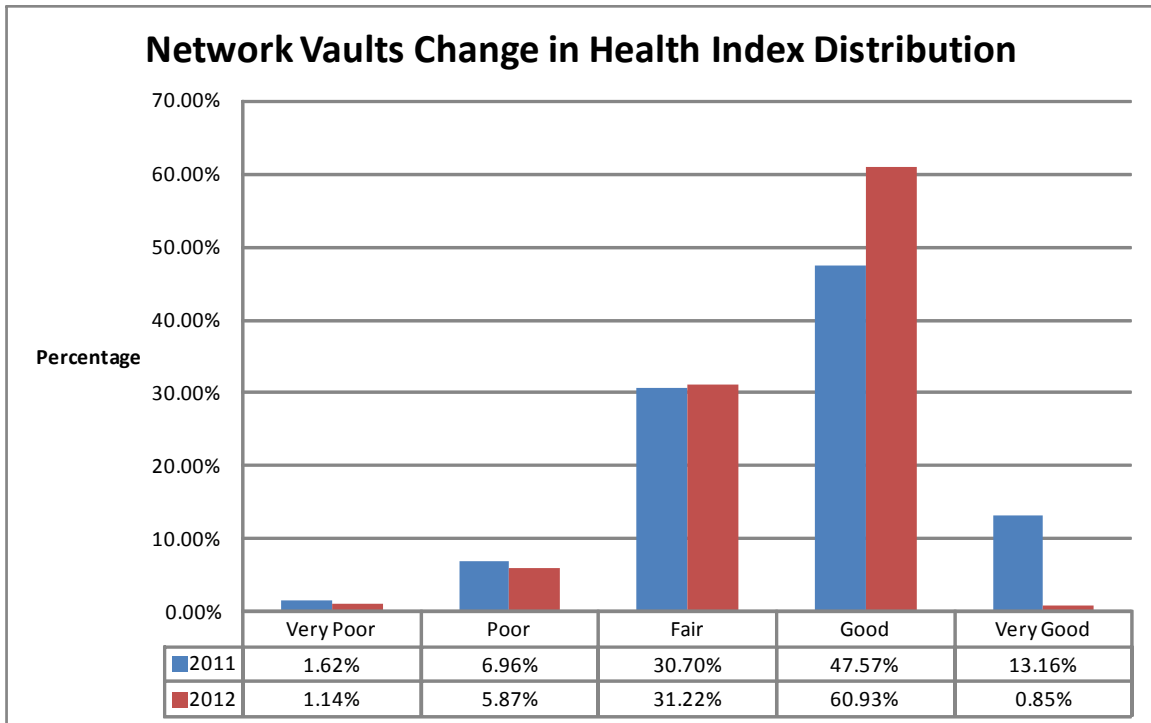


Figure 20-2 Health Index Distribution Comparison

8 Appendix B: Glossary of Terms

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1. Asset Condition Assessment (ACA)

The purpose of Asset Condition Assessment is to detect and quantify the extent of long-term degradation and to provide a means of quantifying remaining asset life. This includes identifying assets that are either at or near their end-of-life or are at high risk of generalized failure and will require capital expenditures to either refurbish or replace them.

2. Calculator

The Calculator is THESL application that derives the Health Index ratings for applicable distribution, station, and civil assets, based on condition data captured from inspections.

3. Condition Data Availability

An asset's condition data availability is the ratio of the sum of its maximum scores of available conditions to the sum of its maximum scores for all possible conditions. For example, say an asset has condition parameters A, B, and C with weights of 1, 2, and 3 respectively. Condition parameter factors are rated from 0 through 4, so the maximum factor is 4. The maximum score for a condition parameter is therefore given by (maximum factor)*weight. Thus, for conditions A, B, and C, the maximum scores are $4*1 = 4$, $4*2 = 8$, and $4*3 = 12$ respectively. It follows that the sum of maximum scores for all possible conditions = $4+8+12 = 24$. If asset X only has data for conditions A and B, the sum of maximum scores of available conditions = $4+8 = 12$. Its condition data availability is therefore $12/24 = 50\%$. According to THESL's 60% Condition Data Availability rule, asset X will not be included in the sample size because its condition data availability is less than 60%. Conversely, if asset Y has data for conditions A and C, its condition data availability = $16/24 = 67\%$, and it will be included in the sample size.

4. Condition Parameter

Condition Parameters are the asset characteristics that are generally related to the long term degradation of the asset. In formulating a Health Index, condition parameters are ranked and evaluated, through the assignment of corresponding weights, based on their contribution to asset degradation. The condition parameter score is an evaluation of an asset with respect to a condition parameter.

A condition parameter may also be comprised of several sub-condition parameters. For example, a parameter called "Insulation" may be a composite of Oil Quality, DGA, or Winding Doble tests.

5. Condition Ratings versus Condition Factors

For the purposes of formulating a Health Index, numerical values must be assigned to each of the condition parameters available for an asset. THESL assigns scores to parameters during inspections through condition ratings. For a parameter with five levels of condition, for example, THESL uses condition ratings of 1 through 5. This is then translated to condition factors of 4-0. Condition factors are used in the numerical calculation of the Health Index. For example, Factors and Rating can be interpreted as:

THESL Condition Rating	Factors to be Used for Health Indexing	Interpretation
1	4	Excellent Working condition
2	3	Minor Wear - Working as Required
3	2	Major Wear/Failed - Repaired During Inspection
4	1	Major Wear/Failed - Scheduled Corrective Repair Required
5	0	Failed - Emergency Repair Required

6. Dominant Factor

A dominant factor is asset condition or property that is of such importance that its status will reflect or over-ride the condition of the entire asset. The end of life of this factor can lead to the end of life of the entire asset. For example, for a civil asset, structural elements (e.g. roof, walls, foundation) are of such importance that if they are found to be in, say poor condition, the entire vault is categorized as poor, regardless of the condition of the other parameters.

Dominant factors are often used to de-rate the calculated Health Index of an asset. In the example of a civil asset, the overall Health Index, as it is based on numerous parameters, may be calculated as 70%. Say, however that the foundation is found to be in very poor condition. The Health Index will therefore, be de-rated by 30%, giving an effective Health Index of $0.3 \times 70\% = 21\%$.

7. Health Index (HI)

The Health Index quantifies equipment condition by comparing an asset's Condition Parameters with the Condition Criteria that are measures of the long-term degradation that cumulatively lead to an asset's end-of-life. Health Indexing differs from maintenance testing whose objective is finding defects and deficiencies that need correction or remediation in order to keep the asset operating prior to reaching its end of life. When using the Health Indexing method it is important to understand the differences between defect management and the resultant unplanned maintenance versus long-term asset condition assessment that evaluates long-term asset degradation leading to its end-of-life.

The Health Index can be used as a tool for assessing the overall health of a complex or relatively simple asset. Distribution assets may consist of several components, e.g. distribution station transformer, or be less complex, e.g. pole mounted transformer. In either case there may be one dominant mode of failure, or there may be several independent failure modes, either for components comprising the asset or for the asset itself. The Health Index combines scores indicating the condition of all of these Condition Parameters into a single indicator of the health of the asset.

8. Health Index Formulation - Sub-System Definitions

- a) **Insulation:** a sub-system that indicates the overall dielectric status of an asset. This overall status is based on the evaluation of all the involved insulating materials such as insulating oil, polymer, porcelain, or other composite material.

The Health Index formulation weighting of this sub-system depends on the degradation mechanism of an asset. Assets that employ this sub-system are: transformers, breakers, switchgears, and network transformers.

- b) **Cooling:** a sub-system that indicates the overall operation temperature status for the asset whose life expectancy is closely correlated to temperature rise. This overall status is based on all the available indications of temperature rise, such as IR scan, temperature monitoring, cooling fluid leakage etc.

The Health Index formulation weighting of this sub-system depends on the degradation mechanism of an asset. Assets that employ this sub-system are: all types of transformers and switchgear.

- c) **Reliability:** a sub-system that indicates the overall probability of failure status for the assets whose statistical failure rate is closely correlated to their operation duration, loading mode or combined effect from multiple independent contributing factors. This overall status is based on the evaluation of all the involved conditions such as age, long-term loading trend and asset overall grading.

The Health Index formulation weighting of this sub-system depends on the degradation mechanism of an asset. Assets that employ this sub-system are: transformers (all types), breakers, switches, and switchgear (all types).

- d) **Operating Mechanism:** a sub-system that indicates the overall mechanical operation performance for circuit breakers and switches. This overall status is based on the evaluation of all components and factors that contribute to the mechanical operation, such as linkage, lubrication etc.

The Health Index formulation weighting of this sub-system depends on the degradation mechanism of an asset. Assets that employ this sub-system are: breakers and switches.

- e) **Contact Performance:** a sub-system that indicates the overall status of switching timings and contact degradation, for circuit breakers and switches. This overall status is based on the evaluation of all the switching timings as well as contact surface condition.

The Health Index formulation weighting of this sub-system depends on the degradation mechanism of an asset. Assets that employ this sub-system are: breakers and switches.

- f) **Arc Extinction:** a sub-system that indicates the overall status of arc extinguishing mechanism during breaking operation of circuit breakers and switches. This overall status is based on the evaluation of all the components and medium for extinguishing breaking arc, such as oil, gas, vacuum bottle, or the factors that affect arc extinction such as leakage, moisture etc.

The Health Index formulation weighting of this sub-system depends on the degradation mechanism of an asset. Assets that employ this sub-system are: breakers and switches.

- g) **Physical Condition:** a sub-system that indicates the overall status of outer surface defects visible during routine inspection. This overall status is based on the evaluation of the non-critical components to which one has direct access, the factors that might hinder such direct access, or the working environment that might accelerate the deterioration of those components.

The Health Index formulation weighting of this sub-system depends on the degradation mechanism of an asset. Assets that employ this sub-system are: switchgear, distribution transformers, poles and ATS.

- h) **Sealing & Connection:** a sub-system that indicates the overall status of physical interfaces among the major components of transformers. This overall status is based on the evaluation of all the component interfaces, such as cable connection, tank gasket etc.

The Health Index formulation weighting of this sub-system depends on the degradation mechanism of an asset. Assets that employ this sub-system are: station transformers and network transformers.

- i) **Control:** a sub-system that indicates the overall status of attached control circuitry for switchgear and ATS. This overall status is based on the evaluation of all the components in control cabinet, such as relay, light, sensor, fuse etc.

The Health Index formulation weighting of this sub-system depends on the degradation mechanism of an asset. Assets that employ this sub-system are: switchgear and ATS.

- j) **Overall:** a sub-system that indicates the overall status of non-electric structures. This overall status is based on the evaluation of all the involved conditions such as age, estimated life and asset overall grading.

The Health Index formulation weighting of this sub-system depends on the degradation mechanism of an asset. Assets that employ this sub-system are: poles, cable chambers and network vaults.

- k) **Access:** a sub-system that indicates the overall status of operation convenience and work environment of non-electric structures. This overall status is based on the evaluation of work clearance as well as presence of hazard materials.

The Health Index formulation weighting of this sub-system depends on the degradation mechanism of an asset. Assets that employ this sub-system are: cable chambers and network vaults.

- l) **Environment:** a sub-system that indicates the overall status of presence of toxic PCB stuff. This overall status is based on the detection of PCB content in distribution transformers.

The Health Index formulation weighting of this sub-system depends on the degradation mechanism of an asset. Assets that employ this sub-system are: distribution transformers.

- m) **Switch/Fuse:** a sub-system that indicates the overall status of switches and/or fuses inside switchgear. This overall status is based on the evaluation of the physical conditions of switches and fuses by means of visual inspection.

The Health Index formulation weighting of this sub-system depends on the degradation mechanism of an asset. Assets that employ this sub-system are: all types of switchgear.

- n) **Structure:** a sub-system that indicates the overall status of civil structure. This overall status is based on the evaluation of the conditions of roof, walls and floors.

The Health Index formulation weighting of this sub-system depends on the degradation mechanism of an asset. Assets that employ this sub-system are: cable chambers and network vaults.

- o) **Mechanical & Electrical:** a sub-system that indicates the overall status of pole characters. This overall status is based on the evaluation of both the mechanical strength and the soil condition.

The Health Index formulation weighting of this sub-system depends on the degradation mechanism of an asset. Assets that employ this sub-system are: different types of poles.

- p) **Pole Accessories:** a sub-system that indicates the overall status of pole hardware. This overall status is based on the evaluation of all the hardware attached to poles, such as guy wire, ground etc.

The Health Index formulation weighting of this sub-system depends on the degradation mechanism of an asset. Assets that employ this sub-system are: different types of poles.

- q) **Ventilation:** a sub-system that indicates the overall status of structure interior contamination. This overall status is based on the evaluation of all the detrimental findings inside a structure during routine inspection.

The Health Index formulation weighting of this sub-system depends on the degradation mechanism of an asset. Assets that employ this sub-system are: cable chambers and network vaults.

- r) **Lighting:** a sub-system that indicates the overall status of structure interior lighting, cabling and ducting. This overall status is based on the evaluation of all such components inside a structure during routine inspection.

The Health Index formulation weighting of this sub-system depends on the degradation mechanism of an asset. Assets that employ this sub-system are: cable chambers and network vaults

9. PDA

Portable Data Acquisition devices (PDAs) refer to mobile handsets or ruggedized laptops that enable single-point data entry of maintenance and inspection data for THESL field staff. The use of PDAs is expected to increase the accuracy and timeliness of maintenance and inspection data collected.

10. Population

Population refers to the total number of assets within the asset group.

11. Sample Size

Sample Size refers to number of assets within an asset group that have sufficient condition parameter data for Health Index calculation.

12. 60% Condition Data Availability Rule

According to THESL's 60% Data Availability rule, 60% of an asset's condition data must be available in order to be included into the sample size.



Yury Tsimberg, P. Eng.



Summary of Qualifications

Yury Tsimberg is a senior engineer and manager with over 30 years of experience in both consulting and utility businesses gained throughout his career with Kinectrics Inc and Hydro One / Ontario Hydro.

Tsimberg is currently a Director of Asset Management with Kinectrics Inc. where he is heading Asset Management Line of Business. His responsibilities include business development, leading client projects and refining existing Asset Management tools and methodologies.

At Ontario Hydro/Hydro One Tsimberg worked in various areas of transmission and distribution utility business, including lines maintenance, power system operation, Bulk and Local System Planning, Mergers & Acquisition, and Regulatory. In his last position at Hydro One Tsimberg managed a department responsible for development and implementation of Hydro One's Asset Management strategies and methodologies.

Tsimberg was a member of the international advisory panel revising Asset Management specifications developed by the British Institute of Asset Management and a member of the NERC committee developing North American planning standards. At the present time Tsimberg is a member of the CIGRE Working Group C1.25 "Risk Management and Information Processes for Asset Management in Electricity Transmission Companies for current and future power systems".

Tsimberg is also an effective negotiator with extensive industry contacts in North America, CIGRE and major consulting companies.

Expertise

Asset Management:

- End-of-life (EOL) estimation of expected investments for various asset classes
- Condition and risk assessment of assets comprising transmission and distribution systems
- Investment prioritization, i.e. optimizing ratios of sustainment investment vs. resultant risk for different classes of assets across the whole OM&A and CAPEX investment portfolios
- Evaluating cost vs. benefit to ratepayers using Customer Interruption Cost (CIC) approach
- Developing Asset Management Plan (AMP) that integrates asset specific strategies with business programs based on the Corporate Business Values and actual asset needs

- Assessing effectiveness of investments made using Performance Metrics
- Determining appropriate levels of reliability for customer delivery points based on their load size and historical performance

Reliability Compliance:

- Assessing compliance with NERC standards
- Preparing for the reliability compliance audit
- Advising on interpretation of NERC standards

Regulatory Rate Applications:

- Justifying Cost-of-Service requirements for various asset classes
- Determining main issues, strategic positioning and key messages
- Positioning asset-specific arguments to be used in developing direct evidence exhibits and supporting documentation.

Mergers and Acquisitions

- Due diligence assessment of prospective acquisitions
- Post-acquisition integration of newly-acquired assets
- Assessment of actual vs. projected savings

Transmission Project Approvals

- Positioning and Preparing Regulatory applications for specific projects
- Public consultations process and negotiating with the First Nations

Education

M. Eng. Electrical Engineering, University of Toronto, 1987.
B.A. Sc. Electrical engineering, University of Toronto, 1978.

Professional Affiliations

Member, Professional Engineers of Ontario, 1980.

Member, AFTSDT (Assess Future Transmission System Needs SAR Team and Standard Drafting Teams)

Member, IAM (Institute of Asset Management) in Great Britain on PAS 55 revision

Member, CIGRE Working Group C1.25 "Risk Management and information Processes for Asset Management in Electricity Transmission Companies for

current and future power systems”.

Details of Expertise 2008 – Present. Kinectrics Inc. **Director - Asset Management**

Responsible for: Integrating knowledge and expertise of staff across various departments to develop new, and refine existing, asset management methodologies and approaches.

Leading Asset Management projects such as Asset Condition Assessments, Risk Assessments, Asset Management Plan development to ensure that they are performed in a timely manner and to the client’s satisfaction.

Growing corporate Asset Management business by developing business opportunities with new and existing clients or via partnerships with other companies.

Exploring business opportunities in the areas related to Asset Management, such as M&A, Reliability compliance and supporting Regulatory applications.

1978-2008. Hydro One. (Ontario Hydro)

Manager, Asset Strategies & Standards (2004-2008) - System Investment.

Responsible for:

Managing department accountable for developing asset specific strategies, standards and policies.

Creating new and refining existing customized applications to enable utilization of “state-of-the-art” Asset Management techniques.

Establishing corporate strategy regarding reliability compliance developments across North America and within Ontario, including participation on NERC and NPCC Committees and Working Groups.

Leading cross-functional teams responsible for securing the required approvals for building new transmission facilities, including negotiations with the First Nations and other market participants.

Manager – Regulatory Support (2002-2004) – Network Strategies

Managed a cross-functional team responsible for preparing Cost-of-Service component of Hydro One’s Transmission Rate Application, including:

Preparing direct evidence exhibits explaining and justifying revenue requirements for individual programs associated with various asset classes.

Co-ordinating input from other groups within the Corporation participating in Rate Application filing to ensure consistency of materials submitted and intended overall themes / messages.

Managing external consultants delivering third party assessments and supporting studies.

Manager – Integration Planning (1999-2002) - Mergers & Acquisitions

Managed department responsible for all aspects of due diligence and integration phases of distribution utilities acquisition program that resulted in Hydro One successfully acquiring 86 distribution utilities, including:

Developing due diligence process for physical evaluation of assets and determining potential synergies and liabilities.

Developing and implementing a process for integrating newly acquired utilities into Hydro One's system, including integration of employees, operations and assets.

Senior Policy Advisor (1997-1999) - Transmission Policies and Standards

Responsible for creating and refining policies and strategies for transmission component of Asset Management business, including:

Assessing impacts of regulatory proposals and models from the Asset Manager's perspective, and developing company's position on various emerging issues associated with entering open electricity market environment in Ontario

Evaluating commercial feasibility and various regulatory and technical aspects of establishing new interconnections with neighbouring utilities.

Senior Account Executive (1996-1997) - Customer Service

Responsible for managing Ontario Hydro's interface with major municipal utilities and directly connected transmission customers. Achievements as Senior Account Executive:

- Led Ontario Hydro team carrying out economic and risk assessments of acquiring transmission and distribution assets of one of the major direct transmission customers.
- Negotiated business deals and led studies addressing specific customers' needs, such as determining the most cost-effective alternatives for meeting forecasted load growth in local areas.

Senior Planning Engineer (1988 - 1996) – Transmission and Regional System Planning

Responsible for planning transmission system facilities required to increase capability of integrated transmission network and to address specific local area or customer needs. Major accomplishments and responsibilities as Senior Transmission Planning engineer:

- Led joint Manitoba Hydro / Minnesota Power / Ontario Hydro team assessing impact of the new Minnesota Power - Ontario Hydro interconnection on interconnected transmission system and led joint Minnesota Power - Ontario Hydro project management team during construction phase of the project.

- Led the team that developed long-term transmission plans for meeting system needs in Northern Ontario. The team successfully completed an integrated plan that mitigated risk of bulk system exposure to major contingencies and at the same time, addressed reliability needs of specific customers and local areas in a cost-effective manner.

Engineer – Operations (1985-1988) - Power System Operations

Responsible for identifying opportunities for electricity sales and purchase to /from neighbouring utilities, and for providing liaison with the National Energy Board (NEB) on matters related to electricity exports., such as participation in NEB hearing assessing export applications by other Canadian utilities, and co-ordinating preparation of Ontario Hydro's submissions to the NEB in support of Export License applications.

Engineer – Technical Services (1978 – 1985) – Transmission Lines

Responsible for providing functional support and direction to field staff on all matters related to maintenance of transmission lines, including technical assessments, economic evaluations of different maintenance methods, and developing new procedures and practices.



Fan Wang, Ph. D. P. Eng.

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fan.wang@kinectrics.com



Expertise

Condition assessment, risk assessment and capital replacement planning for all the major transmission and distribution equipment categories

IEC 61850 based substation automation implementation

Power quality studies and on-site measurement

Protective relay lab test and real time simulation

Tutoring for training courses, including Asset Management and IEC 61850 hands-on commissioning

Engineering design for power generation plants and substations

Education

Ph. D. (2003), Electrical Engineering, Chalmers University of Technology, Sweden
M. Eng. (1999), Electrical Engineering, National University of Singapore, Singapore
B. Eng. (1989), Electrical Engineering, Tsinghua University, China

Summary of Qualifications

Highly qualified professional engineer with over 10 years experience in Asset Management, engineering design, maintenance, P&C troubleshooting and 10 years experience in R&D for power generation, transmission and distribution systems.

Key Projects and Accomplishments

2007 – Present

Engineer/Scientist, Kinectrics Inc., Toronto, Canada

Performing Asset Management studies for all major equipment categories in power transmission and distribution systems. Power quality measurement and studies. Implementation of IEC 61850 substation automation. Protection and control testing and simulations using OMICRON/Doble/Megger and RTDS (real time digital simulator) facilities. Tutoring in Asset Management and IEC 61850 hands-on training courses

Examples of participated projects

--- Asset management for equipment in power systems

Clients: Exelon (ComEd and PECO), USA
PPL, USA
Powerstream, Canada
Toronto Hydro, Canada
Manitoba Hydro, Canada
Pepco Holdings Inc, USA

--- Asset useful life study for equipment in power systems

Clients: OEB, Canada
Powerstream, Canada
Toronto Hydro, Canada
London Hydro, Canada
Enersource Corporation, Canada
Horizon Utilities, Canada

--- Power quality measurement and impact study

Clients: Bluewater Power Distribution Corporation, Canada
Powerstream, Canada

--- IEC 61850 implementation in substation automation

Clients: Hydro One, Canada

--- Protection and control simulation and test

Clients: Hydro One, Canada
OPG, Canada
Bruce Power, Canada

--- Investigation and recommended practice report

Client: CEATI, Canada
ComEd, USA

2004 – 2007

Systems Engineer, Honeywell Aerospace Inc., Mississauga, Canada

Systems engineering test and troubleshooting for secondary power distribution systems in commercial airplanes, for both hardware and software. On-site technical support for system commissioning

Example of participated project

--- A380 SEPDS system

Client: Airbus, France

1998 – 2004

Postgraduate study candidate & researcher, Chalmers University of Technology, Gothenburg, Sweden

Research of power quality impact on protective relays; modeling of practical power system; power system transient analysis; test of relay algorithms and industrial protective relays using RTDS (real time digital simulator) device. Study of electromagnetic field shielding/mitigation in power plants

Example of participated project

--- Impact of power quality on relay protection

Clients: ABB automation technologies, Sweden
SINTEF energy research, Norway

Goteborg Energi AB, Sweden
Unipower AB, Sweden

1994 – 1998	<p>Postgraduate study candidate & research assistant, National University of Singapore, Singapore</p> <p>Study of power system harmonics and its impact on power system equipment in dynamic mode</p> <p>Example of participated project</p> <p>--- Harmonics mitigation for subway electrical power supply system</p> <p>Client: Mass Rapid Transit (MRT), Singapore</p>
1989 – 1994	<p>Electrical engineer, Southwest Electric Power Design Institute, Chengdu, China</p> <p>Engineering design for power plants and substations, for the systems of relay protection, central control, interlocking, SCADA system, process automation, instrumentation, HV transmission, MV/LV distribution, PC/MCC, auxiliary power supply, PLC, electrical wiring diagram, cable wiring diagram</p> <p>Examples of participated project</p> <p>--- Power generation plant</p> <p>Clients: Neijiang CFB boiler power plant, 1X 100 MW, China Jiangyou power plant, 2 X 300 MW, China</p> <p>--- Power substation</p> <p>Client: Caopu 500 kV substation, China</p>
Professional Activities	Member, IEEE
Patents and Publications	Over 10 technical papers published in international journals (IEEE transactions, IEEE, EPSR etc) and conferences
Registrations	Registered Professional Engineer, Province of Ontario
Languages	English written and oral Chinese written and oral Swedish written and oral French written



Katrina Lotho, BE.Sc, B.Sc, P.Eng



Summary of Qualifications

Highly-qualified professional with degrees in Electrical Engineering and Computer Science. Solid understanding and experience in power systems. Extensive knowledge of engineering and software systems for process automation and data acquisition.

Expertise

- *Asset Condition Assessment and Risk Analysis*
- *Electric Arc Modeling and Arc Hazard Assessment*
- *Connection Impact Assessments*
- *SCADA / HMI systems and automation*
- *Application development, testing and deployment*
- *Project planning and coordination*

BE.Sc. Electrical Engineering. University of Western Ontario. 2003.
Dean's Honour List

B. Sc. Computer Science. University of Western Ontario. 2003.

Education

- *Languages: Java, C++, Visual Basic, Assembly, SQL, PLC Ladder logic*
- *Software and Tools: SQL, DB2, Access, CIMPLICITY SCADA / HMI Software, AutoCAD, RSLogix 5, RSLogix 500, RSLogix 5000, RSLinx, EtherNet/IP, ControlNet, DeviceNet*
- *Programmable Logic Controllers: Allen Bradley SLC, PLC3, PLC5, FlexLogix, ControlLogix*
- *Power System Software: PSCAD, SKM, CYME*

Professional Affiliations

Registered Professional Engineer in the Province of Ontario

Details of Expertise

2009 – Present

Engineer. Kinectrics Inc. Toronto, ON

Successfully execute assignments that focus on Health Indexing, Asset Condition Assessments, and Risk Assessment of electric utility assets.

Completion of studies that involve asset depreciation, capital planning, and project prioritization.

Design, develop, and test applications for Protection and Controls, Asset Management, and Power System Reliability.

Research and develop modeling techniques for AC electrical arcs. Conduct arc hazard assessments for substations, feeders, and metering locations as per IEEE and NFPA standards.

Perform Customer Impact Assessment (CIA) as per IEEE 1547. Involves modeling and analyzing distribution feeders with distributed generators.

Meet with clients to gather project requirements and investigate customer needs. Prepare and review engineering reports and support documentation. Work under tight timelines to produce a finished product.

Selected Achievements: Developed substation transformer replacement prioritization methodology for a North American utility that supplies electricity to 14 million people. Developed an application that determines fault location along a transmission line. Designed and created tool for discretionary capital projects prioritization. Developed an application that employs a simplified methodology to determine arc hazards for electrical panels within 208 V substations.

Control Systems Engineer. General Motors Truck Assembly, Oshawa, ON

SCADA / HMI specialist, responsible for the acquisition of real time data plant data, development of HMIs, collection of faults and build information, annunciating and dispatching process alarms; developed applications and reports that facilitated process assessment and improve quality. Responsible for automation and controls of automatic guided vehicle conveyance systems.

2003 – 2008

Coordinate project planning, scheduling and integration with contractors, vendors, engineering departments, and maintenance and production personnel. Responsible for design verification, captain of testing and deployment events, manage and document test procedures, maintain quality control, identify issues, develop appropriate action plans.

Prepared technical specifications, engineering reports and support documents, author comprehensive operator manuals and test procedures.

Selected Achievement: Lead design engineer for a plant-wide SCADA / HMI system, spearheaded the successful deployment of the automation monitoring and control system for the 2007 vehicle platform launch.

Manufacturing Engineer. General Motors Car Assembly, Oshawa, ON

2003 - 2003

Instrumental in designing and documenting the programmable display retrofit project. Provided system support in process used to analyze the fit of vehicle panels. Implemented logic and automation controls to monitor tooling processes

Selected Achievement: Successful deployment of the body shop SCADA / HMI system for the 2004 model launch

Technical Publications

CEATI - Transmission Line Health Indexing and Estimation of Remaining Life
CEATI - Condition Data Requirements for Distribution Asset Condition Assessment



Date May 3, 2012

From BIS Consulting

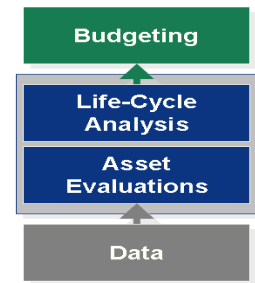
To Amanda Klein
 Senior Regulatory Counsel, Toronto Hydro

Regarding Toronto Hydro's current asset management practices related to aging infrastructure; comparison with industry

A common challenge at virtually all regulated electric utilities is communicating the need for spending on replacement or rehabilitation of aging assets in a way that resonates with executives and regulators. A great deal of institutional knowledge and technical data are available at the technical, engineering level, but this information does not automatically translate into spending needs.

Planning for replacement and rehabilitation is a two-step process, bridging the gap between engineering-level data and the budget:

- ◆ **Step 1: Asset Evaluations** – What have we got? What condition is it in relative to end of life and how critical is it?
- ◆ **Step 2: Life-cycle Value Analysis** – What interventions can be taken to mitigate risk? Are they justified? What is the right long-range spending plan?



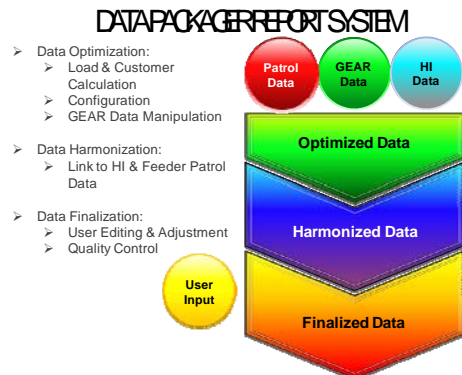
At best-practice utilities, life-cycle analysis is used to quantify the fundamental trade-off between capital spending and marginal cost, which comprises spending on maintenance as well as risk, including cost to customers from outages and other effects of failures of aging assets. Toronto Hydro (THESL) has a well-developed asset management program for optimizing spending on replacement of aging assets and prioritizing among competing programs in case of resource limitations. The outputs of this process, that is projects whose benefits in terms of avoided risk are expected to exceed their costs, are inputs to Toronto Hydro's budget process, which includes project prioritization and the rate filing itself.

This document is a comparison of THESL's practices in this area relative to their peer utilities'.

Data Collection, Storage, and Access

Normal industry practice

All utilities have information that is collected and stored by different groups for different purposes. The information may be in text, numerical, or data format and may be stored on paper, written text stored in an electronic data base, or in spread sheets or data bases in various modules of programs such as SAP. Because this information



is gathered by multiple groups for different purposes it is typical that much of the information needed to establish consistent asset management processes is difficult to retrieve and make use of.

Toronto Hydro practice

The asset management group at THESL has good access to relevant data. When the Feeder Investment Model (FIM) was developed, the data sources were hard-linked to the model through the Data-Packager Report System (DPRS), which retrieves data from line patrols, GEAR, and ACA and passes it to FIM with a minimum of manual intervention. THESL is continuing to develop DPRS, including improvement of the graphical interface.

There are utilities with more developed data-management systems than THESL. However, they relate more to simple data storage and retrieval rather than decision-making as part of asset management. THESL is ahead of its peers in linking its asset data to its aging infrastructure management process. Because of this, and the ongoing progress made in improving data management and integration, we conclude that THESL is at or near the cutting edge of the industry in this area.

Comments, gaps

THESL has a plan in place for continued improvement of its data management. This will be important for ensuring the long-term survival of the process as data ages and as personnel who developed the process move on. We recommend moving forward with this plan.

Definitions of Asset Classes; Inventory / Registry

Normal industry practice

Most utilities maintain inventories of assets for accounting purposes. These data may or may not be directly usable for asset class definitions but typically the necessary information is available. Some utilities have a poor grasp of their asset inventories, especially when it relates to equipment installed many years ago, such as underground cable, or assets that may have been moved from one location to another.

Toronto Hydro practice

THESL has good demographic data, including installation date, for all major asset classes. This includes underground cable, which is a particularly important asset class due to its perceived risk and large capital replacement program. THESL is at or above industry best practice in this area.

Comments, gaps

None.

Condition Assessment

Normal industry practice

Most utilities do not assess the condition of their equipment in a formal or consistent way. After normal maintenance is carried out, the utility documents that the asset is in good condition "as left". With this approach, all equipment appears to be in "good"

condition and the basis for replacement or refurbishment becomes subjective or, at best, age based.

For some assets, notably power transformers and wood poles, data indicating condition relative to end of life are often collected, although the link to replacement planning is usually subjective and ad hoc. For most assets the data that are collected relate much more to maintenance and the need for maintenance rather than how close the asset is to end of life (i.e., major failure).

Toronto Hydro practice

Toronto Hydro has a well developed health indexing program (ACA), which defines the way in which condition relative to end of life is to be assessed for each asset class. These formulations were recently updated. The completeness of required data varies by asset class depending on what has been collected to-date. But THESL has made a commitment to collect the best data regardless of whether it was collected in the past or they are just starting. This means that the completeness of the data will improve over time.

THESL has integrated its health indices into FIM, which is the proper approach. I.e., health index is important because it is a measure of probability of failure; it is not necessarily a justification for replacement on its own.

The ACA program at THESL is leading-edge for the industry, particularly for distribution lines assets which are often difficult to assess.

Comments, gaps

We recommend continued collection of data needed to support ACA. We also recommend calculating the correlations between health index and failure probability as these data become available over time. As the ACA program matures it will be possible to track the failure rates and possibly maintenance cost of assets in terms of health index (see discussion of Failure Probability below).

Use of Subject Matter Experts (SME)

Normal industry practice

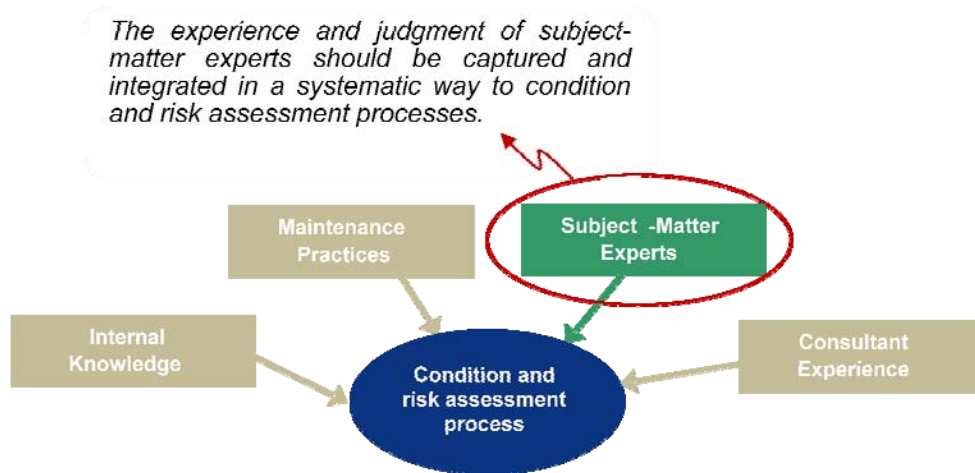
Many large utilities identify specialists or “subject-matter experts” within their company to provide advice and technical input related to the decision making process. In some cases these experts become part of the asset management group. Smaller utilities, without access to such experts in-house, join industry information exchange groups (such as CEA or EPRI) to determine what others are doing regarding certain technical issues and/or retain consulting companies to provide specific expertise.

Toronto Hydro practice

Toronto Hydro has done an exceptional job of leveraging the tacit knowledge of its internal subject-matter experts in developing its asset management tools. During development of FIM, one or more SMEs were identified for each asset class, and they met regularly with the development team to provide input on key issues such as health, failure probability, failure scenarios (i.e., consequences), and intervention strategies. This approach has helped to foster buy-in throughout the utility and has improved the accuracy of the inputs and assumptions for ACA and FIM. In addition to this, THESL

has brought in outside experts to work as part of their team at key stages of development.

The use of subject-matter experts at THESL is industry best-practice.



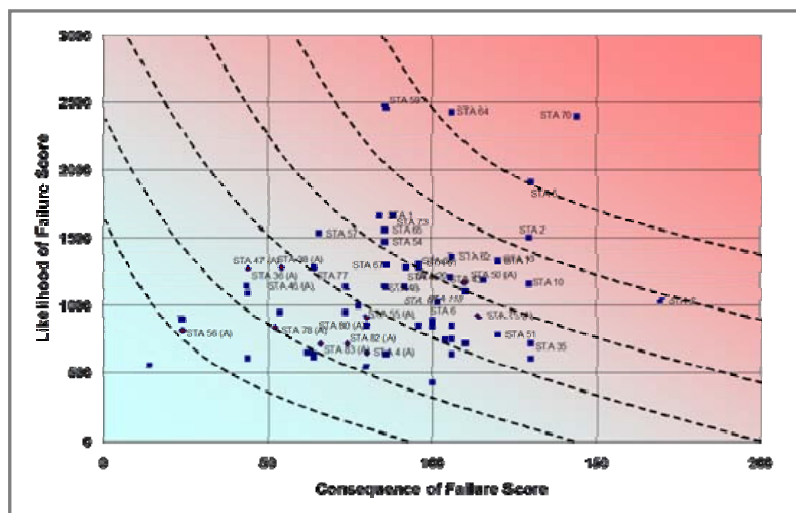
Comments, gaps

None.

Risk Assessment

Normal industry practice

The most common approach to risk assessment as part of aging infrastructure is a qualitative matrix, documenting subjective estimates of probability and consequences of failure within an asset class. Assets will be identified as high risk based on where they fall in the matrix. Those toward the upper right, i.e., high risk assets, are designated as the highest priority for replacement.

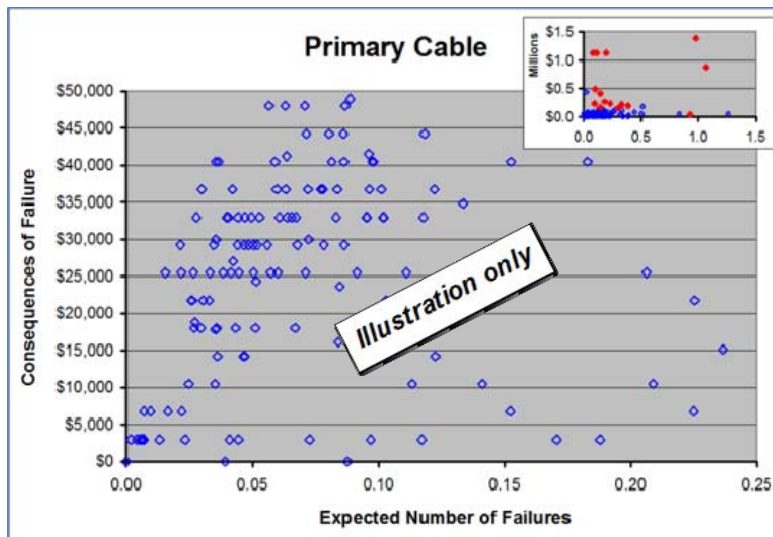


A typical risk matrix, plotting each asset in a given class in terms of a relative measure of probability (X-axis) and consequences (Y-axis) of failure. High risk assets tend toward the upper right corner.

The difficulties with this approach are twofold. First, although the risk matrix ranks the assets by risk, it does not indicate how many should be replaced and how many should be left in service. For example, it is possible that the highest-risk asset should not be removed from service. Second, it is very difficult to compare across asset classes to determine, for example, whether the highest risk transformer should be prioritized above the highest risk breaker.

Toronto Hydro practice

THESL assesses risk in actual cost terms, using concrete failure scenarios in which probability of failure is defined as a true probability and consequences of failure are quantified in dollars. This solves both of the problems identified above: It is clear which assets are at end of life and which are not, and risk is quantified in consistent terms for all assets so they can be compared. This is the best-practice approach to risk assessment.



Sample risk matrix from Toronto Hydro's Feeder Investment Model. Assets are plotted according to actual, not relative, measures of probability of failure and consequence cost, which includes implicit cost to customers. Assets at end of life are highlighted in red.

Comments, gaps
None.

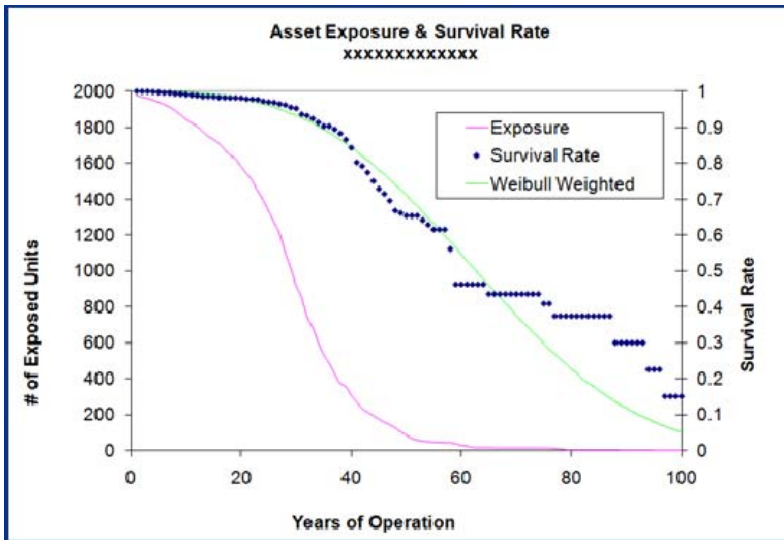
Failure Probability

Industry normal practice

There are generally two methods used by THESL's peer group to describe the probability of failure for aging assets.

- ◆ Relative assessments, e.g., *high, medium, low; or rare, possible, nearly certain*. These are often developed in-house.
- ◆ Failure probability correlations with age or condition, often purchased from consultants or developed through professional organizations like ITOMS.

The perception that a group of assets is failing at an increasing rate is often the basis for a proactive replacement program. A typical example of this is direct-buried cable, which many utilities are replacing or injecting based on perceived failure probability.



This figure shows an example of an industry failure curve for a particular asset class. Typically the analyst will correlate failure data from multiple participating utilities and perform a regression calculation to determine the hazard rate.

Toronto Hydro practice

THESL estimates failure probability with respect to age based on historical failure data, if available, or subject-matter expertise otherwise. THESL has created failure probability curves (also known as hazard curves) for each asset class, which define the annual probability of failure as a function of age, consistent with the failure scenarios, in a failure probability study, which summarizes available failure data, fitted failure probability curves, and third party estimates of expected service life. The methodologies used to generate the failure curves based on this data have been reviewed and validated. Furthermore, THESL has begun collecting failure data more aggressively so the curves can be improved over time.

In addition to correlating failure with age, FIM includes a correlation with health. Because the ACA program is relatively new and not much data is available, it is not yet possible to do a rigorous statistical assessment. At present, THESL uses a single correlation between health index and failure probability, which is based on a small amount of data and the experts' assumptions, built into the interpretation of health index results.

In both of these areas, THESL is well ahead of most utilities in estimating failure probability.

Comments, gaps

We recommend THESL consider sharing failure data with other utilities to jump start the process of improving failure probability estimates, especially with respect to health. This could be accomplished through an organization such as CEA or EPRI, or informally.

Asset Criticality, Consequences of Failure

Normal industry practice

Normal industry practice for managing aging infrastructure may or may not include asset criticality in an explicit way. Where criticality is addressed, the most common approach is to include it as one weighted parameter in an overall replacement priority score.

Where criticality is not explicitly addressed, the utility may use subjective perception of criticality as a “tie-breaker.” For example; if planners would like to replace multiple breakers but have enough money for only one, they will opt to do the breaker that is part of a critical backbone first.

A typical use of asset criticality in a weighted replacement priority formulation.

Weighting Criteria used for replacement	
X%	1. Safety
X%	2. Environmental impact
X%	3. Maintenance cost
X%	4. Impact of failure - (system, customers, etc.)
	H - Loss of generation; derating of transfer capability; or widespread, extended outage
	M - Customers will be affected by an extended outage; typically one feeder or less.
	L - Good system ties exist, good feeder ties exist, or few customers affected
X%	5. Availability to maintain
X%	6. Obsolescence
X%	7. General condition

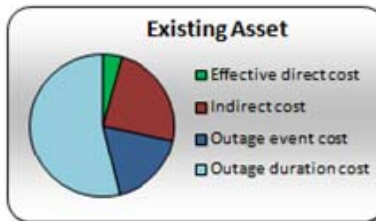
Illustrative example only

Toronto Hydro practice

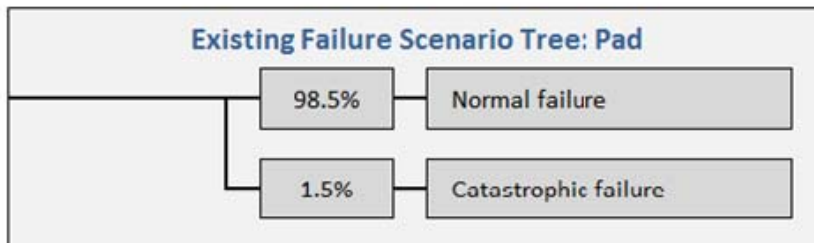
THESL has implemented an approach to quantifying consequence costs based on failure scenarios. The subject-matter experts define the range of failure scenarios based on their experience and historical data where available. For each scenario the cost is quantified based on the expected effect on customers (i.e., Customer Interruptions and Customer Minutes of Outage) and the direct cost for repair or replacement of failed equipment. This sophisticated approach represents cutting-edge practice for the industry, and it supports consistent, robust assessment of the priority of one asset or asset class over another.

Underground Transformers Consequences of Failure: 822087

EXISTING CONSEQUENCE COSTS	
Total direct cost	\$10,232
Effective direct cost	\$540
Indirect cost	\$3,000
Outage event cost	\$2,250
Outage duration cost	\$6,750
Effective consequence	\$12,540



Sample failure scenario tree from Toronto Hydro’s FIM. Multiple failure scenarios are postulated, and consequence costs are quantified according to the expected direct costs and impact to customers



Comments, gaps

In our experience, most utilities use actual customer counts by class (i.e., residential, commercial, industrial), rather than load or number of meters, as the basis for calculating

the cost of an outage. Although load is a reasonable stand-in for customer counts, and it has the advantage of weighting large customers more heavily, actual customer count may help make the connection between the aging infrastructure program and the ongoing reliability planning effort, which is driven by SAIDI and SAIFI metrics. Customer counts may also facilitate improving estimates of CI and CMO costs over time.

We recommend continual review and improvement of the failure scenarios as data become available. The work THESL has done to quantify the relative probabilities of scenarios (e.g., different types of circuit breaker failure) is excellent and should be extended to all assets if possible.

Determining End of Life

Industry normal practice

In our experience, most utilities determine end of life for aging infrastructure in an informal way, relying heavily on the subjective, non-quantitative assessments of technical personnel. Business cases, benefit/cost analyses, and quantitative analysis are rare. There are generally two difficulties utilities face: 1) making the case to regulatory bodies or internal boards that spending to replace infrastructure that has not yet failed is justified; and 2) protecting funds targeted for aging infrastructure from being “prioritized out” of the final budget. There are three commonly used approaches to address these difficulties

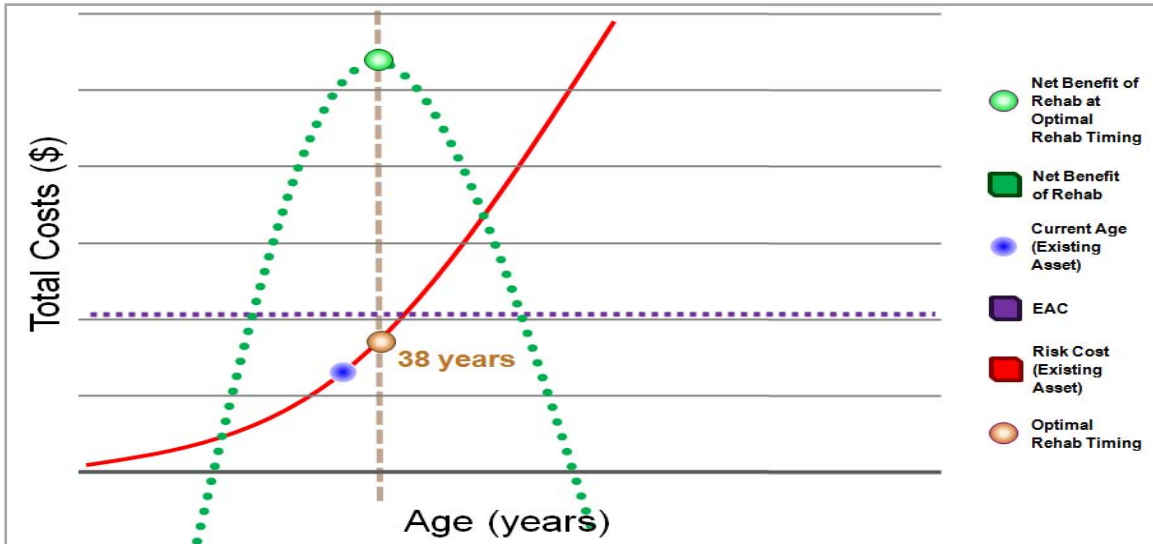
- ♦ **Prudent management argument** – This is the most common means; it is generally based on age alone or age supplemented by condition. The technical experts at the utility argue that, since the assets can’t last forever, surely some must be replaced each year to prevent a “bow wave” (i.e., a significant impending increase in spending needed to manage aging assets) of future spending and unreliability.
- ♦ **One-time justification to replace an entire asset class** – This is most common when technology or design standard change. The utility argues for removing the obsolete infrastructure. This is common for direct-buried cable and air-blast circuit breakers.
- ♦ **Safety justification** – An ongoing replacement program can sometimes be implemented if the argument can be made that it is driven by safety. (Sometimes environmental or regulatory drivers are treated this way, too.) For example, many utilities replace wood poles very aggressively for safety reasons.

Toronto Hydro practice

Notwithstanding the reasonability of the approaches noted above, THESL’s approach to determining end of life for aging assets is cutting-edge utility practice. The FIM optimizes the trade-off between the cost due to risk of failure as assets age and the benefit of delaying expenditures. This results in a minimum life-cycle cost strategy on an asset-by-asset basis.

The graph below is an example of how this computation is executed. As the existing asset ages, its risk of failure (red line) increases. When it reaches the life-cycle cost of a replacement asset (purple dashed line) it is cheaper to replace than to continue operating and face high risk of failure. In addition, the benefit of refurbishment (green dotted curve) shows the net benefit of refurbishment as a function of age. This

calculation determines the optimal strategy for this particular asset, and is repeated for every asset in the population. The results will vary depending on type, condition, and consequence of failure.



Comments, gaps
None.

Business Case

Industry normal practice

There is a wide range of industry practice with respect to preparing business cases. At one end of the spectrum, the approach generally comprises the following.

- ◆ Quantification of direct costs: capital and possibly avoided O&M.
- ◆ Customer effects described but not expressed in dollars.
- ◆ Often includes a worst-case scenario description of what might happen if the project is rejected.

The outcome of this is a summary of the benefits and costs of a project, but does not result in a true cost/benefit such as NPV.

A more advanced asset management approach consists of the following.

- ◆ Explicit risk assessment, addressing both the project itself and the base case, which is usually do-nothing.
- ◆ Includes a value model or other means of quantifying and dollarizing customer effects.
- ◆ Decisions are based on maximizing return on investment from the rate-payers' (i.e., customers') perspective.

Toronto Hydro practice

THESL is among the most advanced distribution utilities we have seen in terms of using business cases to support spending programs for aging infrastructure. The outputs of the FIM are integrated with other costs, such as outages due to non-asset causes, to evaluate complex projects, such as conversion from overhead to underground, or policy decisions. THESL has an advanced Project Creation Process, which documents a standard methodology for this work.

An excellent example is the business case THESL executed to determine whether it was cost effective to replace secondary services as part of a cable replacement program. They looked at representative situations and determined which cases merited replacement and which should be left as-is. This is the only example of this level of analysis we know of.

Comments, gaps

We recommend expansion of the business case process to include capacity planning.

Long-Range Projections

Industry normal practice

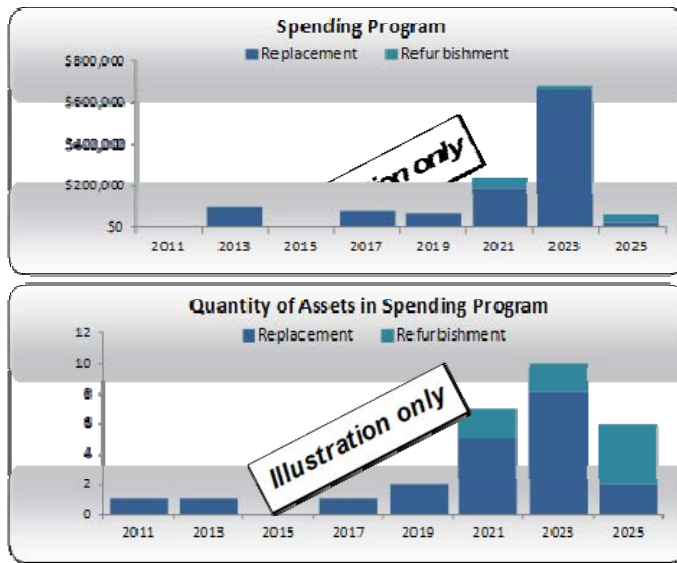
All utilities are interested in a long-range forecast of spending requirements. There is particular interest in a forecast of spending on aging infrastructure, due to the concern that aging and degrading populations will begin to fail at high rates, affecting reliability and increasing risk.

Most utilities' forecasts are based on a "mirror" of the installation history, shifted out based on the assumed service life of the asset in question. For example, if you installed three power transformers in 1965, and if power transformers have a service life of 50 years (a typical number), then your long range plan should include replacement of three transformers in 2015. [Note that this is only the projection of spending. Actual spending is almost always far below this level.]

Another common approach is to determine the replacement rate required to hold constant the average age or total failure rate of the asset class.

Toronto Hydro practice

Toronto's FIM produces a long-range projection of spending for capital replacements as well as unplanned replacements due to failure for all major asset classes. This is leading-edge practice for the industry.



Sample long-range projections of spending from the FIM. These graphs show the optimal spending for replacement and refurbishment of a subset of underground cable over time.

Comments, gaps

We recommend that THESL share the long-range projections with OEB and other stakeholders with the intent that this will help smooth spending over time and avoid shocks to the replacement programs.

Prioritization

Industry normal practice

The most common approach to prioritization among peer utilities is a “bucket” approach, whereby proposed spending is assigned to one of several categories. The categories reflect drivers recognized by the utility and its regulator. Projects are approved and budgeted according to the perceived importance of the buckets. So, for example, projects in a safety bucket are prioritized ahead of projects in a growth driven bucket. There are several problems with this approach.

- ◆ By the time you get down to “reliability” and “risk management,” where most of the aging infrastructure projects are, there may not be much money left. These projects are easily bumped.
- ◆ Although safety or regulatory requirements may be very important, they are not infinitely more important than everything else. At some point all utilities make the decision that the next increment of safety or compliance is not worth the opportunity cost. This approach does not reflect that fact.
- ◆ Many projects have benefits in more than one bucket. For example, adding a new substation may be a growth-driven project, but it will also have risk management benefits.

Toronto Hydro practice

Toronto Hydro’s FIM and business case models result in explicit metrics of NPV and benefit/cost ratio, which support prioritization across asset programs. In addition, FIM is tied to the value model used for prioritizing spending across the entire utility (i.e., not only aging infrastructure spending), which means the results of FIM are consistent with

the overall strategic objectives of the utility and can readily be compared with other spending options.

Comments, gaps

THESL is in the process of improving its value model. As this work progresses, the drivers and values established should be imported into FIM to ensure consistency.

Past recommendations and status

Past reviews of asset management practices at THESL have resulted in recommendations. The following section describes the steps taken by THESL to address these recommendations.

Develop a regulatory strategy

Recommendation: Work in coordination between AM and regulatory group, taking proactive measures to inform OEB staff of the approach and expected results. The asset management group should establish a direct, continual, and informal dialog with OEB staff. The purposes of this dialog are to develop confidence at OEB in the methods and strategies pursued at THESL, to solicit input from OEB that can be incorporated into THESL's strategic objectives ahead of any rate filing, and to facilitate scenarios analysis and other investigations.

Steps taken to-date: THESL has not yet begun an explicit regulatory strategy, however the asset management processes described in this report and elsewhere are used by THESL in developing its proposed budget and responding to interveners. We expect that over time, the consistent use of these methods will create confidence by all stakeholders in the methodologies.

Develop an approach to integrate drivers

Recommendation: The FIM and other AM tools include means of incorporating drivers from executive level management or OEB. For example, an increased emphasis on reliability may be reflected in an increase in customer outage cost. Toronto Hydro is in the process of re-creating its value model, which identifies and weights the drivers of spending decisions. It will be important to ensure that there is consistency between these weights and the FIM: either the weighting should be done based on the assumptions in FIM, or the FIM assumptions should be updated to reflect the weightings.

Steps taken to-date: Since the new value model is still in development, the asset management team has not yet filtered its results into the FIM.

Asset Condition Assessment data

Recommendation: THESL's plan going forward is to continue improving data collection. Once the data and health index calculations are made current, THESL should begin to analyze the statistics. For example, THESL will attempt to calculate the correlation between health index and failure rate for each asset class (and some sub-classes).

Steps taken to-date: THESL has continued collecting condition data as required by ACA. This is a long-term process, requiring several years before all assets have been cycled through.

Feeder Investment Model

Recommendation: The FIM has been implemented for only four asset classes so far (i.e., underground cable, vault transformers, underground switches, and network units). Some work has been done on several other asset classes, including overhead lines and major station equipment, but these tools have not been finished and implemented. The intent should be to extend the FIM to all major asset classes.

Steps taken to date: The FIM has been extended to all major asset classes

Continual evaluation of customer outage costs

Recommendation: THESL should investigate ways of improving its estimates of customer outage cost. There is not necessarily anything wrong with the values currently being used, however this is a notoriously difficult parameter to evaluate; new surveys and methods are continually being published.

Steps taken to-date: In addition to the value model work discussed previously, THESL has continued to evaluate and examine other customer outage cost valuation studies, and to compare the results with their own estimates and assumptions.

Conclusions

Toronto Hydro has one of the more advanced and well-developed processes for identifying, justifying, and prioritizing spending related to aging infrastructure in the electric utility industry. In addition to the specific points discussed below in this report, there are three foundational principles that they have consistently applied and on which the process has been built.

- ◆ *Customer focus.* A central tenet of asset management is that decisions should be made from the perspective of the customer. THESL's process is explicitly customer-driven. It is common among electric utilities to find that decisions are actually being made with a strong bias toward the benefit of the utility itself, e.g., to reduce troublesome maintenance or to standardize equipment regardless of whether it is cost effective for the rate-payer.
- ◆ *Use of data.* THESL has made use of historical data, surveys, other utility's experience, and the tacit knowledge of their own and third-party experts in developing their processes. The use of these data has been documented and is subject to inspection. The most common approach to using data is *ad hoc*, in an anecdotal way to justify a particular project or policy. For example, a field engineer might use the trend in cable failures over time to justify a cable replacement program, without doing the work necessary to determine whether the trend actually supports his proposal.
- ◆ *Continual improvement.* Toronto Hydro has made ongoing efforts to improve the accuracy of the input assumptions and algorithms used in their planning processes. For example, The Feeder Investment Model (discussed below) and Asset Condition Assessment have undergone significant upgrades within the past few years. Assumptions about failure rates, outage effects, and benefits of upgrade are constantly being reviewed and compared with available data.

Experience Summary

Darin Johnson is the President and director of the asset management practice at BIS Consulting, LLC. His experience includes risk analysis, capital planning, and life-cycle cost analysis for electric transmission and distribution, water/wastewater, and hydro and thermal generation facilities. This work addresses the full range of asset management program development, from framework and strategic planning through implementation of decision-support methodologies and business processes to justify and prioritize replacement of aging assets and other spending programs.

Credentials

Licensed Professional Mechanical Engineer, Washington State

B.S., Mechanical Engineering, University of Washington

Relevant Expertise

- ◆ *Decision-support methodologies*
- ◆ *Risk-based economic evaluation*
- ◆ *Capital planning and prioritization*
- ◆ *Statistical analysis of failure data*
- ◆ *Asset Management strategic planning*

Predictive Maintenance Tool; [Duke Energy](#), [Midwest Commercial Generation](#)

Developed a tool for evaluating the life-cycle cost tradeoffs between replacement and refurbishment strategies of assets at multiple coal-fired generating facilities. Work included development of failure projections, facilitation guides for eliciting expert criticality data, a prototype model and integration strategy, and support for capital planning and prioritization.

Feeder Investment Model; [Toronto Hydro](#)

Created a risk-based economic model for optimizing the timing and scope of refurbishment programs on feeder lines assets, including overhead lines, underground cables, and other equipment. The outputs of this model feeder directly into a standardized business case template, which quantifies the scope of the project, its cost, and the expected benefit in terms of improved reliability. The business cases are being used by Toronto Hydro as part of their ongoing rate case application to their regulator.

Capital Spending Evaluation Process Development; [Washington State Ferries](#)

Established a business case process for evaluating proposed capital projects, especially preservation spending, to determine which projects were justified and how to prioritize in case of limited funding. Project was driven by a legislative requirement for asset management methods and the need for Ferries to produce convincing and transparent justification for spending requests to the State.

Condition, Criticality, and Risk Assessment Process; [Eskom Transmission](#), [South Africa](#)

Worked with Eskom's asset managers as part of an overall asset management project to develop a process and tools to justify replacement of aging transmission equipment. Facilitated business case to support the decision to repair, replace, or refurbish a high-voltage gas-insulated substation. The business case quantified the benefit of the preferred option as well as its priority relative to other spending alternatives.

Asset Management Program Development; [Idaho Power Company](#)

Led development and application of an asset management process to justify and prioritize replacement and overhaul of existing, aging infrastructure in Idaho Power's electric transmission and distribution systems. The decision support methodology considered all costs and benefits of asset ownership to optimize life-cycles, maintenance strategies, and other spending options. Costs considered include direct capital or maintenance costs as well as the cost of outages carried by Idaho Power's customers. The result is an optimized spending plan for each asset type, along with an economic case to justify the spending both internally and externally, and a measure of the priority of each spending program.

Alaskan Way Viaduct Utilities Economic Analysis; [Seattle City Light](#) and [Seattle Public Utilities](#)

Provided consulting services to Seattle City Light and Seattle Public Utilities to support economic evaluations of options to address Transmission and distribution lines and combined sewer upgrades as part of the Alaskan Way Viaduct replacement project. The project includes not only replacement of existing facilities and coordination with roads and other utilities, but also upgrades in response to increased regulatory requirements.

Morse Lake Pump Station Risk-Assessment and Alternatives Analysis; [Seattle Public Utilities](#)

Provided risk-assessment and economic analysis in evaluating capital improvements to reduce risk to the City's water supply of low-probability, high-impact events. The work comprised estimating probabilities of rare events, developing scenarios to model the utility's response, and estimating the total economic cost of the event. A major part of the work was assessing the uncertainty of the cost estimates, which were a major source of overall risk. The final decision is still being made, but it appears that the large-scale interventions are not justified. Aborting the major construction project, based on the results of the risk analysis will save Seattle Public Utilities more than \$50 million.

Risk-Based Capital Prioritization Process; [PacifiCorp Hydro Generation](#)

Developed and implemented a methodology for reviewing and analyzing key components in PacifiCorp's 22 largest hydro generation facilities, to provide a basis for capital spending decisions. The study prioritized expenditures across nearly 200 components, based on the benefits of upgrade, including avoided risk. These results were used to develop plant-wide upgrade and rehabilitation plans for each of the 22 plants, and to prioritize among plants or entire river systems.

Sewer Replacement Planning; [Seattle Public Utilities](#)

Development of a risk-based model to determine remaining economic life of aging sewer pipes. The methodology used the pipes' probability and consequences of failure to select the economically optimal strategy and timing of pipe rehabilitation. The result is a projection of future capital and operating expenses for the sewer system. Failure probability curves were developed using a sophisticated statistical analysis of past failures, which indicated a much lower failure rate than industry standard models.

Electrical Distribution System Asset Management Program; [Hydro Ottawa](#)

Development and implementation of an economic life process to be used in planning and budgeting capital expenditures for electrical distribution system. The methodology was used as part of a successful rate case before the Ontario Electric Board.

Electron Power Plant, Assessment of Remaining Economic Life; [Puget Sound Energy](#)

Conducted mortality study of a 10-mile wooden flume serving Puget Sound Energy's Electron Power Plant. The plant was built in 1904, and the flume was rebuilt most recently in 1985. The mortality of the flume was used by PSE to verify the rate of depreciation of the project overall. The study included condition assessment of the flume and support structures, and an economic and probabilistic analysis of these components to estimate their remaining economic life based on the expected rate of failures.

Transformer Replacement and Spares Strategy at Grand Coulee Dam; [Bonneville Power Administration](#)

Risk analysis study for Bonneville Power Administration of the step-up transformers in the left and right powerhouses at Grand Coulee. This study determined the optimum number and timing of spare transformers to back up the existing 54. It also recommended optimal replacement strategies based on the availability of spares. Work included a condition assessment of the transformers, as well as development of methods for considering multiple, concurrent failures, which would require more than one spare transformer.

Other Asset Management Projects

- ◆ Development of risk-based economic life model, transmission and distribution assets; **Tacoma Power**
- ◆ Development of tools to support replacement planning of substation equipment; **Landsnet**, Iceland
- ◆ Risk-based asset replacement program development; **MRSK-1**, Moscow, Russia
- ◆ Risk-Based Autotransformer Replacement tool; **ComEd**
- ◆ Risk-based economic approach to optimizing improvements in fire flows for **Seattle Public Utilities**
- ◆ Condition Assessment and Life Extension Plan, Rock Island Powerhouse; **Chelan County PUD**
- ◆ Asset Condition Assessment and Baseline Study, statistical sampling techniques for condition assessment; **British Columbia Transmission Corporation** (now BC Hydro)
- ◆ Optimization and justification of upgrade and life-extension at Mossyrock hydro plant; **Tacoma Power**

Experience Summary

Neil Reid's experience includes asset management, condition assessment, conceptual engineering, project management and scheduling, preliminary and final design, cost estimating and control, equipment specification, construction management and testing of hydroelectric, fossil and nuclear power plants, high voltage substations, transmission, and distribution systems.

In addition to project management, he has an extensive background in preparing reports, filings and proposals for managing, defining and evaluating power supply interconnection plans, power and energy requirements, and load flow, short circuit, and voltage drop studies. He has had full responsibility for the preparation of asset condition assessment reports for use in rate filings submitted to the Ontario Electric Board, the BC Utilities Commission and the National Energy Regulator of South Africa (NERSA). He has provided expert testimony related to electric power system costs, operation and safety. Mr. Reid is a registered Professional Engineer in several states in the United States of America and is qualified for registration in Canada and the United Kingdom.

Credentials

B.S., Electrical Engineering, University of Bristol, England, 1962

*Professional Engineer in 7 states
45 years in power transmission*

Relevant Expertise

- ◆ *Documentation in support of rate-filing.*
- ◆ *Asset Management*
- ◆ *Condition Assessment and Health Indexing*
- ◆ *Project Management*
- ◆ *Transmission and Distribution systems engineering*

Process Mapping and Redesign Methodology

Eskom Transmission Division, Johannesburg, South Africa

Core Team Member on UMS project. Project Lead for Design and Construction process mapping and redesign methodology development. Responsible for facilitation of the Design and Construction Process Team in the identification of the Level 1, 2, 3 and 4 processes as they would specifically apply to Eskom. The criticality of the processes and sub-processes identified were assessed and prioritized, producing a list of key sub-processes for redesign. The preliminary process flows were mapped through a series of facilitated team meetings. This effort was focused at documenting the main process flow in order to establish a framework for later refinement. Special attention was given to the identification of best practices and their impact on the process.

Standard formats and architectures were applied to assist in maintaining consistency and compatibility between the processes. To accompany the process maps the team produced process guides, change matrixes, and detailed process accountabilities. These items were to assist in the complete communication of the process design changes required. Training and Information technology needs were identified, as well as applicable process and performance measures. The final maps and guides were presented to the organization early in 2009.

Asset Condition Assessment and Baseline Study

BCTC, British Columbia, Canada

Project Manager. Led a comprehensive Asset Condition Assessment and Baseline Study of all physical assets managed by British Columbia Transmission Corporation (BCTC) and preparation of an independent report to support a filing to the BC Utilities Commission in 2005. Lead role in developing the documentation for the British Columbia Utilities Commission related to Asset Condition Assessment, and answered questions from BCUC and the interveners related to the findings of the baseline study as well as gaps and recommendations for continuation and improvement going forward.

Asset Condition Assessment

Hydro One, Toronto, Ontario, Canada

Assistant Project Manager. Assisted in leading a comprehensive Asset Condition Assessment program of all physical assets owned and operated by Hydro One (formerly Ontario Hydro). Preparation of an independent report to support a filing to the Ontario Electric Board in 2003.

Condition and Criticality Assessment

Eskom Transmission Division, Johannesburg, South Africa

Core Team Member on UMS project. Project Manager for Condition and Criticality Assessment of selected Transmission assets. Responsible for facilitation of development of Condition Assessment methodology and metrics for selected transmission assets in the Eskom Transmission system. BIS Team also developed criticality assessments for individual assets and prepared detailed analytical tools to facilitate the calculation of the optimal economic time to replace or refurbish any given asset. These tools were presented to the organization early in 2009.

Asset Management Plan

Hydro Ottawa Limited, Ottawa, Ontario, Canada

Special Consultant. Consulted to the team working with Hydro Ottawa Limited for development of a comprehensive Asset Management Plan.

Primary Power Equipment Asset Management Analysis

Several Clients, Washington

Project Manager. Led risk-based asset management analyses and prepared reports for primary power equipment for several clients, including Bonneville Power Administration, Bureau of Reclamation, Puget Sound Energy, Seattle City Light and Chelan Public Utility District.

Asset Due Diligence Report Review

Trans Alta Utilities, Calgary, Alberta, Canada

Project Manager and Lead Electrical Engineer. Led owner's review of the Asset Due Diligence report prepared by Trans-Elect for the acquisition of the transmission assets of Trans Alta Utilities, Alberta. The transmission system consists of 11,600km overhead lines and 269 substations operating at voltages of 500kV, 240kV, 138kV and 69kV.

Rock Island Hydroelectric Power Plant Condition Assessment

Chelan Public Utility District, Wenatchee, Washington

Lead Electrical Engineer. Led condition assessment, life extension planning and upgrade study for electrical equipment at the Rock Island hydroelectric power plant on the Columbia River. Prepared detailed reports related to electrical equipment for inclusion in the final documentation to support major plant additions. The plant consists of two powerhouses containing a total of 18 propellers, Kaplan and bulb type units with a total capacity of approximately 600 MW.

Capital Improvement Program Review

Seattle City Light, Seattle, Washington

Principal-in-Charge and Project Manager for the capital improvement program review which was requested by the Seattle City Council, Washington. The aim of the project was to determine if the City's major (\$150 million/year) capital investment in its electric power facilities was prudent. The first part of the project was a physical review of the condition of this utility's capital facilities, including hydroelectric plants, substations, transmission and distribution facilities, downtown network, and general plant. The second was a review of the utility's internal processes and controls used to formulate, budget, approve and manage capital improvement programs and projects.



Distribution Design Standards

Independent Survey and Review

Prepared for:

**Toronto Hydro Electric System,
Limited**

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May 3, 2012

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Overview

Background and Scope

Navigant (“NCI”) was retained by Toronto Hydro Electric System, Limited (“THESL”) to compare its design practices and equipment component standards for its electricity distribution system to those of other similar utilities, both within and outside the province of Ontario. Specifically, THESL seeks to determine:

- How its practices compare to other Ontario utilities and those in other provinces or in the United States
- Differences in design practices, standards, and materials, including potential costs and benefits of these differences
- Where differences exist, are they justified given the unique characteristics of Toronto and THESL

This summary report presents Navigant’s independent assessment of THESL practices versus those of other utilities with similar service territories. Our findings reflect our judgment and experience gained from our knowledge of extensive reviews conducted in Ontario, other provinces, and the United States; supplemented by a formal survey completed by a select number of comparable utilities.

Work Plan and Approach

Navigant conducted the following tasks to assess THESL’s distribution design practices and a selection of major components to other similar utilities.

1. Select THESL Overhead & Underground Design Standards for Review

Navigant met with THESL engineering and design staff to discuss and identify key overhead and underground design standards included in our review. Navigant’s primary objective focused on identifying distribution design standards that have the greatest cost impact when implemented system wide. The following lists the key design standards Navigant investigated:

- Overhead wire size and loading criteria
- Pole class selection, maximum loading and replacement criteria
- Maximum number of primary/secondary lines per pole

- Underground cable specifications, loading and duct bank design, including spare ducts
- Underground system design, including radial versus open loop configuration
- Distribution feeder ties, and capacity reservation for feeder/station back-up
- Overhead and padmount transformer selection and loading criteria
- Padmount switchgear selection and application
- Low voltage secondary grid and spot network design, application and protection
- Distribution protection practices, including smart grid applications
- Replacement/renewal criteria for underground cable, padmount/submersible devices, and rear lot conversions
- Overhead switch and protective devices, including communications systems
- Station switchgear design and replacement criterion

2. *Prepare Survey*

Navigant prepared a survey instrument and issued it to participating utilities with distribution system characteristics and load density similar to THESL. Navigant and THESL prepared the questions and identified a group of utilities deemed to be preferred candidates for the survey. The survey is included as Attachment A.

3. *Interview Utility Participants*

Navigant contacted five participating utilities with comparable service territory demographics, load density and distribution design standards to participate in the benchmark survey. Three of these utilities are located in Ontario; the other two in other provinces or states in the U.S.

Navigant has worked with each of the participating electric utilities (and other similar utilities as well), both within Ontario and other provinces, and is very familiar with their distribution design practices. To encourage participation, Navigant agreed to share the results of the survey with the utilities, with the understanding that survey results and participants would be treated confidentially.

4. *Summarize Results*

Once the surveys and interviews were completed and results tallied, Navigant summarized its findings for each of the standards included in the review for this report. Findings were quantified, where applicable; all other results are presented qualitatively. Our report, presented herein, describes differences in design standards, including reasons why THESL's are justified due to unique characteristics of Toronto and THESL's system.

Distribution Design and Equipment Replacement Practices

The following describes NCI's assessment of THESL distribution design standards and criteria. The analysis examines equipment selection and design criterion that THESL applies for distribution capacity expansion, new connections, and to meet reliability and performance requirements.

THESL's Energy Delivery System

The City of Toronto is the fifth largest metropolitan area in terms of population in North America. Total load for the amalgamated system is approximately 5,000 MW, of which 2,000 MW was THESL peak load prior to amalgamation of surrounding systems. Most of the downtown load is served by 13.8kV and 4.16kV lines, while the remaining load is served mostly with 27.6kV distribution. Hydro One Networks, Inc. ("HONI") owns all of the transmission lines that supply transformer stations ("TS"). Hydro One also owns all equipment from the low side of the transformer switchgear up to and including all station equipment at 115kV or higher. THESL owns and operates the low-side switchgear and related equipment. THESL owns and operates one entire station, Cavanaugh, and will own most of the equipment at the proposed Bremner station in downtown Toronto, projected for commercialization in 2014.

The load density and type of load served suggest continuity of service to downtown electric load is critical, as it includes Toronto's financial district, large office complexes, numerous high rises, and major tourist destinations. Accordingly, approximately 350 MW of this load is served by highly reliable, complex electrical distribution supply systems configured in a network or grid arrangement. Total electric demand in the downtown core of Toronto is approximately 1,000 MW, of which 350 MW is served by secondary networks.

Design Standards and Expansion Criteria

The following describes the criterion THESL employs in the design of its electric power delivery system. Design criterion is presented separately for stations and distribution feeders, with a separate discussion of network facilities serving downtown Toronto.

Stations

Generally, THESL does not own or operate network transmission lines and stations, and therefore is not responsible for the establishment of planning, loading and reliability criteria for the high voltage system. Network transmission assets serving THESL stations are owned and operated by HONI. Most stations located outside downtown Toronto are served by overhead 230kV lines, whereas most downtown stations are served by a combination of overhead and underground 115kV lines.

Although THESL is not responsible for the transmission planning and design criteria, it works closely with HONI, the Ontario Power Authority (“OPA”), the Independent Electricity System Operator (“IESO”), and participates in joint planning sessions to coordinate and plan for the continuity of supply to THESL stations. THESL has also opined on transmission reliability in prior investigations conducted by the IESO.¹ Most important, THESL designs its municipal stations (“MS”) (mostly 4.16kV and 13.8kV and 27.6kV) with consideration given to the design and contingency criterion applied to the transmission system. For example, if a loss of key transmission lines or transformers were to cause the entire or partial loss of station capacity, then THESL would need to design its system in a manner to ensure back-up feeders and station capacity were available.

THESL planning criteria specifies that all downtown stations must be able to serve projected load for a single contingency; that is, for loss of a single station transformer, incoming supply line or switchgear bus section, will not cause loss of load (also referred to as n-1 criteria). THESL employs a Dual Element Spot Network Design (“DESN”) standard for downtown stations, with each bus supplied by two transformers. Stations typically include four 100 MVA 115/13.8kV transformers (owned by HONI). A maximum of 10 to 15 feeders are allowed per switchgear bus. Under this design, the 13.8kV station bus rating is typically the limiting element from a capacity standpoint. Net firm station capacity is derated to 95 percent of the projected future peak to account for unanticipated loads or weather anomalies. For the loss of a single transformer, THESL temporarily increases the utilization of the remaining transformers in service above nameplate ratings to an acceptable level.² These practices and criteria are consistent with survey participant practices and industry practices in general.³

¹ For example, THESL offered its comments to the IESO *Stakeholders Engagement Plan SE-50 for Supply to Large Urban Centres* in a letter dated February 28, 2008.

² IEEE/ANSI has issued guidelines for oil-immersed transformers below 100 MVA that indicate the acceptable level of increasing loading without loss of life based on transformer preloading, temperature and duration of increasing loading. THESL practices are consistent with IEEE/ANSI guidelines.

³ Some North American urban utilities serving critical, high density loads have adopted second contingency (n-2) station planning criterion.

THESL's planning criteria allow for the loss of any single major station element, at peak, without full or partial loss of load. An Emergency Preparedness exercise conducted in May 2006 suggested that THESL's planning criteria should include a requirement that outages caused by a partial or full loss of a station should be restored within 24 hours. However, without adjacent transformer station switchgear ties in downtown Toronto, this objective cannot be met for a major outage at several stations. Other utilities design their systems to provide feeder ties on most or all overhead and underground distribution lines. However, the construction of the proposed Bremner station and proposed feeder ties to Strachan and Esplanade and other proposed upgrades associated with externally driven upgrades along the waterfront will address this issue.

As noted earlier, THESL also owns many MS' that step down higher primary distribution voltages to lower voltage; mostly 27kV to 4.16kV and 13.8kV to 4.16kV. (Two utilities in the survey own most 230/27/12.47kV TS' as well.) These unit stations typically are equipped with one or more station class power transformers, building enclosures for relaying and controls, enclosed switchgear, and SCADA access. This practice is consistent with each of the utilities surveyed. Later in this report, programs that utilities have implemented to convert distribution lines to operate at higher voltages will be described. Generally, utilities have pursued this approach as means to either eliminate some, or all of the unit stations on their distribution system over time.

Distribution Feeder Design

Outside of the former downtown Toronto system, most THESL's feeders are rated 27.6kV and designed in a radial "open loop" configuration. The open loops include several transfer switches and normally open feeder ties that are suitable for inter-station load transfers. In the event of a contingency loss of station transformation capacity, these ties can be utilized to transfer load to other nearby stations where sufficient transformation capacity exists to carry the load. Many of the 27.6kV feeders and transfer switches are located overhead. This practice is consistent with other utilities participating in the survey group.

The mostly underground 13.8kV system in downtown Toronto predates the overhead 27.6kV open loop design located in the amalgamated distribution systems. Unlike the 27.6kV system, downtown stations and radial 13.8kV distribution feeders rely on the 115kV voltage transmission system to maintain reliability to downtown customers. The current downtown 13.8kV design criterion excludes reservation of feeder capacity to back-up load from other stations. This design configuration has no inter-station feeder ties, which limits load transfer among downtown stations.⁴ Thus, the loss of a downtown station would result in significant

⁴ The absence of feeder ties and reliance on incoming supply to maintain reliability does not address the complete loss of a station, which is usually deemed as a very low probability, but high impact event. However, the near full

and extended loss of load until repairs are completed and the station returned to service.⁵ Notably, lack of space in downtown area for underground feeder tie switches and the absence of spare conduit or underground duct bank systems is a major deterrent to creating feeder ties where none currently exist. In contrast, most other utilities surveyed provided inter-station tie capability for underground distribution located in urban areas.

About 350 MW of high density load in downtown Toronto is served by low voltage secondary grid networks. These networks operate in a looped arrangement such that a loss of any single element will not cause overloads or loss of load. A substantial portion of secondary network load in downtown Toronto is served from a few stations, with some busses dedicated to serving network load. THESL secondary grid networks, both from a design and planning criterion perspective, is similar to other utilities surveyed.⁶ However, Toronto is one of the largest cities in Canada, and therefore has significantly more and larger networks than most of the other utilities surveyed.⁷ Some utilities also have installed enhanced communications and protection systems, described in greater detail in subsequent sections.

Conformance with Industry Design Criteria

As noted, planning guidelines for stations in Ontario (and adopted by THESL) are based on a single contingency (n-1) planning criterion. Station bus design includes transfer busses with full feeder back-up capability reserved for maintenance or when outages occur. Many downtown loads are served by secondary grid (lower load density) or spot (highest load density such as high rise buildings) networks. Each of these design practices is consistent with common utility practices for urban areas, with the primary exception being the absence of inter-station feeder ties in downtown Toronto.

utilization of station bus capacity and deterioration of equipment has increased outage exposure and the probability of station outages.

⁵ Three prior events highlight the exposure caused by the loss of downtown stations. In January 2009, one of the coldest days of the year, the Dufferin station was shut down due to flooding caused by the operation of HONI's transformer fire protection system. Over 34,000 customers were interrupted, some for up to 24 hours. A similar flooding event occurred at the Terauley station in January 2005, causing an interruption of service to over 3,500 downtown customers for up to 10 hours. Lastly, a TS transformer failure at Windsor on October 14, 2010 caused an interruption of service to several downtown high rise buildings and retail centers during daytime business hours.

⁶ Some utilities report that some network primaries may be used to serve radial load, sometimes with auto-transfer switches (as opposed to spot networks).

⁷ The single contingency criterion that THESL applies to station transformers is less conservative than other large utilities serving critical, high density loads. For example, the City of Manhattan (Consolidated Edison Company of New York) applies a second contingency (n-2) criterion for lines and stations serving the Island of Manhattan. Similar criterion has been adopted for critical government and commercial load centers in Washington, D.C. by the Potomac Electric Power Company, Houston, and other large cities worldwide, such as downtown Tokyo.

Overhead Distribution Design and Component Selection

The following presents survey results for overhead systems, including a comparison of THESL practices to survey participants. Where differences exist, Navigant describes the circumstances causing these differences, such as constraints associated with the design and operation of a major urban distribution system.

Overhead Conductors

Most utilities with 15kV class distribution (e.g., 12.47kV, 13.8kV and 14.4kV) now use 477 or 556 AAC conductor or equivalent on most three-phase main line sections. Maximum normal loadings are between 400 to 500 amperes (8 to 10 MW). Actual ampere ratings of overhead main lines are 600 to 700 amps, but the limiting element typically is underground exit cables, where capacity limits are lower. For most utilities, including THESL, overhead distribution system capacity is constrained by underground exit feeders which are the limiting elements due to localized duct bank heating.

Related findings include:

- Lateral taps for most utilities is 1/O conductor or equivalent, although older lines sometimes are #2 or smaller. Most utilities, including THESL, have formal programs or measures in place to upgrade older and deteriorated lateral tap lines built with smaller conductors such as #6 copper. Some of these programs are incorporated into worst performing feeder and other reliability programs.
- Each of the utilities surveyed also use distribution rated 25kV or higher. Utilities load these lines up to 15 to 20 MVa, or higher during emergencies, although average loadings typically are lower. All utilities also use lower voltage distribution such as 4.16kV, typically in downtown areas that are fully built out. Similar to THESL, many of these utilities are converting some of these lines to operate at higher voltages.
- Most utility overhead distribution lines contain two to three tie points to enable full transfer between stations. This practice is consistent with THESL's 27.6kV system, but in contrast, THESL's practices on its downtown 13.8kV system differs, where many feeders do not have open ties with feeders served from other nearby 13.8kV stations.

- Where ties exist, most utilities reserve up to one-third of feeder capacity for back-up. Most utilities include emergency ratings when establishing feeder tie capacity limits; whereas one utility does not apply emergency ratings in its planning criteria. This practice is comparable to the design criterion THESL applies to its 13.8kV and 27.6kV distribution system.
- For most utilities, use of open wire construction is dominant. However, utilities increasingly are using bundled conductor (e.g., spacer cable) such as Hendrix or tree wire on primary three-phase lines most susceptible to tree-related interruptions. THESL's design standards specify use of tree wire in areas susceptible to tree-related interruptions. Both tree wire and bundled conductor are viewed as a cost-effective reliability improvement measures, designed to improve reliability performance metrics.⁸
- For secondaries, utilities use triples or quadruplex wire as a standard, although several have large amounts of legacy open wire secondaries. Open wire secondaries are typically replaced in conjunction with conversion or other primary line upgrades or relocations. THESL does not have an active conversion program for open wire secondaries.

The design and loading practices employed by the utility survey group outlined above are generally consistent with those currently employed by THESL. The primary exception is the number of feeders installed on overhead distribution and absence of back-up on downtown 13.8kV feeders. For the former, THESL tends to limit the number of feeders in congested areas to two; whereas some utilities allow up to three or four per pole, particularly on taller poles. One utility reported that three to four feeders are allowed only where lines of different voltages are installed on the pole, where there is less risk of the loss of multiple feeders from the same station. However, THESL pole height and number of feeders often is limited to two in congested areas or where obstructions exist; THESL allows a greater number of feeders to be installed in less congested areas, particularly on 27.6kV lines.

Poles and Structures

Pole routing practices varied among the survey group. Most utilities prefer to install poles near travelled roadways. However, some utilities have significant amounts of back lot legacy

⁸ Several U.S. utilities use bundled conductors extensively, sometimes as a design standard. It is often installed on line sections where heavy tree growth, coupled with limited horizontal clearances makes bundled conductors a cost-effective choice.

construction, especially on single-phase lateral tap lines. Some of these utilities have implemented programs and policies to move these lines roadside, but often are forced to relocate overhead as underground due to difficulty in obtaining permits for new pole lines. Where overhead distribution is located in urban areas, these lines often are located in alleyways.

Pole Selection Practices

Most utilities, including THESL, use class 2 or 3 wood poles, 40 to 50 feet in height for three-phase primary overhead lines. The use of stronger class 2 poles typically is used in areas where large devices are installed, on lines with multiple circuits, corner structures, or in areas highly susceptible to vehicular accidents. Most lateral, single and two-phase lines are equipped with Class 4 poles, typically 40 feet in height. Taller poles are used for both three-phase lines and laterals where underbuild primary is installed or where additional clearance is needed for devices, highway crossings or where other obstructions exist. One utility reports extensive use of concrete poles (relative to other utility practices), and is developing policies to determine when concrete should be used versus wood; for example, concrete poles should be located on main traveled roadways where guying rights are more difficult to obtain. THESL also generally uses concrete poles on its distribution system for similar reasons.

Most existing three-phase construction is cross arm (including alley-arm) while most single phase lines use pole-top insulators. Several utilities, including THESL report that current design standards specify armless construction with stand-off insulators - cross arms are replaced on feeders where legacy design was cross arm construction, or in areas where tight clearances require use of alley arm construction. Utilities with poles located in densely populated areas often use higher poles to maintain vertical or horizontal clearances. Each of these practices is generally consistent with those currently employed by THESL.

Some utilities own and operate lower voltage transmission (e.g., subtransmission) rated 34.5kV or 69kV installed on wood poles, often along roadways with distribution underbuild. This practice is not applicable to THESL's system, as all TS' that supply THESL are rated 138kV or 230kV. Utilities with 34.5kV or 69kV transmission lines often include one or more 13.8kv or 25kV lines below the transmission conductor. This practice does not apply to THESL, as it does not own lines rated 34.5kV and higher.

Cross Arms and Insulators

All utilities surveyed use standard 8 foot cross arm construction, although THESL's and several other utilities current standard for 15kV class distribution specify armless construction; cross arms are used for legacy applications or where additional clearances are required. Use of stand-off insulators is more prevalent on utilities with 25kV (or higher) distribution. A common practice among utilities is to install insulators rated for higher voltage distribution; for example, utilities often will install insulators with 25kV Basic Impulse Level ("BIL") ratings on 15kV class

lines and insulators with BIL ratings of 35kV for 25kV lines. The use of higher insulators with higher BIL is intended to improve reliability at relatively low cost or where future voltage conversions are expected or likely to occur. One utility reports it is proposing to examine fiberglass crossarms on a pilot basis.

Two of the reporting utilities indicated the institution of formal insulator replacement programs, mostly to facilitate the change-out of porcelain insulators with fiberglass. Typically, these are detected or identified through scheduled inspections. Some utilities, including THESL, also change out defective porcelain insulators on gang-operated switches. Defective porcelain is identified either during routine tests where the devices are operated to assess integrity or previously identified as defective by equipment suppliers.

Transformers and Devices

The design standards that THESL uses for overhead transformers are comparable to the utility group; although one utility continues to install three-phase overhead devices whereas THESL uses three single-phase units for three-phase loads. One company reports it is actively replacing submersibles with pad mount devices. However, THESL continues to install many submersible transformers to comply with City requirements; whereas other utilities are seeking to minimize or eliminate their use due to maintenance and harsh operating environments. Most utilities utilize line reclosers to isolate faults and reduce customer interruptions; some utilities are more aggressive in terms of the number of devices installed. THESL previously considered, but has not adopted use of line reclosers due to the shorter primary line sections, longer laterals and fault current levels that typically are above standard recloser ratings. One utility has pursued distribution automation aggressively, including installation of auto-loop schemes that use reclosers or motor-operated switches to isolate faults and transfer load to unfaulted line sections from feeders supplied by nearby stations.

Some utilities, including THESL, are considering or actively replacing completely self-protected ("CSP") transformers, but Navigant did not identify any with an active program to proactively replace them on an accelerated basis. Some are replaced and retired as part of a renewal project triggered for reasons other than CSP transformer replacement.

All utilities report that transformers are viewed as "run-to-failure" devices. Obviously damaged or worn transformers detected during scheduled 3-year inspections sometimes are replaced or upgraded. One utility reports it has begun to replace one-of-a-kind type devices (or those with limited installed quantities) to reduce inventories needed for spares. THESL has begun to remove legacy equipment and one-of-a-kind devices that are no longer consistent with

current design and procurement practices in order to have standardized equipment and to reduce the dependence on one-of-a-kind devices, which may be hard to procure.

Rear to Front Lot Conversions

Few companies are actively relocating overhead lines to front or roadside locations, as lines along property frontage or roadways usually need to be relocated underground at significant cost. Some companies are relocating overhead lines to underground, but only when needed for reliability or lack of access. Virtually all primary and secondary relocations include use of conduit, either concrete-encased duct banks for primary three-phase lines and directional boring and flexible conduit for single-phase laterals. Direct buried cable, while discouraged, is sometimes used for replacement of secondary cable due to cost or when replacing small segments of line.

Specific findings include:

- The preferred method for single-phase lines is to use directional boring in combination with the installation of flexible conduit. THESL practice is to install concrete-encased conduit for single- and three-phase cable.
- Those relocating lines underground have formalized policies that also mandate the use of padmounted transformers (as opposed to submersibles); this has caused some difficulties in obtaining easements as property owners are reluctant to grant easements when installation of underground cables is conditioned upon the installation of padmount transformers.
- One company has established a policy to only install pad mount transformers when submersible devices fail or need to be replaced due to deterioration.
- Where relocations are single-phase only, directional boring with flexible conduit is most often used. However, where three-phase main line primary distribution is relocated, concrete-encased duct bank is installed in trenches dug by backhoes. The use of conduit also includes single phase lines that may later be upgraded to three-phase.
- One utility reports that it pays for electric panel replacements if the utility has chosen to relocate the line.

- One utility reports that it does not replace service cable for underground residential distribution (“URD”)⁹ due to cost, unless the cable is obviously deteriorated.
- Where secondaries and services are replaced, these are usually in duct as directional boring is applied where possible.
- Utilities report that concrete-encased duct bank systems are installed for three-phase primary trunk lines or where street crossings exist. This is consistent with THESL practices.

Where concrete encased duct banks are installed to accommodate three-phase primary cable, these typically are 1x4 ducts, configured horizontally. If additional feeders are in the planning horizon, 2x4 duct bank systems may be installed. For major street crossings with three-phase lines, typically 4x4 duct banks (or larger) are installed.

One utility reports that it is installing spare conduits at road crossings when other utilities (e.g., communications utilities) are installing new lines or replacing existing communications cable. THESL has adopted a similar practice, as the impact on electric infrastructure is reviewed and coordinated with City departments, provincial agencies or other utilities when new construction is proposed or where new lines are to be installed.

⁹ Often referred to as underground rural distribution by some utilities.

Underground Distribution Design

The following presents survey results for underground distribution, including a comparison of THESL practices to survey participants. Where differences exist, Navigant describes the circumstances causing these differences, such as constraints associated with the design and operation of a major urban distribution system.

Most utilities surveyed use extensive amounts of cable, both for three-phase main lines serving urban or commercial load, and URD for residential areas. Due to legacy systems, the type of cable and infrastructure that currently exists varies widely among utilities. However, all utilities, including THESL, report that cable replacement and underground infrastructure renewal are critical areas due to the presence of older, first or second generation cable with known defects and performance concerns. All report that replacements are carefully prioritized to ensure only the worst performing cables and sections are replaced first.

Underground Cable

Most utilities, including THESL, with 15kV class distribution (e.g., 12.47kV and 13.8kV) typically use 500 MCM copper or 750/1000 MCM Aluminum conductor or equivalent on three-phase main line sections. THESL design standards specify that copper should be used for most 13.8kV lines in the downtown area; copper or aluminum is used on 27.6kV distribution. Maximum normal loadings are between 8 to 10 MW, or 400 to 500 amps. For primary cable, use of tree-retardant, cross linked polyethylene ("TR-XLPE") is common; typically equipped with jacketed concentric neutrals or copper shield. For main line sections, use of 1000 MCM aluminum is common, with 500 MCM copper installed in areas where smaller existing duct banks require smaller cable.

Some utilities limit maximum feeder loadings to about 350 amps due to heating limits in exit feeders, where multiple feeders cause localized heating and resulting capacity derating. Actual conductor ampere ratings on most primary overhead sections are 600 to 700 amps, but the limiting element typically is underground exit cables, where ampere ratings are lower. Most utilities, including THESL, design the overhead distribution system with underground exit feeders that are the limiting element on overhead feeder capacity.

Lateral taps and URD construction for most utilities, including THESL, is 1/O aluminum or equivalent, although older lines sometimes are equipped with #2 copper.

Each of the utilities surveyed also install primary distribution cable rated 25kV or higher. All utilities load these lines up to 20 MVA, although average loadings typically are lower due to exit feeder constraints. All utilities also use lower voltage distribution such as 4.16kV, typically in downtown areas that are fully built out. Many of these utilities are also converting some of these lines to operate at higher voltages.

Most utility underground distribution lines contain two to three tie points to enable full transfer between stations. This contrasts THESL's practices on its downtown 13.8kV system, where many feeders are not equipped with ties to feeders served from other stations.

All utilities have significant amounts of URD, some direct buried, and others in conduit. Most utilities now require duct bank, open loop systems, although some lines are still direct buried. Directional boring is often used where obstructions limit the utility's ability to dig trenches. All utilities have replaced older deteriorated URD cable (mostly installed in the late 1960's and 1970's), with much of it being cross-linked polyethylene ("XLPE") with unjacketed neutrals, or with corroded sheathing.

Civil Infrastructure

All utilities have implemented an underground civil infrastructure upgrade or replacement program, as most have facilities that are up to 60 to 80 years old or longer. However, the level of investment compared to the amount of infrastructure in service appears to be modest, as the cost of major infrastructure upgrades or replacements can be exceedingly expensive. For example, the cost to replace an underground vault typically can be \$1 million or higher. Similarly, duct banks are increasingly a concern, including clay tile ducts (terra cotta) or other older materials that have become brittle or begun to collapse. Navigant found that very few of these ducts are actually being replaced on a widespread basis. In some cases, new concrete-encased duct bank systems are being installed in conjunction with distribution upgrades associated with new construction or downtown load growth.

Because THESL vaults and duct banks are located in areas with high traffic density, multiple circuits and minimal greenways (for accessing or locating duct banks), replacement of civil infrastructure is a greater challenge for THESL; a key difference to other utilities that have better access and less restrictive rules on when work can be performed. The latter point refers to municipal rules that limit work along travelled roadways to off-peak hours, thereby increasing the difficulty in coordinating the work as well as higher cost. Further, THESL typically allows up to four cables per duct bank, with a larger number of cables allowed in congested areas. The design and loading practices employed by the utility group, outlined above, are generally consistent with THESL, as each utility surveyed has space or routing

constraints that require exceptions to the company's preferred design and material selection practices.

Paper Insulated Lead Cable

All but one utility uses Paper Insulated Lead Cable ("PILC") on main line underground sections. Some report very favorable performance, but are limiting or eliminating installation of new PILC. Those with PILC have implemented replacement programs, due to degraded reliability and the relatively few suppliers of PILC cable. Some of these programs are in their infancy, with proposed replacements, prioritized based on condition assessment and reliability exposure. Notably, at least two utilities plans to continue to support use of PILC, with one utility reportedly stockpiling the cable as a hedge to future cost increases or lack of supply. Similar to some of the utilities surveyed, THESL continue to use PILC on its 13.8kV system for maintenance or replacement, although TR-XLPE is installed on new underground lines.

Cable Replacement

Many utilities report that they have or are planning to implement primary cable replacements programs. However, many appear to in their infancy, as prior replacements have been very modest as a percent of total cable known to be potentially at risk of failure. Most utilities reported large amounts of cable that may be near the end of its service life, with costs for replacement potentially higher than amounts in current replacement plans. At least one utility reports that it is focusing on cable failures caused by inadequate or improperly installed vault racks as cable failure records indicate failures are often in vaults where racking is inadequate. Vaults are inspected for cable droop, damaged racks, missing racks, and are consequently replaced or repaired (instead of replacing cable) if deemed inadequate.

Secondary Networks

All of the utilities surveyed, except one, operate one or more secondary networks, including grid and spot networks. Some of the spot networks operate in a mini-grid configuration. One utility is in the final phases of converting its only network to operate radially. The latter is due to several factors, including the need to upgrade degrading network equipment and cables, the loss of key skills for operating and maintaining the networks, and the limited number of suppliers of network equipment. One utility is expanding its network, while another is expanding its network only by adding service lines within the existing network. THESL expects to expand secondary grids mostly within existing networks.

Several owners of network systems have or plan to enhance network reliability and reduce major outage exposure by adding fast-acting current limiting fuses ("CLF") at station breaker locations, heat detection equipment, and through real-time access to load data and remote

switching of breakers or network devices within vaults. Several have also begun to replace underground infrastructure, including cable chambers, vault walls/roofs, cable racks, and supporting devices. Utilities expanding their networks are also adding new vaults and associated primary cable and network equipment. Despite concerns with regard to duct bank condition, only a limited amount of underground duct banks are being replaced.

Stations

Most of the discussion that follows focuses on distribution class equipment and design practices, as most transformer stations and equipment is owned and operated by HONI. Similar to THESL, most utilities own and operate MS' that convert higher distribution voltages to lower operating voltages. Many of these stations include enclosed structures, transformation equipment, switchgear and protective devices that functionally, are comparable to those used in TS'.

A key difference in design practices employed by THESL is the use of station equipment with higher fault level ratings (e.g., breakers with rating higher than standard 20kA ratings) due to high fault current levels associated with the highly interconnected HONI bulk power system and strong generation sources. Notably, the cost of the higher rated equipment is considerably higher than devices with standard ratings.

Municipal Stations and Voltage Conversions

All utilities have or plan to convert portions its distribution system, mostly 4.16kv to 12.47/13.8kV; or in some case to 25kV or higher. All utilities report that these conversions are performed due to the need for higher capacity or for renewal due to deteriorated equipment. Most utilities plan to continue to own, operate and maintain unit stations, mostly 12.47/13.8 to 4.16kV although at least one utility proposes to convert all lines fed from unit stations to operate at higher voltages – all stations would be retired within the next 30 to 40 year, with all distribution feeders served from HONI (or in some cases, company owned stations). Other reasons cited for the conversion includes increasing obsolete or deteriorating station equipment, higher Operations, Maintenance and Administration (“OM&A”), larger inventories and spares, and costly capital upgrades. One utility indicated it strictly wanted to be in the ‘wires’ business, with a focus on distribution line assets as opposed to station equipment. This would also allow them to eliminate station equipment from their equipment inventory, and phase out crew training for station class equipment. THESL practices are comparable to utilities surveyed, including the planned retirement of some MS' in conjunction with distribution line conversions.

Another key reason for conversion is the ability to retire older unit stations equipped with obsolete switchgear or deteriorated transformers. Some utilities have implemented programs to

partially convert some lower voltage lines, and install padmount step down transformers and switchgear, with SCADA communications, at much lower cost than fully-equipped stations.¹⁰

Although conversion programs are underway at these utilities, many expect several unit stations to be in service for the next 10 to 20 years or longer. Utilities that expect to keep unit stations in service for an extended time frame continue to invest in upgrades needed to ensure the lower voltage systems are reliable. These upgrades include replacing or adding new transformation capacity, switchgear and protection systems; particularly where obsolete or susceptible to catastrophic failures, such as non-arc resistant switchgear.

To reduce cost, some utilities install overhead or pad mount step down transformers to retain portions of the lower voltage distribution, particularly in areas that are not expected to grow over time. This may include use of several smaller step down banks or individual transformers. In contrast, one utility reports that once a feeder (or set of feeders) is selected for conversion in conjunction with the retirement of a unit station, it will convert all line sections to operate at a higher voltage – single phase step down transformers for single-phase lateral is strongly discouraged. All utilities report that all construction in lower voltages areas – typically 4.16kV – is built to the current higher voltage design standard. The most common example is installation of 15kV class (or higher) insulators on existing 4.16kV lines during upgrades or replacement.

Replacement Criteria

Some utilities proposed to replace some unit stations, but continue to operate unit stations that cannot be replaced on a cost-effective basis. Utilities that expect to keep unit stations in service indefinitely or at least for an extended number of years will typically invest in the following to ensure these stations continue to operate reliably and safely.

- Switchgear – typically for the replacement of non-arc resistant components
- Power Transformers – either new purchases or re-use of devices removed from other stations that have been retired
- SCADA/RTU's – often in conjunction with communications systems upgrades
- Protection Equipment – programmable devices often installed in conjunction with switchgear replacement

¹⁰ A variation of this option is to install overhead step down transformers – for example, three 500kVA devices on a single pole – along with an overhead line recloser or in-line fuses.

All utilities report that non-arc resistant switchgear is being replaced in many unit and TS'. However, some report that existing switchgear will remain in service if it will be in service for 10 to 20 years or less.

For TS', utilities collectively report that obsolete protection and older electro-mechanical devices are systematically being replaced with programmable devices, particularly in locations where distributed generation is present or is expected to be installed on local distribution lines.

Summary Assessment and Conclusions

Navigant's review of THESL's distribution design practices and equipment component standards is comparable to those employed by other utilities that serve a mix of suburban and high density urban load, with some exceptions. Where differences exist, they often are due to restrictions associated with the location of overhead lines and underground facilities in dense urban areas. For example, THESL limits the number of feeders on a single pole to no more than two in most downtown areas; whereas utilities with fewer space constraints install a greater number of feeders. Similarly, THESL's use of submersible transformers contrasts practices of other utilities seeking to install only pad mount devices where possible. However, for key design standards such as line loading, conductor and cable selection, overhead design, and system protection, THESL practices are comparable to those Navigant surveyed.

Key results and findings supporting our assessment include the following:

1. THESL station and distribution capacity planning practices are consistent with other comparable utilities. Navigant's review of actual THESL loadings indicate line and equipment utilization is at or above other utilities.
2. Loading criteria for 13.8kV and 27.6kV lines is consistent with other utilities; further, THESL's higher BIL for 27.6kV lines has been adopted by other utilities that typically use 25kV or higher class distribution.
3. THESL planning and design for inter-station transfer tie capability is consistent with other utilities for higher voltage primary overhead lines (e.g., 27.6kV). However, in contrast to other utilities surveyed, THESL's downtown distribution lines that operate at 13.8kV tend to have fewer or no feeder ties, and instead rely on intra-station bus ties for feeder back-up support.
4. THESL's current use of Class 3 poles for three-phase main line and Class 4 poles for laterals is consistent with other utilities. The use of armless construction for primary three-phase lines is consistent with other utilities, as several utilities now designate use of armless construction as a standard. However, these differences are insignificant with regard to reliability and cost, and are mostly a matter of preference.
5. The installation of up to two primary feeders per pole in congested downtown areas is consistent with most other utilities surveyed. Some utilities occasionally will install up to three or more primary lines in areas where taller poles can be installed; however, typically no more than two feeders are fed from the same station.
6. THESL's pole inspection and replacement practices are consistent with, and in some case above, common utility practices.

7. THESL's replacement of known defects for porcelain insulators is consistent with other utility practices, as it is a low-cost reliability improvement.
8. There is some discrepancy in utility practices with regard to rear lot conversion, with some utilities actively converting overhead lines to underground, some which limit the practice, and others that install all new lines along roadways or otherwise accessible locations. THESL's practice is to relocate overhead rear lot lines to front lot underground in concrete-encased duct banks. Use of pad mount transformers is preferred, but submersible transformers are installed where required by municipal mandate or where space constraints exist.
9. All utilities surveyed have active voltage conversion programs, mostly 4.16kV converted to operate at 12.47kV or 25kV (or higher). Some utilities, including THESL plan to eliminate some low voltage MS' over time as distributed lines are converted to operate at higher voltages.
10. Where unit stations are expected to be in service for the foreseeable future, utilities tend to make required investments in key components such as transformers and switchgear to avoid degradation in reliability.
11. Similar to other large utilities, THESL plans to own and operate higher voltage TS stations such as the existing Cavanaugh and proposed Bremner station. Some larger utilities within Ontario and most of those outside of Ontario commonly own stations supplied by lines operating at transmission voltages. The installation of enclosed or below grade stations in urban areas is uncommon, but consistent with practices of other utilities in large urban areas such as Vancouver.
12. All utilities, including THESL, have targeted reliability programs that include enhanced animal protection, use of tree wire or bundled conductor, and limited relocation of overhead lines to underground. Most have pursued distribution automation where cost-effective, focusing on mid-stream reclosers or auto-sectionalizing loop schemes. THESL does not currently install line reclosers due to high fault current levels and shorter main line segments.
13. Most utilities, including THESL, employ dual radial lines with open loops for most underground distribution. Use of padmount switchgear for main line feeders is common. Some utilities include SCADA monitoring or control of pad mount switchgear.
14. All utilities, including THESL, have proactive programs to replace main line cable and URD. However, due to the large amount of cable on each of these systems, each has prioritized these replacements to areas with highest exposure to failure and customer interruptions. Replacements rates tend to be less than one percent annually.
15. Most cable replacements are installed in ducts, although some utilities use directional boring and flexible conduit for some URD cable replacements. Some cable replacement

programs have only recently been implemented due to cost. Those that have formal programs underway expect cable replacement programs to extend well into the future (up to 40 years or longer) due to the large amount of cable that will need to be replaced and the high cost of replacement.

16. Where concrete-encased duct banks are replaced or newly installed, THESL and other utilities will generally install spare ducts for future expansion. The number of additional ducts depends on location, and the number of main line versus lateral line segments.
17. Cable replacement program include use of cable that is fully jacketed cross-linked polyethylene and aluminum conductor. However, where duct size is limited, smaller grade copper is purchased.
18. Of the utilities that use PILC, all expect to continue using the cable, although several are now considering cross-linked polyethylene as an alternative or for new lines due to concerns relating to reliance on a single supplier, environmental impacts and specialized skills required of crews. Several utilities report continued good reliability performance despite increasing age of PILC cable. THESL continues to use PILC for maintenance or replacements only.
19. Similar to THESL, concrete-encased duct bank is used for all new or replacement of main line cable sections, often with sufficient spare duct capability to accommodate future expansion. All utilities also avoid the use of direct buried cable, using directional boring where possible, both to provide cable ducts and to avoid replacement or repair of roadways and driveways. Some utilities, including THESL, install spare duct banks in coordination with other utilities, even when electric cables are not proposed for installation in the near-term
20. All utilities surveyed with extensive urban underground distribution indicate underground civil infrastructure is degrading and is selectively upgrading or reinforcing their underground civil infrastructure. The high cost of mitigation is cited as a major factor in selection criterion, with complete replacement of vaults or duct banks only completed where essential and necessary.
21. Similar to most utilities, THESL is replacing obsolete/legacy transformers or those with safety issues, such as CSP, live-front, or one-of-a-kind transformers.

Attachment 1: Utility Survey

Distribution Design Benchmark Survey Questions

For all questions relating to design, equipment procurement or construction, please list only those which are currently employed by your company or that are included in its design and equipment standards.

General

1. Introduction
 - i. Please list your Company, Department, Position, Contact Information.
2. General Statistics
 - i. Please provide the KM of Overhead ("OH") / Underground ("UG").
 - ii. Please specify the primary distribution voltages in use.
 - iii. Please list the breakdown of the number of Residential / Commercial / Industrial Customers.
 - iv. What types of distribution design configurations does your company currently employ (e.g., radial, radial looped with open ties, secondary networks, unit step down stations)? Does the design vary with regard to OH versus UG primary?
 - v. Does your company have any unique characteristics (e.g., owns transmission connected transformer stations)?

Overhead Distribution

3. Conductors
 - i. Please list the applicable OH conductor and construction types that currently use: Open Wire, Bundled, Tree Wire, Other
 - ii. Does your current design standard include cross arm, stand-off insulators, or other construction types?
 - iii. If there are any recent changes in design standards / philosophy for OH conductors with your company, what is the primary driver of these changes? For example, use of bundled conductor if this previously was not a design standard.
4. Pole Specification and Design
 - i. What is the maximum number of primary feeders installed per pole? Please list by voltage if applicable.

- ii. What is the limiting factor on the number of primary / secondary lines installed per pole (e.g, pole height, loading limits, clearances, reliability exposure, other)?
 - iii. Does your company have a pole inspection program? If so, what is the inspection interval in years per inspection?
 - iv. Does your company have porcelain insulator and / or grounding improvements for overhead distribution? If so, please describe.
 - v. If there are any recent changes in design standards for poles with your company, what is the primary driver of these changes (e.g., higher class poles due to higher design / loading standard or to improve storm resiliency)?
5. Rear To Front Lot Conversions
- i. Does your company have an active rear to front lot conversion program? If so, what are the design details of the conversions (e.g., primary and / or secondary, full service or splice point only), and does any of the following apply?
 - a) Covering the cost of relocating the meter
 - b) OH-OH only
 - c) OH-UG only
 - d) Combination of a) and b)
 - e) Use of concrete, duct bank system in right of ways
 - f) Use of directional boring and if applicable, under what conditions it is used
 - g) Use of PVC for primary, secondaries or services?
 - ii. If so, does it include payments for relocation of customer electric service panels (e.g., does the utility bear the cost or otherwise recover these costs from customers)?
 - iii. If there are any recent / forward looking changes in design standards / philosophy for rear to front lot conversions with your company, what is the primary driver of these changes?
6. Distribution Transformers
- i. Does your company have a distribution transformer replacement program? If so, please describe the type of transformers replaced (e.g., OH, Padmount, Submersibles, Completely Self-Protected "CSP").
 - ii. Please describe the criterion for the replacement distribution transformers.
 - iii. Is this program still active today?
 - iv. If there are any recent / forward looking changes in design standards / philosophy for distribution transformers with your company, what is the primary driver of these changes?

Underground

7. Cable Selection

- i. What is your company's current practice for cable procurement? For example, does your company purchase Ethylene Propylene Rubber ("EPR"), or Cross-Linked Polyethylene ("XLP") cable, or Tree-Retardant Cross-Linked Polyethylene ("TR-XLPE")?
- ii. Please describe cable specifications for mainline construction versus Underground Residential Distribution ("URD"), including use of aluminum or copper, insulation type, sheathing, etc
- iii. Does your company direct bury conduit and / or encase in concrete duct banks? Please list separately for main line, lateral or URD, where applicable.
- iv. If there are any recent / forward looking changes in design standards / philosophy for cable selection with your company, what is the primary driver of these changes?

8. UG Cable Replacement

- i. Does your company have an UG cable replacement program? If so, please describe the estimated amount of UG cable replaced annually as a percentage of total UG lines.
- ii. Please describe the criterion for replacing mainline and URD cable segments, and whether they are replaced by section, or is the entire loop or mainline section replaced?
- iii. How long is the program expected to continue for in the future?
- iv. Does the company pay in whole or in part for temporary or complete refurbishment of driveways and roadways?
- v. Does the company utilize cable injections as an alternative to cable replacements?
- vi. Does the company currently direct bury cable for primary and / or secondary circuits, and if so, please list criterion for direct bury versus use of conduit?
- vii. Where UG cable is installed in ducts, under which conditions or locations are these concrete encased (e.g., main line versus laterals, street crossings, secondary networks only, other)?

9. Residential Rebuild Program

- i. Does your company have a residential rebuild program that addresses the rebuild of the electrical infrastructure of existing, older residential subdivisions where UG / URD cable is failing? If so, please describe selection criterion and the number of years the program is expected to continue (e.g., no. of failures, cable condition assessment, inspections, etc)

10. Paper-Insulated Lead Cable ("PILC")
- i. Does your company have PILC on its UG distribution system? If so, has your company implemented a PILC replacement program?
 - ii. If yes to (i), please describe what the estimated amount of PILC is replaced annually as a percentage of total UG lines equipped with PILC
 - iii. If PILC is no longer used, please describe the type of cable currently used (XLP, TRXLP, EPR; CU or Alum).
 - iv. IF PILC is no longer used, please describe reasons (limited suppliers, specialized skills, environmental, stocking/stores)?

Stations

11. General
- i. Is the company replacing unit station equipment for medium voltage unit stations; unit stations are those that convert higher primary voltage to lower primary voltage, such as 12.47kV to 4.16kV (e.g., power transformers, civil infrastructure)? If so, please provide the replacement criterion.
 - ii. Is the company investing in refurbishments and capital upgrades in order to sustain existing unit station equipment, or are these stations retired and distribution lines converted to operate at a higher voltage when upgrades are needed (e.g., MS primary distribution stepdown stations)? If so, please provide the criterion used to either for continued use of the unit stations.
 - iii. Does the company have any specific station equipment that it stocks or uses to address the high fault duty requirements, higher distribution voltages, or any other legacy equipment that is deemed to be specialty equipment such as higher BIL specifications for distribution lines (e.g., use of equipment with 34.5kV BIL)? This question applies mostly to TS type stations that convert transmission voltage to primary distribution voltage.
 - iv. If there are any recent / forward looking changes in design standards / philosophy for stations with your company, what is the primary driver of these changes?
12. Distribution Switchgear / Circuit Breakers
- i. Does your company have a distribution switchgear or circuit breaker replacement program? If so, please describe the type of switchgear / circuit breakers replaced (e.g., gang operated, single blade, other).
 - ii. Please describe the criterion for the replacement distribution switchgear / circuit breakers (e.g., obsolescence due to inadequate arc flash protection)

Distribution Planning, Reliability and Equipment /Replacement Programs

13. Voltage Conversions

- i. Does your company have an active voltage conversion program? If so, please describe the conversion voltage (e.g., 4kV to 13kV) and the criterion for the voltage conversion.
- ii. Are retirements of unit stations a part of the voltage conversion program?
- iii. Other details (e.g., years to conversion completion, main line conversions only).
- iv. If there are any recent / forward looking changes in design standards / philosophy for voltage conversions with your company, what is the primary driver of these changes?

14. Feeder Tie Reserve Capacity

- i. Does your company reserve capacity for feeder ties? If so, please describe the maximum loading as a percentage of line or cable rating.
- ii. Please describe whether capacity is reserved for both OH and UG lines.
- iii. Does the capacity reserve include emergency ratings? If so, what is the typical emergency rating as a percentage of normal rating (OH and UG separately if applicable)?
- iv. What is the typical number of feeder ties per feeder?

15. Feeder Reliability

- i. Does your company implement a worst feeder reliability improvement program? If so, please describe the percentage of feeders in the worst feeder group.
- ii. Please describe the criterion for allocation into the worst feeder group (e.g., SAIFI, SAIDI, CEMI, other).
- iii. Please describe the typical Operations & Maintenance, Capital improvements or mitigation strategies employed for feeder reliability.

16. Secondary Networks

- i. Does your company operate secondary networks? If so, do these include grid, spot, or both types of networks?
- ii. Please provide the number of grid and spot networks.
- iii. Is the number or size of the secondary networks expanding? If so, please describe if these are grid, spot, or both.
- iv. If secondary networks are expanding, does this include an increase in the number of vaults?
- v. Does your company have a separate program for network vault roofs?
- vi. Do upgrades to the secondary networks include any special protection (e.g, current limiting fuses, heat detection systems)?

- vii. If there are any recent / forward looking changes in design standards / philosophy for secondary networks with your company, what is the primary driver of these changes?

17. Insulators

- i. Does your company have a replacement program for porcelain insulators other than those associated with OH distribution switches (e.g., gang-operated switches)?
- ii. If there are any recent / forward looking changes in design standards / philosophy for insulator replacements with your company, what is the primary driver of these changes?

18. Distribution Automation (“DA”)

- i. Does your company implement DA? If so, please describe the number of years the program has been in effect.
- ii. Please describe the DA program objectives and the type / technology of DA employed.

19. Other

- i. Does your company have projects / programs that target specific distribution related equipment (e.g., SCADA, grounding, fibertop network protectors)? If so, please describe the related designs and equipment that is included in the program.

References

1. Toronto Hydro Electric System, *Standard Design Practice (SDP #002 Rev 3), Overhead Distribution*, October 10, 2007
2. Toronto Hydro Electric System, *Standard Design Practice (SDP #002 Rev 2), New Underground Residential Subdivisions*, June 9, 2005
3. Toronto Hydro Electric System, *Standard Design Practice (SDP #003 Rev 1), New Underground Services*, June 9, 2005
4. Toronto Hydro Electric System, *Standard Design Practice (SDP #004), Major Civil Projects*, April 3, 2006
5. Toronto Hydro Electric System, *Standard Design Practice (SDP #005), Underground Cable Installations*, June 16, 2006
6. Toronto Hydro Electric System, *Standard Design Practice (SDP #006 Rev 2), Underground Residential Rebuilds*, March 15, 2011
7. Toronto Hydro Electric System, *Standard Design Practice (SDP #007 Rev 1), Underground Rebuilds Industrial/Commercial Areas*, March 21, 2011
8. Toronto Hydro Electric System, *Standard Design Practice (SDP #008), Rear Lot Conversions*, August 24, 2010
9. Toronto Hydro Electric System, *Distribution Construction Standards*, Various dates.

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Professional History

- Navigant Consulting, Inc.
2002 to Present
- Arthur D. Little, Inc.
2000 to 2002
- Florida Power & Light Company
1986 to 2000

Education

- M.S. Engineering Management,
University of South Florida
- B.S. Mechanical Engineering,
University of Florida

Professional Associations

- Association of Energy Engineers
- Association of Cuban Engineers
- American Society of Mechanical Engineers

Hector Artze is a Director in Navigant’s Energy practice. His professional career spans more than 25 years in the electrical utility and energy conservation field. Mr. Artze assists clients in crafting their Smart Grid strategy, leveraging the integration of new and existing technologies to transform the business and organization, as well as in developing their energy vision. Mr. Artze’s expertise includes smart grid and energy strategy development, contract development and negotiations, energy conservation, asset management, reliability, utility operations, emergency restoration, evaluation and implementation of distribution technologies, process and quality improvement, C/I accounts management, as well as electrical distribution engineering and construction services. Mr. Artze is a Certified Energy Manager.

Professional Experience

- » For the U.S. Navy, Mr. Artze leads the consulting team that assists the Navy in the management of its utility systems. Some of the services to the Navy under this multi-year contract include energy visioning, utility rate analysis, electricity buy vs. generate analysis, organization staffing studies, operational metrics, capital plans, and continued support to the Navy’s utilities privatization program, including the sale and lease of Navy utility systems. Under this contract Mr. Artze has led, and continues to lead, multiple engagements.

Two of the most recent engagements include:

- *Development of the SmartEnergy strategy (OT-IT) for 23 installations across the U.S.* For this engagement, the team led by Mr. Artze is developing a comprehensive strategy to integrate and leverage information from building controls, smart meters, and utility SCADA systems to optimize the operations of facilities and utilities. The strategy encompasses energy information technologies that extend from the point of generation or utility interconnection down to building equipment controls. For a recently completed SmartEnergy analysis performed for Naval Station Norfolk, Navigant recommended: 1) the construction of a regional control center that integrates the buildings' and utilities' control systems to provide complete visibility and control over all

energy loads and utility systems in the base; and 2) a portfolio of projects to deploy a common communication network, expand and integrate all building and SCADA controls, develop a common database for all operations critical information, and develop applications to optimize the operations of all utilities and facilities. Once completed, the Navy will be able to, among other things, reduce energy consumption by setting the buildings' lighting and HVAC to night and weekend setbacks, manage electricity peak demands, respond to calls for demand response by controlling building temperature and by dispatching emergency generators, and continuous building re-commissioning.

- *Development of a long-term thermal energy plan for eight Navy installations across the U.S.* This engagement follows a previous desk top analysis of 15 steam distribution systems across the U.S. For each of these installations, Mr. Artze and his team performed a detailed analysis of the current and future steam requirements. They documented the current state of steam generation and distribution system assets, developing facilities and ship steam load by analyzing meter data when available or by using Navigant's use model. They calculated the distribution system heat losses and developed fuel and electricity forecasts. By working with the installation's stakeholders and Navy technical staff, Mr. Artze and his team selected options to compare to the base case and performed a comparative analysis that included detailed economic assessment of capital and operating costs as well as an evaluation of the impact on Navy-wide and regional energy goals. For example one of the recommendations resulting from this engagement, included development of a 15 MW cogeneration system to replace an old and inefficient boiler plant.

- » For the Department of Energy (DOE) Office of Electricity Delivery and Energy Reliability (OE), Mr. Artze supports the Smart Grid Investment Grants and Smart Grid Demonstrations Programs. This work includes creating benefits assessment frameworks for analyzing and reporting project progress and results. Mr. Artze works with grant recipients to collect project data and to quantify the impact of the smart grid technologies that are being deployed. Mr. Artze focuses projects in the areas of Distribution Automation and Crosscutting projects.

- » For a large electrical utility company based in the Midwest, Mr. Artze served as a subject matter expert and provided expert testimony in an action brought by the Attorney General against the company claiming damages due to sustained customer outages after a series of storm and alleging that the failure resulted from the poor condition of the company's distribution assets.
- » For the DOE OE, Mr. Artze assisted with the review of the selected Smart Grid Investment Grant and Demonstration proposals to individually customize the data collection and reporting requirements for each project. This review utilized the analytical framework Navigant developed to assess the overall program benefits and impact for DOE.
- » For a large electrical utility company based in the Midwest, Mr. Artze led an engagement to quantify the value of proposed smart grid investments, including distribution automation and conservation voltage reduction. The results of the analysis were presented as testimony in a rate filing case with the state's Commerce Commission. For this client, Mr. Artze also led an engagement to perform an independent assessment of an urban underground facility reinvestment program being proposed to the State's Commission. The study evaluated the costs and benefits associated with the program by quantifying the cost-to-benefit ratio of the investment.
- » For a hospital group in Ohio, Mr. Artze led an engagement to determine the optimal solution to address future heating, cooling, and emergency electricity generation needs, and to identify project financing alternatives. The Group plans to consolidate its inpatient services into one of its campuses. This consolidation requires significant renovation of existing, as well as the construction of new, facilities, changing the requirements of the campus facilities and utilities plant. Navigant: 1) developed a detailed model of the current and future campus heating, cooling and electrical loads; 2) assessed the capacity of existing boilers, chillers, and generators, as well as their condition and operating efficiency; 3) determined the equipment needs to meet projected loads; 4) recommended the addition and replacement of chillers, boilers and generators, and the construction of an extension to the heating and cooling plant; 5) assessed a number of project financing options available to the Group; and 6) recommended an option that minimized financing costs and met the project's capital requirements.
- » For the Architect of the Capitol - Capitol Power Plant (CPP), Mr. Artze led an engagement to: 1) conduct a workforce skills assessment to identify cross-training opportunities; 2) develop criteria, guidelines, and an approach for sourcing/contracting decisions; and 3) perform an initial evaluation of competitive sourcing opportunities. Previously, Mr. Artze led a study to evaluate staffing requirements for the CPP. The CPP supplies Congress and other federal buildings with steam and chilled water.
- » For the DOE OE, Mr. Artze led the development of a High Temperature Superconducting (HTS) value propositions framework for utility applications, as well as the development of a tool and case studies that electric utilities could use to evaluate HTS applications during their planning process.

- » For the California Energy Commission (CEC), Mr. Artze led a study to determine research and development needs for Smart Grid communications security. Also for the CEC, Mr. Artze led a study to determine the research and development needs to harden the transmission and distribution systems against wild fires.
- » For the DOE, Mr. Artze led a study to quantify the operational value of distributed energy resources (DER) from the perspective of utilities, customers, and society. DER technologies in the analysis comprised distributed generation (including photovoltaic) demand response and storage. This study evaluated the operational, maintenance, and capacity deferral benefits of DER.
- » For the City of Tallahassee, Mr. Artze assisted with the characterization of a comprehensive set of energy efficiency and load management/demand response measures and forecasts for their penetration into the local market place. This engagement was part of the City's Integrated Resource Planning initiative. Mr. Artze also assisted with the development of a DSM Request for Proposal (RFP) to obtain a Program Manager to deliver the estimated efficiency resources from the market place, along with an RFP to select Technical Assistance Consultants to review the Program Manager's savings claims and assist the City in developing customer-specific efficiency programs for its largest customers.
- » For a large electrical utility company based in the Midwest with operating companies in three states, Mr. Artze reviewed the company's Energy Delivery policies, processes, and procedures. Mr. Artze assisted in structuring the approach used to document the policies and processes. As part of a second engagement with this client, Mr. Artze assisted the Energy Delivery business with the development and implementation of an integrated asset management and capital prioritization strategy across all seven operating companies. Both engagements were part of a larger transformational effort aimed at operational excellence and the implementation of an asset management strategy
- » For the U.S. Navy, Mr. Artze managed the consultant team that supported the NAVFAC Southern Division Navy Utility Privatization Program. This privatization program encompassed over 130 utility systems in Navy and Marine Corps bases in the Southeast and Gulf Coasts of the U.S. Mr. Artze provided financial, management, contractual, and negotiation support to the Navy privatization team. Mr. Artze worked closely with his NAVFAC Southern Division clients to develop the Government's historical utility costs, the independent Government estimates, the business case that underlies the Navy-Private Sector privatization relationship, the financial and technical evaluation of bidders' proposals, and the performance-based utility service contracts. Mr. Artze also led the Navy team in discussions and negotiations with the bidders. Effective project and client management was central to this engagement's success. Key elements of the success included: constant interaction with the Navy team, ongoing contingency planning, subcontractor management and relationship-building, staff planning and management, a robust quality control program, as well as regular and frequent formal and informal communications with the Navy and subcontractor teams.

- » For Long Island Power Authority (LIPA), Mr. Artze assisted in the development of the Policy and Long Range Plan for Storm Hardening. The project included: 1) the development of LIPA's policy position on storm hardening to proactively address areas susceptible to outages and to enhance reliability in severe storms; 2) a restoration strategy that incorporates best practices and restoration technologies; and 3) a high-level estimate of the financial impact of the proposed plan.
- » For an international utility holding company, Mr. Artze assisted in the design and launch of its enterprise-wide continuous improvement program. The global decentralized nature of the company required flexibility within a common overall structure and had an existing Continuous Improvement Program with different levels of sophistication across the company. The client needed to achieve buy-in and commitment of diverse business units while avoiding a "corporate mandate" perspective. To this end, Mr. Artze assisted senior management in establishing alignment and commitment of overall program drivers through facilitated Executive Management sessions; facilitating the methodology/toolkit selection to meet diverse needs of all businesses; and establishing initial infrastructure for the program (organization, knowledge sharing, training, etc.).
- » For a major U.S. electric utility, Mr. Artze led a team that performed a market assessment for distributed generation (DG), including PV, as part of the utility's DG strategy and business plan development. This work included an analysis of the essential elements that affect the viability for DG investments, including transmission and distribution rates, interconnection requirements, environmental regulations, and other elements, as well as the development of a methodology to rank the market.
- » For the Saudi Electric Company, in an engagement to restructure and commercialize the Saudi electricity sector, Mr. Artze performed a diagnostic of operations and information systems, conducted a high-level business practice assessment across the four regional companies, and developed an organizational structure for a consolidated electrical Distribution Company.
- » For the CEC, Mr. Artze assisted in the assessment of the research and development environment in the area of distributed energy resources (DER).
- » As a project manager in the Power Systems Restoration Department of Florida Power and Light Company, Mr. Artze assisted in the development of FPL's service restoration technology vision which included the integration of information technology (IT) systems such as: Distribution Management System (DMS), Automated Meter Infrastructure (AMI), Automated Trouble Ticket Allocation (ATA), Trouble Call Management System (TCMS), and Feeder Telemetry, among others. Mr. Artze was responsible for the evaluation of the productivity gains expected from the integrated IT systems, and for the design of a trouble dispatch center organization capable of operating in the new environment. Mr. Artze also managed other technically-complex projects in the areas of emergency restoration and customer communications processes. Further, Mr. Artze developed FPL's street light restoration plan and led the restoration of all FPL street lights damaged by Hurricane Andrew.

- » As a major accounts manager for Florida Power and Light Company, Mr. Artze served as the single point of contact between FPL and major Commercial, Industrial, and Governmental accounts such as Miami-Dade County, Florida International University, University of Miami, and a number of municipalities in South Florida. Mr. Artze routinely performed complex energy conservation analyses for his customers' facilities and coordinated system expansions and reliability projects.
- » As a construction services engineer for Florida Power and Light Company, Mr. Artze designed and provided oversight for the installation of complex duct and manhole systems, throw-over transformer vaults, and underground residential systems. Mr. Artze also worked on a number of initiatives to improve system reliability.
- » As a marketing representative for Florida Power and Light Company, Mr. Artze performed hundreds of residential and commercial energy audits and hundreds of inspections of installed energy conservation measures.
- » As an adjunct professor at the University of Miami School of Architecture, Mr. Artze taught Environmental Control Systems. The class syllabus included HVAC, lighting, electrical, and plumbing design.

Conference Presentations and Proceedings

- » "Automated Ticket Allocation," 11th Annual DistribuTech Conference and Exhibition, San Diego, CA, 2001.
- » "Distributed Generation Business Model," 12th Annual DistribuTech Conference and Exhibition, Miami Beach, FL, 2002. Co-authored.
- » "Valuing Distributed Energy Resources - Results and Methodology," DistribuTech Conference and Exhibition, San Diego, CA, 2009. Co-authored.
- » "Framework for Evaluating High Value Utility Applications of HTS," High Temperature Superconductivity Program Peer Review, Alexandria, VA, August 4, 2009. Presenter.

Eugene Shlatz
Director

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Education and Professional

- M.S. Electric Power Engineering, Rensselaer Polytechnic Institute
- B.S. Electric Power Engineering, Rensselaer Polytechnic Institute

Employment

- Navigant Consulting (1999 – present)
Director
- Stone & Webster Management Consultants (1994-1999) Executive Consultant
- Green Mountain Power Corp (1985-1994)
 - Assistant Vice President, Energy Planning
 - Director of Engineering and Operations
- Ernst & Whinney (1984-1985)
Supervisor
- Gilbert/Commonwealth (1980-1984)
Senior Consulting Engineer
- Westinghouse Electric Corporation (1978-1979)
Systems Analysis Engineer
- Boston Edison Company (1976-1977)
Student Engineer, Cooperative Education Program

Professional Associations

- Professional Engineer - State of Vermont
- Institute of Electrical and Electronic Engineers, Section Chairman

Eugene L. Shlatz

Mr. Shlatz is a Director in Navigant Consulting Inc.'s Energy Practice. He has over 25 years of management consulting and supervisory experience in energy delivery, electric power generation and distributed resources. Engagements he has directed include smart grid, renewable technology, asset management, reliability, benchmarking, energy efficiency, electric pricing, distributed resources, due diligence and system adequacy studies for US, Canadian, and South American utilities, equipment suppliers and government agencies. Mr. Shlatz is an expert on electric power delivery systems, and has testified before FERC and State regulatory commissions on open access, transmission expansion, DG integration, retail rates, regulatory compliance, and least-cost planning. He is a professional engineer and section chairman of IEEE. Mr. Shlatz has published numerous articles on smart grid, distributed resources, electric reliability, asset management, demand-side management, and electric pricing.

Summary of Professional Experience

Energy Practice. Responsible for consulting engagements for electric utility, government and energy supply clients. Responsible for evaluation and assessment of key energy delivery and power production and issues including:

- Emerging Technologies – renewable technology and smart grid integration, energy efficiency and technical/economic assessment of distributed resources
- Asset Management – implementation strategy, project prioritization, performance measurement, utilization and cost optimization, electric delivery system planning
- Reliability & Planning – transmission and distribution performance evaluation; target setting, remediation analysis
- Benchmarking – industry best practices, service quality standards and business process improvement

Representative Client List and Engagements

Smart Grid, Distributed Generation & Renewable Technologies

- » **NV Energy.** Project manager of DG and large PV integration studies for southern and northern Nevada. Responsible for technical and economic evaluation of power system impacts and integration costs, including intermittency. Testified before Nevada Commission on study results.
- » **PowerStream.** Conducted capital prioritization studies for energy delivery investments, including Smart Grid integration and automated systems. Included quantification of reliability and performance benefits associate with renewal replacement and automation.
- » **Toronto Hydro.** Project manager of comprehensive evaluation of distributed energy resources versus traditional T&D alternatives for a major urban center. Includes the technical assessment of DG systems impacts, technology integration and forecast of cost-effective alternatives.
- » **Pennsylvania Power & Light.** Lead investigator of a DOE Smart Grid Investment Grant (SGIG) project. Assessed SGIG metrics reporting and compliance as required for distributed automation systems, focusing on reliability and efficiency benefits.
- » **Exelon.** Conducted an analysis of Commonwealth Edison’s Smart Grid reliability and distribution automation program. Developed predictive models to value reliability and performance benefits.
- » **Smart Grid, Multi-Client.** Project manager of a comprehensive assessment of the integration of smart grid technologies to enhance the value of distributed and central solar photovoltaic systems. The consortium included major electric utilities, suppliers and industry stakeholders.
- » **U.S. Department of Energy (DOE).** Project manager and lead investigator of numerous advanced technology and system integration (RDSI) studies, including smart grid, energy storage, DG valuation and power system integration.
- » **Consolidated Edison.** Project manager of a process and impact evaluation of CECONY’s Targeted DSM program. Conducted a technical and economic assessment of DSM/DG measures designed to defer capital investments in load pockets experiencing T&D constraints.
- » **Arizona Public Service** – Lead investigator of long-term electric vehicle options analysis and system integration study. Identified barriers to stationary and mobile EV systems.
- » **Southern California Edison.** Project manager of a technical and economic study to assess the value of Distributed Energy Resources (DER) as an alternative to traditional utility investments.
- » **Massachusetts Technology Collaborative.** Provided independent technical support to a Collaborative on Distributed Generation, with key industry stakeholders and electric utilities.

Asset Management

- » **Horizon Utilities.** Technical and advisory support for asset management framework initiatives. Includes gap analysis and implementation of asset management strategies and evaluation methods. Addressed infrastructure alternatives of upgrades using AM-based approaches.
- » **First Energy.** Responsible for implementing asset management processes and capital prioritization models for 6 operating companies in three jurisdictions. Project leader for model development and applications, technical review and overall quality assurance.
- » **Seattle City Light.** Responsible for conducting a benchmarking and gap analysis of the power supply and energy delivery business units. It included a business case analysis to support implementation of asset management methods and new AM organization.
- » **Pepco/Conectiv (PHI).** Responsible for an asset management and prioritization assessment of capital improvement and O&M programs for three states and the District of Columbia. It included developing asset prioritization methods for transmission, distribution and IT programs.
- » **Entergy.** Responsible for an asset management and prioritization assessment of Entergy's capital improvement programs for six jurisdictional utilities in 5 states. It included developing asset-specific prioritization methods for transmission and distribution programs.
- » **PacifiCorp.** Responsible for an asset management and prioritization assessment of PacifiCorp's capital improvement programs for six jurisdictional utilities in 6 states. It included developing asset-specific prioritization methods for transmission and distribution and IT programs.

Reliability, Benchmarking and Electric System Planning

- » **Toronto Hydro Electric System, Limited (THESL).** Performed a long-range planning study for THESL's radial and network downtown distribution system. Evaluated capital expansion versus CDM needed to serve downtown Toronto for 20 years.
- » **Sulphur Springs Valley Electric Cooperative (SSVEC).** Project manager of an independent Feasibility Study of delivery alternatives, including new transmission, distributed generation, energy efficiency, energy storage and renewables. Expert witness support before AZ commission.
- » **Austin Energy.** Performed a benchmarking and gap analysis of performance measures of AE's energy delivery organization.
- » **Ameren Services.** Conducted a review and predictive assessment of distribution reliability. A methodology was developed to apply fact-based methods to allocate reliability expenditures.
- » **American Electric Power.** Conducted a review and predictive assessment of distribution reliability. Applied fact-based methods to prioritize investment decisions and to quantify risk.

- » **National Grid.** Conducted a system review and predictive assessment of distribution reliability. A strategic methodology was developed to predict system outage performance based on system attributes, equipment performance and historical reliability.
- » **Potomac Electric Power Company (PHI).** Conducted an investigation and benchmarking of PEPCO's T&D system, including transmission and distribution infrastructure. Prepared recommendations to enhance performance and reduce outage risk.
- » **Dominion – Virginia Power.** Project manager and lead investigator of a comprehensive technical review and risk assessment of secondary networks. Reviewed and analyzed engineering standards, planning criteria, operations and maintenance, and construction methods.

Regulatory and Pricing

- » **Canadian Utility (Confidential) – Confidential study to assess the value and strategic benefits of the acquisition of electric utility energy delivery assets.** Included a technical and economic assessment of key regulatory and acquisition risk factors to support a recommendation.
- » **Progress Energy.** Project manager of a best practices and compliance review of fixed asset charging practices. Reviewed methods, systems and practices used to record fixed assets for Florida and the Carolinas to support proposed changes filed with state commissions and the SEC.
- » **Citizens Utilities/Vermont Electric Cooperative.** Supported numerous Certificate of Public Good (CPG) applications before the Vermont Public Service Board (VPSB). Expert witness for technical, environmental, and costing studies.
- » **Vermont Department of Public Service (VDPS).** Conducted research and prepared sections of the Twenty-Year Electric Plan, including the impact of the independent system operator (ISO) and regional transmission organization (RTO) initiatives on Vermont's transmission providers.
- » **Potomac Electric Power Company (PHI).** Project manager of a benchmarking study of storm hardening measures. Assessed the impact of hardening options on reliability and performance. Also assessed service quality (SQI) measures and performance-based rate (PBR) mechanisms.
- » **Citizens Utilities (Vermont Electric Division).** Project manager for a T&D Audit mandated by the Vermont Public Service Board. Reviewed T&D plant accounting systems and processes, and provided recommendations for improvement.
- » **Massachusetts Department of Telecommunications and Energy (MDTE).** Project manager of a stray voltage assessment of jurisdictional utilities. Identified causes of stray voltage and provided recommendations to mitigate future events, including action and improvement plans.

Previous consulting experience and responsibilities while employed at Stone & Webster, Ernst & Whinney, Gilbert/Commonwealth and Westinghouse include:

- » **Entergy (Gulf States Utilities).** Lead investigator of a Commission-mandated Service Quality Assessment. Developed and applied state-of-the-art methods to identify cost-effective performance improvements using predictive reliability and cost optimization methods.
- » **Ontario Hydro (Hydro One).** Project Manager of a comprehensive post-event assessment of the January 1998 Ice Storm that impacted northeastern U.S and Canadian utilities. Analyzed and provided recommendations for emergency preparedness and storm hardening.
- » **New Brunswick Power.** Project manager of a technical audit and benchmarking of NB Power's T&D business unit. Conducted benchmark survey; analyzed the T&D organization, cost of services, efficiency, O&M practices, design and planning criteria, IT and system operations.
- » **Commonwealth Edison.** Project manager of a T&D technical audit in response to a complaint initiated by the Illinois Attorneys' General office. Reviewed T&D operations, resource allocation and methods, reliability and performance, T&D planning and design standards.
- » **BC Hydro.** Project manager of a benchmarking study and assessment of BC Hydro's T&D business unit. Examined candidate organization structures and business unit service offerings.
- » **Pennsylvania Public Utility Commission.** Principal investigator of a comprehensive audit of a major utility (Pennsylvania Power & Light). Investigated power supply planning, construction, fossil operations, customer services, marketing and energy services, and economic development.
- » **Consolidated Edison.** Project manager of a locational generation capacity requirements study. Conducted reliability studies using multi-area simulation models. Represented the company as an expert witness on its Competitive Opportunities, Transition Planning and Support filing.
- » **Privatization and Independent Reviews – South America.** Conducted independent technical and economic reviews for 4 privatized electric utilities (Luz del Sur, Edenor, ESPA, Edelnor). Developed tariff and pricing framework and service quality standards mandated by national law.
- » **Transmission Open Access.** Project manager or principal investigator for open access tariff development. Included rates and ancillary services, tariff development, and expert witness support for Tampa Electric, NISource, GMP, Dairyland Power, and Velco.
- » **Holyoke Gas & Electric.** Project manager of a cost of service study designed to produce unbundled rates for production, transmission, and distribution services. The study included a technical analysis of production expansion/reinforcement options.

- » **Northern Indiana Public Service Company.** Provided ongoing assistance in a wide range of cost of service and related technical support. Responsibilities include development and training of retail and wholesale COS models, unbundled costs, ancillary services, and regulatory support.
- » **Barbados Power and Light.** Project manager of a short and long-term Transmission and Distribution Planning Study. Prepared load forecast and system expansion plans.
- » **Plains Electric & Generation Cooperative.** Project manager of a Power Cost Study. Evaluated generation additions, joint participation units, and purchase power options.
- » **Northern States Power.** Conducted a technical and economic feasibility study of a cogeneration project. Responsible for developing risk-adjusted pricing strategies.

Responsibilities while employed at Green Mountain Power include:

- » **Engineering and Construction.** Directed the ongoing review and evaluation of major engineering and construction requirements. Implemented comprehensive improvements to the power delivery system, and improved system reliability and performance by 35 percent.
- » **Capital Improvements.** Responsible for implementing multi-year programs to improve system reliability, performance, and efficiency. It included transmission and distribution lines, new and rebuilt substations, new control and monitoring systems, and protection systems.
- » **Preventative Maintenance.** Instituted programs to improve the performance of transmission, distribution, and generating equipment, maintenance practices and procedures. Managed an extensive maintenance program that included generation, substations and protective relaying.
- » **Integrated Resource Planning.** Integrated Resource Planning (IRP). Responsible for developing long-term resource plans, including demand side management. Testimony before state agencies resulted in a finding that the plan was consistent with state least cost planning criteria.
- » **Demand Side Management.** DSM Program Management - Directed the planning and implementation of residential, commercial and industrial DSM programs. Responsibilities included program administration, design, marketing, evaluation, and regulatory support.
- » **Storm Procedures.** As the Company Storm Officer, directed the development and implementation of Storm Procedures. Revised plans, conducted comprehensive drills with state agencies, and expanded internal and external resources available to restore service.
- » **Hydroelectric Relicensing and Compliance.** Directed programs to improve the performance and condition of hydroelectric plants. It included audits to identify cost-effective efficiency improvements. Implemented safety programs for federally licensed projects. Served as chief negotiator on minimum flow issues, water quality, aesthetics, archeology and impoundment.

Testimony and Appearances as an Expert Witness

<u>Case Description</u>	<u>Company</u>	<u>Year</u>	<u>Docket</u>	<u>Jurisdiction</u>
Certificates of Public Good				
Transmission Line Construction Authorization	SSVEC	2010	E-01575A	Arizona
Northern Loop Transmission Upgrades	Velco/CUC	2004	6792	Vermont
Substation Reconstruction – Richford	CUC	2003	6682	Vermont
Island Pond to Bloomfield Line	CUC	2001	6044	Vermont
HK Webster Substation	CUC	1999	6045	Vermont
Burton Hill Substation	CUC	1999	6046	Vermont
Border to Richford 120/46kV Line	CUC	1998	5331A	Vermont
New Transmission Lines and Substation	IBM	1991	5549	Vermont
New Substation – Northern Vermont	GMP	1990	5459	Vermont
Gas Turbine Interconnection Facilities	IBM	1989	5347	Vermont
Dover Substation Expansion	GMP	1987	5226	Vermont
Rate Cases & Integrated Resource Planning (Retail and Wholesale)				
Distributed Generation Integration	NV Energy	2011	10-04008	Nevada
Distributed Utility Planning	CUC	2003	6290	Vermont
Power Purchase Contracts – IURC Complaint	Jay REMC	1998	9704-CP-069	Indiana
Section 205 Filing – Wholesale Rates	NISource	1997	ER96-35-000	FERC
Open Access Transmission Tariff Filing	NISource	1996	ER96-399-000	FERC
Request for Increase in Wholesale Rates	NISource	1996	ER92-330-000	FERC
Request for Increase in Retail Rates	GMP	1991	5532	Vermont
Least-Cost Planning Integrated Resource Plan	GMP	1991	5270	Vermont
Request for Increase in Retail Rates	GMP	1990	5428	Vermont
Request for Increase in Retail Rates	GMP	1989	5370	Vermont
Request for Increase in Retail Rates	GMP	1988	5282	Vermont
Request for Increase in Retail Rates	GMP	1986	5125	Vermont
Industry Restructuring & Asset Transactions				
Purchase of Electric Assets	VEC	2004	6853	Vermont
Certificate of Consent, Sale of Distribution Assets	CUC	2004	6850	Vermont
Certificate of Consent, Sale of Transmission Assets	Velco/CUC	2004	6825	Vermont
Prudency Review and Audit Support	CUC	2003	5841/5859	Vermont
Competitive Opportunities Filing	ConEdison	1997	96-E-0897	New York

Articles and Publications

- *"Grid Integration of Renewable, Intermittent Resources"* 2011 PowerGen International Conference, December 2011, Las Vegas, NV, with Vladimir Chadliev (paper approved).
- *"Reducing T&D Investments Through Energy Efficiency"* IEPEC, August 2011, with Kathryn Parlin & Walter Poor, (paper approved).
- *"Value of Distributed Generation and Smart Grid Applications,"* DistribuTECH, San Diego, February, 2011.
- *"Prioritization Methods for Smart Grid Investments,"* EI Perspectives, April-May, 2010.
- *"Evaluation of Targeted Demand-Side Management at ConEd (CECONY),"* ACEEE Energy Efficiency Conference, September, 2009, with Craig McDonald.
- *"DER Operational & Grid Benefits"* Electric Light & Power, February, 2009.
- *"Benefits of Smart Grid Integration with Distributed Energy Storage Systems,"* Infocast Power Storage Conference, July, 2008.
- *"The Rise of Distributed Energy Resources,"* Public Utilities Fortnightly, Feb, 2007, with S. Tobias.
- *"Risk Planning & Project Prioritization: Bringing Energy Delivery to the Next Level in Asset Management,"* InfoCast T&D Asset Management Conference, St. Louis, MI, May 2004.
- *"Valuation Methods: Estimating the Value of Avoiding the Risks Associated with T&D Reliability Failures,"* EI Spring 2004 T&D Conference, Charlotte, NC, April 2004.
- *"Reliability Tradeoffs,"* EI Perspectives, January-February, 2004, with Daniel O'Neill.
- *"What's the Outlook for Distributed Generation Interconnection Standards?"* 2003 PowerGen International Conference, Las Vegas, Nevada, December 2003.
- *"Federal Interconnection Standards: Putting DG in a Box,"* Public Utilities Fortnightly, April 2003, with Stan Blazewicz.
- *"An Innovative Approach to Fact-Based Distribution Reliability Cost Optimization,"* Distribution 2000, Brisbane, Australia, November 1999, with Cheryl Warren.
- *"System Reliability: Competitive Issues,"* Rethinking Electric Reliability Conference, Chicago Illinois, September 1997.
- *"Reliability: Competition & Keeping the Lights On,"* EUCI, Denver, Colorado, October 1998.
- *"System Reliability in a Restructured Environment,"* Electric System Reliability in a Competitive Environment Workshop, Denver, Colorado, October 1997.
- *"Privatization Efforts in South America"* EUCI Workshop, Denver, Colorado, January 1997.
- *"Open Access Pricing Issues,"* Transmission Pricing Conference, Vail, Colorado, Sept. 1996.

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Toronto Hydro-Electric System Limited
EB-2012-0064
Tab 4
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ORIGINAL (26 pages)

ICM Business Cases—Summary Report

for
Toronto Hydro-Electric System
Limited

May 8, 2012

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1 Introduction and Summary

Toronto Hydro-Electric System Limited (“THESL”) retained Power System Engineering, Inc. (“PSE”) to review ten business cases that THESL prepared for its 2012 Incremental Capital Module (“ICM”) filing. These business cases (“BCs”) primarily deal with proposed capital improvements that are rooted in reliability concerns. Other causes, such as safety, operational concerns, or regulatory requirements, can also be factors. PSE performed a high-level review on these business cases, focusing on overall methodologies and strategies. This report (the “PSE Report”) describes PSE’s overall viewpoints regarding these ten business cases.

Electric distribution utilities have important responsibilities when it comes to providing reliable power in a safe manner at a cost that is fair to both existing and future customers. One of the most demanding responsibilities is to install, operate, and maintain, a capital-intensive infrastructure, which is necessary in delivering electric power to better the lives of families, business, and the community. From the inception of the power industry, the challenge of managing these assets has become more and more demanding as the average age of plant continues to grow. This challenge has grown not only due to the aging of the infrastructure, but to the increased demands of end-use customers for an extremely reliable power delivery system.

Electric distributors endeavor to recognize in their planning process the full costs of their decisions. The full costs are an amalgamation of the direct utility costs and the externalized costs to customers. This is especially true for projects that are primarily reliability-driven in nature (e.g. feeder automation projects). The long-term planning objective is to minimize the overall costs, irrespective of the stakeholder incurring that cost.¹

$$\text{Overall Costs} = \text{Utility Costs} + \text{Customer Interruption Costs}$$

THESL’s approach to asset management is a groundbreaking one. The company’s method aims to optimize capital spending projects from the perspective of all stakeholders. The approach recognizes the impact of its decisions on customers and explicitly incorporates this broad view into the planning process. Distribution utilities are beginning to recognize the reliability, safety, and operational consequences of their aging infrastructures. There is a need for a culture change in making asset choices that incorporates a full view of the cost impacts of their decisions. THESL’s methodology is innovative and, in PSE’s opinion, on the right track.

Chapter 2 (“Infrastructure Asset Planning and Management”) discusses THESL’s approach to managing aging assets, with an eye on some specific business cases. Chapter 3 of the PSE Report (“Business Cases—Methodology”) evaluates THESL’s general approach to selecting and prioritizing reliability-driven projects. PSE concludes that THESL’s general approach provides an important tool in evaluating the economic merits of projects from the ratepayer perspective.

¹ The planner should also keep in mind other factors that should play into this decision. An example of this could be employee and public safety improvements, which are unquestionably important but not given a monetized value in the cost/benefit analysis.

1.1 PSE's Scope of Review

THESL is submitting the BCs as part of its Incremental Capital Module filings, to be presented to the Ontario Energy Board (the "Board"). The BCs and other filings are submitted as support for THESL's request for approval of ICM projects. PSE's scope did not include an evaluation of whether the administrative or legal standards for ICM approval were met, or of the specific assumptions of any particular BC. Providing judgments on the specific model assumption values (e.g. asset failure rates, consequences of interruptions) requires utility-specific information that we have not reviewed. For these reasons, we do not make judgments or recommendations on the approval or funding of the individual ICM BCs.

The intention of this report is to offer the Ontario Energy Board and THESL stakeholders information regarding PSE's viewpoint on the overall planning process and industry practices regarding the economic and asset planning content found in the BCs we have examined. PSE reviewed the following BCs:

1. Overhead Infrastructure
2. Automatic Transfer Switches (ATS) and Reverse Power Breakers (RPB)
3. Fibertop Network Units
4. Downtown Station Load Transfers
5. Paper Insulated Lead Covered Cable – Piece Outs and Leakers
6. Box Construction
7. Network Vaults and Roofs
8. Rear Lot Construction
9. Feeder Automation
10. Underground Infrastructure

In addition to review of the BC documents, PSE also interviewed company personnel on the business case process. This investigation has enabled PSE to formulate an opinion on the overall planning process of the reliability-driven business cases that we have examined.

1.2 PSE Findings

After reviewing the above BCs and reflecting on the challenges of an aging infrastructure in today's power industry, PSE has formed the following opinion:

1. The ten ICM business cases presented by THESL provide significant justification that the projects are required, and in particular that the proposed projects are based on one or a combination of safety, reliability, operational concerns, and regulatory requirements.

THESL recognizes the need for a cultural change in asset management which is confirmed in our review of the business cases. They have demonstrated sophisticated approaches in evaluating the options of addressing aging facilities. They have shown their objective approach in recognizing failure probabilities, managing the associated risks, quantifying the costs and benefits of projects in order to determine the proper

amount of spending and then determine the prioritization of the projects within the spending limits.

The business cases exemplify THESL's solid approach to their planning process. The proposed solutions incorporate measuring anticipated failures in order to be proactive in asset replacement, distinguishing between frequency and duration of outages, assigning a risk-cost based on failure estimates and the consequences of those failures. THESL typically presents a preferred solution along with alternatives and determines which solution strikes the right balance of cost and reliability for both customer and utility.

2. THESL's evaluation of the proposed ICM projects applies industry leading techniques that aim to economically justify projects from the standpoint of all stakeholders, including customers.

The economic evaluation of the projects examined by THESL incorporates the risks to customers of failure due to aging equipment and other risk factors. This process enables the inclusion of the risks faced by customers of asset failure. The economic merits of each project and its alternatives can be more accurately and fairly evaluated through this risk-cost assessment. This is a groundbreaking approach to asset management for reliability-driven projects and represents a key data point in making sound financial decisions on spending capital wisely and in the best interests of ratepayers. It is PSE's belief that as infrastructure continues to age across the industry, these tools will become popular and necessary in decision-making processes.

An advantage of the process engaged by THESL is the ability to provide internal and external decision-makers with an objective analytical tool to assist them in the evaluation of diverse capital projects. While this tool should be supplemented with system knowledge and other analysis, it can illuminate the benefits of projects and these can be weighed against anticipated investment costs. This process can help to identify projects that may have previously been looked over or help eliminate projects that may not be in the public's interest. Prioritization of projects and giving urgency to projects that offer high benefit to cost ratios to ratepayers is a valuable use of THESL's Feeder Investment Model ("FIM").²

3. Deferral or abandonment of the proposed THESL ICM projects will likely increase the probability of lower reliability to customers served by the corresponding facilities and present potential safety hazard exposures to the public and utility workers.

The THESL approach truly shows advancement in distribution planning. Their approach balances two conflicting demands of electricity customers: low rates and reliable service. At the same time their approach balances utility expenses and economic consequences to customers. Where appropriate, THESL also considers safety factors for both the public and utility personnel in its analysis.

² For a description of the FIM, please refer to THESL's Managers Summary, Appendix 4.

PSE finds that the projects we examined in the ten BCs will have a valuable long-term impact on reliability to customers. As with most reliability-driven investments, there will be a lag involved from the time the money is spent to when the reliability benefits are realized, which will be over a multi-year period. It is also noteworthy, that the BCs are in some cases meant to mitigate a future acceleration in outages due to an asset class growing older or having a deteriorating condition.

The economic consequences of under-funding reliability projects are real. If failure rates, consequences of failures, and the resultant customer interruption costs are not incorporated into a proper analytical tool, a sub-optimal level or misallocation of funding will occur. This will harm the customers who demand a proper balance of costs with reliability from their utility.

2 Infrastructure Asset Planning and Management

Electric distribution utilities such as THESL have an important responsibility when it comes to providing reliable power in a safe manner, and at a cost that is fair to both existing and future customers. One of the top responsibilities, if not the foremost, is being a custodian of an asset intense infrastructure composed of poles, conductors, insulators, transformers, overcurrent protection equipment, and other physical plant. These assets make up the electric network necessary for delivering electric power to better the lives of families, businesses, and the community. Utility decisions in developing corporate objectives and asset plans with regards to this infrastructure must carefully balance short and long term business and customer considerations with regards to reliability, safety, and cost.

Corporate objectives and asset planning can be defined as separate components that are performed under a common utility framework, but developed through distinct areas with unique responsibilities. Corporate objectives include the consideration of business values, corporate strategies, capital structure, regulatory mandates, and overall financial health. Asset plans include the consideration of capital planning, operations planning, maintenance planning, project evaluation, life-cycle costing, risk management and budgeting.³ Although these components are developed within distinct areas, they are done through an iterative process of feedback loops that allows a utility to strike an overall balance.

The main intent of this section is to focus on THESL's asset planning and management components in the BCs, as well as to make some specific observations.

2.1 The Aging Infrastructure

From the inception of the power industry to today, the challenge of managing infrastructure assets has become more and more demanding as the average age of plant continues to grow. A significant percent of plant is well beyond its depreciated and useful life; more so now than any other time in history. In an IEEE article titled "The Economics of Aging Infrastructure" authored by Richard E. Brown and H. Lee Willis, it was noted that the electric utility industry is roughly 120 years old, which means, at this age, all of the original equipment in any utility system is now long gone. Thus, it's clear that most utilities managed to deal with equipment aging and replacement in an effective manner over the past century. However, there is a present concern about aging infrastructure today, largely because of the amount of equipment simultaneously reaching the end of its life cycle.⁴

As stated in the Brown and Willis article, the protracted economic expansion of the economy after World War II, along with simultaneous technological growth of new electric loads such as air conditioning and industrial electrification, led to an explosion in utility construction and equipment installations within North America during the 1950s and early 1960s. Until recently,

³ Brown, R.E. , Humphrey, B.G., "Asset Management for Transmission and Distribution," Power and Energy Magazine, IEEE, May-June 2005, pp. 39-45.

⁴ Brown, Richard and H. Lee Willis, "The Economics of Aging Infrastructure," IEEE Power and Energy Magazine, Vol. 4, No. 3, May/June 2006, pp. 36-43.

equipment installed in that period, which constituted over 50% of the plant for some utilities, was of an age where deterioration due to long service was not likely a pressing concern. However, the time has come where these assets are now showing signs of increased deterioration and failures.

It is assumed that the City of Toronto was no different during the 1950s and 1960s time period, and so it also experienced both strong economic growth and significant utility plant expansions. As a result, and as illustrated in various THESL ICM Business Cases, the distribution facilities on THESL’s system are also now showing both signs of deterioration and accelerated failures associated with an aging infrastructure.

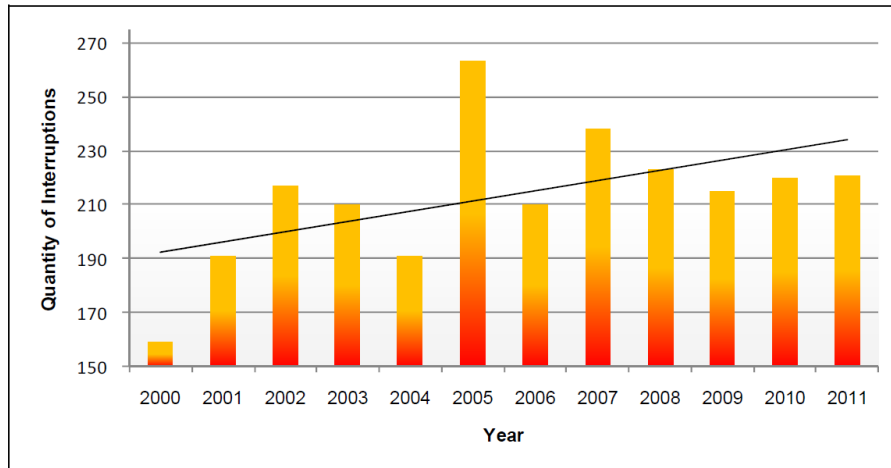
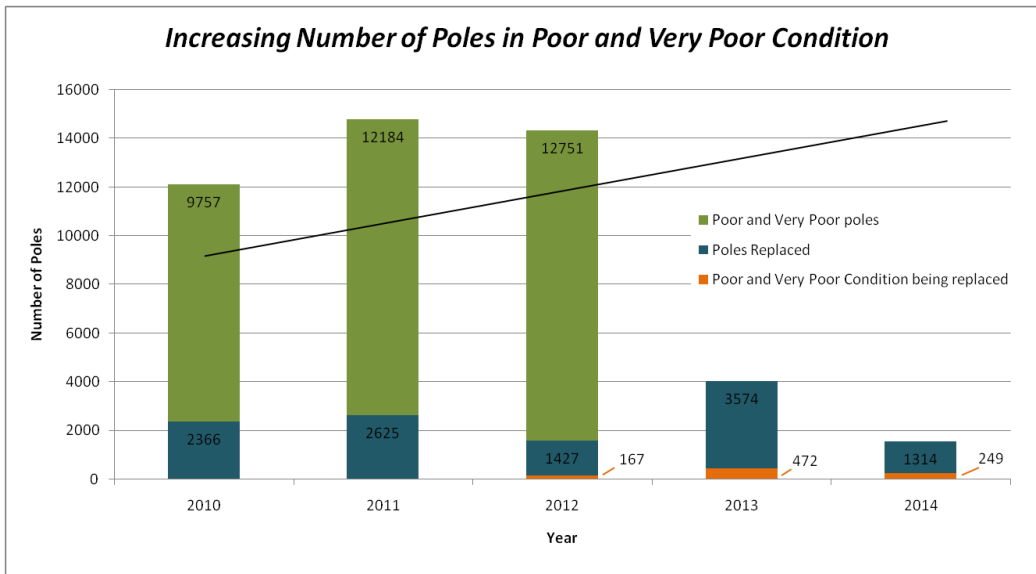


Figure 43: Number of interruptions attributed to direct buried cable failures. Each interruption increases the Feeders Experiencing Sustained Interruptions (FESI) count.

A specific example is the increasing trend in failures of direct buried cable as shown in the above graph, taken from the THESL Underground Infrastructure Segment ICM Business Case. A specific example of deteriorating assets is the quantity of wood poles that are in “poor” to “very poor” condition, as shown in the below graph taken from the THESL Overhead Infrastructure Segment ICM Business Case.



To a great extent, utilities and customers alike obtain some benefit from an aging infrastructure, as maintaining an aging system helps to keep overall capital carrying costs and corresponding electric rates down. For this reason, THESL and other utilities have inspection and maintenance programs in place, for the purpose of keeping their assets operating safely and reliably. This process involves applying methods and technologies to repair, upgrade, refurbish, and extend the life of the overall infrastructure. For example, as discussed in THESL’s Network Vaults and Roofs Segment ICM Business Case, THESL has been repairing and refurbishing network system vaults and vault roofs which were constructed in the 1950s and 1960s, allowing them to have a useful life of 60 years. The below graph, taken from the mentioned BC, illustrates that the vast population of vaults are nearing the 60 year age mark.

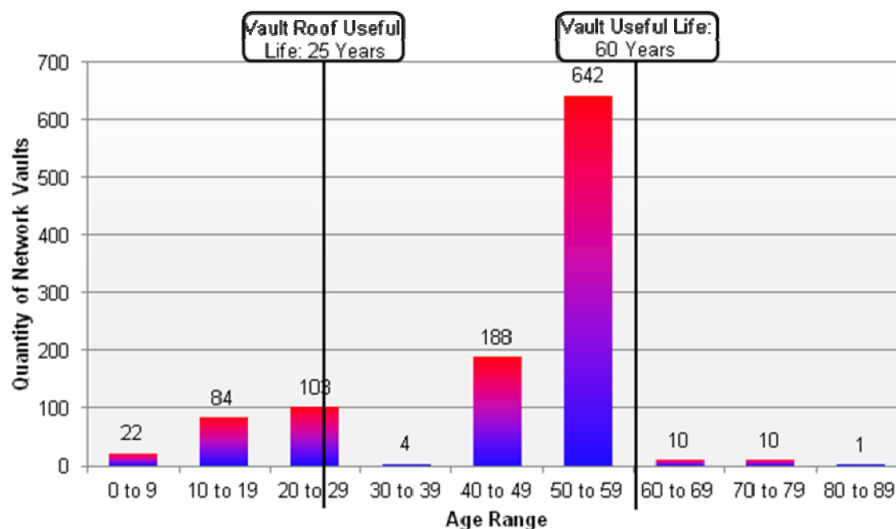


Figure 1: Distribution of Network Vaults

However, at some point, maintenance practices and lower reliability to customers and decreased

safety levels to the public and utility workers, inherent with aged assets, may cost more than the costs of replacement. Even if it seems wasteful to replace old equipment before it fails, the continuing operation of equipment with a high probability of failure and safety concerns is unacceptable to all stakeholders from a financial, system performance, and human welfare perspective.

With that said, at this point simply replacing old assets with new assets at a pace consistent with the infrastructure age is not feasible—i.e., it would be impractical to replace 642 vaults within the next ten years, as the graph above might imply. On the same note, because of the significant investments made in the 1950's and early 1960's, it is not realistic to expect capital spending on replacement of assets to be consistent with historical years.

An analogy of this is an issue which the United States is facing today: its Social Security System. As more and more baby boomers become eligible for receiving Social Security benefits, the Social Security Trust Fund is being depleted at a faster rate than which it can be replenished with the current population of taxpayers. In both cases, continuing down an unchanged path will result in unfavorable consequences to future beneficiaries; be it either U.S. citizens in the case of Social Security, or future utility customers in the case of aging assets. Rather, tough decisions need to be made which will require maximizing benefits against risks, but ultimately requiring some level of sacrifice. For that reason, planning and managing utility assets requires a more sophisticated approach compared to traditional practices to minimize and balance the amount of sacrifice required today and in the future.

2.2 Need for Change

Also discussed in “The Economics of Aging Infrastructure” article is the need for a cultural shift within the industry regarding asset management and the acceptance of costs required to address an aging infrastructure. Brown and Willis state that the vast majority of equipment installed in the 1950's and through the 1960's was incredibly durable and remained robust even into the last decade of the 20th century. As a result, two generations of utility engineers and operators, those reaching senior positions today and those who trained them through the 1970s and into the early 1990s, did not view aging and age related problems as particularly important, because at the time they were not. During this period, any traditional mechanisms utilities had to manage aging infrastructures atrophied, and engineers and managers joining utilities developed no new skills in this area. The industry did not look at new technologies from the standpoint of how they might apply to mitigating deterioration or managing their efforts of aging equipment on system operations.

Part of the challenge facing utilities today, and perhaps the most difficult aspect of an aging infrastructure, is to manage a cultural change from one of equipment stewardship to one that recognizes failure and replacement as inevitable and healthy when properly managed. Processes must be put in place to monitor and track conditions, analyze aging trends, failure probabilities and the cost they drive, and manage all that for a maximum performance.

It can be seen from the THESL ICM Business Cases that their asset managers and asset planning team comprehend the need for cultural change and have demonstrated sophisticated approaches

in evaluating the options of addressing aging facilities. For example, THESL references an Asset Condition Assessment (“ACA”) tool in a number of their Business Cases. This ACA tool is used to determine future replacement needs based on the condition and informs the predicted probability of failure for a particular asset. The following graph, taken from the THESL Automatic Transfer Switch (ATS) and Reverse Power Breakers (RPB) Segment ICM Business Case, illustrates the ACA results for the condition of THESL’s Automatic Transfer Switches.



Figure 2: Asset Condition for ATS units

In addition, THESL has referenced a Health Index Methodology (“HIM”), used to quantify equipment conditions based on a number of criteria that are related to the long-term degradation factors that cumulatively lead to an asset’s end-of-life. An example of this is shown below table taken from the THESL “Automatic Transfer Switch (ATS) and Reverse Power Breakers (RPB) Segment ICM Business Case.

Table 2: Health Index Scale for Transformers

Health Index	Condition	Description	Requirements
85 - 100	Very Good	Some ageing or minor deterioration of a limited number of components	Normal maintenance
70 – 85	Good	Significant deterioration of some components	Normal maintenance
50 – 70	Fair	Widespread significant deterioration or serious deterioration of specific components	Increase diagnostic testing, possible remedial work or replacement needed depending on criticality
30 – 50	Poor	Widespread serious deterioration	Start planning process to replace or rebuild considering risk and consequences of failure
0 – 30	Very Poor	Extensive serious deterioration	At end-of-life, immediately assess risk; replace or rebuild based on assessment

Both the ACA and HIM results feed into the BCs and incorporate the net present value of quantified risks against capital replacement costs to determine the optimal intervention time. This process illustrates that THESL is moving in the direction of a culture that understands the significance of asserting efforts towards recognizing failure probabilities and managing the associated risks. Further discussion of the HIM can be found in Appendix #1 of the THESL Automatic Transfer Switches (ATS) and Reverse Power Breakers (RPB) Segment ICM Business Case.

2.3 Conclusions on THESL's Approach on Asset Planning and Management

The future of utility asset management needs to consist of a strategy that seeks a balance between performance, cost, and risk. This can be done through a comprehensive and analytical method that drives all decisions related to equipment use, care, investment and retirement from a consistent business basis in which the cost of risk and probability of failure as well as the cost and timing of new capital is considered. The ultimate payoff of this approach will result in a set of spending decisions capable of delivering the greatest long term stakeholder value by optimizing present and future investment required to maintain an aging infrastructure in an organized and orderly fashion.

As demonstrated in THESL ICM Business Cases, THESL has initiated such an approach. Rather than replacing all assets solely on its age or letting assets run to failure, they have developed a methodology that evaluates the cost and probability of such events and compares it against the cost of replacement with the intent to identify the most optimal solution from an economic benefit standpoint. Also where appropriate, they are considering safety factors for both the public and utility personnel, as well as inherent benefits of addressing multiple assets within a common affected area.

Overall, THESL appears to be on the leading edge of asset planning and management within the electric distribution industry. This initiative should prove to be beneficial in the long term while continuing their responsibility of being custodians of an asset intense infrastructure that must provide reliable power, in a safe manner, and at a cost that is fair to both existing and future customers.

3 Business Cases—Methodology

The dependability of available electricity impacts the economic welfare of customers. Research conducted by the Berkeley National Laboratory estimated that power outages cost the U.S. economy approximately \$80 billion annually, with an estimated range of \$30 billion to \$130 billion. Even the low end of the estimated range represents a considerable annual cost: approximately \$100 per capita.⁵

Calculating the optimal level of service reliability is difficult because the benefits of lessening power outages accrue chiefly to end-use customers, and these benefits are not easy to quantify. However, the costs of enhancing service are incurred by the utility.⁶ Aggregate economic welfare is maximized when reliability levels for each utility reach an equilibrium level, one where the marginal costs of improving service equal the marginal benefits. Marginal benefits take the form of avoided outage damage costs to electricity customers.

For reliability planning and investment decisions, it is helpful to know what the cost of service interruptions is to consumers and how much they are willing to pay for reliability. Project costs and benefits can then be estimated for each project to determine its economic merits. This approach balances two conflicting demands of electricity customers: low rates and reliable service.

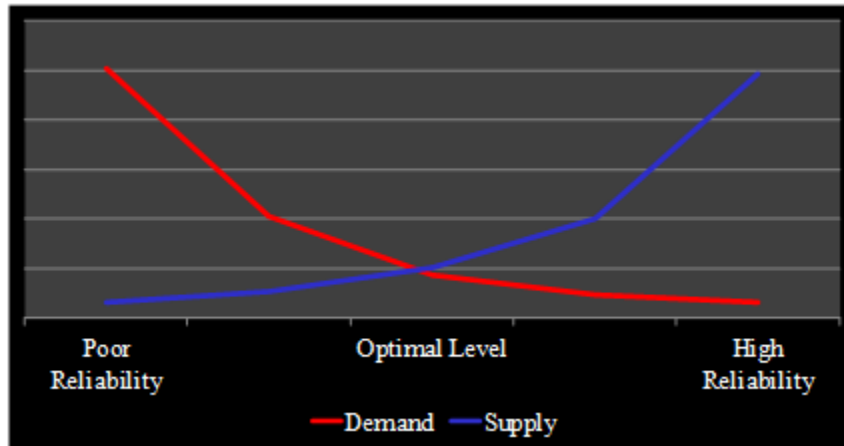
Optimal Reliability Levels

Ideally, a utility would set its reliability target such that the incremental costs of supplying customers with improved reliability equal the incremental benefit for the increased level of reliability. The graph below depicts the optimal level of reliability. In the graph, the blue line represents the cost to the utility for increasing reliability, and the red line represents the cost of outages to the consumer (or “demand” in terms of what they would pay to receive higher reliability). Notice that if reliability is poor and too low, then the customer demand for better reliability exceeds the cost of improving it; however, if reliability is too high, then the utility costs of improving reliability will exceed the customers’ demand for it. The optimal long-run level is one where the added costs of increasing reliability equal the marginal benefit to customers of enjoying that reliability level.

⁵ Eto, Joseph H. and Kristina Hamachi LaCommare, “Understanding the Cost of Power Interruptions to U.S. Electricity Consumers.” LBNL-55718, September 2004.

⁶ In a competitive market, firms will increase service quality to attract and retain customers. Given the monopoly status of most utilities, this market mechanism is eliminated.

Figure 1 Illustrative Supply-Demand Graph



Simple reliability comparisons to peer utilities sometimes serve as the basis for targets for internal management or regulators. However, caution should be exercised in this approach because no two service territories (or individual regions within a given utility) are alike. In other words, the blue line in Figure 1 will look different for each utility, based on its service territory. The specific characteristics and challenges inherently present should be factored into an appropriate reliability level.⁷ Similarly, different customers will have varying demands for reliability provision. These differences are present both across utilities and within the specific regions and feeders of a given utility. This means that the red line in Figure 1 will also vary across utilities, and even within a utility.

The demand curve for reliable service depends on the frequency of outages that are avoided. A significant amount of economic damage from outages will likely be incurred in the immediate moments after a service interruption occurs. A brief example of this for a residential household is that the mere presence of an outage (even one that lasts for less than one minute) will cause all clocks solely dependent on delivered electricity to blink “12:00”. The resident then needs to reset the clocks to the correct time of day. While this represents a trivial overall economic cost, this same concept applies to businesses that will need to “re-boot” equipment, adjust processes, and incur equipment damage when outages occur.

Customers also incur costs as the duration of an outage lengthens. Retail stores will continually lose customers and eventually close their doors for the day if an outage continues indefinitely. Manufacturers will have idle workers and increased lost production as the time of outages escalates, residential customers will eventually have spoiled food issues, and people working from their homes will experience lower productivity during work hours.⁸

⁷ For a discussion on how to adjust industry-based reliability targets for service territory characteristics see:

Fenrick, S.A and Lullit Getachew, “Formulating Appropriate Electric Reliability Targets and Performance Evaluations”. *The Electricity Journal*, Volume 25, Issue 2, March 2012, pages 44-53.

⁸ Sullivan, M.J., Matthew Mercurio, and Josh Schellenberg, “Estimated Value of Service Reliability for Electric Utility Customers in the United States.” LBNL-2132E, June 2009.

Strategies to provide higher service reliability and mitigate outages are numerous and multi-faceted, and normally require high capital investments. It would be a sub-optimal strategy for a utility to over-build an electrical delivery system to reach a level of reliability that costs more than ratepayers are willing to pay, or under-build in ways that results in more power outages than ratepayers are willing to bear. For reliability planning and investment decisions, it is useful to incorporate estimates of what service interruptions would cost consumers and how much they are willing to pay for reliability.

Model Inputs for Reliability Optimization

Developing an analysis that properly balances the marginal costs of reliability improvement with the marginal benefits of specific projects requires some key inputs. The primary model inputs include such items as the initial and on-going project costs, estimated hazard functions of assets, estimates of the consequences of failure which include both utility restoration, response, and replacement expenses and the costs to customers when interruptions occur, and estimated maintenance costs of the existing assets.

The economic consequences of under-funding reliability projects are real. In a time when infrastructure is aging such that reliability problems are accelerating, optimizing investments and incorporating the costs to end-use customers into distribution planning is desirable. If failure rates, consequences of failures, and the resultant customer interruption costs are not incorporated into a proper analytical tool, a sub-optimal level of funding will occur. This will harm the ratepayers/customers who demand a proper balance of costs with reliability from their utility.

3.1 THESL's Approach to Reliability-Driven Investments

PSE examined ten reliability-driven business cases prepared by THESL.⁹ In these cases, THESL typically presents a preferred solution along with one or more alternatives, and then compares the net present value (“NPV”) of the preferred solution to the alternative. These NPV calculations incorporate customer interruption costs, asset probability of failure, and other cost and benefit items to estimate a risk-based cost of ownership. Project costs and cost of ownership are evaluated to determine if project funding is in the public interest, or if an alternative approach is more suitable. Typically, one of the alternate approaches is “do nothing,” i.e. continue with the status quo, which is usually “make repairs or replace as failures occur.”

As discussed earlier, incorporating the risks to customers within the planning process is a sound business practice. Projects that explicitly account for the benefits of avoided customer interruption costs within their business cases are more comprehensive in their assessment. Without accounting for the customer interruption costs inherent within the business case, a distribution planner might under-invest in the system because many of the benefits of reliability-driven projects are external to the utility. It is in stakeholders' interests to account for those costs and place a monetary value for reliability improvement within the business case. THESL performs this through its approach to calculating NPVs for specific projects.

⁹ Again, some of these BCs are also driven by safety, operational, or regulatory concerns.

An example of estimating the risk costs to customers is found in the ICM Business Case for Rear Lot Construction. On page 72, THESL estimates the NPV of the expected risk costs (probability multiplied by consequences) of ownership of the existing rear lots slated to be replaced. This is compared to the risk cost of ownership of the proposed underground front yard facilities. These numbers reflect the customer interruption cost risk that customers bear under the two scenarios. Other items such as maintenance and project costs enter the NPV calculation to evaluate the options.¹⁰

It is sound practice to anticipate the failure rates of assets and then proactively replace these assets (rather than reactively wait for failure). The assets to be replaced are those that are expected to inflict more economic damage than their replacement costs. This strategy brings value to stakeholders. A strategy of “run-to-failure” or waiting for system growth to necessitate replacement may cause an unnecessary burden on electricity customers in the form of service outages. By estimating the probability of failure and incorporating this with anticipated customer interruption costs when failure occurs, THESL has used an approach that can identify projects where replacement brings economic benefits to its customers.

THESL’s modeling approach also distinguishes between the frequency, (as measured by the system average interruption frequency index, or “SAIFI”) and duration (SAIDI) of outages. In this way a more accurate estimate of customer interruption costs can be calculated that accounts for the immediate customer costs incurred during outages and the duration of those outages on customer economic welfare.

The THESL practice of not only incorporating the age of assets but also the observed condition of those assets is useful. THESL does this through Asset Condition Assessments (“ACA”). ACAs better inform the probability of failure estimates. More accurate and informed asset failure rates will make for improved replacement asset decisions.

An example of anticipating the failure rates of a project is presented in the ICM Business Case for Automatic Transfer Switches (ATS) and Reverse Power Breakers (RPB) submitted by THESL. In Figure 1 (“Predicted ATS Failures”) on page 3 of that BC, THESL provides an estimate on the number of ATS failures if a run to failure strategy is pursued or if the proactive replacement project is undertaken. These estimates are incorporated into the planning process.

In Table 2 of the same ATS/RPB business case (on page 3), THESL estimates the ATS failure probability in 2013 and quantifies the consequences of these failures. These inputs are inserted into the FIM to estimate if the projects are in the ratepayers’ best interests. This type of analytical approach of incorporating the risk-based costs to customers is a robust and defensible tool in distribution planning.

Most system planners within the industry are much more subjective in their planning process. The THESL approach is objective in nature and aims to quantify and monetize the costs and benefits of projects. The FIM is an important tool in both determining the proper amount of

¹⁰ Safety considerations also enter this project but are not quantified in the NPV analysis. If we assume the NPV calculations and assumptions are accurate, the rear lot project’s NPV is \$14.57 million and, additionally, enhances both employee and public safety.

spending and the prioritization of projects within a given amount of spending. It is important to note, this is just one tool that should be used. System knowledge and in-house expertise should not be discounted and should also play a large role in the determination of projects. Industry benchmarks, properly adjusted for the operating circumstances of a given utility, for capital spending, reliability levels, and customer demands for reliability service should also play a role.

3.2 Conclusions on THESL's Reliability-Driven Investment Approach

PSE supports THESL's general approach to prioritizing and determining the economic merits of contemplated reliability-driven investments. Based on our review of the Business Cases, the FIM incorporates both the utility and the customer perspectives. These include the impacts on utility expense levels and the economic consequences to customers in its NPV calculations. The FIM does this by assigning a risk-cost that is based on an estimate of asset failure rates and the consequences if those failures occur.

PSE sees THESL's approach as advancement in distribution planning. Better allocation and decision-making is crucial to providing the best balance of reliability and rates to ratepayers. The THESL approach can provide key tools to better optimize capital spending and project decision-making.

References

Brown, R.E. , Humphrey, B.G., “Asset Management for Transmission and Distribution,” Power and Energy Magazine, IEEE, May-June 2005, pp. 39-45.

Brown, Richard and H. Lee Willis, “The Economics of Aging Infrastructure,” IEEE Power and Energy Magazine, Vol. 4, No. 3, May/June 2006, pp. 36-43.

Eto, Joseph H. and Kristina Hamachi LaCommare, “Understanding the Cost of Power Interruptions to U.S. Electricity Consumers.” LBNL-55718, September 2004.

Fenrick, S.A and Lullit Getachew, “Formulating Appropriate Electric Reliability Targets and Performance Evaluations”. The Electricity Journal, Volume 25, Issue 2, March 2012, pages 44-53.

Sullivan, M.J., Matthew Mercurio, and Josh Schellenberg, “Estimated Value of Service Reliability for Electric Utility Customers in the United States,” LBNL-2132E, June 2009.

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Mr. Fenrick has over a decade of consulting experience in the evaluation of utility cost and reliability efficiency. He leads PSE's benchmarking and economic study practice areas. He has provided expert witness testimony on performance benchmarking and authored numerous reports on the topic. He is the conference chair for a semi-annual EUCI conference on measuring and improving the cost and reliability performance of electric distributors. Mr. Fenrick has evaluated performance relating to electric and gas distribution, power transmission, power plant performance, and water distribution. These evaluations have been conducted for utilities, regulatory agencies, and consumer advocates. Mr. Fenrick earned a BS in Economics (Mathematical Emphasis) and a Master's in Applied Economics, both from the University of Wisconsin-Madison.

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- Leader of PSE's Economics and Market Research group which conducts research in the fields of DSM, performance benchmarking, incentive regulation, load research and forecasting, and survey design and implementation
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- Directs research on value-based reliability planning efforts for electric utilities
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Pacific Economics Group – Madison, WI (2001 - 2009)

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Co-authored research reports submitted as testimony in numerous proceedings in several states and in international jurisdictions. Research topics included statistical benchmarking, alternative regulation, and revenue decoupling.

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- “Formulating Appropriate Electric Reliability Targets and Performance Evaluations”, *Electricity Journal*, March 2012. (With Lullit Getachew)
- “Estimation of the Effects of Price and Billing Frequency on Household Water Demand Using a Panel of Wisconsin Municipalities”, *Applied Economics Letters*, 2012, 19:14, 1373-1380.
- “Altreg Rate Designs Address Declining Average Gas Use”, *Natural Gas & Electricity*. April 2008. (With Mark Lowry, Lullit Getachew, and David Hovde).
- “Regulation of Gas Distributors with Declining Use per Customer”, *Dialogue*. August 2006. (With Mark Lowry and Lullit Getachew).
- “Balancing Reliability with Investment Costs: Assessing the Costs and Benefits of Reliability-Driven Power Transmission Projects.” April 2011. *RE Magazine*.
- “Ex-Post Cost, Productivity, and Reliability Performance Assessment Techniques for Power Distribution Utilities”. Thesis.

Recent Presentations

- Conference chair for EUCI conference in 2012 titled, “Balancing, Measuring, and Improving the Cost and Reliability Performance of Electric Distribution Utilities”. St. Louis.
- Conference chair for EUCI conference in 2012 titled, “Demand Response: The Economic and Technology Considerations from Pilot to Deployment”. St. Louis.
- 2012 Presentation in the Missouri PSC Smart Grid conference entitled, “Maximizing the Value of DSM Deployments”. Jefferson City.
- 2011 conference chair on a nationwide benchmarking conference for rural electrical cooperatives. Madison.
- 2011 presentation on optimizing demand response program at the CRN Summit. Cleveland.

- Conference chair for EUCI conference in 2011 titled, “Balancing, Measuring, and Improving the Cost and Reliability Performance of Electric Distribution Utilities”. Denver.
- 2010 presentation on cost benchmarking techniques for REMC. Wisconsin Dells.

History of Major Research Projects

1. Evaluation and review of business cases for reliability-driven projects, Toronto Hydro, 2012.
2. Energy efficiency rebate optimization, Corn Belt, 2012.
3. Energy efficiency and demand response customer baseline load algorithm development for an MDM system vendor, 2012.
4. Incentive Regulation Productivity and Benchmarking, Enbridge Gas Distribution, 2011
5. Reliability Benchmarking and Target Setting, Vectren 2011/2012
6. DSM potential analysis, South Central Indiana, 2011/2012
7. Annual benchmarking updates of Ontario’s 77 power distribution utilities, OEB 2011
8. Cost and reliability benchmarking research involving a group of 20 electric utilities, 2011
9. Energy Efficiency program design and cost effectiveness, Corn Belt 2011
10. Cost/Benefit model of direct load control, Corn Belt 2011
11. Peak time rebate demand response program design and cost effectiveness, Heartland 2011
12. Value Based Reliability Planning project at New Hampshire Electric Cooperative, 2010
13. DSM research on pilots at 25 electric utilities, 2010-2014
14. Benchmarking research involving a group of 14 electric utilities, 2010
15. M&V research of OPower energy efficiency program, 2010.
16. M&V research of Smart Thermostat demand response program, 2010.
17. Benchmarking research regarding Union Electric, 2010
18. Benchmarking research regarding the three Ameren Illinois Utilities, 2009
19. Benchmarking research for Central Vermont Public Service, 2009
20. Benchmarking research on Oklahoma Gas & Electric, 2009
21. Research North American power industry revenue forecast precedents, HECO, 2008.
22. Revenue Adjustment Mechanism for CVPS Revenue Decoupling Proposal, CVPS, 2008.
23. Productivity Research for Bundled Power Service, HECO, 2008.

24. A&G Power Benchmarking Research. 2008.
25. Productivity Research of Ontario's Power Distribution Utilities, OEB, 2008.
26. Productivity Research of U.S. Power Generation and Distribution, APS, 2007.
27. Productivity Research of Northeast Power Distribution, CMP, 2007.
28. Productivity Research of Ontario's Gas Distribution Utilities, OEB, 2007.
29. Benchmarking Research of Ontario's Power Distribution Utilities, OEB, 2007.
30. Benchmarking Research of Electric A&G Expenses, Michigan PSC, 2006.
31. Productivity Research for Gas Distribution, Sempra, 2006.
32. Productivity Research for Power Distribution, Sempra, 2006.
33. Benchmarking Research for Gas Distribution, Nstar Gas, 2006.
34. Benchmarking Research for Power Distribution, Central Vermont PSC, 2005.
35. Benchmarking Research of Nuclear Power Generation, Sempra, 2005.
36. Research on Rate Trends for Electric Power, EEI, 2005.
37. Benchmarking Research of Bundled Power Service, Florida Power, 2005.
38. Benchmarking Research of Canadian Electric Distribution, Hydro One, 2005.
39. Benchmarking Research of Gas Distribution, Bay State, 2005.
40. Benchmarking Research of Electric Distribution, Aquaelectra, 2004.
41. Benchmarking Research for the Caribbean Water Distribution Industry, Aquaelectra, 2004.
42. Compensatory Rate Trend for the U.S. Gas Industry, 2004.
43. Productivity Research for the U.S. Electrical industry, TXU, 2004.
44. Research on Productivity and Benchmarking for Queensland, Australia Electrical Companies, 2004.
45. Research on Productivity and Benchmarking for Gas and Electric Industries for Sempra, 2004.
46. Research on Productivity and Benchmarking for Jamaican Power Company. JPS, 2003-4.
47. Cost analysis research and benchmarking for the Bolivian Power regulator, 2003.
48. Research on Productivity and Benchmarking for a Canadian Power Transmission Company, 2002.

49. Research on Productivity and Benchmarking for a Natural Gas Distributor. Boston Gas, 2002-3.
50. Research on Benchmarking for Bundled Power Service. AmerenUE, 2002
51. Statistical Benchmarking for Electric Power Transmission. Transcend, 2002.
52. Statistical Benchmarking for three Australian Gas Utilities, 2001.
53. Power Distribution TFP trends for Bangor Hydro, 2001.

ERIK S. SONJU, P.E.

VICE PRESIDENT – POWER DELIVERY PLANNING AND DESIGN

SUMMARY OF EXPERIENCE AND EXPERTISE

- Experienced Professional Engineer in areas of electric transmission and distribution system capital investment planning strategic operations planning, design, and reliability assessment.
- Other areas of expertise include system protection and coordination, power quality investigations, system loss analysis, distributed generation interconnections, system operations, and overall utility management.
- Instructor for professional development courses in power delivery planning, system protection, and line design.
- Licensed Professional Engineer in 15 states.

PROFESSIONAL EXPERIENCE

Power System Engineering, Inc. –Madison, WI (2006-present)

Vice President – Power Delivery Planning and Design (2010 - Present)

Responsible for PSE's involvement in electric transmission and distribution capital investment planning, system protection and coordination, system operations and maintenance support, distributed generation interconnection studies, and specialty studies. Other responsibilities included substation design, transmission line design, and distribution line design.

Leader of System Planning and Line Design (2008 – 2010)

Senior engineer and leader of system planning and line design within the Resource and System Planning Division. Emphasis included short range and long system planning studies, distributed generation system impact studies, system protection studies, and expert testimony in regulatory proceedings associated with engineering analysis used for State Commission and FERC filed tariffs. Other responsibilities included distribution and transmission line design.

Leader of System Planning (2006 – 2008)

Senior engineer and leader of system planning within the Resource and System Planning Division.

Great Lakes Energy –Boyne City, MI (2001-2006)

System Engineer and Manager of Engineering

Chief engineer and engineering department manager for a newly formed 120,000 meter electric distribution cooperative following the merger of three cooperatives in Michigan.

- Activities included the establishment of an engineering department responsible for system planning, system protection, daily engineering support to operations, mapping, line design, metering, and distribution system technology applications.

ERIK S. SONJU, P.E.

- Other activities included representation for the Michigan Electric Cooperative Association in the development of joint utility distributed generation interconnection standards for the State of Michigan, Public Service Commission presentations on behalf of the cooperative regarding reliability initiatives, and interconnection agreements with large industrial customers.

Heartland Engineering Services – Rockford, MN (1999-2001)

System Engineer

Co-founder of an engineering consulting firm for utilities owning transmission and distribution facilities.

- Responsible for a wide range of engineering projects and client relation functions.
- Emphasis in long range and short range system plans, system protection and coordination, power quality investigations, programming of electric system controls, line design, power factor correction studies, substation construction coordination, post construction inspections, cost of service studies, and capital credit allocation studies for electric cooperatives.

United Services Group – Elk River, MN (1997-1999)

Planning Engineer

Consulting engineer within a department of United Power Association (currently Great River Energy) for its distribution cooperative members and non-member utilities.

- Performed short and long-range distribution planning studies, reliability studies, system protection plans, and distribution design projects.
- Other responsibilities included transmission line design, power quality investigations, field inspections, and motor starting analysis.

EDUCATION

North Dakota State University, Fargo, ND

Bachelor of Science in Electrical Engineering with Emphasis in Power Systems, 1997

University of Nebraska, Lincoln, NE

NRECA Management Internship Program, 2006

Numerous technical and business continuing education courses focusing on issues and topics within the power industry.

PROFESSIONAL MEMBERSHIPS

NRECA T&D Engineering Committee – Power Quality Subcommittee Member

Institute of Electrical and Electronic Engineers

INDEPENDENT ASSESSMENT OF TORONTO HYDRO BUSINESS CASES

High Level Review of Proposed Projects and Programs to
be Filed before the Ontario Energy Board under its
Incremental Capital Module



The star design is a trade-mark of Toronto Hydro Corporation used under licence.
'Toronto Hydro' means Toronto Hydro-Electric System Limited.

MAY 8, 2012

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EXECUTIVE SUMMARY

Navigant Consulting Ltd. (Navigant) was retained by Toronto Hydro-Electric System Limited (THESL) to conduct an independent review of specific business cases that THESL has prepared to support major energy delivery projects and programs that THESL plans to submit for approval under the OEB’s ICM mechanism. The specific business case segments that Navigant reviewed are listed in Table 1.

Table 1: THESL ICM Business Cases Reviewed by Navigant

- | | |
|--|--|
| • Polymer SMD-20 –Fuses | • Plant Relocations |
| • Stations Circuit Breakers | • Wholesale and Smart Metering |
| • Bremner Transformer Station | • Stations Power Transformers |
| • Hydro One Capital Contributions | • SCADAMate R1 Switches |
| • Underground Infrastructure and Cable – Handwell Replacements | • Stations Switchgear - Municipal and Transformer Stations |
| • Stations Control and Communications | |

Based on our review of above business cases (for simplicity, “the proposed ICM projects”), Navigant has concluded the following:

- The proposed ICM projects are required and justified based on the business cases developed by THESL.**
 - Each of the proposed ICM projects addresses important reliability, safety, and performance issues. Deferring these projects will degrade service reliability and quality of service to THESL customers.
 - The business cases confirm that the solutions THESL propose are the preferred alternatives based on performance and economic criteria.
 - The proposed ICM projects are consistent with solutions other similar utilities have or propose to implement; for example, utilities throughout North America are replacing obsolete air blast magnetic breakers, transformers and communications and control systems.
 - Several of the proposed ICM projects reflect the intent of the Distribution System Code and Electrical Safety Authority (ESA) rules and regulations with respect to power system safety and reliability.

2. The proposed ICM projects are consistent with other utility practices and programs. Navigant’s experience indicates that THESL is prudently addressing known deficiencies in a responsible manner.

- Several of the safety-related upgrades, including elevated voltage mitigation and switch replacements, are issues that many other utilities have encountered and have proactively addressed or are addressing.
- Many of the deficiencies THESL has identified and proposes to address through the proposed ICM projects were identified in DSC mandated inspections, and should be addressed without unreasonable delay.
- The mitigation and renewal programs covered by the proposed ICM projects are consistent with best practice solutions that other leading utilities have implemented.

3. The methods and tools employed by THESL to evaluate and select the proposed ICM projects are appropriate, and meet or exceed those employed by electric utilities in Ontario and other provinces. The business cases provide ample evidence that the projects are not only required, but have been thoroughly evaluated.

- THESL has conducted extensive technical evaluation of the condition of the assets it proposes to upgrade or replace. The underlying reasons as to why the equipment or facilities proposed for renewal are deficient are clearly evident from the analyses THESL engineers and support staff have performed and documented in the ICM business cases.
- The proposed upgrades are based on rigorous and thorough condition assessment methods, using modern tools and methods. For example, power transformer replacements were selected, in large part, based on physical data that confirms declining performance or potential for failure.
- Project need and the evaluation of alternatives are based on similar asset management best practices and principles that leading utilities now employ.

4. There are potential undesirable consequences to system reliability, safety and performance if THESL does not receive funding to proceed with the proposed ICM projects. THESL has identified key equipment and facilities that can no longer perform the functions they were designed to perform, or have degraded to a state where replacement is the most appropriate course of action to take.

- Data and analyses presented in the business cases demonstrate that key energy delivery facilities and equipment increasingly are at risk of failure or are inadequate to reliably serve current and future load. System reliability and customer satisfaction are expected to decline as these risk factors increase and equipment performance declines.
- THESL is proposing to responsibly address known safety and performance deficiencies that company personnel have identified, including elevated contact voltage on low voltage facilities that places public and crew safety at risk.

- Similarly, the known deficiencies associated with primary distribution switches should be addressed to reduce safety risk to THESL crews and minimize the potential for interruptions or longer restoration times for customers.
 - THESL customers will likely see higher costs in the form of increased O&M, longer restoration time, and greater likelihood of collateral damage due to catastrophic equipment failures.
 - Timely completion of key major projects is needed to complement Hydro One renewal programs, and vice-versa, with sub-optimal performance and higher costs if these are not installed as THESL and Hydro One have proposed.
- 5. THESL’s design and construction standards, including those applied to the proposed ICM projects, are consistent with common utility practices. Navigant conducted a comprehensive survey of comparable utilities to confirm that THESL design and construction standards are in line with industry best practices.**
- THESL planning criteria with respect to equipment loading and distribution feeder design are consistent with other utilities, except in the downtown Toronto core, where feeder back-up is provided by intra-station ties instead of inter-station feeder ties.
 - Equipment and material standards are comparable to other leading utilities, ensuring renewal upgrades and system enhancements are consistent with good utility practices; for example, the size and types of poles, overhead conductor and cable used by THESL is similar to other utilities with similar service territories.
 - Where differences in standards exist, they typically are due to constraints associated with operating energy delivery facilities in a major urban center, or because of unique equipment requirements due to higher operating voltages or subject to higher fault current levels.
- 6. THESL’s proposed ICM projects are coordinated to ensure they will result in the maximum utilization and efficient use of equipment.**
- Project selection is based on sound Asset Management practices and principles that are consistent with those we have seen at other utilities that have adopted best practices and solutions.
 - Several projects are complementary; that is, investments often are needed to ensure maximum efficiency and utilization of equipment, particularly those designed in consideration of area planning.
 - Some assets are nearing maximum utilization and new facilities are needed to serve growing load and to ensure reliability is maintained. Downtown Toronto is one of the areas experiencing capacity constraints and increased risk of exposure to high impact events. For example, downtown station’s capacity constraints will be addressed by a new downtown station (i.e., the Bremner Station).

- Some investments are needed to support City of Toronto initiatives, including high profile events such as the Pan Am Games in 2014.

In summary, each of the proposed ICM projects that Navigant reviewed is consistent with those currently or previously undertaken by many other urban utilities in Canada and the United States that Navigant has evaluated. Notably, we did not identify any projects or measures that are inconsistent in scope or need with programs implemented elsewhere. In Navigant's view, because of these reasons and the review and analysis presented in subsequent sections of our report, the proposed ICM projects that THESL seeks funding for are reasonable and justified.

INTRODUCTION AND BACKGROUND

Background

Under Ontario Energy Board (OEB) policy, distributors in Ontario are required to adopt the OEB’s Incentive Regulation Mechanism (IRM) unless circumstances exist which preclude the IRM from providing a reasonable outcome. THESL’s current electricity distribution rates in effect for 2011 are the result of a cost of service application EB-2010-0142 filed on August 23, 2010, and a subsequent Ontario Energy Board (OEB or Board) Decision (the “Partial Decision”) issued on July 7, 2011.

Navigant’s Scope of Work

Navigant was retained by THESL to conduct an independent review of business cases that THESL has prepared to support major energy delivery projects and programs that THESL plans to submit for approval under the OEB’s ICM mechanism.

The specific business cases that Navigant reviewed are listed in Table 2.

Table 2: THESL ICM Business Cases Reviewed by Navigant

- | | |
|--|--|
| • Polymer SMD-20 –Fuses | • Plant Relocations |
| • Stations Circuit Breakers | • Wholesale and Smart Metering |
| • Bremner Transformer Station | • Stations Power Transformers |
| • Hydro One Capital Contributions | • SCADAMate R1 Switches |
| • Underground Infrastructure and Cable – Handwell Replacements | • Stations Switchgear - Municipal and Transformer Stations |
| • Stations Control and Communications | |

For each business case, Navigant’s reviewed the overall robustness of the business cases in terms of establishing that the projects are required and justification of the proposed investments. The criteria considered by Navigant in its review included, among other factors, the following:

1. Comprehensiveness of impact analysis including underlying logic, quantification of benefits wherever possible, and linkage back to a robust, systematic capital planning approach used by Toronto Hydro.
2. Prioritization within the cases, as appropriate (e.g., why do the recommended units need to be replaced versus other units?) and rationale for such prioritization.
3. Clarity regarding incremental impact of the proposed investment relative to a clearly defined baseline (e.g., do nothing).

4. Robustness of analytical methods and technical support for establishing need and the impact on reliability and performance if the projects are not funded and implemented by THESL.
5. Identification of options considered and robust analysis of these options clearly showing the advantage of the preferred options.
6. Comparison with industry practices through benchmarking or surveys as appropriate.

Navigant also reviewed THESL's Feeder Investment Model (FIM) and related methodologies that supported several of the business cases for consistency with industry practice and sound logical underpinning.

In the sections that follow, Navigant poses a series of questions that address why these projects are required, and the methods and assumptions THESL employed to justify these expenditures under the OEB's ICM. It includes questions regarding the consistency of evaluation and project selection methods with common utility practices. Navigant also compared THESL's design standards to those of other utilities to identify any differences and to determine whether the type and scope of projects THESL proposes follow good utility practices and consistent with programs implemented by other comparable utilities.

PROJECT NEED

In the following, Navigant opines on the benefits of the proposed ICM projects for approval under the OEB's ICM mechanism, with attention placed on the likely benefits that will accrue to its customers.

What are the associated ICM project benefits and likely consequences if the projects are not completed?

Project Benefits

Specific benefits Navigant identified from THESL's business case studies are highlighted below.

Maintain Reliability

Many of the projects that THESL proposes are designed to ensure reliability of service to its customers does not degrade and quality of service is not compromised. For example, THESL proposes the installation of a new downtown station (Bremner) and the replacement of equipment that increasingly is susceptible to failure, including obsolete switchgear and circuit breakers. Navigant's experience with similar Canadian utilities confirms THESL's renewal program is consistent with programs implemented on other systems. The case for Bremner is compelling, as the loading of major downtown station transformers and switchgear is nearing limits, with inadequate back-up among key stations in the downtown core. A loss of a major station or switchgear bus could result in extended outages to critical downtown customers and tarnish the image of Toronto as a leading metropolitan centre and tourist destination.¹

The breakers and switchgear that THESL proposes to replace, and that many other utilities have already begun to replace, are not only old, but demonstrably obsolete as many of these devices are degrading and contain equipment that poses potential safety risks. Further, replacement parts are no longer readily available, and parts sometimes are salvaged from other devices that have been taken out of service. In addition, equipment is increasingly approaching fault current rating limits due to the strong nearby supply sources and robust transmission sources. The replacement of transmission class breakers at Leaside, of which THESL will contribute to the cost of the upgrade, is one clear example of the need to upgrade station equipment that in many instances was installed over 40 to 50 years earlier. The replacement of equipment that is no longer meeting its functional requirements and therefore is approaching, or has passed the end of its service life is an appropriate and responsible course of action.

¹ Navigant prepared a report supporting the Bremner TS business case and need for a new downtown station.

Importantly, continued use of obsolete equipment will likely degrade reliability, particularly for critical commercial and industrial load centres. THESL, by first replacing equipment that presents the greatest risk, is better positioned to maintain reliability at current levels.

Greater Safety

As noted, station breakers and switchgear proposed for replacement, although well maintained, do not meet current standards for arc flash resistance or may be nearing fault duty ratings, each of which poses potential safety risks. Because of these concerns, THESL, like many other utilities in North America, proposes to replace these devices, focusing first on equipment most at risk and affecting the greatest number of customers or critical load centres.

Similarly, THESL proposes to repair or replace handwells, enclosures and secondary lines and cables throughout Toronto to decrease the risk of elevated contact voltage to the public. Navigant views such actions as entirely reasonable and appropriate to complete in the short term, as utilities throughout North America are undertaking similar programs and with good reason: several well-publicized recent incidents of human or animal contact with readily accessible metal structures, including human fatalities, have heightened utility awareness of such dangers, and underscore the need to implement proactive remediation. In short, low voltage cable and equipment located in urban areas laden with salts and other contaminants invariably will deteriorate over time, and do not automatically shut down such as lines and equipment operating at primary voltages. Mitigation of these conditions is wholly appropriate and demonstrates THESL’s commitment to reduce the risk of human or animal contact with elevated voltages.

Lower Costs

While project need documentation for the proposed investments focuses mostly on reliability, performance and safety; support for these projects is further enhanced by lower costs. Reduced costs are expected in several categories, including lower restoration costs due to reduced failures, and avoidance of collateral damage caused by catastrophic equipment failure. Further, the timely construction and upgrades THESL proposes will avoid future cost increase and higher cost associated with installation of equipment after it has failed, often during hours where additional overtime is incurred.

What assurances does THESL provide to ensure the projects make efficient use of capital funds, are not redundant and are proposed to be built when needed?

Coordination with Area Plans

Several of the proposed ICM projects are stand-alone and do not impact other proposed ICM projects. For example, the secondary upgrades and metering replacements are needed for safety or to meet Measurement Canada requirements. However, other projects such as the Bremner station, switchgear replacements and HONI contributions are in some case interrelated. For example, the HONI upgrades near Windsor station are needed to support

Bremner, and the replacement of switchgear in several downtown locations is needed to provide support to other stations where equipment will be upgraded or replaced. Further, the upgrade of station breakers and replacement of automated distribution switches enhances tie capability, thereby improving reliability and enhancing distribution line and station effective capacity.

The externally-initiated plant relocations and expansions also provide an opportunity to evaluate and incorporate long-term internally-driven expansion plans, at lower overall cost. THESL has proposed to undertake these upgrades concurrent with relocation or expansion for various improvements proposed by various government and City agencies along the downtown waterfront and other City venues. In addition to meeting a demonstrable need initiated by external entities, THESL's coordination of these improvements with other long-term plans benefits THESL's customers over the long term. For example, the capacity of line to be relocated along the waterfront should be upgraded to accommodate expected load growth. THESL's proposal to advance these upgrades at lower incremental cost is consistent with practices employed by other utilities. In fact, to ignore the opportunity would likely increase long-term costs.

The large investments associated with the Hydro One upgrades and expansion projects have undergone similar intensive review, with Hydro One and THESL working jointly to ensure the projects are designed to meet the needs of each company. In particular, the integration of Hydro One system expansion to improve downtown reliability and to supply a new station (Bremner) via a T-Tap on a new 115kV line has been critically reviewed over the past several years – the Bremner station is not viable absent a new transmission source. The replacement of switchgear at Strachan and Windsor also are integral to THESL's proposed Bremner station and associated THESL switchgear replacements plans, as well as expansion to accommodate area load growth. Similarly, the transmission breaker upgrades at Leaside have been scrutinized for several years, including recent studies that examined constraints to new distributed generation (DG) in downtown Toronto. The upgrade of the Leaside breakers is an important and major step to alleviate constraints on THESL's distribution system for new DG.

EVALUATION AND IMPACT ASSESSMENT

METHODOLOGY

The section addresses the methods and tools THESL employed to evaluate projects, and the level of rigour applied to justify project need. Specifically, with respect to the projects THESL proposes, Navigant critically reviewed the approach THESL undertook to justify each project, summarized in the following question:

Are the methods and tools employed by THESL to select the proposed ICM projects appropriate and sufficient to justify the investment?

Methodology

For all business case Navigant reviewed, THESL provided factual or empirical evidence that amply demonstrate why the proposed projects are needed. The methodology the company employs is founded on engineering principles and assumptions that are consistent with the level of rigour employed by leading utilities. Foremost among these is the use of sophisticated tools and tests to determine the condition of equipment, and to predict the areas of the system at greatest risk. For example, the condition and need for replacement of station transformers is based on dissolved gas analysis (DGA) performed by reputable firms, coupled with the exposure to customers if such devices were to fail. Similarly, the replacement of SMD-20 fuse mounts and SCADAMate gang-operated switches is based on thorough research and tests performed by THESL personnel that confirm that some of the devices installed on THESL's system are defective, with attendant reliability and safety exposure.

Similarly, THESL uses a Feeder Investment Model (FIM), which is a comprehensive series of distribution simulation and analytical tools, to accurately predict asset performance and equipment loading under a range of operating conditions. Importantly, the FIM incorporates risk factors and life-cycle economics to evaluate project need and value. The upgrade of remote terminal units (RTU) also is critical as several devices are no longer capable of reliably providing continuous status data to system operators. Navigant has witnessed the degradation of RTU functionality at many other utilities, which have adopted similar replacement strategies.

Asset Management

For several years, THESL has developed an Asset Management (AM) strategy that adopts key principles outlined in the British Publicly Available Standard (PAS) 55. The methods, criteria and evaluation tools are outlined in several documents THESL prepared which were reviewed by Navigant. The strategies THESL has outlined and adopted are designed to identify renewal program requirements based on quantifiable data that accurately describe asset condition and risk. The information contained in the business cases include significant condition data based on measurements and root cause analysis, such as those performed for

station transformers and overhead switches. THESL also highlights the associated risks if the investments are not undertaken. The FIM, described above, is one of the primary AM tools used to incorporate project economic value based on asset condition, risk factors and customer impacts.

CONFORMANCE WITH UTILITY PRACTICES AND STANDARDS

In this section, Navigant addresses the degree to which proposed investments are in line with projects implemented by comparable utilities. It includes an assessment as to whether THESL practices exceed or are below those of other utilities, and reasons why differences exist in some segments of THESL's system. Specifically,

Are THESL's design and planning practices consistent with utility best practices?

To support its review, Navigant conducted a recent survey of planning criterion, and design and construction standards of other comparable utilities in Ontario and other provinces.

Practices and Standards Reviewed

Navigant reviewed the following areas for consistency:

- Distribution design and planning criteria
- Equipment selection criteria
- Station and distribution line loading criteria and practices
- Line relocation policies and practices
- Equipment replacement (renewal) criteria
- Overhead and underground distribution design and protection
- Physical infrastructure and renewal programs
- Safety-related upgrades and replacements

Survey Findings

From survey results and prior experience evaluating similar utilities, Navigant confirmed that THESL's practices are generally consistent with those employed by other utilities. Consistency of design and planning practices was clearly evident in several key areas, including line and equipment loading, overhead and underground distribution equipment selection and replacement criteria. Based on survey results and our extensive work performed for other electric utilities in Ontario and other provinces, Navigant can offer an opinion that THESL does not over-design its system or follow practices that are not appropriate for the intended application. Where differences exist, such as number of primary lines installed per pole or higher fault current rating of some station equipment, these are due to the unique challenges and requirements associated with a major urban system.

Consistency with Industry Best Practices

As noted in prior sections, the projects that THESL proposes are consistent with measures undertaken at other utilities with comparable service areas and electric system configurations. The methods that THESL has employed to determine need and sequencing of renewal upgrades also is consistent with or above current utility practices. This is particularly evident for high cost replacements such as power transformers and station switchgear, where the technical capability and depth of THESL engineering expertise provides a level of rigour and analysis to demonstrate where the need for renewal is greatest.

The replacement of obsolete equipment and facilities that are deteriorated and pose reliability or safety risks, such as non-arc resistant switchgear, is common among utilities, as are some of the more salient, and equally compelling needs to replace defective porcelain and change out meters that no longer meet measurement standards – each of these programs are underway at many other utilities in Canada and the U.S.

The upgrade of communications and remote terminal units (RTU's) also is consistent with common utility practice, as sound and reliable communications provided via redundancy of SONNET systems is now an essential component of utility monitoring and control systems. The increased sophistication of these systems is essential to meet the increased use of SmartGrid systems and increased penetration of customer-owned generation (DG).

In summary, Navigant views THESL practices and proposed investment programs to be in line with those undertaken by other utilities that have adopted best practice for renewal programs. Such actions assure that THESL's energy delivery system will continue to operate safely and reliably. Further, the proposed investment schedule will assure that renewal programs are implemented in a scheduled and orderly manner.

TORONTO HYDRO ELECTRIC SYSTEM LIMITED |

Project Specific Designated Substances and Hazardous Materials Survey 14 Carlton Street, Toronto, ON

111-18752-00



SURVEY REPORT

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111-18752-00

July 20, 2011

Andrew Bennett, A.Sc.T. M.A.A.T.O.
Facilities Technologist, Facilities & Asset Management Department
Toronto Hydro Electric System Limited
14 Carlton Street
Toronto, ON M5B 1K5

**Re: Project Specific Designated Substances and Hazardous Materials Survey,
Toronto Hydro Electric System Limited, 14 Carlton Street, Toronto, ON**

Dear Mr. Bennett:

This report documents relevant background information, methodologies utilized, work undertaken and the findings of the Project Specific Designated Substances and Hazardous Materials Survey (PS-DSHMS), destructive testing at the 6th floor of the Toronto Hydro building, located at 14 Carlton Street, Toronto, Ontario, as performed by GENIVAR personnel on 06/22/2011.

Please do not hesitate to contact us if you have any questions.

We sincerely thank you for your business and look forward to future opportunities to work with you and collaborate on future projects.

Yours truly,

GENIVAR Inc.

Prepared by:

A handwritten signature in black ink, appearing to read "Sh Heikkila".

Stephen Heikkila, B. Eng.
E.I.T., Environment

Reviewed by:

A handwritten signature in black ink, appearing to read "C. Paoletti".

Cesare Paoletti, P. Eng.
Project Manager, Environment

[Project Specific Designated Substances and Hazardous Materials Survey Report for 14 Carlton Street, Toronto, ON]

Executive Summary

GENIVAR Inc. was retained by Toronto Hydro Electric System Limited to conduct a Project Specific Designated Substances and Hazardous Materials Survey (PS-DSHMS), including destructive testing for the 6th floor at Toronto Hydro's head office, located at 14 Carlton Street, Toronto, Ontario.

The objectives of this survey were as follows:

To identify designated substances and/or hazardous materials that may be present within the areas surveyed, which may be affected by planned upgrades on the 6th floor;

To prepare a report documenting the identities, usages and locations of designated substances and hazardous materials discovered to be present during the survey; and,

To provide Toronto Hydro Electric System Limited with applicable management considerations in support of planned upgrades on the 6th floor.

The primary findings of this survey are summarized below:

Designated Substance/ Hazardous Material	Survey Findings
Asbestos	Mechanical pipe insulation observed in the perimeter plaster bulkhead in the ceiling space of the 6 th Floor was found to be asbestos-containing. Mechanical pipe fitting insulation also observed in the ceiling space in various locations of the 6 th floor is assumed to be asbestos-containing. Drywall joint compound throughout the surveyed area was identified to be asbestos-containing. The drywall joint compound was primarily observed to be in good condition. Texture coat applications applied on the walls and ceilings of the 6 th Floor was identified as being asbestos-containing. The texture coat application was primarily observed to be in good condition. The locations of identified asbestos-containing materials (ACM) are detailed in Appendix A. O. Reg. 278/05 requires that the condition of these materials be inspected once every 12-month period and that a record of this inspection be maintained on record with this survey report on the building's premises.
Lead	A total of 4 paint chip samples were collected from interior paint applications and submitted to an accredited laboratory for analysis of lead content. Analytical results indicated that <u>all</u> samples collected had a concentration of lead greater than 90ppm (0.009% by weight), the threshold concentration limit above which materials are considered to be lead-containing products under the federal <i>Hazardous Products Act (Surface Coating Materials Regulation)</i> .
Silica	Building components known to contain silica such as concrete and mortar were observed within the surveyed areas.
PCB	Fluorescent light ballasts present throughout the 6 th floor area, may contain PCB's.

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1. Introduction

1.1 Background

GENIVAR Inc. was retained by Toronto Hydro Electric System Limited to conduct a Project Specific Designated Substances and Hazardous Materials Survey (PS-DSHMS), requesting destructive testing at the 6th floor of the Toronto Hydro building, located at 14 Carlton Street, Toronto, Ontario.

This report summarizes the rationale, scope of work, methodology and findings of the PS-DSHMS as performed by GENIVAR personnel on June 22, 2011.

1.2 Survey Objectives

The objectives of this survey were as follows:

- 1) To identify designated substances and/or hazardous materials that may be present within areas scheduled for demolition;
- 2) To prepare a report for documenting the identities, usages and locations of designated substances and hazardous materials discovered to be present during the survey, and;
- 3) To provide Toronto Hydro Electric System Limited with applicable management considerations.

1.3 Scope of Work

The areas surveyed as part of this work included:

- All areas and rooms on the 6th Floor, and;
- Any ceiling spaces, and concealed building spaces (i.e. pipe chases) that were encountered during the course of the survey and that were easily accessible via removable ceiling tiles and/or access panels and were accessible with a 6ft ladder.

The PS-DSHMS consisted of the following tasks:

- A systematic (area-by-area) survey of the prescribed areas;
- Sampling of suspect materials which are scheduled for removal;
- Submission of samples to an accredited laboratory for analysis;
- Reduction of analytical data and identification of designated substances and hazardous materials, and;
- A review of site-specific management considerations and recommendations.

1.4 Regulatory Context

Section 30 of the *Occupational Health and Safety Act* (the Act) stipulates that prior to the commencement of a project a list shall be prepared of all designated substances that are present at the project site (i.e. a designated substances survey). In accordance with the Act, the locations of designated substances must be identified in writing to all prospective constructors, contractors and sub-contractors who may work, disturb or come into contact with this type of material, at the same time as, or prior to, project tendering.

The term “designated substance” refers to the eleven chemical or physical agents specifically identified within the Act. Each of these substances is governed by its own respective regulation that defines the minimum health and safety requirements for assuring safe worker-substance interaction as well as the obligations of employers and workers in workplaces containing said substances. These regulations further stipulate the maximum concentrations of the respective substance to which a worker may be

exposed, according to short-term exposure values and time-weighted average exposure values. Table 1 lists the eleven chemical/physical agents identified in the act as well as their respective regulations and corresponding amendments.

Table 1-1 Ontario Occupational Health & Safety Regulations for Designated Substances

Designated Substance	Applicable Regulation	Most Recent Amendment
Acrylonitrile	O.Reg. 490/09	-
Arsenic	O.Reg. 490/09	-
Asbestos	O.Reg. 490/09	-
Asbestos (<i>on Construction Projects and in Buildings and Repair Operations</i>)	O.Reg. 278/05	O.Reg. 479/10
Benzene	O.Reg. 490/09	-
Coke Oven Emissions	O.Reg. 490/09	-
Ethylene Oxide	O.Reg. 490/09	-
Isocyanates	O.Reg. 490/09	-
Lead	O.Reg. 490/09	-
Mercury	O.Reg. 490/09	-
Silica	O.Reg. 490/09	-
Vinyl Chloride	O.Reg. 490/09	-

1.5 Additional Regulatory Requirements for Asbestos

Among the designated substances, asbestos is unique in that it is governed by two regulations under the Act - one for the general mining and processing operations of asbestos and one for asbestos on construction projects and in buildings and repair operations.

Ontario Regulation 278/05, made under the Act, entitled “Designated Substance – Asbestos on Construction Projects and in Buildings and Repair Operations” came into effect on November 1st, 2005, with some sections contained therein becoming effective on November 1st, 2007. This regulation revoked and replaced the previous asbestos regulation, O. Reg. 838/90.

O. Reg. 278/05 introduces significant changes to how asbestos management is regulated in Ontario. Many of the regulatory changes adopted by O. Reg. 278/05 were already in wide-use in industry as part of best management practices. Noteworthy regulatory changes include modifications to asbestos survey requirements, the management of asbestos on-site, abatement operations and procedures (i.e. Type 1, 2 and 3), the use of personal protective equipment (PPE) and air monitoring requirements.

1.6 Additional Regulatory Requirements for Lead

In April 2005, the federal *Surface Coating Materials Regulation (SOR/2005-109)* limited the allowable concentration of total lead present in a surface coating material (with some exceptions) to 600 mg/kg (600 ppm).

In December 2010, the Federal Government lowered the total lead limit in surface coating materials from 600 mg/kg to 90 mg/kg under subsections 4(1) and 5(1) and section 8 of the *Surface Coatings Materials Regulations (SOR/2005-109)*. The lowering of this limit aligns Canada with the United States in respect of total lead levels in surface coating materials and certain products with surface coating materials applied to them.

Therefore, using this revised threshold limit, those surface coating materials with lead concentrations that exceed 90 ppm (0.009% by weight) are considered to be lead-based.

1.7 Additional Regulatory Requirements for Waste Management

The disposal of designated substances is regulated under the Ontario *Environmental Protection Act* (the EPA), specifically O. Reg. 347, *General – Waste Management* (most recently amended by O. Reg. 395/07). The regulation details the minimum requirements for the appropriate transport and disposal of wastes.

In addition to the EPA waste management requirements, the *Canada Wide Standards on Fluorescent Lamps Containing Mercury* requires that quantities of fluorescent light tubes destined for waste in excess of 25 tubes are to be considered hazardous waste and thus must be disposed of in a manner that is compliant with O. Reg. 347.

2. Methodology

2.1 Pre-Demolition DSHMS Survey Methodology

GENIVAR's PS-DSHMS sought to identify those substances defined as designated substances under the *Ontario Occupational Health and Safety Act* including: asbestos (friable and non-friable), lead, mercury, silica, benzene, acrylonitrile, arsenic, coke oven emissions, ethylene oxide, isocyanates, and vinyl chloride. In addition, other hazardous materials, such as PCBs, ozone-depleting substances (ODSs), urea-formaldehyde foam insulation and other stored chemicals and wastes were included in the survey scope. Background information on designated substances and hazardous materials, in addition to a brief description of their past uses is provided in **Appendix E** of this report.

A preliminary survey was conducted of the entire 6th floor area which was non-destructive in nature. The preliminary survey sought to identify those materials which were asbestos-containing in order to develop a destructive testing work plan in compliance with applicable regulatory requirements.

Subsequent to the preliminary survey, destructive testing was performed. On June 25, 2011, GENIVAR retained the asbestos abatement and demolition services of Restoration Environmental Contractors (REC). The destructive testing sought to identify hidden/concealed areas, and materials with the potential to contain asbestos-containing material, designated substances and hazardous materials.

Prior to conducting the destructive testing, the preliminary survey results were utilized to formulate a work plan and to comply with regulatory requirements (O. Reg. 278/05) by constructing Type 2 asbestos enclosures around those materials identified as being asbestos-containing. In these instances, Type 2 asbestos abatement procedures were also followed for the investigation and sample collection in order to minimize the risk of exposure to asbestos.

Upon completion of the destructive investigation and sample collection, semi-permanent sturdy metal access hatches were installed to enclose these exposed areas. The access hatches also allow for easy re-inspection of these areas if required (see **Appendix C** – Photographs).

Bulk samples were collected from suspect building materials (materials known as having the potential to be asbestos-containing) for analysis of their asbestos content. Paint chip samples were collected from paint applications for analysis of their lead content. Survey procedures specific to asbestos-containing materials and lead are documented in Sections 2.2 and 2.3 of this report, respectively.

2.2 Asbestos Survey Methodology

The surveyor inspected the subject area for the presence of friable and non-friable asbestos-containing materials (ACM) including, but not limited to:

- Sprayed insulation;
- Acoustic/texture plaster;
- Mechanical insulation;
- Asbestos cement;
- Piping;
- Acoustic ceiling tiles;
- Vinyl floor tiles and vinyl sheet flooring; and,
- Plaster.

It is noted that not all of the above materials were necessarily observed on-site. Bulk samples were collected from suspect materials and analyzed to confirm the presence/absence of asbestos.

The collection of bulk material samples was performed according to the procedures documented in the Ontario Ministry of Labour's (MOL) publication *Designated Substances in the Workplace: A Guide to the Asbestos Regulation for Construction Projects, Buildings and Repair Operations*.

O. Reg. 278/05 stipulates the minimum number of samples that must have asbestos concentrations less than 0.5% in order for an area of homogenous material to be not considered asbestos-containing. A homogeneous sampling area is defined by the USEPA as containing material that is uniform in texture and appearance, was installed at one time and is unlikely to consist of more than one type or formulation of material. The O. Reg. 278/05 sampling requirements are summarized in greater detail in Table 2-1 below.

Table 2-1 Minimum Number of Bulk Samples to be Collected Under O. Reg. 278/05 According to Material Area, Application and Friability

Type of Material	Size of Homogenous Material	Minimum Number of Bulk Samples
Surfacing material, including without limitation material that is applied to surfaces by spraying, by trowelling or otherwise, such as acoustical plaster on ceilings, fireproofing materials on structural members and plaster	Less than 90 m ²	3
	90m ² or more, but less than 450m ²	5
	450m ² +	7
Thermal insulation, except as described below	Any size	3
Thermal insulation patch	Less than 2m or 0.5m ²	1
Other material	Any size	3

Samples were collected from discrete locations with every attempt to minimize damage. All sample locations were left in a safe condition. The following procedures for collection of samples were followed:

- The surface of the material was wetted with amended water using a spray bottle. In situations where the material could not be wetted, a plastic bag or other containment device was placed around the sampling device.
- A sample was then obtained by one of two methods:
 - 1) A sampling device was slowly pushed into the material with a twisting motion until the entire thickness was penetrated, followed by extraction of the sampling device; or,
 - 2) A knife was cleaned and then used to excise a piece of the material.

- Each sample was placed in a clear bag with a tight closure, labelled appropriately and placed in a second, similar bag.
- Debris was cleaned with wet paper towels and discarded into a plastic bag.
- Damage to the material sampled was repaired with duct tape and/or filler material as needed.
- A chain of custody form was completed for all samples collected on-site and accompanied samples in transit. The asbestos samples were couriered to IATL Laboratories of Mount Laurel, New Jersey for analysis of asbestos content using Polarized Light Microscopy (PLM).

A total of forty-two (42) samples were analyzed by IATL Laboratories after having been collected from suspect building/construction materials. The number of homogenous samples collected from each suspect building material was done so in accordance with Table 1 of O. Reg. 278/05. The locations at which samples were collected are identified in the Site Plans, provided in **Appendix A** of this report.

2.3 Lead Survey Methodology

A total of four (4) paint chip samples from distinct paint colours observed within the structures were collected during the survey and submitted for analysis of lead content. Samples were collected with the aid of a thin-bladed knife, which was cleaned prior to each sampling event. The site surveyor selected sample locations where it appeared that the paint application was most representative of all areas on which it was applied. Each paint chip sample was placed in a clear bag with a tight closure, labelled appropriately and placed in a second, similar bag. The sample locations are identified on the Site Plans provided in **Appendix A** of this report. A chain of custody form was completed for all samples collected on-site for accompaniment with samples sent via courier to IATL Laboratories of Mount Laurel, New Jersey.

To determine their lead content, samples were analyzed using Atomic Absorption Spectrophotometry.

3. Observations and Results

Designated substances and hazardous materials identified by this survey are detailed below. The locations of the surveyed structures and locations of asbestos-containing materials can be found in **Appendix A** - Drawings. Analytical results are summarized in **Appendix B** of this report with Laboratory Certificates of Analysis provided in **Appendix D** of this report. Relevant photographs taken during the survey are presented in **Appendix C** of this report.

3.1 Asbestos-Containing Materials

3.1.1 Drywall Joint Compound

Gypsum board with drywall joint compound (DJC) applied was observed on the walls and on the ceiling throughout the surveyed area of 6th floor. Ten (10) samples of drywall joint compound were collected from various areas (Sample Set TH-1) and analyzed for asbestos content. The drywall joint compound was found to contain 1.4% *Chrysotile* asbestos. The gypsum board with drywall joint compound was observed to be in good condition at the time of the survey.

3.1.2 Plaster

Plaster was observed on the walls and on the ceiling throughout the surveyed 6th floor. Ten (10) samples of plaster were collected from various areas (Sample Set TH-2) and analyzed for asbestos content. Asbestos was not detected in any of the samples analyzed.

3.1.3 Texture Coat Application

Texture coat applied on gypsum board and plaster walls and ceilings were observed throughout the surveyed 6th floor. Seven (7) samples of the texture coat application were collected from various areas (Sample Set TH-4) and analyzed for asbestos content. The texture coat application was found to contain 0.75% *Chrysotile* asbestos. The texture coat applied on gypsum board and plaster walls and ceilings was observed to be in good condition at the time of the survey.

3.1.4 Vinyl Floor Sheeting

Vinyl floor sheeting was observed in the washrooms – locations 11 and 12 of the 6th floor. Three (3) samples of the material were collected (Sample Set TH-7) and analyzed for asbestos content. Asbestos was not detected in any of the samples analyzed.

3.1.5 Mechanical Insulation

3.1.5.1 Fibrous Fireproofing Insulation

Sprayed on fibrous fireproofing insulation was observed in the ceiling space on the north side of the 6th floor near the elevator lobby area. Three (3) samples of the material were collected (Sample Set TH-5) and analyzed for asbestos content. Asbestos was not detected in any of the samples analyzed.

3.1.5.2 Firestop Material

Firestopping material was observed on pipe penetrations at floor level in the mechanical room – location 26 of the 6th floor. Three (3) samples of the material were collected (Sample Set TH-6) and analyzed for asbestos content. Asbestos was not detected in any of the samples analyzed.

3.1.5.3 Mechanical Pipe Fitting Insulation

Mechanical pipe fitting insulation was observed on pipe fittings within the perimeter plaster bulkhead noted in the ceiling space of the 6th floor. Samples could not be collected due to inaccessibility; however, this material was visually identified and known to contain asbestos.

3.1.5.4 Mag Block Pipe Insulation

Mag block pipe insulation was observed within the perimeter plaster bulkhead noted in the ceiling space of the 6th floor. Three (3) samples of the pipe insulation were collected (Sample Set TH-9) and analyzed for asbestos content. The mag block pipe insulation was found to contain 30% *Chrysotile* asbestos. The overall condition of the mag block pipe insulation cannot be determined due to inaccessibility and limited visibility.

3.1.6 Acoustic Ceiling Tiles (ACT)

3.1.6.1 ACT - Style 1

A 1'x1' tan acoustic ceiling tile with small fissures and small pinholes was observed in various areas in the ceiling space. Three (3) samples of acoustic ceiling tiles – style 1 were collected from various areas (Sample Set TH-3) and analyzed for asbestos content. Asbestos was not detected in any of the samples analyzed.

3.1.6.2 ACT - Style 2

A 2'x4' white acoustical ceiling tiles with cavity spots and small pinholes were observed in location 1, 2 and 3. Close analysis of the manufacturer's product stamp on the back of the ACT shows that the ceiling

tile was manufactured post 1990, which indicates that these tiles are not suspect, and thus were not sampled.

3.1.6.3 ACT - Style 3

A 2'x2' white acoustical ceiling tiles with small fissures and small pinholes were observed in the elevator lobby. Close analysis of the manufacturer's product stamp on the back of the ACT shows that the ceiling tile was manufactured post 1990, which indicates that these tiles are not suspect, and thus were not sampled.

3.1.6.4 ACT - Style 4

A 2'x4' white acoustical ceiling tiles with small fissures and small pinholes were observed in location 8. Close analysis of the manufacturer's product stamp on the back of the ACT shows that the ceiling tile was manufactured post 1990, which indicates that these tiles are not suspect, and thus were not sampled.

3.1.6.5 ACT - Style 5

One style of 1'x1' tan acoustic ceiling tiles with small fissures and small pinholes was observed in various areas in the ceiling space. Three (3) samples of acoustic ceiling tiles – style 1 were collected from various areas (Sample Set TH-3) and analyzed for asbestos content. Asbestos was not detected in any of the samples analyzed.

3.2 Lead

Descriptions of each paint chip sample collected and associated lead concentrations are provided in the Summary of Analytical Results Tables, provided in **Appendix B** of this report.

Four (4) paint chip samples were collected from the 6th floor and submitted to IATL Laboratories for analysis of lead content. The concentrations of lead from the collected samples are as follows:

Table 3-1 Lead Sample Summary Table

Sample No.	Location	Description	Lead Content (%)
TH-L1	1	Off-white paint from bulkhead in ceiling space	0.28
TH-L2	1	White paint off plaster deck	0.28
TH-L3	2	Light pink wall paint from office area	<0.018
TH-L4	5	Green wall paint from the ceiling space in elevator lobby	0.19

All paint samples exceed the threshold limit of 0.009% (wt) and is considered to be lead-containing under the federal *Hazardous Products Act (Surface Coating Materials Regulation)*.

3.3 Silica

Materials known to contain silica such as concrete foundations, flooring, walls, columns and mortar were identified on-site. These types of materials were prevalent throughout the surveyed areas and require consideration in advance of their disturbance.

3.4 Hazardous Materials

3.4.1 PCBs

Light ballasts within the surveyed areas may be PCB-containing. If the light ballasts are likely to be disturbed or disposed of during the planned work activities, they should be inspected prior to removal or disposal. During dismantling operations, if PCB-containing light ballasts are identified, they must be separated from other light ballasts, drummed and hauled to a licensed facility in accordance with current Ontario PCB regulations.

3.4.2 Other Chemicals and Wastes

No other potentially hazardous chemicals and wastes were observed on site.

4. Conclusions and Recommendations

The following summarizes the findings of the PS-DSHMS and provides associated recommendations, with details presented in relevant report sections.

4.1 Asbestos-Containing Materials

Descriptions and quantities of each material determined to be asbestos-containing are provided in the following table, as well as in the Summary of Analytical Results Tables, provided in Appendix B of this report.

The following recommendations are made for action or management (as required) of these materials:

Table 4-1 Summary of Asbestos -Containing Materials

Material	Asbestos Content	Estimated Quantity	Condition	Recommended Action
Drywall Joint Compound (White)	1.4% <i>Chrysotile</i>	26,700 ft ²	Good	Manage in accordance with Ontario Regulation 278/05. Removal of this material should follow Type 2 procedures if likely to be disturbed.
Texture Coat Application (White)	<1.0% <i>Chrysotile</i>	750 ft ²	Good	Manage in accordance with Ontario Regulation 278/05. Removal of this material should follow Type 3 procedures if likely to be disturbed.
Mechanical Pipe Insulation (Mag-Block)	30% <i>Chrysotile</i>	510 linear feet	Unknown - Inaccessible	Manage in accordance to Ontario Regulations 278/05. Prior to any renovations or demolition abate following Type 2 (Glove-bag) Procedures or Type 3 Procedures in accordance with Ontario Regulation 278/05.
Mechanical Pipe Fitting Insulation	Unknown	Unknown	Unknown - Inaccessible	

4.2 Lead

During demolition activities, work that will disturb lead-containing materials should follow the recommendations provided in the Ministry of Labour *Guideline for Lead on Construction Projects*, September 2004. In addition, the aforementioned painted surfaces (containing lead) should be handled with appropriate health and safety precautions so as to comply with requirements of O. Reg. 843.

Finally, lead is assumed to be present in the solder joints of the copper piping, storm drainage and floor drains that may exist throughout the building however, it is unlikely that any special action will be required during demolition work unless the cutting of the pipes at joints is required.

4.3 Silica

Silica hazards arise when materials such as concrete that contain sand are drilled, abraded, ground, sawn or otherwise aggressively reshaped. It is recommended that dust resulting from the modification of existing sand-containing building components be controlled by using normal construction dust control procedures. These procedures include avoiding dry cutting and eliminating the use of forced air to clean/remove dust. Respiratory protection should be used at all times during work that involves generating sand-containing dust.

Prior to any demolition activities that may alter the integrity of silica-based products or materials, it is recommended that workers be made aware of the potential for exposure to airborne silica and be instructed in the appropriate use of equipment required to afford adequate protection, including the use of respirators in accordance with O. Reg. 845.

During demolition activities, work that will disturb silica-containing materials should follow the recommendations provided in the Ministry of Labour *Guideline for Silica on Construction Projects*, September 2004.

4.4 Other Designated Substances and Hazardous Materials

In some cases, building materials, equipment and other building components were inaccessible to GENIVAR personnel at the time of this survey. In these cases, the presence of designated substances or hazardous materials remains to be determined. O. Reg. 490/09 requires that building owners take the necessary precautions to minimize the exposure potential to designated substances. We encourage building owners/management to have previously inaccessible areas assessed if future work will likely disturb materials not assessed, sampled and documented in this report.

5. Management Requirements of Building Owner

5.1 Ongoing Asbestos Management

O. Reg. 278/05 defines the requirements and responsibilities of building owners in the ongoing management of asbestos within buildings where the presence of asbestos-containing material has been confirmed.

- 3) Owners who know that asbestos-containing material has been used in any purpose related to their building are required to,
 - a. prepare and keep on the premises a record containing the information set out in subsection (4) (*e.g. this report*);
 - b. give any other person who is an occupier of the building written notice of any information in the record that relates to the area occupied by the person;

- c. give any employer with whom the owner arranges or contracts for work that is not described in clause 10 (1) (a) written notice of the information in the record, if the work,
 - i. may involve material mentioned in the record, or
 - ii. may be carried on in close proximity to such material and may disturb it;
- d. advise the workers employed by the owner who work in the building of the information in the record, if the workers may do work that,
 - i. involves material mentioned in the record, or
 - ii. is to be carried on in close proximity to such material and may disturb it;
- e. establish and maintain, for the training and instruction of every worker employed by the owner who works in the building and may do work described in clause (d), a program dealing with,
 - i. the hazards of asbestos exposure,
 - ii. the use, care and disposal of protective equipment and clothing to be used and worn when doing the work,
 - iii. personal hygiene to be observed when doing the work, and
 - iv. the measures and procedures prescribed by this Regulation; and
 - v. inspect the material mentioned in the record at reasonable intervals in order to determine its condition.

O. Reg. 278/05 also requires that the contents of this report be routinely updated. Where the presence of asbestos-containing material is identified, this update requires inspection for changes in its condition/status. O. Reg. 278/05 reads as follows:

- 5) The owner shall update the record described in clause (3) (a) (*e.g. this report*),
 - a. at least once in each 12-month period; and
 - b. whenever the owner becomes aware of new information relating to the matters the record deals with.

5.2 Responsibilities Before Requesting Tender or Arranging Work

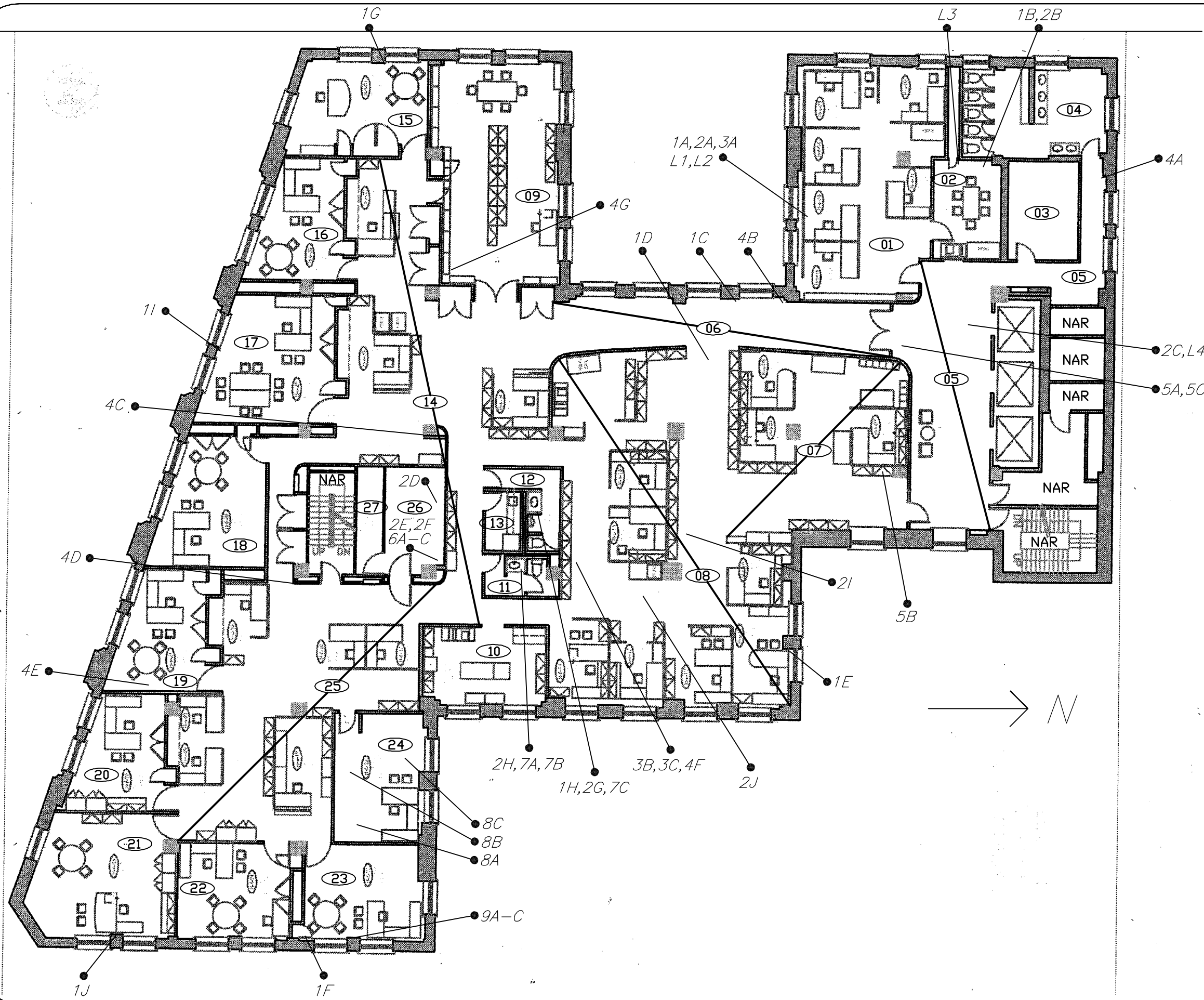
Should the building owner consider engaging in the demolition of all or part of any machinery, any equipment or the building itself, be advised that Section 6 of O. Reg. 278/05 stipulates that such work may be carried out or continued only when any asbestos-containing material that may be disturbed during the work has been removed to the extent practicable. In the event that demolition activities uncover previously unidentified material suspected of containing asbestos, all work in the area that may disturb the materials should be stopped. Samples of the suspect material should be submitted for laboratory analysis to determine if asbestos is present. Should analytical results confirm that the materials are asbestos-containing, they must be handled in accordance with O. Reg. 278/05. Reg. 278/05 requires that prospective contractors be provided with a copy of this report prior to tendering of this work and that the report contains information including descriptions of the materials' condition/friability, drawing, plans and specifications as appropriate.

6. Closure

GENIVAR Inc. warrants that the findings and conclusions contained herein have been prepared in accordance with generally accepted environmental consulting methodology. There is a possibility that materials may exist which could not be reasonably identified within the scope of the assessment or which were not apparent during the site visit. GENIVAR Inc. believes that the information collected during the survey is accurate. However, GENIVAR cannot warrant or guarantee that the information provided is absolutely complete or accurate beyond current environmental consulting standards. GENIVAR Inc. reserves the right to amend and/or supplement this report in the event that additional information or documentation becomes available.

Appendix A

Figures



General Notes

- (01) LOCATION NUMBERS
- 7A BULK SAMPLES
- NAR NO ACCESS TO ROOM

No.	Revision/Issue	Date

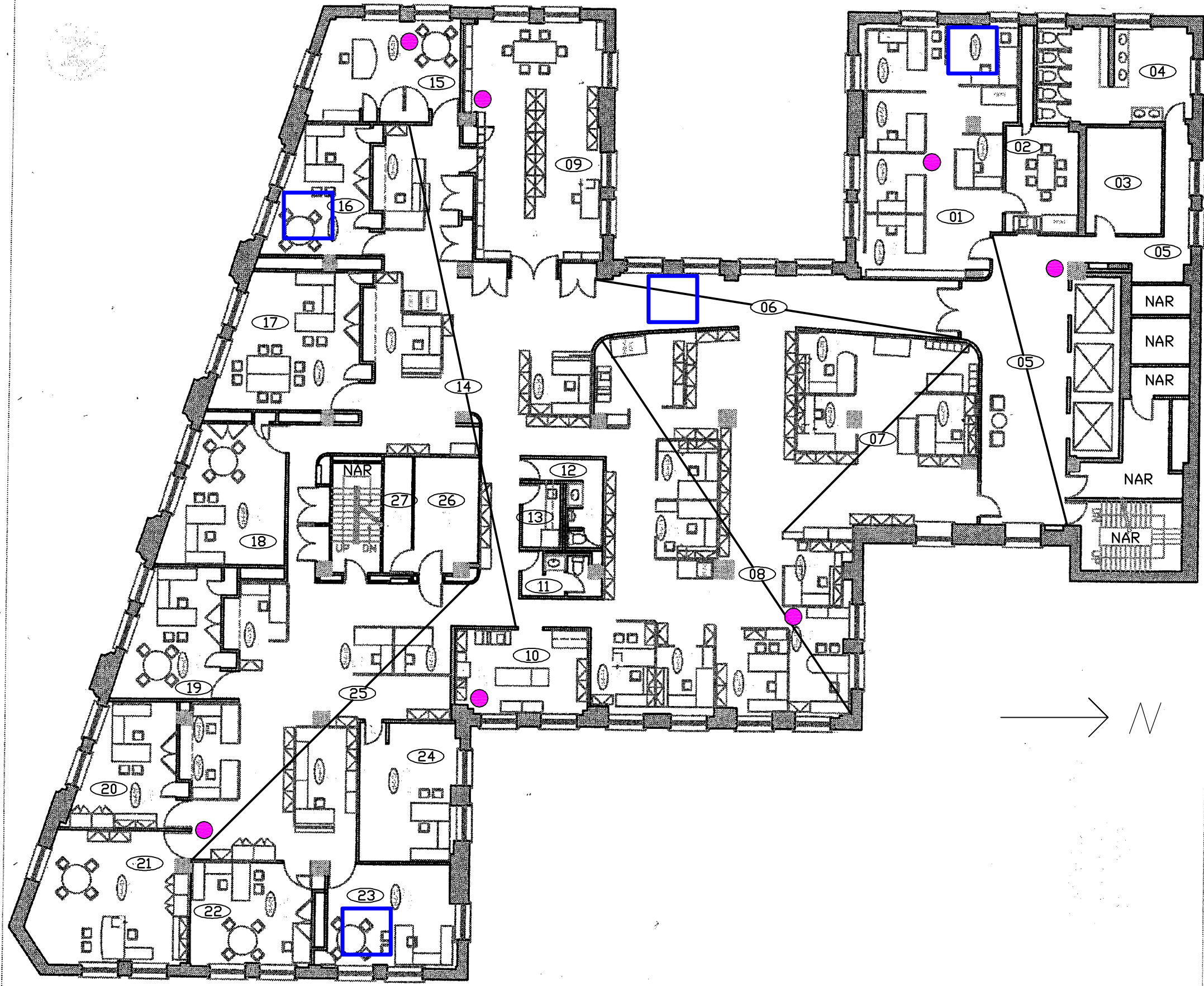
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TORONTO HYDRO

 14 CARLTON STREET
 TORONTO, ONTARIO, CANADA
 M5B 2E9

SAMPLING LOCATIONS AND ROOM LOCATION NUMBERS

Project No.: 111-18752-00	Floor: 6th
Date: JUNE 22, 2011	Drawn By: SWH/HK
Scale: N.T.S.	Sheet: ACM-1



General Notes

- 01 LOCATION NUMBERS
- 1A BULK SAMPLES
- NAR NO ACCESS TO ROOM
- TYPE 2 ENCLOSURE FOR DESTRUCTIVE TESTING/INVESTIGATION
- CARPET INSPECTION LOCATIONS

No.	Revision/Issue	Date

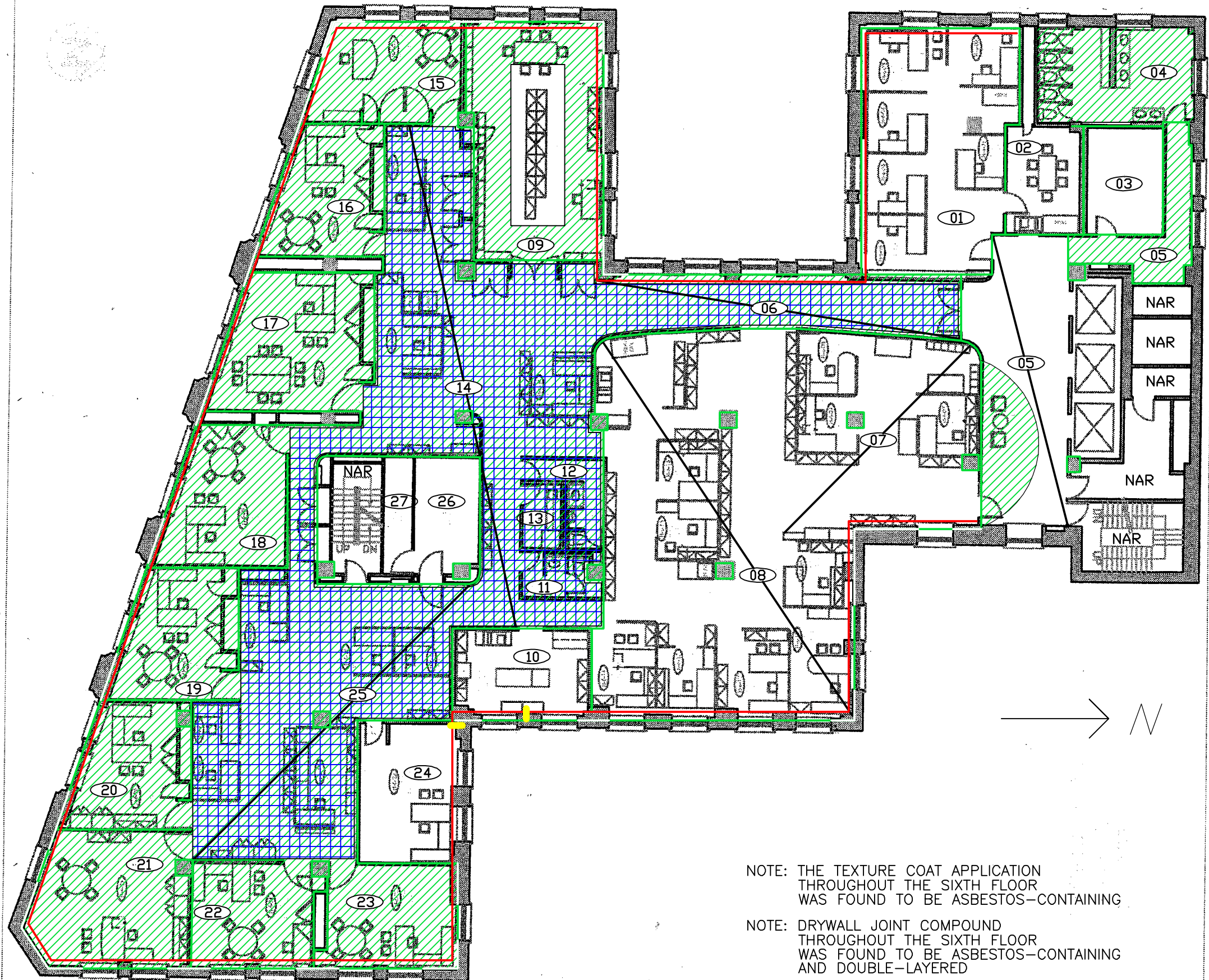
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TORONTO HYDRO

 14 CARLTON STREET
 TORONTO, ONTARIO, CANADA
 M5B 2E9

LOCATIONS OF DESTRUCTIVE TESTING AND SAMPLING LOCATIONS






Project No.: 111-18752-00	Floor: 6th
Date: JUNE 22, 2011	Drawn By: SWH/HK
Scale: N.T.S.	Sheet: ACM-2



NOTE: THE TEXTURE COAT APPLICATION THROUGHOUT THE SIXTH FLOOR WAS FOUND TO BE ASBESTOS-CONTAINING

NOTE: DRYWALL JOINT COMPOUND THROUGHOUT THE SIXTH FLOOR WAS FOUND TO BE ASBESTOS-CONTAINING AND DOUBLE-LAYERED

General Notes

- (01) LOCATION NUMBERS
- NAR NO ACCESS TO ROOM
-  ASBESTOS-CONTAINING TEXTURE COAT APPLICATION
-  ASBESTOS-CONTAINING DRYWALL JOINT COMPOUND (CEILING)
-  ASBESTOS-CONTAINING DRYWALL JOINT COMPOUND (WALL)
-  ASBESTOS-CONTAINING MAG BLOCK PIPE INSULATION
-  ASBESTOS-CONTAINING PIPE FITTING

No.	Revision/Issue	Date

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Title:
 LOCATIONS OF ASBESTOS-CONTAINING MATERIALS

Project No.: 111-18752-00	Floor: 6th
Date: JUNE 22, 2011	Drawn By: SWH/HK
Scale: N.T.S.	Sheet: ACM-3

Appendix B

Asbestos-Containing Material Summary Table

Asbestos-Containing Material Inventory Table
Toronto Hydro - 14 Carlton Street, Toronto, ON

Location of ACM	Material ID	LOCATIONS		TYPE OF BUILDING MATERIALS	ESTIMATED QUANTITIES	UNITS	FRIABLE (Y/N)	CONDITION (QUANTITY)	DESCRIPTION/ NOTES	RECOMMENDED ACTION
		PHOTO(S)	AREA(S)							
6th Floor - Throughout	1	-	Throughout, on walls/ceilings	Drywall Joint Compound (White)	26,700	ft ²	N	Good	1.4% Chrysotile	Any future work to be performed that may directly or indirectly disturb this material will require professional abatement and engineering services related to preparation of abatement specifications and contract administration.
6th Floor - Throughout	4	5,6	Throughout, on walls/ceilings Rooms 6 and 8	Texture Coat Application (White)	750	ft ²	N	Good	<1.0% Chrysotile	Any future work to be performed that may directly or indirectly disturb this material will require professional abatement and engineering services related to preparation of abatement specifications and contract administration.
6th Floor - Perimeter	9	16	Entire perimeter of building, within ceiling space bulkheads	Mag Block Pipe Straight Insulation	510	linear ft	Y	Unknown - Inaccessible	30% Chrysotile	Any future work to be performed that may directly or indirectly disturb this material will require professional abatement and engineering services related to preparation of abatement specifications and contract administration.
6th Floor - Perimeter	-	9,10	Within ceiling space bulkheads Rooms 10,23,24	Pipe Fittings Insulation	Unknown	fittings	Y	Unknown - Inaccessible. Some observed in poor condition.	Not sampled. Material known historically to be asbestos-containing.	Any future work to be performed that may directly or indirectly disturb this material will require professional abatement and engineering services related to preparation of abatement specifications and contract administration.

Appendix C

Photographs

Toronto Hydro 6th Floor DSHMS
14 Carlton Street, Toronto, ON



Photograph 1: [Rm. 1] Damaged plaster bulkhead (Sample set TH-2) and asbestos-containing mag block pipe straight insulation (Sample set TH-9).



Photograph 2: [Rm. 5] Damaged plaster and lead-containing green paint in ceiling space (Sample TH-L4).



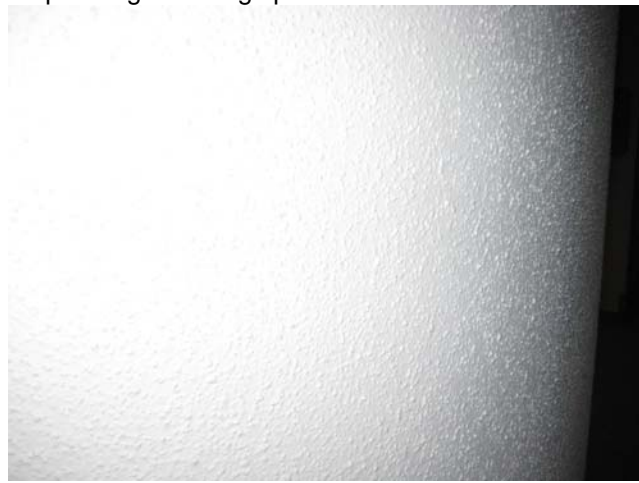
Photograph 3: [Rm.5/7] Sprayed fibrous fireproofing in ceiling space (Sample set TH-5).



Photograph 4: [Rm. 8] Damaged plaster and fibrous fireproofing in ceiling space.



Photograph 5: [Rm. 6] White texture coat application (Sample set TH-4) applied over drywall ceiling.



Photograph 6: Asbestos-containing white texture coat application found on walls and ceilings throughout the 6th floor.

Toronto Hydro 6th Floor DSHMS
14 Carlton Street, Toronto, ON



Photograph 7: [Rm. 1] 1'x1' acoustic ceiling tile (ACT-2) debris in the ceiling space (Sample set TH-3).



Photograph 8: [Rm. 8] 1'x1' acoustic ceiling tiles (ACT-2) in the ceiling space.



Photograph 9: [Rm. 10] Damaged asbestos-containing pipe fitting in bulkhead/ceiling space.



Photograph 10: [Rm. 24] Two damaged asbestos-containing pipe fittings in bulkhead/ceiling space.



Photograph 11: [Rm. 10] View of concrete and underpad adhesive underneath carpet.



Photograph 12: [Rm. 9] View of concrete and underpad adhesive underneath carpet.

Toronto Hydro 6th Floor DSHMS
14 Carlton Street, Toronto, ON



Photograph 13: [Rm. 6] View of enclosure to control asbestos release during 1'x1' hatch installation (#1).



Photograph 14: [Rm. 6] View inside newly-installed hatch (#1) (no visible asbestos-containing materials).



Photograph 15: [Rm. 16] View of newly-installed 1'x1' hatch (#2).



Photograph 16: [Rm. 16] View inside newly-installed hatch (#2). Asbestos-containing white mag block pipe insulation in background (Sample set TH-9).



Photograph 17: [Rm. 16] View of ACT-2 on deck inside newly-installed hatch (#2).



Photograph 18: [Rm. 1] View of double-layered drywall inside newly-installed hatch (#4).

Appendix D

Laboratory Certificates of Analysis

CERTIFICATE OF ANALYSIS

Client:	Genivar Consultants 600 Cochran Drive; Ste 500 Markham ON L3R 5K3	Report Date:	6/24/2011
		Report No.:	244418
		Project:	Toronto Hydro 6th Floor
		Project No.:	111-18752-00

BULK SAMPLE ANALYSIS SUMMARY

Lab No.:	4343210	Description / Location:	Sample Not Analyzed	
Client No.:	TH-1I			
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
Sample Not Analyzed		Sample Not Analyzed		

Lab No.:	4343211	Description / Location:	Sample Not Analyzed	
Client No.:	TH-1J			
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
Sample Not Analyzed		Sample Not Analyzed		

Lab No.:	4343212	Description / Location:	White Plaster Above False Ceiling; Location 1	
Client No.:	TH-2A			
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	None Detected	None Detected	100

Lab No.:	4343212	Description / Location:	Grey Plaster	Layer No.: 2
Client No.:	TH-2A		Above False Ceiling; Location 1	
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	Trace	Hair	100

Accreditations: **NIST-NVLAP No. 101165-0** **NY-DOH No. 11021** **AIHA-LAP, LLC No. 100188**
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Analytical Method EPA 600/R-93/116

Comments: (PC) Indicates Stratified Point Count Method performed. Method not performed unless stated. Quantification at <0.25% by volume is possible with this method. (PC-Trace) represents this limit of quantitation. (PC-Trace) means that asbestos was detected but is not quantifiable under the Point Counting regimen. Analysis includes all distinct separable layers in accordance with EPA 600 Method. If not reported or otherwise noted, layer is either not present or the client has specifically requested that it not be analyzed. Small asbestos fibers may be missed by PLM due to resolution limitations of the optical microscope. Therefore, negative PLM results cannot be guaranteed. Electron Microscopy can be used as a confirming technique. Regulatory Limit is based upon the sample matrix.

Analysis Performed By: L. Solebello

Date: 6/24/2011

CERTIFICATE OF ANALYSIS

Client: Genivar Consultants
600 Cochran Drive; Ste 500
Markham ON L3R 5K3

Report Date: 6/24/2011
Report No.: 244418
Project: Toronto Hydro 6th Floor
Project No.: 111-18752-00

BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 4343213 **Description / Location:** White Plaster
Client No.: TH-2B Wall; Location 2

<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	None Detected	None Detected	100

Lab No.: 4343213 **Description / Location:** Grey Plaster **Layer No.:** 2
Client No.: TH-2B Wall; Location 2

<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	Trace	Hair	100

Lab No.: 4343214 **Description / Location:** White Plaster
Client No.: TH-2C Wall/Bulkhead; Location 5

<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	None Detected	None Detected	100

Lab No.: 4343214 **Description / Location:** Grey Plaster **Layer No.:** 2
Client No.: TH-2C Wall/Bulkhead; Location 5

<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	Trace	Hair	100

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Analytical Method EPA 600/R-93/116

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Analysis Performed By: L. Solebello

Date: 6/24/2011

CERTIFICATE OF ANALYSIS

Client:	Genivar Consultants	Report Date:	6/24/2011
	600 Cochran Drive; Ste 500	Report No.:	244418
	Markham ON L3R 5K3	Project:	Toronto Hydro 6th Floor
		Project No.:	111-18752-00

BULK SAMPLE ANALYSIS SUMMARY

Lab No.:	4343215	Description / Location:	White Plaster	
Client No.:	TH-2D		Ceiling; Location 26	
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	None Detected	None Detected	100

Lab No.:	4343215	Description / Location:	Grey Plaster	Layer No.: 2
Client No.:	TH-2D		Ceiling; Location 26	
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	Trace	Hair	100

Lab No.:	4343216	Description / Location:	White Plaster	
Client No.:	TH-2E		Wall; Location 26	
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	None Detected	None Detected	100

Accreditations: NIST-NVLAP No. 101165-0 NY-DOH No. 11021 AIHA-LAP, LLC No. 100188

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Analytical Method EPA 600/R-93/116

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Analysis Performed By: L. Solebello

Date: 6/24/2011

CERTIFICATE OF ANALYSIS

Client: Genivar Consultants
600 Cochran Drive; Ste 500
Markham ON L3R 5K3

Report Date: 6/24/2011
Report No.: 244418
Project: Toronto Hydro 6th Floor
Project No.: 111-18752-00

BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 4343217 **Description / Location:** White Plaster
Client No.: TH-2F Wall; Location 26

<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	None Detected	None Detected	100

Lab No.: 4343217 **Description / Location:** Grey Plaster **Layer No.:** 2
Client No.: TH-2F Wall; Location 26

<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	None Detected	None Detected	100

Lab No.: 4343218 **Description / Location:** White Plaster
Client No.: TH-2G Wall; Location 12

<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	None Detected	None Detected	100

Lab No.: 4343218 **Description / Location:** Grey Plaster **Layer No.:** 2
Client No.: TH-2G Wall; Location 12

<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	None Detected	None Detected	100

Accreditations: **NIST-NVLAP No. 101165-0** **NY-DOH No. 11021** **AIHA-LAP, LLC No. 100188**
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Analytical Method EPA 600/R-93/116

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Analysis Performed By: L. Solebello

Date: 6/24/2011

CERTIFICATE OF ANALYSIS

Client:	Genivar Consultants 600 Cochran Drive; Ste 500 Markham ON L3R 5K3	Report Date:	6/24/2011
		Report No.:	244418
		Project:	Toronto Hydro 6th Floor
		Project No.:	111-18752-00

BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 4343219	Description / Location: White Plaster		
Client No.: TH-2H	Wall; Location 11		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>
None Detected	None Detected	None Detected	None Detected
			<u>% Non-Fibrous Material</u> 100

Lab No.: 4343219	Description / Location: Grey Plaster		Layer No.: 2
Client No.: TH-2H	Wall; Location 11		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>
None Detected	None Detected	None Detected	None Detected
			<u>% Non-Fibrous Material</u> 100

Lab No.: 4343220	Description / Location: White Plaster		
Client No.: TH-2I	AboveFalseCeilng, E/WBeam; Location 8		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>
None Detected	None Detected	None Detected	None Detected
			<u>% Non-Fibrous Material</u> 100

Lab No.: 4343220	Description / Location: Grey Plaster		Layer No.: 2
Client No.: TH-2I	AboveFalseCeilng, E/WBeam; Location 8		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>
None Detected	None Detected	Trace	Hair
			<u>% Non-Fibrous Material</u> 100

Accreditations:	NIST-NVLAP No. 101165-0	NY-DOH No. 11021	AIHA-LAP, LLC No. 100188
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Analytical Method	EPA 600/R-93/116
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Analysis Performed By: L. Solebello

Date: 6/24/2011

CERTIFICATE OF ANALYSIS

Client:	Genivar Consultants 600 Cochran Drive; Ste 500 Markham ON L3R 5K3	Report Date:	6/24/2011
		Report No.:	244418
		Project:	Toronto Hydro 6th Floor
		Project No.:	111-18752-00

BULK SAMPLE ANALYSIS SUMMARY

Lab No.:	4343221	Description / Location:	White Plaster Above False Ceiling, N/S Beam; Location 8	
Client No.:	TH-2J			
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	None Detected	None Detected	100

Lab No.:	4343221	Description / Location:	Grey Plaster Above False Ceiling, N/S Beam; Location 8	Layer No.: 2
Client No.:	TH-2J			
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	None Detected	None Detected	100

Lab No.:	4343222	Description / Location:	Off-White Ceiling Tile; 1x1 Above False Ceiling; Location 1	
Client No.:	TH-3A			
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	60	Fibrous Glass	40

Lab No.:	4343223	Description / Location:	Off-White Ceiling Tile; 1x1 From Deck; Location 8	
Client No.:	TH-3B			
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	60	Fibrous Glass	40

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Analytical Method EPA 600/R-93/116

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Analysis Performed By: L. Solebello

Date: 6/24/2011

CERTIFICATE OF ANALYSIS

Client:	Genivar Consultants	Report Date:	6/24/2011
	600 Cochran Drive; Ste 500	Report No.:	244418
	Markham ON L3R 5K3	Project:	Toronto Hydro 6th Floor
		Project No.:	111-18752-00

BULK SAMPLE ANALYSIS SUMMARY

Lab No.:	4343224	Description / Location:	Off-White Ceiling Tile; 1x1	
Client No.:	TH-3C		From Deck; Location 8	
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	60	Fibrous Glass	40

Lab No.:	4343225	Description / Location:	Off-White Texture	
Client No.:	TH-4A		Wall; Location 5	
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
PC 0.75	Chrysotile	None Detected	None Detected	POC 99.25

Lab No.:	4343226	Description / Location:	Sample Not Analyzed	
Client No.:	TH-4B			
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
Sample Not Analyzed		Sample Not Analyzed		

Lab No.:	4343227	Description / Location:	Sample Not Analyzed	
Client No.:	TH-4C			
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
Sample Not Analyzed		Sample Not Analyzed		

Accreditations: NIST-NVLAP No. 101165-0 NY-DOH No. 11021 AIHA-LAP, LLC No. 100188

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Analytical Method EPA 600/R-93/116

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Analysis Performed By: L. Solebello

Date: 6/24/2011

CERTIFICATE OF ANALYSIS

Client:	Genivar Consultants	Report Date:	6/24/2011
	600 Cochran Drive; Ste 500	Report No.:	244418
	Markham ON L3R 5K3	Project:	Toronto Hydro 6th Floor
		Project No.:	111-18752-00

BULK SAMPLE ANALYSIS SUMMARY

Lab No.:	4343228	Description / Location:	Sample Not Analyzed	
Client No.:	TH-4D			
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
Sample Not Analyzed		Sample Not Analyzed		

Lab No.:	4343229	Description / Location:	Sample Not Analyzed	
Client No.:	TH-4E			
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
Sample Not Analyzed		Sample Not Analyzed		

Lab No.:	4343230	Description / Location:	Sample Not Analyzed	
Client No.:	TH-4F			
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
Sample Not Analyzed		Sample Not Analyzed		

Lab No.:	4343231	Description / Location:	Sample Not Analyzed	
Client No.:	TH-4G			
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
Sample Not Analyzed		Sample Not Analyzed		

Accreditations: **NIST-NVLAP No. 101165-0** **NY-DOH No. 11021** **AIHA-LAP, LLC No. 100188**
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Analytical Method EPA 600/R-93/116

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Analysis Performed By: L. Solebello

Date: 6/24/2011

CERTIFICATE OF ANALYSIS

Client:	Genivar Consultants 600 Cochran Drive; Ste 500 Markham ON L3R 5K3	Report Date:	6/24/2011
		Report No.:	244418
		Project:	Toronto Hydro 6th Floor
		Project No.:	111-18752-00

BULK SAMPLE ANALYSIS SUMMARY

Lab No.:	4343232	Description / Location:	Grey Insulation	
Client No.:	TH-5A		FireproofingInCeilingSpace; Location 5	
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	80	Fibrous Glass	20

Lab No.:	4343233	Description / Location:	Blue/Grey Insulation	
Client No.:	TH-5B		FireproofingCeilingSpace: Location 7	
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	75	Fibrous Glass	25

Lab No.:	4343234	Description / Location:	Grey Insulation	
Client No.:	TH-5C		FireproofingCeilingSpace: Location 5	
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	80	Fibrous Glass	20

Lab No.:	4343235	Description / Location:	Sample Not Analyzed	
Client No.:	TH-6A			
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
Sample Not Analyzed		Sample Not Analyzed		

Accreditations:	NIST-NVLAP No. 101165-0	NY-DOH No. 11021	AIHA-LAP, LLC No. 100188
	<i>This confidential report relates only to those item(s) tested and does not represent an endorsement by NIST-NVLAP, AIHA or any agency of the U.S. government</i>		
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Analytical Method	EPA 600/R-93/116
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Comments: (PC) Indicates Stratified Point Count Method performed. Method not performed unless stated. Quantification at <0.25% by volume is possible with this method. (PC-Trace) represents this limit of quantitation. (PC-Trace) means that asbestos was detected but is not quantifiable under the Point Counting regimen. Analysis includes all distinct separable layers in accordance with EPA 600 Method. If not reported or otherwise noted, layer is either not present or the client has specifically requested that it not be analyzed. Small asbestos fibers may be missed by PLM due to resolution limitations of the optical microscope. Therefore, negative PLM results cannot be guaranteed. Electron Microscopy can be used as a confirming technique. Regulatory Limit is based upon the sample matrix.

Analysis Performed By: L. Solebello

Date: 6/24/2011

CERTIFICATE OF ANALYSIS

Client:	Genivar Consultants 600 Cochran Drive; Ste 500 Markham ON L3R 5K3	Report Date:	6/24/2011
		Report No.:	244418
		Project:	Toronto Hydro 6th Floor
		Project No.:	111-18752-00

BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 4343236	Description / Location: White Caulk		
Client No.: TH-6B	Firestop-BaseFlange; Location 26		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>
None Detected	None Detected	2	Wollastonite
			98

Lab No.: 4343236	Description / Location: Pink Insulation		Layer No.: 2
Client No.: TH-6B	Firestop-BaseFlange; Location 26		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	90	Fibrous Glass
			10

Lab No.: 4343237	Description / Location: White Caulk		
Client No.: TH-6C	Firestop-BaseFlange; Location 26		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	2	Wollastonite
			98

Lab No.: 4343237	Description / Location: Pink Insulation		Layer No.: 2
Client No.: TH-6C	Firestop-BaseFlange; Location 26		
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	90	Fibrous Glass
			10

Accreditations: **NIST-NVLAP No. 101165-0** **NY-DOH No. 11021** **AIHA-LAP, LLC No. 100188**
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Analytical Method EPA 600/R-93/116

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Analysis Performed By: L. Solebello

Date: 6/24/2011

CERTIFICATE OF ANALYSIS

Client:	Genivar Consultants 600 Cochran Drive; Ste 500 Markham ON L3R 5K3	Report Date:	6/24/2011
		Report No.:	244418
		Project:	Toronto Hydro 6th Floor
		Project No.:	111-18752-00

BULK SAMPLE ANALYSIS SUMMARY

Lab No.:	4343238	Description / Location:	Tan Vinyl Sheet Flooring Location 11	
Client No.:	TH-7A			
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	None Detected	None Detected	100

Lab No.:	4343239	Description / Location:	Tan Vinyl Sheet Flooring Location 11	
Client No.:	TH-7B			
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	None Detected	None Detected	100

Lab No.:	4343240	Description / Location:	Tan Vinyl Sheet Flooring Location 12	
Client No.:	TH-7C			
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	None Detected	None Detected	100

Lab No.:	4343241	Description / Location:	White/Grey Ceiling Tile; 2x2 Location 24	
Client No.:	TH-8A			
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	Trace 60	Cellulose Fibrous Glass	40

Accreditations:	NIST-NVLAP No. 101165-0	NY-DOH No. 11021	AIHA-LAP, LLC No. 100188
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Analytical Method	EPA 600/R-93/116
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Comments: (PC) Indicates Stratified Point Count Method performed. Method not performed unless stated. Quantification at <0.25% by volume is possible with this method. (PC-Trace) represents this limit of quantitation. (PC-Trace) means that asbestos was detected but is not quantifiable under the Point Counting regimen. Analysis includes all distinct separable layers in accordance with EPA 600 Method. If not reported or otherwise noted, layer is either not present or the client has specifically requested that it not be analyzed. Small asbestos fibers may be missed by PLM due to resolution limitations of the optical microscope. Therefore, negative PLM results cannot be guaranteed. Electron Microscopy can be used as a confirming technique. Regulatory Limit is based upon the sample matrix.

Analysis Performed By: L. Solebello

Date: 6/24/2011

CERTIFICATE OF ANALYSIS

Client: Genivar Consultants
600 Cochran Drive; Ste 500
Markham ON L3R 5K3

Report Date: 6/24/2011
Report No.: 244418
Project: Toronto Hydro 6th Floor
Project No.: 111-18752-00

BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 4343242 **Description / Location:** White/Grey Ceiling Tile; 2x2
Client No.: TH-8B Location 24

<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	Trace	Cellulose	40
		60	Fibrous Glass	

Lab No.: 4343243 **Description / Location:** White/Grey Ceiling Tile; 2x2
Client No.: TH-8B Location 24

<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	Trace	Cellulose	40
		60	Fibrous Glass	

Accreditations: **NIST-NVLAP No. 101165-0** **NY-DOH No. 11021** **AIHA-LAP, LLC No. 100188**
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Analytical Method EPA 600/R-93/116

Comments: (PC) Indicates Stratified Point Count Method performed. Method not performed unless stated. Quantification at <0.25% by volume is possible with this method. (PC-Trace) represents this limit of quantitation. (PC-Trace) means that asbestos was detected but is not quantifiable under the Point Counting regimen. Analysis includes all distinct separable layers in accordance with EPA 600 Method. If not reported or otherwise noted, layer is either not present or the client has specifically requested that it not be analyzed. Small asbestos fibers may be missed by PLM due to resolution limitations of the optical microscope. Therefore, negative PLM results cannot be guaranteed. Electron Microscopy can be used as a confirming technique. Regulatory Limit is based upon the sample matrix.

Analysis Performed By: L. Solebello

Date: 6/24/2011

CERTIFICATE OF ANALYSIS

Client: Genivar Consultants
600 Cochran Drive; Ste 500
Markham ON L3R 5K3

Report Date: 6/28/2011
Report No.: 244764
Project: Toronto Hydro-6th Floor
Project No.: 111-18752-00

BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 4346809 **Description / Location:** White Insulation
Client No.: TH-1A Mag Block Pipe Straight; Location 23

<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
30	Chrysotile	Trace	Cellulose	70

Lab No.: 4346810 **Description / Location:** Sample Not Analyzed
Client No.: TH-1B

<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
Sample Not Analyzed		Sample Not Analyzed		

Lab No.: 4346811 **Description / Location:** Sample Not Analyzed
Client No.: TH-1C

<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
Sample Not Analyzed		Sample Not Analyzed		

Accreditations: **NIST-NVLAP No. 101165-0** **NY-DOH No. 11021** **AIHA-LAP, LLC No. 100188**
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Analytical Method EPA 600/R-93/116

Comments: (PC) Indicates Stratified Point Count Method performed. Method not performed unless stated. Quantification at <0.25% by volume is possible with this method. (PC-Trace) represents this limit of quantitation. (PC-Trace) means that asbestos was detected but is not quantifiable under the Point Counting regimen. Analysis includes all distinct separable layers in accordance with EPA 600 Method. If not reported or otherwise noted, layer is either not present or the client has specifically requested that it not be analyzed. Small asbestos fibers may be missed by PLM due to resolution limitations of the optical microscope. Therefore, negative PLM results cannot be guaranteed. Electron Microscopy can be used as a confirming technique. Regulatory Limit is based upon the sample matrix.

Analysis Performed By: M. Gallagher

Approved By: _____

Date: 6/28/2011

Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: Genivar Consultants
600 Cochran Drive; Ste 500
Markham ON L3R 5K3

Report Date: 6/29/2011
Report No.: 244418
Project: Toronto Hydro 6th Floor
Project No.: 111-18752-00

BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 4343202 **Description / Location:** Off-White Joint Compound
Client No.: TH-1A Above False Ceiling, Location 1

<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
PC 1.4	Chrysotile	None Detected	None Detected	PC 98.6

Lab No.: 4343203 **Description / Location:** Sample Not Analyzed
Client No.: TH-1B

<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
Sample Not Analyzed		Sample Not Analyzed		

Lab No.: 4343204 **Description / Location:** Sample Not Analyzed
Client No.: TH-1C

<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
Sample Not Analyzed		Sample Not Analyzed		

Lab No.: 4343205 **Description / Location:** Sample Not Analyzed
Client No.: TH-1D

<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
Sample Not Analyzed		Sample Not Analyzed		

Accreditations: NIST-NVLAP No. 101165-0 NY-DOH No. 11021 AIHA-LAP, LLC No. 100188
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Analytical Method EPA 600/R-93/116

Comments: (PC) Indicates Stratified Point Count Method performed. Method not performed unless stated. Quantification at <0.25% by volume is possible with this method. (PC-Trace) represents this limit of quantitation. (PC-Trace) means that asbestos was detected but is not quantifiable under the Point Counting regimen. Analysis includes all distinct separable layers in accordance with EPA 600 Method. If not reported or otherwise noted, layer is either not present or the client has specifically requested that it not be analyzed. Small asbestos fibers may be missed by PLM due to resolution limitations of the optical microscope. Therefore, negative PLM results cannot be guaranteed. Electron Microscopy can be used as a confirming technique. Regulatory Limit is based upon the sample matrix.

Analysis Performed By: L. Solebello

Approved By:

Date: 6/24/2011

Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: Genivar Consultants
600 Cochran Drive, Ste 500
Markham ON L3R 5K3

Report Date: 6/29/2011
Report No.: 244418
Project: Toronto Hydro 6th Floor
Project No.: 111-18752-00

BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 4343206 **Description / Location:** Sample Not Analyzed

Client No.: TH-1E

<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
Sample Not Analyzed		Sample Not Analyzed		

Lab No.: 4343207 **Description / Location:** Sample Not Analyzed

Client No.: TH-1F

<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
Sample Not Analyzed		Sample Not Analyzed		

Lab No.: 4343208 **Description / Location:** Sample Not Analyzed

Client No.: TH-1G

<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
Sample Not Analyzed		Sample Not Analyzed		

Lab No.: 4343209 **Description / Location:** Sample Not Analyzed

Client No.: TH-1H

<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
Sample Not Analyzed		Sample Not Analyzed		

Accreditations: NIST-NVLAP No. 101165-0 NY-DOH No. 11021 AIHA-LAP, LLC No. 100188

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Analytical Method

EPA 600/R-93/116

Comments: (PC) Indicates Stratified Point Count Method performed. Method not performed unless stated. Quantification at <0.25% by volume is possible with this method. (PC-Trace) represents this limit of quantitation. (PC-Trace) means that asbestos was detected but is not quantifiable under the Point Counting regimen. Analysis includes all distinct separable layers in accordance with EPA 600 Method. If not reported or otherwise noted, layer is either not present or the client has specifically requested that it not be analyzed. Small asbestos fibers may be missed by PLM due to resolution limitations of the optical microscope. Therefore, negative PLM results cannot be guaranteed. Electron Microscopy can be used as a confirming technique. Regulatory Limit is based upon the sample matrix.

Analysis Performed By: L. Solebello

Date: 6/24/2011

CERTIFICATE OF ANALYSIS

Client: Genivar Consultants
600 Cochran Drive; Ste 500
Markham ON L3R 5K3

Report Date: 6/29/2011
Report No.: 244418
Project: Toronto Hydro 6th Floor
Project No.: 111-18752-00

BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 4343210 **Description / Location:** Sample Not Analyzed
Client No.: TH-11

<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
Sample Not Analyzed		Sample Not Analyzed		

Lab No.: 4343211 **Description / Location:** Sample Not Analyzed
Client No.: TH-1J

<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
Sample Not Analyzed		Sample Not Analyzed		

Lab No.: 4343212 **Description / Location:** White Plaster
Client No.: TH-2A Above False Ceiling; Location 1

<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	None Detected	None Detected	100

Lab No.: 4343212 **Description / Location:** Grey Plaster **Layer No.:** 2
Client No.: TH-2A Above False Ceiling; Location 1

<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	Trace	Hair	100

Accreditations: NIST-NVLAP No. 101165-0 NY-DOH No. 11021 AIHA-LAP, LLC No. 100188
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Analytical Method EPA 600/R-93/116

Comments: (PC) Indicates Stratified Point Count Method performed. Method not performed unless stated. Quantification at <0.25% by volume is possible with this method. (PC-Trace) represents this limit of quantitation. (PC-Trace) means that asbestos was detected but is not quantifiable under the Point Counting regimen. Analysis includes all distinct separable layers in accordance with EPA 600 Method. If not reported or otherwise noted, layer is either not present or the client has specifically requested that it not be analyzed. Small asbestos fibers may be missed by PLM due to resolution limitations of the optical microscope. Therefore, negative PLM results cannot be guaranteed. Electron Microscopy can be used as a confirming technique. Regulatory Limit is based upon the sample matrix.

Analysis Performed By: L. Solebello

Date: 6/24/2011

CERTIFICATE OF ANALYSIS

Client:	Genivar Consultants 600 Cochran Drive; Ste 500 Markham ON L3R 5K3	Report Date:	6/29/2011
		Report No.:	244418
		Project:	Toronto Hydro 6th Floor
		Project No.:	111-18752-00

BULK SAMPLE ANALYSIS SUMMARY

Lab No.:	4343213	Description / Location:	White Plaster Wall; Location 2	
Client No.:	TH-2B			
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	None Detected	None Detected	100

Lab No.:	4343213	Description / Location:	Grey Plaster Wall; Location 2	Layer No.: 2
Client No.:	TH-2B			
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	Trace	Hair	100

Lab No.:	4343214	Description / Location:	White Plaster Wall/Bulkhead; Location 5	
Client No.:	TH-2C			
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	None Detected	None Detected	100

Lab No.:	4343214	Description / Location:	Grey Plaster Wall/Bulkhead; Location 5	Layer No.: 2
Client No.:	TH-2C			
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	Trace	Hair	100

Accreditations:	NIST-NVLAP No. 101165-0	NY-DOH No. 11021	AIHA-LAP, LLC No. 100188
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Analytical Method EPA 600/R-93/116

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Analysis Performed By: L. Solebello

Date: 6/24/2011

CERTIFICATE OF ANALYSIS

Client: Genivar Consultants
600 Cochran Drive; Ste 500
Markham ON L3R 5K3

Report Date: 6/29/2011
Report No.: 244418
Project: Toronto Hydro 6th Floor
Project No.: 111-18752-00

BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 4343215 **Description / Location:** White Plaster
Client No.: TH-2D Ceiling; Location 26

<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	None Detected	None Detected	100

Lab No.: 4343215 **Description / Location:** Grey Plaster
Client No.: TH-2D Ceiling; Location 26 **Layer No.:** 2

<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	Trace	Hair	100

Lab No.: 4343216 **Description / Location:** White Plaster
Client No.: TH-2E Wall; Location 26

<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	None Detected	None Detected	100

Accreditations: NIST-NVLAP No. 101165-0 NY-DOH No. 11021 AIHA-LAP, LLC No. 100188

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Analytical Method EPA 600/R-93/116

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Analysis Performed By: L. Solbello

Date: 6/24/2011

CERTIFICATE OF ANALYSIS

Client: Genivar Consultants
600 Cochran Drive; Ste 500
Markham ON L3R 5K3

Report Date: 6/29/2011
Report No.: 244418
Project: Toronto Hydro 6th Floor
Project No.: 111-18752-00

BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 4343217 **Description / Location:** White Plaster
Client No.: TH-2F Wall; Location 26

<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	None Detected	None Detected	100

Lab No.: 4343217 **Description / Location:** Grey Plaster
Client No.: TH-2F Wall; Location 26 **Layer No.:** 2

<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	None Detected	None Detected	100

Lab No.: 4343218 **Description / Location:** White Plaster
Client No.: TH-2G Wall; Location 12

<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	None Detected	None Detected	100

Lab No.: 4343218 **Description / Location:** Grey Plaster
Client No.: TH-2G Wall; Location 12 **Layer No.:** 2

<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	None Detected	None Detected	100

Accreditations: NIST-NVLAP No. 101165-0 NY-DOH No. 11021 AIHA-LAP, LLC No. 100188
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Analytical Method EPA 600/R-93/116

Comments: (PC) Indicates Stratified Point Count Method performed. Method not performed unless stated. Quantification at <0.25% by volume is possible with this method. (PC-Trace) represents this limit of quantitation. (PC-Trace) means that asbestos was detected but is not quantifiable under the Point Counting regimen. Analysis includes all distinct separable layers in accordance with EPA 600 Method. If not reported or otherwise noted, layer is either not present or the client has specifically requested that it not be analyzed. Small asbestos fibers may be missed by PLM due to resolution limitations of the optical microscope. Therefore, negative PLM results cannot be guaranteed. Electron Microscopy can be used as a confirming technique. Regulatory Limit is based upon the sample matrix.

Analysis Performed By: L. Solebello

Date: 6/24/2011

CERTIFICATE OF ANALYSIS

Client: Genivar Consultants
600 Cochran Drive; Ste 500
Markham ON L3R 5K3

Report Date: 6/29/2011
Report No.: 244418
Project: Toronto Hydro 6th Floor
Project No.: 111-18752-00

BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 4343219 **Description / Location:** White Plaster
Client No.: TH-2H Wall; Location 11

<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	None Detected	None Detected	100

Lab No.: 4343219 **Description / Location:** Grey Plaster **Layer No.:** 2
Client No.: TH-2H Wall; Location 11

<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	None Detected	None Detected	100

Lab No.: 4343220 **Description / Location:** White Plaster
Client No.: TH-2I AboveFalseCeiling, E/WBeam; Location 8

<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	None Detected	None Detected	100

Lab No.: 4343220 **Description / Location:** Grey Plaster **Layer No.:** 2
Client No.: TH-2I AboveFalseCeiling, E/WBeam; Location 8

<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	Trace	Hair	100

Accreditations: NIST-NVLAP No. 101165-0 NY-DOH No. 11021 AIHA-LAP, LLC No. 100188

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Analytical Method EPA 600/R-93/116

Comments: (PC) Indicates Stratified Point Count Method performed. Method not performed unless stated. Quantification at <0.25% by volume is possible with this method. (PC-Trace) represents this limit of quantitation. (PC-Trace) means that asbestos was detected but is not quantifiable under the Point Counting regimen. Analysis includes all distinct separable layers in accordance with EPA 600 Method. If not reported or otherwise noted, layer is either not present or the client has specifically requested that it not be analyzed. Small asbestos fibers may be missed by PLM due to resolution limitations of the optical microscope. Therefore, negative PLM results cannot be guaranteed. Electron Microscopy can be used as a confirming technique. Regulatory Limit is based upon the sample matrix.

Analysis Performed By: L. Solebello

Date: 6/24/2011

CERTIFICATE OF ANALYSIS

Client:	Genivar Consultants 600 Cochran Drive; Ste 500 Markham ON L3R 5K3	Report Date:	6/29/2011
		Report No.:	244418
		Project:	Toronto Hydro 6th Floor
		Project No.:	111-18752-00

BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 4343221	Description / Location: White Plaster Above False Ceiling, N/S Beam; Location 8		
Client No.: TH-2J			
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	None Detected	100

Lab No.: 4343221	Description / Location: Grey Plaster Above False Ceiling, N/S Beam; Location 8		Layer No.: 2
Client No.: TH-2J			
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	None Detected	100

Lab No.: 4343222	Description / Location: Off-White Ceiling Tile; 1x1 Above False Ceiling; Location 1		
Client No.: TH-3A			
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	60	Fibrous Glass 40

Lab No.: 4343223	Description / Location: Off-White Ceiling Tile; 1x1 From Deck; Location 8		
Client No.: TH-3B			
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	60	Fibrous Glass 40

Accreditations: **NIST-NVLAP No. 101165-0** **NY-DOH No. 11021** **AIHA-LAP, LLC No. 100188**
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Analytical Method EPA 600/R-93/116

Comments: (PC) Indicates Stratified Point Count Method performed. Method not performed unless stated. Quantification at <0.25% by volume is possible with this method. (PC-Trace) represents this limit of quantitation. (PC-Trace) means that asbestos was detected but is not quantifiable under the Point Counting regimen. Analysis includes all distinct separable layers in accordance with EPA 600 Method. If not reported or otherwise noted, layer is either not present or the client has specifically requested that it not be analyzed. Small asbestos fibers may be missed by PLM due to resolution limitations of the optical microscope. Therefore, negative PLM results cannot be guaranteed. Electron Microscopy can be used as a confirming technique. Regulatory Limit is based upon the sample matrix.

Analysis Performed By: L. Solebello

Date: 6/24/2011

CERTIFICATE OF ANALYSIS

Client:	Genivar Consultants 600 Cochran Drive; Ste 500 Markham ON L3R 5K3	Report Date:	6/29/2011
		Report No.:	244418
		Project:	Toronto Hydro 6th Floor
		Project No.:	111-18752-00

BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 4343224	Description / Location: Off-White Ceiling Tile; 1x1 From Deck; Location 8		
Client No.: TH-3C			
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>
None Detected	None Detected	60	Fibrous Glass
			<u>% Non-Fibrous Material</u> 40

Lab No.: 4343225	Description / Location: Off-White Texture Wall; Location 5		
Client No.: TH-4A			
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>
PC 0.75	Chrysotile	None Detected	None Detected
			<u>% Non-Fibrous Material</u> PC 99.25

Lab No.: 4343226	Description / Location: White Texture Ceiling; Location 6		
Client No.: TH-4B			
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>
None Detected	None Detected	None Detected	None Detected
			<u>% Non-Fibrous Material</u> 100

Lab No.: 4343227	Description / Location: White/Grey Plaster Column; Location 14		
Client No.: TH-4C			
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>
None Detected	None Detected	None Detected	None Detected
			<u>% Non-Fibrous Material</u> 100

Accreditations: NIST-NVLAP No. 101165-0	NY-DOH No. 11021	AIHA-LAP, LLC No. 100188
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Analytical Method EPA 600/R-93/116

Comments: (PC) Indicates Stratified Point Count Method performed. Method not performed unless stated. Quantification at <0.25% by volume is possible with this method. (PC-Trace) represents this limit of quantitation. (PC-Trace) means that asbestos was detected but is not quantifiable under the Point Counting regimen. Analysis includes all distinct separable layers in accordance with EPA 600 Method. If not reported or otherwise noted, layer is either not present or the client has specifically requested that it not be analyzed. Small asbestos fibers may be missed by PLM due to resolution limitations of the optical microscope. Therefore, negative PLM results cannot be guaranteed. Electron Microscopy can be used as a confirming technique. Regulatory Limit is based upon the sample matrix.

Analysis Performed By: J. Haremza

Date: 6/29/2011

CERTIFICATE OF ANALYSIS

Client: Genivar Consultants
600 Cochran Drive; Ste 500
Markham ON L3R 5K3

Report Date: 6/29/2011
Report No.: 244418
Project: Toronto Hydro 6th Floor
Project No.: 111-18752-00

BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 4343228 **Description / Location:** White/Tan Texture
Client No.: TH-4D Ceiling; Location 8

<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	None Detected	None Detected	100

Lab No.: 4343229 **Description / Location:** Off-White Texture
Client No.: TH-4E Wall; Location 19

<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	None Detected	None Detected	100

Lab No.: 4343230 **Description / Location:** White/Tan Texture
Client No.: TH-4F Wall; Location 8

<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	None Detected	None Detected	100

Lab No.: 4343231 **Description / Location:** Tan/Brown Texture
Client No.: TH-4G Wall; Location 9

<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
PC 0.25	Chrysotile	None Detected	None Detected	PC 99.75

Accreditations: NIST-NVLAP No. 101165-0 NY-DOH No. 11021 AIHA-LAP, LLC No. 100188

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Analytical Method EPA 600/R-93/116

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Analysis Performed By: J. Haremza

Date: 6/29/2011

CERTIFICATE OF ANALYSIS

Client: Genivar Consultants
600 Cochran Drive; Ste 500
Markham ON L3R 5K3

Report Date: 6/29/2011
Report No.: 244418
Project: Toronto Hydro 6th Floor
Project No.: 111-18752-00

BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 4343232 **Description / Location:** Grey Insulation
Client No.: TH-5A FireproofingInCeilingSpace; Location 5

<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	80	Fibrous Glass	20

Lab No.: 4343233 **Description / Location:** Blue/Grey Insulation
Client No.: TH-5B FireproofingCeilingSpace; Location 7

<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	75	Fibrous Glass	25

Lab No.: 4343234 **Description / Location:** Grey Insulation
Client No.: TH-5C FireproofingCeilingSpace; Location 5

<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	80	Fibrous Glass	20

Lab No.: 4343235 **Description / Location:** Sample Not Analyzed
Client No.: TH-6A

<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
Sample Not Analyzed		Sample Not Analyzed		

Note: Insufficient sample provided for analysis.

Accreditations: NIST-NVLAP No. 101165-0 NY-DOH No. 11021 AIHA-LAP, LLC No. 100188

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Analytical Method EPA 600/R-93/116

Comments: (PC) Indicates Stratified Point Count Method performed. Method not performed unless stated. Quantification at <0.25% by volume is possible with this method. (PC-Trace) represents this limit of quantitation. (PC-Trace) means that asbestos was detected but is not quantifiable under the Point Counting regimen. Analysis includes all distinct separable layers in accordance with EPA 600 Method. If not reported or otherwise noted, layer is either not present or the client has specifically requested that it not be analyzed. Small asbestos fibers may be missed by PLM due to resolution limitations of the optical microscope. Therefore, negative PLM results cannot be guaranteed. Electron Microscopy can be used as a confirming technique. Regulatory Limit is based upon the sample matrix.

Analysis Performed By: L. Solebello

Date: 6/24/2011

CERTIFICATE OF ANALYSIS

Client: Genivar Consultants
600 Cochran Drive; Ste 500
Markham ON L3R 5K3

Report Date: 6/29/2011
Report No.: 244418
Project: Toronto Hydro 6th Floor
Project No.: 111-18752-00

BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 4343236 **Description / Location:** White Caulk
Client No.: TH-6B Firestop-BaseFlange; Location 26

<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	2	Wollastonite	98

Lab No.: 4343236 **Description / Location:** Pink Insulation **Layer No.:** 2
Client No.: TH-6B Firestop-BaseFlange; Location 26

<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	90	Fibrous Glass	10

Lab No.: 4343237 **Description / Location:** White Caulk
Client No.: TH-6C Firestop-BaseFlange; Location 26

<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	2	Wollastonite	98

Lab No.: 4343237 **Description / Location:** Pink Insulation **Layer No.:** 2
Client No.: TH-6C Firestop-BaseFlange; Location 26

<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	90	Fibrous Glass	10

Accreditations: NIST-NVLAP No. 101165-0 NY-DOH No. 11021 AIHA-LAP, LLC No. 100188

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Analytical Method EPA 600/R-93/116

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Analysis Performed By: L. Solebello

Date: 6/24/2011

CERTIFICATE OF ANALYSIS

Client: Genivar Consultants
600 Cochran Drive; Ste 500
Markham ON L3R 5K3

Report Date: 6/29/2011
Report No.: 244418
Project: Toronto Hydro 6th Floor
Project No.: 111-18752-00

BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 4343238 **Description / Location:** Tan Vinyl Sheet Flooring
Client No.: TH-7A Location 11

<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	None Detected	None Detected	100

Lab No.: 4343239 **Description / Location:** Tan Vinyl Sheet Flooring
Client No.: TH-7B Location 11

<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	None Detected	None Detected	100

Lab No.: 4343240 **Description / Location:** Tan Vinyl Sheet Flooring
Client No.: TH-7C Location 12

<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	None Detected	None Detected	100

Lab No.: 4343241 **Description / Location:** White/Grny Ceiling Tile; 2x2
Client No.: TH-8A Location 24

<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	Trace	Cellulose	40
		60	Fibrous Glass	

Accreditations: NIST-NVLAP No. 101165-0 NY-DOH No. 11021 AIHA-LAP, LLC No. 100188
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Analytical Method EPA 600/R-93/116

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Analysis Performed By: L. Solebello

Date: 6/24/2011

CERTIFICATE OF ANALYSIS

Client: Genivar Consultants
600 Cochran Drive; Ste 500
Markham ON L3R 5K3

Report Date: 6/29/2011
Report No.: 244418
Project: Toronto Hydro 6th Floor
Project No.: 111-18752-00

BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 4343242
Client No.: TH-8B

Description / Location: White/Grey Ceiling Tile; 2x2
Location 24

<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	Trace 60	Cellulose Fibrous Glass	40

Lab No.: 4343243
Client No.: TH-8C

Description / Location: White/Grey Ceiling Tile; 2x2
Location 24

<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
None Detected	None Detected	Trace 60	Cellulose Fibrous Glass	40

Accreditations: NIST-NVLAP No. 101165-0 NY-DOH No. 11021 AIHA-LAP, LLC No. 100188

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Analytical Method EPA 600/R-93/116

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Analysis Performed By: L. Solebello

Date: 6/24/2011

Ray Sankey

From: Hassan Ktaech [Hassan.Ktaech@genivar.com]
Sent: Monday, June 27, 2011 2:20 PM
To: raysankey@iatl.com
Subject: Project Number: 111-18752-00 (Toronto Hydro 6th Floor)
Importance: High

Hi Ray,

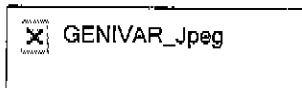
As discussed, if you can analyze the remaining *Off-White Texture* samples with a **Rush Turn-Around Time**.

Lab No.
4343226
4343227
4343228
4343229
4343230
4343231

LS
6/24

Due 6/28 Ana
RS

Thanks,



Hassan Ktaech | Project Manager
GENIVAR | Constructive People
600 Cochrane Drive, Suite 500
Markham, ON L3R 5K3
Phone: (905) 475-7270, Ext. 18292
Mobile: (416) 505-0205
Fax: (905) 475-5994



Think about it... do you really need to print?

Ⓟ 6/29/11
[Signature]

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This message is intended only for the use of the individual or entity to which it is addressed, and may contain information which is privileged, confidential, proprietary or exempt from disclosure under applicable law. If you are not the intended recipient or the person responsible for delivering the message to the intended recipient, you are strictly prohibited from disclosing, distributing, copying or in any way using this message. If you have received this communication in error, please notify the sender, and destroy and delete any copies you may have received.

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Chain of Custody

9000 Commerce Parkway
Suite B
Mt. Laurel, NJ 08054
Toll Free: 877 428-4285
info@iatl.com
www.iatl.com

Client: GENIVAR Incorporated
600 Cochrane Drive, Suite 500
Markham, ON L3R 5K3

Project Name: Toronto Hydro 6th Floor Sampling
Project No.: 111-18752-00

Office Phone: tel: 905-475-7270 / fax: 905-475-5994
Cell Phone: 416-505-0205 / 416-725-9085
FAX / Email 1: hassan.ktaech@genivar.com

Contact 1: Hassan Ktaech
Contact 2: Cesare Paoletti
FAX / Email 2: cesare.paoletti@genivar.com

Special Instructions: Stop positive analysis. Please e-mail results to both e-mail addresses.

Matrix:

Air Soil Bulk Other _____
 Water Paint Surface Dust / Wipe _____

Analysis Method:

<input type="checkbox"/> PCM : NIOSH 7400	See Page 2 for Bulk Asbestos Specific Log	<input type="checkbox"/> TEM : AHERA
<input type="checkbox"/> PCM : OSHA	<input checked="" type="checkbox"/> PLM : Bulk Asbestos EPA 600	<input type="checkbox"/> TEM : NIOSH 7402
<input type="checkbox"/> PCM : TWA	<input type="checkbox"/> PLM : Point Counting 198.1	<input type="checkbox"/> TEM : Dust / Wipe
	<input type="checkbox"/> PLM : NOB via 198.1 (PLM only)	<input type="checkbox"/> TEM : Dust / Microvac
	<input type="checkbox"/> If <1% by PLM, to TEM via 198.4 ²	<input type="checkbox"/> TEM : NOB 198.4
<input type="checkbox"/> AAS : Lead in Air	<input type="checkbox"/> PLM : See page 2 for instructions	<input type="checkbox"/> TEM : Bulk Analysis
<input type="checkbox"/> AAS : Lead in Water	See Page 4 for Mold Specific Log	<input type="checkbox"/> TEM : Potable Water
<input type="checkbox"/> AAS : Lead in Paint	<input type="checkbox"/> IAQ: I Bioaersol Fungal Spore Trap ³	<input type="checkbox"/> TEM : Non-Potable Water
<input type="checkbox"/> AAS : Lead Dust/Wipe ¹	<input type="checkbox"/> IAQ: II Bioaersol Fungal Spore Trap ⁴	<input type="checkbox"/> TEM : Other _____
<input type="checkbox"/> AAS : Lead in Soil	<input type="checkbox"/> IAQ: Tape, Bulk, Misc. Qualitative ³	<input type="checkbox"/> Total Dust : NIOSH 0500
<input type="checkbox"/> AAS : TCLP	<input type="checkbox"/> IAQ: Tape, Bulk, Misc. Quantitative ³	<input type="checkbox"/> Total Dust : NIOSH 0600
<input type="checkbox"/> AAS : Metals (Cd, Zn, Cr)	<input type="checkbox"/> IAQ: Other Culturable ID ²	

1- Requires ASTM acceptable material 2- Call to confirm TAT 3- Non-culturable 4- With Non-fungal Microscopic Exam

Turnaround Time:

Preliminary Results Requested By... _____ Verbals FAX Email
date / time

10 Day 5 Day 3 Day 2 Day 1 Day* 12 Hour** 6 Hour** RUSH**

* End of next business day unless otherwise specified. ** Matrix Dependent. Please notify the lab before shipping.

Sample Numbers:

Client #(s): TH-1A - TH-8C IATL#(s): _____ - _____ Total: 42
(start) (end) (start) (end)

Please use your sample log to supply sampling information (ex. Volumes, areas, descriptions, locations, etc.) or download forms at iatl.com

Chain of Custody:

Relinquished (Name / Organization): Stephen Heikkila, GENIVAR
Received (Name / IATL): _____
Sample Login (Name / IATL): LS 6/22/11
Sample Prep (Name / IATL): _____
Analysis (Name(s) / IATL): LS 6/22/11 SUBA
QA/QC Review (Name / IATL): LS 6/29/11
Archived / Released: _____
QA/QC InterLAB Use: _____

R E C E I V E D
Date: June 22, 2011 Time: 2:30pm
Date: _____ Time: _____
Date: JUN 24 2011 Time: _____
Date: _____ Time: _____
Date: _____ Time: _____
Date: By Time: _____

ASBESTOS - BULK SAMPLE SUMMARY TABLE

Project Name: Toronto Hydro 6th Floor Sampling

Project# 111-18752-00

Building Name: 14 Carlton Street, Toronto, ON

Building ID#

Date: June 22, 2011

Sample No.	Description	Location Sampled	Asbestos % & Type	Photo No.
TH-1A	Drywall Joint Compound (DJC) above false ceiling	1	4343202	
-1B	Drywall Joint Compound (DJC) from wall	2	4343203	
-1C	Drywall Joint Compound (DJC) from wall	6	4343204	
-1D	Drywall Joint Compound (DJC) from ceiling	8	4343205	
-1E	Drywall Joint Compound (DJC) from wall	8	4343206	
-1F	Drywall Joint Compound (DJC) from wall	23	4343207	
-1G	Drywall Joint Compound (DJC) from wall	15	4343208	
-1H	Drywall Joint Compound (DJC) from ceiling	12	4343209	
-1I	Drywall Joint Compound (DJC) from wall	17	4343210	
-1J	Drywall Joint Compound (DJC) from wall	21	4343211	
-2A	Plaster above false ceiling	1	4343212	
-2B	Plaster from wall	2	4343213	
-2C	Plaster from wall/bulkhead	5	4343214	
-2D	Plaster from ceiling	26	4343215	
-2E	Plaster from wall	26	4343216	
-2F	Plaster from wall	26	4343217	
-2G	Plaster from wall	12	4343218	
-2H	Plaster from wall	11	4343219	
-2I	Plaster from above false ceiling, E/W beam	8	4343220	
-2J	Plaster from above false ceiling, N/S beam	8	4343221	
-3A	ACT-2; 1'x1' ceiling tiles above false ceiling	1	4343222	
-3B	ACT-2 from deck	8	4343223	
-3C	ACT-2 from deck	8	4343224	

LS 6/24/11

ASBESTOS - BULK SAMPLE SUMMARY TABLE

-4A	Texture coat from wall	5	4343225	
-4B	Texture coat from ceiling	6	4343226	
-4C	Texture coat from column	14	4343227	
-4D	Texture coat from ceiling	25	4343228	
-4E	Texture coat from ceiling	19	4343229	
-4F	Texture coat from wall	8	4343230	
-4G	Texture coat from wall	9	4343231	
-5A	Fireproofing (FFP) in ceiling space	5	4343232	
-5B	Fireproofing (FFP) in ceiling space	7	4343233	
-5C	Fireproofing (FFP) in ceiling space	5	4343234	
-6A	Firestop material from base flange	26	4343235	
-6B	Firestop material from base flange	26	4343236	
-6C	Firestop material from base flange	26	4343237	
-7A	VSF-1; brown with cream specks	11	4343238	
-7B	VSF-1; brown with cream specks	11	4343239	
-7C	VSF-1; brown with cream specks	12	4343240	
-8A	ACT-5; 2'x2' ceiling tiles	24	4343241	
-8B	ACT-5; 2'x2' ceiling tiles	24	4343242	
-8C	ACT-5; 2'x2' ceiling tiles	24	4343243	

ND=No Asbestos Detected

STP= Stop Positive Analysis, sample not analyzed

6/24/10

CERTIFICATE OF ANALYSIS

Client:	Genivar Consultants	Report Date:	6/24/2011
	600 Cochran Drive; Ste 500	Report No.:	244418
	Markham ON L3R 5K3	Project:	Toronto Hydro 6th Floor
		Project No.:	111-18752-00

BULK SAMPLE ANALYSIS SUMMARY

Lab No.:	4343202	Description / Location:	Off-White Joint Compound	
Client No.:	TH-1A		Above False Ceiling; Location 1	
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
PC 1.4	Chrysotile	None Detected	None Detected	PC 98.6

Lab No.:	4343203	Description / Location:	Sample Not Analyzed	
Client No.:	TH-1B			
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
Sample Not Analyzed		Sample Not Analyzed		

Lab No.:	4343204	Description / Location:	Sample Not Analyzed	
Client No.:	TH-1C			
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
Sample Not Analyzed		Sample Not Analyzed		

Lab No.:	4343205	Description / Location:	Sample Not Analyzed	
Client No.:	TH-1D			
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>	<u>% Non-Fibrous Material</u>
Sample Not Analyzed		Sample Not Analyzed		

Accreditations: **NIST-NVLAP No. 101165-0** **NY-DOH No. 11021** **AIHA-LAP, LLC No. 100188**
*This confidential report relates only to those item(s) tested and does not represent an endorsement by NIST-NVLAP, AIHA or any agency of the U.S. government
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Analytical Method EPA 600/R-93/116

Comments: (PC) Indicates Stratified Point Count Method performed. Method not performed unless stated. Quantification at <0.25% by volume is possible with this method. (PC-Trace) represents this limit of quantitation. (PC-Trace) means that asbestos was detected but is not quantifiable under the Point Counting regimen. Analysis includes all distinct separable layers in accordance with EPA 600 Method. If not reported or otherwise noted, layer is either not present or the client has specifically requested that it not be analyzed. Small asbestos fibers may be missed by PLM due to resolution limitations of the optical microscope. Therefore, negative PLM results cannot be guaranteed. Electron Microscopy can be used as a confirming technique. Regulatory Limit is based upon the sample matrix.

Analysis Performed By: L. Solebello

Approved By: _____

Date: 6/24/2011

Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client:	Genivar Consultants 600 Cochran Drive; Ste 500 Markham ON L3R 5K3	Report Date:	6/24/2011
		Report No.:	244418
		Project:	Toronto Hydro 6th Floor
		Project No.:	111-18752-00

BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 4343206	Description / Location: Sample Not Analyzed		
Client No.: TH-1E			
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>
Sample Not Analyzed		Sample Not Analyzed	

Lab No.: 4343207	Description / Location: Sample Not Analyzed		
Client No.: TH-1F			
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>
Sample Not Analyzed		Sample Not Analyzed	

Lab No.: 4343208	Description / Location: Sample Not Analyzed		
Client No.: TH-1G			
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>
Sample Not Analyzed		Sample Not Analyzed	

Lab No.: 4343209	Description / Location: Sample Not Analyzed		
Client No.: TH-1H			
<u>% Asbestos</u>	<u>Type</u>	<u>% Non-Asbestos Fibrous Material</u>	<u>Type</u>
Sample Not Analyzed		Sample Not Analyzed	

Accreditations: **NIST-NVLAP No. 101165-0** **NY-DOH No. 11021** **AIHA-LAP, LLC No. 100188**
*This confidential report relates only to those item(s) tested and does not represent an endorsement by NIST-NVLAP, AIHA or any agency of the U.S. government
This report shall not be reproduced except in full, without written approval of the laboratory.*

Analytical Method EPA 600/R-93/116

Comments: (PC) Indicates Stratified Point Count Method performed. Method not performed unless stated. Quantification at <0.25% by volume is possible with this method. (PC-Trace) represents this limit of quantitation. (PC-Trace) means that asbestos was detected but is not quantifiable under the Point Counting regimen. Analysis includes all distinct separable layers in accordance with EPA 600 Method. If not reported or otherwise noted, layer is either not present or the client has specifically requested that it not be analyzed. Small asbestos fibers may be missed by PLM due to resolution limitations of the optical microscope. Therefore, negative PLM results cannot be guaranteed. Electron Microscopy can be used as a confirming technique. Regulatory Limit is based upon the sample matrix.

Analysis Performed By: L. Solebello

Date: 6/24/2011

CERTIFICATE OF ANALYSIS

Client: Genivar Consultants
600 Cochran Drive; Ste 500
Markham ON L3R 5K3

Report Date: 6/24/2011
Report Number: 244387
Project: TorontoHydro6thFl.Sampling
Project No.: 111-18752-00

LEAD PAINT SAMPLE ANALYSIS SUMMARY

<u>Lab No.</u>	<u>Client No.</u>	<u>Location / Description</u>	<u>Concentration Lead By Weight (%)</u>
4343084	TH-L1	Off-White Paint From Bulkhead Location: 1	0.28
4343085	TH-L2	White Paint From Deck Location: 1	0.17
4343086	TH-L3	Lt. Pink Paint From Wall Location: 2	<0.018*
4343087	TH-L4	Green Paint From Wall Location: 5	0.19***

Accreditations: **NATIONAL LEAD LABORATORY ACCREDITATION PROGRAM (NLLAP)**
AIHA-LAP, LLC No. 100188 NYSDOH-ELAP No. 11021

Analytical Methods: ASTM D3335-85A "Standard Method To Test For Low Concentrations Of Lead In Paint By Atomic Absorption Spectrophotometry"
EPA SW846-(3050B;7000B) "Standard Method To Test For Low Concentrations Of Lead In Soils, Sludges and Sediments By AAS"

Comments: Regulatory limit is 0.5% lead by weight (EPA/HUD guidelines). Recommend multiple sampling for all samples less than regulatory limit for confirmation. All results are based on the samples as received at the lab. IATL assumes that appropriate sampling methods have been used and the data upon which these results are based have been accurately supplied by the client. Method Detection Limit (MDL) per EPA Method 40CFR Part 136 Appendix B. Reporting Limit (RL) based upon Lowest Standard Determined (LSD) in accordance with AIHA-ELLAP policies. LSD=0.2 ppm MDL=0.0024% by weight. RL= 0.010% by weight (based upon 100 mg sampled). * Insufficient sample provided to perform QC reanalysis (<200 mg) ** Not enough sample provided to analyze (<50 mg) *** Matrix / substrate interference possible. Sample results are not corrected for contamination by field or analytical blanks. This confidential report relates only to those item(s) tested and does not represent an endorsement by NIST-NVLAP, AIHA or any government agency. This report shall not be reproduced except in full, without written approval of the laboratory.

Date Received: 6/24/2011
Date Analyzed: 6/24/2011
Analyst: M. Stewart

Approved By: _____
Frank E. Ehrenfeld, III
Laboratory Director



Chain of Custody

Client: GENIVAR Incorporated
600 Cochrane Drive, Suite 500
Markham, ON L3R 5K3

Project Name: Toronto Hydro 6th Floor Sampling
Project No.: 111-18752-00

Office Phone: tel: 905-475-7270 / fax: 905-475-5994
Cell Phone: 416-505-0205 / 416-725-9085
FAX / Email 1: hassan.ktaech@genivar.com

Contact 1: Hassan Ktaech
Contact 2: Cesare Paoletti
FAX / Email 2: cesare.paoletti@genivar.com

Special Instructions: Please e-mail results to both e-mail addresses.

Matrix:

Air Soil Bulk Other _____
 Water Paint Surface Dust / Wipe _____

Analysis Method:

<input type="checkbox"/> PCM : NIOSH 7400	See Page 2 for Bulk Asbestos Specific Log	<input type="checkbox"/> TEM : AHERA
<input type="checkbox"/> PCM : OSHA	<input type="checkbox"/> PLM : Bulk Asbestos EPA 600	<input type="checkbox"/> TEM : NIOSH 7402
<input type="checkbox"/> PCM : TWA	<input type="checkbox"/> PLM : Point Counting 198.1	<input type="checkbox"/> TEM : Dust / Wipe
<input type="checkbox"/> AAS : Lead in Air	<input type="checkbox"/> PLM : NOB via 198.1 (PLM only)	<input type="checkbox"/> TEM : Dust / Microvac
<input type="checkbox"/> AAS : Lead in Water	<input type="checkbox"/> If <1% by PLM, to TEM via 198.4 ²	<input type="checkbox"/> TEM : NOB 198.4
<input type="checkbox"/> AAS : Lead in Paint	<input type="checkbox"/> PLM : See page 2 for instructions	<input type="checkbox"/> TEM : Bulk Analysis
<input type="checkbox"/> AAS : Lead Dust/Wipe ¹	See Page 4 for Mold Specific Log	<input type="checkbox"/> TEM : Potable Water
<input checked="" type="checkbox"/> AAS : Lead in Soil	<input type="checkbox"/> IAQ: I Bioaerosol Fungal Spore Trap ³	<input type="checkbox"/> TEM : Non-Potable Water
<input type="checkbox"/> AAS : TCLP	<input type="checkbox"/> IAQ: II Bioaerosol Fungal Spore Trap ⁴	<input type="checkbox"/> TEM : Other
<input type="checkbox"/> AAS : Metals (Cd, Zn, Cr)	<input type="checkbox"/> IAQ: Tape, Bulk, Misc. Qualitative ²	<input type="checkbox"/> Total Dust : NIOSH 0500
	<input type="checkbox"/> IAQ: Tape, Bulk, Misc. Quantitative ³	<input type="checkbox"/> Total Dust : NIOSH 0600
	<input type="checkbox"/> IAQ: Other Culturable ID ²	

1- Requires ASTM acceptable material 2- Call to confirm TAT 3- Non-culturable 4- With Non-fungal Microscopic Exam

Turnaround Time:

Preliminary Results Requested By... _____ Verbals FAX Email
date / time

10 Day 5 Day 3 Day 2 Day 1 Day* 12 Hour** 6 Hour** RUSH**

* End of next business day unless otherwise specified. ** Matrix Dependent. Please notify the lab before shipping.

Sample Numbers:

Client #(s): TH-L1 - TH-L4 IATL#(s): _____ Total: 4
(start) (end) (start) (end)

Please use your sample log to supply sampling information (ex. Volumes, areas, descriptions, locations, etc.) or download forms at iatl.com

Chain of Custody:

Relinquished (Name / Organization): Stephen Heikkila, GENIVAR
Received (Name / IATL): _____
Sample Login (Name / IATL): PS 6/24/11
Sample Prep (Name / IATL): _____
Analysis (Name(s) / IATL): MS 6/24/11
QA/QC Review (Name / IATL): _____
Archived / Released: _____ QA/QC InterLAB Use: _____

Date: June 22, 2011 Time: 2:30pm
Date: _____ Time: _____
Date: _____ Time: _____
Date: _____ Time: _____
Date: 24 2011 Time: _____
Date: _____ Time: _____

IATL - By _____

LEAD - BULK SAMPLE SUMMARY TABLE

Project Name: Toronto Hydro 6th Floor Sampling

Project# 111-18752-00

Building Name: 14 Carlton Street, Toronto, ON

Building ID#

Date: June 22, 2011

Sample No.	Description	Location Sampled	Lead by Weight (%)	Photo No.
TH - L1	Off-white paint from bulkhead 4343084	1		
- L2	White paint from deck 4343085	1		
- L3	Light pink paint from wall 4343086	2		
- L4	Green paint from wall 4343087	5		

PRELIMINARY RESULTS

ALSO AVAILABLE ON THE WEB

Deliver Promptly To: _____
Company: _____
Fax/Email: _____
From: _____
Date: _____

Clients can now access their reports via the web!

Simply request a Client Portal account to track your samples and access your reports, invoices, and signed COCs.

Number of Pages Including This Page: _____

Message: LEAD RESULTS

- For bulk asbestos analysis, if you require that certain samples move forward to gravimetric reduction TEM analysis (ex. TEM-NOB by ELAP 198.4 or equivalent), please look over your PLM bulk asbestos results, circle or highlight any samples/layers that require additional analysis, and submit to us as soon-as possible. FAX 856-231-9818, info@iatl.com.
- For airborne fiber counts by PCM 7400, if you require that certain samples move forward to airborne TEM analysis (ex. TEM-NIOSH 7402 or equivalent), please look over your PCM results, circle or highlight any samples that require additional analysis, and submit to us as soon as possible. FAX 856-231-9818, info@iatl.com.

Preliminary results are issued by iATL to expedite client decision making.

There are several factors that limit these results: sampling methods, sampling data, packaging and handling.

These results may not have been reviewed by the Laboratory Director. Final Certificates of Analysis will follow these preliminary results. The signed COA is considered the official results.

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Appendix E

Background Information Regarding Designated Substances

Prior to the establishment and mainstream acknowledgement of the negative health consequences associated with human exposure to designated substances defined in the Act, these substances found use in an assortment of applications. The adverse health effects and common applications of substances regulated under the Act are summarized in this section.

Asbestos

Unlike other designated substances regulated under the act that are unimolecular (one chemical), asbestos is a term used to describe a group of minerals, all with long, thin fibrous crystals. In the late 19th century, asbestos maintained large popularity among the manufacturing and construction industries due to its resistance to heat, chemical and electrical damage, its sound absorption properties, tensile strength and affordability. These desirable characteristics resulted in the appearance of asbestos containing materials (ACM) in construction products such as flat and corrugated sheets, pipes and shingles, vinyl flooring, linoleum, roofing felts, reinforced cement products, coatings and mastics and asbestos paper products. Asbestos' thermal insulating properties resulted in its appearance in sprayed insulation and fireproofing for steel structures, often in high relative ratios. Its capacity to absorb both heat and acoustic energy prompted its use as thermal/acoustic insulation for pipes and boilers. The three most prevalent and widely used types of asbestos were; 1) chrysotile; 2) amosite, and; 3) crocidolite.

In the early 1970s, the use of asbestos products declined sharply due to increasing concerns raised over the material's health effects. By mid 1979, the specific prohibition and the availability of safer alternatives largely put an end to the use of many asbestos products.

Due to the extensive use of ACM in the construction industry over a period of approximately 50 years, the concern over the possibility of individuals being exposed to ACM is a legitimate one. It has been shown that inhalation of asbestos fibres at high concentrations or over extended periods of time can cause asbestosis, lung cancer or mesothelioma. However, it has been well established that, unless damaged or disturbed, satisfactorily encapsulated ACM does not pose a hazard to worker or employee health and safety.

Lead

Lead is a heavy metal that has been used by humans in industrial applications for several millennia. Lead may be used in its pure metallic form or combined chemically with other elements to form lead compounds. Inorganic lead compounds (lead salts) result when lead forms an ionic bond with atomic or polyatomic anions, examples of which include lead oxide, lead chromate, lead carbonate and lead nitrate. Inorganic lead compounds may exist in either the solid or liquid state and have found use in applications such as insecticides, pigments, paints, glasses, plastics and rubber compounds. Lead was used as a primary ingredient in many interior and exterior oil-based paints from the early 1900s to the late 1970s. Interior or exterior paints produced after 1970 may however; still contain small amounts of lead. Lead can enter the human body through all known mechanisms of toxicological exposure; inhalation, ingestion and dermal absorption. The toxicological dynamics and kinetics of lead are such that no amount of lead exposure is safe. Worker exposure to lead in the form of a high dose sustained over a short time period or after chronic exposure to low doses can both result in severe adverse health effects.

Lead dust is a particular hazard in buildings. Lead conjugated particulate has been documented to be aerosolized in facilities that house applications such as rifle/gun ranges or industrial processes such as sanding, cutting or grinding of lead-containing materials.

Silica

Silica has found use in a variety of applications, including: sandblasting; abrasive grinding and scouring, resin, moulds casting and glass manufacturing and in processes related to the production of electronic components and fibreglass.

The prolonged inhalation of dust containing free crystalline silica results in a disease known as silicosis. Silicosis is a pneumoconiosis (a lung disease caused by the inhalation of dust) and is characterized by progressive fibrosis of the lungs and marked by shortness of breath, impaired lung function and subsequent complications that sometimes result in death. In the construction sector, silica (as common

sand) is a major ingredient of concrete and cement products such as masonry and mortar. Concern over silica's adverse health effects are raised when silica becomes respirable for two reasons; 1) smaller silica particles can more deeply permeate into the lungs, resulting in a higher capacity for the material to cause adverse damage on a per mass basis and; 2) these smaller sized particles are more easily aerosolized than their larger, non-respirable counterparts. Processes such as cutting, abrading, and drilling of concrete and other sand-containing materials creates respirable silica-containing dust that has the potential to be inhaled by workers who do not use appropriate protective measures and personal protective equipment.

Mercury

Mercury is a silver-coloured metal that exists in the liquid state at room temperature. Mercury has been and is currently used in commercial applications as both a pure metal and in metallic, chelated compounds. The greatest use of elemental mercury in Ontario is in electrical equipment such as silent switches. Small amounts of mercury compounds are present in fluorescent tubes and mercury vapour lamps, older thermostats and paints.

Other Designated Substances

Ethylene oxide is used in the pharmaceutical industry and by hospitals as a disinfectant of plastic items that cannot be autoclaved.

Isocyanates are a class of chemicals used in the manufacture of certain types of plastics, foams, coatings and other products.

Acrylonitrile is a clear, (colourless or yellow) liquid that is explosive, flammable and toxic. It is used as a polymer or resin in the production of rubbers, coatings and adhesives.

Coke oven emissions are the benzene-soluble fraction of total particulate matter produced by the destructive distillation or carbonization of coal for the production of coke.

Benzene is a clear, colourless and highly volatile organic solvent. It is used in a tremendous number of processes in chemical laboratories and within the chemical industry and is demonstrated to be highly carcinogenic.

Arsenic is a metalloid used to harden copper, lead and other alloys, in the manufacture of electronics and glass and in numerous other applications. Its mechanism of toxicity is via the arrest of cellular respiration and can be absorbed via ingestion, inhalation or dermal absorption.

Vinyl chloride is a colourless gas with a sweet odour that is used in the manufacture of various products in the building and construction sectors, including the automotive industry, electrical wire insulation, cables, piping, industrial and household equipment, and medical supplies. The carcinogenicity of this substance has been widely established.

Other Hazardous Materials

Polychlorinated Biphenyls (PCBs) have been synthetically manufactured on a commercial basis since 1929. They have never been manufactured in Canada, with the entire supply coming from the USA. By the late 1960s, the toxic effects of PCBs started to gain recognition, as did its bioaccumulative properties, as significant levels of PCBs were being detected within species throughout the world's most remote environments. Throughout the 1970s, the manufacture of PCBs was phased out; however considerable amounts remain in use.

PCBs were commonly used in electrical equipment because of their excellent electrical and fire-resistant properties. For a considerable period of time, askarels (a mixture of chlorobenzenes and PCBs) were the coolants of choice for indoor transformers. Many outdoor transformers with mineral oil coolant became contaminated with PCBs during manufacture or servicing.

PCBs were also used in a variety of other products including heat transfer fluids, lubricants, plasticizers, inks, dyes, pesticides and adhesives.

Ozone Depleting Substances such as halocarbons are synthetic, organic compounds that containing halogen species, namely fluorine, chlorine, and bromine. These substances have either been classified

into groups based on chemical structure (such as the fluorocarbons, the halons, the chlorofluorocarbons (CFCs), and the hydrochlorofluorocarbons (HCFCs)) or are molecules that cannot be grouped into such classifications on the basis of their physical/chemical properties (such as carbon tetrachloride, methyl chloroform, and methyl bromide). Canadian environmental legislation aimed at prohibiting the release of these substances is in effect, as they are known contributors to ozone depletion.

ODS-based solvents (particularly CFCs and HCFCs) have found general use in numerous domestic, commercial and industrial applications. Halocarbons are used primarily as a refrigerant and as a blowing agent in foam product manufacturing. In buildings, ODSs are commonly found in refrigeration systems, halon fire extinguishers and air conditioning systems.

Urea Formaldehyde Foam Insulation (UFFI) is a solid product that was used in buildings (particularly residential dwellings) as injectable insulation, often in cases where it was otherwise impractical to provide conventional insulation. UFFI was used extensively throughout the 1970s, with particular usage between 1975 and 1978, the time period during which the Canadian Home Insulation Program, a financial incentive program to encourage home insulation upgrades administered by the federal government, was in effect. The insulation was approved for use in Canada in exterior wood-frame walls only and was banned for use in 1980.

UFFI contains formaldehyde, which in a non-vapour state, is not believed to cause adverse health effects in humans. Concerns regarding the safety of UFFI were raised when it became known that the material has the capacity to release formaldehyde gas, a well-known probable human carcinogen.

As a solid product, UFFI is considered to be safe for human contact. However, upon initial application of the foam, small amounts of formaldehyde may be released to the air. Given that there is a finite amount of formaldehyde available for off-gassing, the rate of formaldehyde release from the foam declines steadily as time progresses. Studies have shown that within two years of application, half of the available formaldehyde has been released.

Other Chemicals and Wastes include potentially toxic substances that may exist at the subject building. These may include water treatment chemicals associated with heating and cooling systems, heating fuels, building maintenance supplies such as paint and paint stripper, building cleaning supplies containing chemicals such as sodium hypochlorite and ammonium hydroxide and pesticides.

In line with the objectives of this assessment, efforts were made to identify whether substances were in use, are present for intended future use or have become obsolete. It is recommended that; 1) the health and safety information of those substances identified as having use at the subject facility be reviewed in order to ensure that they appropriately stored and handled and; 2) wastes be gathered at a central location, classified and disposed of in accordance with the applicable regulatory requirements

Appendix F

Compliance Flow Chart for Building Owners, Operators and Project Managers

COMPLIANCE FLOW CHART FOR BUILDING OWNERS, OPERATORS & PROJECT MANAGERS

START HERE IF

- 1- You are a project manager or owner, constructor, employer or worker engaged in or on a project.
- 2- Repairs, alteration or maintenance of a building are to occur and you are the owner or operator of the building, an employer or worker engaged in the repair, alteration or maintenance work.
- 3- You are the owner or operator of a building that uses material which may contain asbestos.

Is it apparent that friable materials such as fireproofing, acoustical or thermal insulation or ceiling tiles have fallen or been disturbed?

KEY TERM : FRIABLE MATERIAL (adj)

Materials that

- (a) when dry, can be crumbled, pulverized or powdered by hand pressure, or
- (b) are crumbled, pulverized or powdered

STOP!
Work may not proceed until the material is tested for asbestos!

Has a professional examination shown the material to be asbestos containing?

Has an asbestos audit of the building been performed and is a record of the audit report available on the building premises?

Has any material in the building been previously treated as if it were asbestos containing?

Has the building owner/operator ever been advised that asbestos containing material has been discovered?

Does the building owner /operator/ project manager know or ought to reasonably know that asbestos has been used in the building for any purpose?

GO!
Compliance with O.Reg. 278/05 verified. Ensure that the record is professionally updated once every 12 months.

STOP!
Non-compliance with O.Reg. 278/05
Contact GENIVAR


KEY PHRASE : "OUGHT TO REASONABLY KNOW"
There is no regulated definition of what constitutes having "ought to reasonably know". Much liability has resulted from this clause, as regulators have been granted the authority to use their discretion as they see fit. In line with best industry practices, GENIVAR recommends the phrase "ought to reasonably know" applies if the building was constructed during the late 80's or earlier.


ONTARIO REGULATION 278/05: ASBESTOS ON CONSTRUCTION PROJECTS AND IN BUILDINGS & REPAIR OPERATIONS

Asbestos Surveys, Abatement & Management
Mould Remediation And Testing
Contract Preparation And Tendering



HAZARDOUS BUILDING MATERIALS SERVICES
600 Cochrane Drive, Suite 500, Markham, Ontario L3R 5K3
Tel : 905.475.7270 - Fax : 905.475.5994
www.genivar.com - c





Ontario Energy Board
**Incremental Capital
 Workform**

Legend

DROP-DOWN MENU

INPUT FIELD

CALCULATION

Applicant Name	Toronto Hydro-Electric System Limited
Application Type	IRM3
LDC Licence Number	ED-2002-0497
Applied for Effective Date	May 1, 2012
Stretch Factor Group	III
Stretch Factor Value	0.6%
Last COS Re-based Year	2011
Last COS OEB Application Number	EB-2010-0142
ICM Billing Determinants for Growth - Numerator	2011 Re-Based Forecast
ICM Billing Determinants for Growth - Denominator	2010 Audited RRR



Table of Contents

Sheet Name	Purpose of Sheet
A1.1 LDC Information	Enter LDC Data
A2.1 Table of Contents	Table of Contents
B1.1 Re-Based Bill Det & Rates	Set Up Rate Classes and enter Re-Based Billing Determinants and Tariff Rates
B1.2 Removal of Rate Adders	Removal of Rate Adders
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C1.1 Ld Act-Mst Rcent Yr	Enter Billing Determinants for most recent actual year
D1.1 Current Revenue from Rates	Enter Current Rates to calculate current rate allocation
E1.1 Threshold Parameters	Shows calculation of Price Cap and Growth used for incremental capital threshold calculation
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Z1.0 OEB Control Sheet	Not Shown



Ontario Energy Board

Incremental Capital Workform

Rate Class and Re-Based Billing Determinants & Rates

Select the appropriate Rate Groups and Rate Classes from the drop-down menus in Columns C and D respectively. Following your selection, all appropriate input cells will be shaded green.

Last COS Re-based Year

2011

Last COS OEB Application Number

EB-2010-0142

Rate Group	Rate Class	Fixed Metric	Vol Metric	Re-based Billed Customers or Connections A	Re-based Billed kWh B	Re-based Billed kW C	Re-based Tariff Service Charge D	Re-based Tariff Distribution Volumetric Rate kWh E	Re-based Tariff Distribution Volumetric Rate kW F
RES	Residential	Customer	kWh	598,508	4,886,977,489		18.25	0.0151	
RES	Residential Urban	Customer	kWh	24,898	99,791,184		17.00	0.0257	
GSLT50	General Service Less Than 50 kW	Customer	kWh	65,792	2,139,318,076	0	24.30	0.0225	
GSGT50	General Service 50 to 999 kW	Customer	kW	13,067	10,116,374,153	26,935,191	35.56		5.5956
GSGT50	General Service 1,000 to 4,999 kW	Customer	kW	514	4,626,928,262	10,587,119	686.46		4.4497
LU	Large Use	Customer	kW	47	2,376,778,323	4,993,733	3,009.11		4.7406
SL	Street Lighting	Connection	kW	162,777	110,165,016	322,023	1.30		28.7248
USL	Unmetered Scattered Load	Connection	kWh	1,130	56,231,585		4.84	0.0607	
USL	Unmetered Scattered Load	Connection	kWh	21,729	0		0.49		
NA	Rate Class 10	NA	NA						
NA	Rate Class 11	NA	NA						
NA	Rate Class 12	NA	NA						
NA	Rate Class 13	NA	NA						
NA	Rate Class 14	NA	NA						
NA	Rate Class 15	NA	NA						
NA	Rate Class 16	NA	NA						
NA	Rate Class 17	NA	NA						
NA	Rate Class 18	NA	NA						
NA	Rate Class 19	NA	NA						
NA	Rate Class 20	NA	NA						
NA	Rate Class 21	NA	NA						
NA	Rate Class 22	NA	NA						
NA	Rate Class 23	NA	NA						
NA	Rate Class 24	NA	NA						
NA	Rate Class 25	NA	NA						



Removal of Rate Adders

Last COS Re-based Year

2011

Last COS OEB Application Number

EB-2010-0142

Rate Class	Re-based Tariff	Re-based Tariff Distribution	Re-based Tariff Distribution	Service Charge	Distribution Volumetric	Distribution Volumetric	Re-based Base	Re-based Base Distribution	Re-based Base Distribution
	Service Charge	Volumetric Rate kWh	Volumetric Rate kW	Rate Adders	kWh Rate Adders	kW Rate Adders	Service Charge	Volumetric Rate kWh	Volumetric Rate kW
	A	B	C	D	E	F	H = A - D	I = B - E	J = C - F
Residential	18.25	0.0151	0.0000	0.00	0.0000	0.0000	18.25	0.0151	0.0000
Residential Urban	17.00	0.0257	0.0000	0.00	0.0000	0.0000	17.00	0.0257	0.0000
General Service Less Than 50 kW	24.30	0.0225	0.0000	0.00	0.0000	0.0000	24.30	0.0225	0.0000
General Service 50 to 999 kW	35.56	0.0000	5.5956	0.00	0.0000	0.0000	35.56	0.0000	5.5956
General Service 1,000 to 4,999 kW	686.46	0.0000	4.4497	0.00	0.0000	0.0000	686.46	0.0000	4.4497
Large Use	3,009.11	0.0000	4.7406	0.00	0.0000	0.0000	3,009.11	0.0000	4.7406
Street Lighting	1.30	0.0000	28.7248	0.00	0.0000	0.0000	1.30	0.0000	28.7248
Unmetered Scattered Load	4.84	0.0607	0.0000	0.00	0.0000	0.0000	4.84	0.0607	0.0000
Unmetered Scattered Load	0.49	0.0000	0.0000	0.00	0.0000	0.0000	0.49	0.0000	0.0000



Calculated Re-Based Revenue From Rates

Last COS Re-based Year

Last COS OEB Application Number

Rate Class	Re-based Billed Customers or Connections A	Re-based Billed kWh B	Re-based Billed kW C	Re-based Base Service Charge D	Re-based Base Volumetric Rate kWh E	Re-based Base Volumetric Rate kW F	Service Charge Revenue G = A * D * 12	Distribution Volumetric Rate Revenue kWh H = B * E	Distribution Volumetric Rate Revenue kW I = C * F	Revenue Requirement from Rates J = G + H + I
Residential	598,508	4,886,977,489	0	18.25	0.0151	0.0000	131,073,252	73,646,751	0	204,720,003
Residential Urban	24,898	99,791,184	0	17.00	0.0257	0.0000	5,079,192	2,559,644	0	7,638,836
General Service Less Than 50 kW	65,792	2,139,318,076	0	24.30	0.0225	0.0000	19,184,993	48,070,477	0	67,255,470
General Service 50 to 999 kW	13,067	10,116,374,153	26,935,191	35.56	0.0000	5.5956	5,575,758	0	150,718,556	156,294,314
General Service 1,000 to 4,999 kW	514	4,626,928,262	10,587,119	686.46	0.0000	4.4497	4,234,085	0	47,109,505	51,343,590
Large Use	47	2,376,778,323	4,993,733	3,009.11	0.0000	4.7406	1,697,138	0	23,673,292	25,370,430
Street Lighting	162,777	110,165,016	322,023	1.30	0.0000	28.7248	2,539,322	0	9,250,042	11,789,364
Unmetered Scattered Load	1,130	56,231,585	0	4.84	0.0607	0.0000	65,611	3,413,257	0	3,478,868
Unmetered Scattered Load	21,729	0	0	0.49	0.0000	0.0000	127,767	0	0	127,767
							169,577,117	127,690,129	230,751,395	528,018,642
	O	P	Q	R						



Detailed Re-Based Revenue From Rates

Last COS Re-based Year	2011
Last COS OEB Application Number	EB-2010-0142

Applicants Rate Base

Average Net Fixed Assets

			Last Rate Re-based Amount	
Gross Fixed Assets - Re-based Opening	\$ 4,183,572,075	A		
Add: CWIP Re-based Opening	\$ 204,719,106	B		
Re-based Capital Additions	\$ 376,263,596	C		
Re-based Capital Disposals		D		
Re-based Capital Retirements		E		
Deduct: CWIP Re-based Closing	-\$ 232,060,508	F		
Gross Fixed Assets - Re-based Closing	\$ 4,532,494,269	G		
Average Gross Fixed Assets			\$ 4,358,033,172	H = (A + G) / 2

Accumulated Depreciation - Re-based Opening	\$ 2,285,733,698	I		
Re-based Depreciation Expense	\$ 138,815,781	J		
Re-based Disposals	\$ 2,807,234	K		
Re-based Retirements		L		
Accumulated Depreciation - Re-based Closing	\$ 2,427,356,713	M		
Average Accumulated Depreciation			\$ 2,356,545,206	N = (I + M) / 2

Average Net Fixed Assets \$ 2,001,487,967 O = H - N

Working Capital Allowance

Working Capital Allowance Base	\$ 2,479,952,766	P		
Working Capital Allowance Rate	12.0%	Q		
Working Capital Allowance			\$ 296,739,314	R = P * Q

Rate Base \$ 2,298,227,281 S = O + R

Return on Rate Base

Deemed Short Term Debt %	4.00%	T	\$ 91,929,091	W = S * T
Deemed Long Term Debt %	56.00%	U	\$ 1,287,007,277	X = S * U
Deemed Equity %	40.00%	V	\$ 919,290,912	Y = S * V

Short Term Interest	2.46%	Z	\$ 2,261,456	AC = W * Z
Long Term Interest	5.37%	AA	\$ 69,112,291	AD = X * AA
Return on Equity	9.58%	AB	\$ 88,068,069	AE = Y * AB
Return on Rate Base			<u>\$ 159,441,816</u>	AF = AC + AD + AE

Distribution Expenses

OM&A Expenses	\$ 231,014,224	AG		
Amortization	\$ 138,815,781	AH		
Ontario Capital Tax (F1.1 Z-Factor Tax Changes)	\$ 6,802,382	AI		
Grossed Up PILS (F1.1 Z-Factor Tax Changes)	\$ 11,791,223	AJ		
Low Voltage		AK		
Transformer Allowance	\$ 11,479,842	AL		
	\$ -	AM		
		AN		
		AO		
			\$ 399,903,452	AP = SUM (AG : AO)

Revenue Offsets

Specific Service Charges	-\$ 7,580,526	AQ		
Late Payment Charges	-\$ 4,900,000	AR		
Other Distribution Income	-\$ 7,240,556	AS		
Other Income and Deductions	-\$ 6,300,000	AT	-\$ 26,021,082	AU = SUM (AQ : AT)

Revenue Requirement from Distribution Rates \$ 533,324,186 AV = AF + AP + AU

Rate Classes Revenue

Rate Classes Revenue - Total (B1.1 Re-based Revenue - Gen)	\$ 528,018,642		AW
Difference	\$ 5,305,544		AZ = AV - AW
Difference (Percentage - should be less than 1%)	1.00%		BA = AZ / AW



Load Actual - Most Recent Year

Rate Class	Fixed Metric	Vol Metric	Billed			Base Service Charge	Base Distribution Volumetric Rate kWh	Base Distribution Volumetric Rate kW	Service Charge Revenue	Distribution Volumetric Rate Revenue kWh	Distribution Volumetric Rate Revenue kW	Total Revenue by Rate Class
			Customers or Connections	Billed kWh	Billed kW							
Residential	Customer	kWh	591,496	5,105,974,275	0	\$18.25	\$0.0151	\$0.0000	\$129,537,624	\$76,947,032	\$0	\$206,484,656
Residential Urban	Customer	kWh	24,898	99,791,184	0	\$17.00	\$0.0257	\$0.0000	\$5,079,192	\$2,559,644	\$0	\$7,638,836
General Service Less Than 50 kW	Customer	kWh	65,799	2,095,343,918	0	\$24.30	\$0.0225	\$0.0000	\$19,186,988	\$47,082,378	\$0	\$66,269,366
General Service 50 to 999 kW	Customer	kWh	12,873	10,189,051,346	26,712,248	\$35.56	\$0.0000	\$5.5956	\$5,493,167	\$0	\$149,471,055	\$154,964,221
General Service 1,000 to 4,999 kW	Customer	kWh	509	4,828,382,733	10,972,419	\$686.46	\$0.0000	\$4.4497	\$4,192,898	\$0	\$48,823,974	\$53,016,871
Large Use	Customer	kWh	47	2,263,227,585	5,267,224	\$3,009.11	\$0.0000	\$4.7406	\$1,697,138	\$0	\$24,969,801	\$26,666,940
Street Lighting	Connection	kWh	162,964	112,727,603	321,995	\$1.30	\$0.0000	\$28.7248	\$2,542,238	\$0	\$9,249,232	\$11,791,471
Unmetered Scattered Load	Connection	kWh	1,107	52,097,299	0	\$4.84	\$0.0607	\$0.0000	\$64,295	\$3,162,306	\$0	\$3,226,601
Unmetered Scattered Load	Connection	kWh	12,159	0	0	\$0.49	\$0.0000	\$0.0000	\$71,495	\$0	\$0	\$71,495
									\$167,865,035	\$129,751,360	\$232,514,062	\$530,130,457



Ontario Energy Board
Incremental Capital Workform

This sheet is used to determine the applicants most current allocation of revenues (after the most recent revenue cost ratio adjustment, if applicable) to be used to calculate the incremental capital rate riders.

Current Revenue from Rates

Rate Class	Fixed Metric	Vol Metric	Current Base Service Charge A	Current Base Distribution Volumetric Rate kWh B	Current Base Distribution Volumetric Rate kW C	Re-based Billed Customers or Connections D	Re-based Billed kWh E	Re-based Billed kW F	Current Base Service Charge Revenue G = A * D * 12	Current Base Distribution Volumetric Rate kWh Revenue H = B * E	Current Base Distribution Volumetric Rate kW Revenue I = C * F	Total Current Base Revenue J = G + H + I	Service Charge % Total Revenue L = G / \$K	Distribution Volumetric Rate % Total Revenue M = H / \$K	Distribution Volumetric Rate % Total Revenue N = I / \$K	Total % Revenue O = J / \$K			
Residential	Customer	kWh	18.25	0.0151		598,508	4,886,977,489	0	131,073,252	73,646,751	0	204,720,003	24.9%	14.0%	0.0%	38.9%			
Residential Urban	Customer	kWh	6.83	0.0257		24,898	99,791,184	0	2,040,640	2,559,644	0	4,600,284	0.4%	0.5%	0.0%	0.9%			
General Service Less Than 50 kW	Customer	kWh	24.30	0.0225		65,792	2,139,318,076	0	19,184,993	48,070,477	0	67,255,470	3.6%	9.1%	0.0%	12.8%			
General Service 50 to 999 kW	Customer	kW	35.56		5.5956	13,067	10,116,374,153	26,935,191	5,575,758	0	150,718,556	156,294,314	1.1%	0.0%	28.7%	29.7%			
General Service 1,000 to 4,999 kW	Customer	kW	686.46		4.4497	514	4,626,928,262	10,587,119	4,234,085	0	47,109,505	51,343,590	0.8%	0.0%	9.0%	9.8%			
Large Use	Customer	kW	3,009.11		4.7406	47	2,376,778,323	4,993,733	1,697,138	0	23,673,292	25,370,430	0.3%	0.0%	4.5%	4.8%			
Street Lighting	Connection	kW	1.30		28.7248	162,777	110,165,016	322,023	2,539,322	0	9,250,042	11,789,364	0.5%	0.0%	1.8%	2.2%			
Unmetered Scattered Load	Connection	kWh	0.49	0.0607		1,130	56,231,585	0	6,642	3,413,257	0	3,419,900	0.0%	0.6%	0.0%	0.7%			
Unmetered Scattered Load	Connection	kWh	4.84			21,729	0	0	1,262,025	0	0	1,262,025	0.2%	0.0%	0.0%	0.2%			
												167,613,855	127,690,129	230,751,395	526,055,380	31.9%	24.3%	43.9%	100.0%

K



Threshold Parameters

Price Cap Index

Price Escalator (GDP-IPI)	2.00%
Less Productivity Factor	-0.72%
Less Stretch Factor	-0.60%

Price Cap Index **0.68%**

Growth

ICM Billing Determinants for Growth - Numerator : 2011 Re-Based Forecast	<u>\$528,018,642</u>	A
ICM Billing Determinants for Growth - Denominator : 2010 Audited RRR	<u>\$530,130,457</u>	B
Growth	-0.40%	C = A / B



 Ontario Energy Board

**Incremental Capital
 Workform**

Threshold Test

Year	2011	
Price Cap Index	0.68%	A
Growth	-0.40%	B
Dead Band	20%	C
Average Net Fixed Assets		
Gross Fixed Assets Opening	\$ 4,183,572,075	
Add: CWIP Opening	\$ 204,719,106	
Capital Additions	\$ 376,263,596	
Capital Disposals	\$ -	
Capital Retirements	\$ -	
Deduct: CWIP Closing	-\$ 232,060,508	
Gross Fixed Assets - Closing	\$ 4,532,494,269	
Average Gross Fixed Assets	<u>\$ 4,358,033,172</u>	
Accumulated Depreciation - Opening	\$ 2,285,733,698	
Depreciation Expense	\$ 138,815,781	D
Disposals	\$ 2,807,234	
Retirements	\$ -	
Accumulated Depreciation - Closing	\$ 2,427,356,713	
Average Accumulated Depreciation	<u>\$ 2,356,545,206</u>	
Average Net Fixed Assets	<u>\$ 2,001,487,967</u>	E
Working Capital Allowance		
Working Capital Allowance Base	\$ 2,479,952,766	
Working Capital Allowance Rate	12%	
Working Capital Allowance	<u>\$ 296,739,314</u>	F
Rate Base	<u>\$ 2,298,227,281</u>	G = E + F
Depreciation	D \$ 138,815,781	H
Threshold Test	124.62%	I = 1 + (G / H) * (B + A * (1 + B)) + C
Threshold CAPEX	\$ 172,989,465	J = H * I



Summary of Incremental Capital Projects (ICPs)

Number of ICPs

1

Project ID #	Incremental Capital Non-Discretionary Project Description	Incremental Capital CAPEX	Amortization Expense	CCA
ICP 1	Summary of Projects (please see Schedule E01-2)	275,754,831	8,770,639	20,346,055
		<u>275,754,831</u>	<u>8,770,639</u>	<u>20,346,055</u>



Incremental Capital Adjustment

Current Revenue Requirement

Current Revenue Requirement - Total	\$533,324,186	A
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Return on Rate Base

Incremental Capital CAPEX		\$275,754,831	B
Depreciation Expense		\$ 8,770,639	C
Incremental Capital CAPEX to be included in Rate Base		\$266,984,192	D = B - C
Deemed ShortTerm Debt %	4.0%	E \$ 10,679,368	G = D * E
Deemed Long Term Debt %	56.0%	F \$ 149,511,148	H = D * F
Short Term Interest	2.46%	I \$ 262,712	K = G * I
Long Term Interest	5.37%	J \$ 8,028,749	L = H * J
Return on Rate Base - Interest		\$ 8,291,461	M = K + L
Deemed Equity %	40.0%	N \$ 106,793,677	P = D * N
Return on Rate Base -Equity	9.58%	O \$ 10,230,834	Q = P * O
Return on Rate Base - Total		\$ 18,522,295	R = M + Q

Amortization Expense

Amortization Expense - Incremental	C \$ 8,770,639	S
------------------------------------	----------------	---

Grossed up PIL's

Regulatory Taxable Income	O \$ 10,230,834	T
Add Back Amortization Expense	S \$ 8,770,639	U
Deduct CCA	\$ 20,346,055	V
Incremental Taxable Income	-\$ 1,344,581	W = T + U - V
Current Tax Rate (F1.1 Z-Factor Tax Changes)	26.4% X	
PIL's Before Gross Up	-\$ 354,970	Y = W * X
Incremental Grossed Up PIL's	-\$ 482,296	Z = Y / (1 - X)

Ontario Capital Tax

Incremental Capital CAPEX	\$275,754,831	AA
Less : Available Capital Exemption (if any)	\$ -	AB
Incremental Capital CAPEX subject to OCT	\$275,754,831	AC = AA - AB
Ontario Capital Tax Rate (F1.1 Z-Factor Tax Changes)	0.000% AD	
Incremental Ontario Capital Tax	\$ -	AE = AC * AD

Incremental Revenue Requirement

Return on Rate Base - Total	Q \$ 18,522,295	AF
Amortization Expense - Total	S \$ 8,770,639	AG
Incremental Grossed Up PIL's	Z -\$ 482,296	AH
Incremental Ontario Capital Tax	AE \$ -	AI
Incremental Revenue Requirement	\$ 26,810,639	AJ = AF + AG + AH + AI



Calculation of Incremental Capital Rate Rider - Option A Fixed and Variable

Rate Class	Service Charge % Revenue A	Distribution Volumetric	Distribution Volumetric	Service Charge Revenue D = \$N * A	Distribution Volumetric	Distribution Volumetric	Total Revenue by Rate Class G = D + E + F	Billed Customers or Connections H	Billed kWh I	Billed kW J	Service Charge Rate Rider K = D / H / 12	Distribution Volumetric	Distribution Volumetric
		Rate % Revenue kWh B	Rate % Revenue kW C		Rate Revenue kWh E = \$N * B	Rate Revenue kW F = \$N * C						Rate kWh L = E / I	Rate kW M = F / J
Residential	24.9%	14.0%	0.0%	##### \$ 3,753,438.35	\$ -	\$ -	\$ 10,433,643.05	598,508	4,886,977,489	0	\$0.930119	\$0.000768	
Residential Urban	0.4%	0.5%	0.0%	\$ 104,002.10	\$ 130,453.35	\$ -	\$ 234,455.45	24,898	99,791,184	0	\$0.348094	\$0.001307	
General Service Less Than 50 kW	3.6%	9.1%	0.0%	\$ 977,771.41	\$ 2,449,932.56	\$ -	\$ 3,427,703.97	65,792	2,139,318,076	0	\$1.238460	\$0.001145	
General Service 50 to 999 kW	1.1%	0.0%	28.7%	\$ 284,170.90	\$ -	\$ 7,681,436.09	\$ 7,965,606.99	13,067	10,116,374,153	26,935,191	\$1.812331	\$0.000000	\$0.285182
General Service 1,000 to 4,999 kW	0.8%	0.0%	9.0%	\$ 215,791.98	\$ -	\$ 2,400,956.18	\$ 2,616,748.16	514	4,626,928,262	10,587,119	\$34.985729	\$0.000000	\$0.226781
Large Use	0.3%	0.0%	4.5%	\$ 86,495.37	\$ -	\$ 1,206,519.52	\$ 1,293,014.89	47	2,376,778,323	4,993,733	\$153.360586	\$0.000000	\$0.241607
Street Lighting	0.5%	0.0%	1.8%	\$ 129,417.62	\$ -	\$ 471,432.38	\$ 600,850.01	162,777	110,165,016	322,023	\$0.066255	\$0.000000	\$1.463972
Unmetered Scattered Load	0.0%	0.6%	0.0%	\$ 338.53	\$ 173,958.12	\$ -	\$ 174,296.66	1,130	56,231,585	0	\$0.024973	\$0.003094	
Unmetered Scattered Load	0.2%	0.0%	0.0%	\$ 64,319.66	\$ -	\$ -	\$ 64,319.66	21,729	0	0	\$0.246673		
				##### \$ 6,507,782.38	\$ 11,760,344.18	\$ -	\$ 26,810,638.84						

Enter the above rate riders onto "Sheet 14. Proposed Rate_Riders" in the 2012 OEB IRM3 Rate Generator as an "Rate Rider for Incremental Capital"



Calculation of Incremental Capital Rate Rider - Option B Variable

Rate Class	Total Revenue \$ by Rate Class A	Total Revenue % by Rate Class B = A / \$H	Total Incremental Capital \$ by Rate Class C = \$I * B	Billed kWh D	Billed kW E	Distribution Volumetric Rate kWh Rate Rider F = C / D	Distribution Volumetric Rate kW Rate Rider G = C / E
Residential	\$204,720,003	38.92%	\$10,433,643	4,886,977,489	0	\$0.0021	
Residential Urban	\$4,600,284	0.87%	\$234,455	99,791,184	0	\$0.0023	
General Service Less Than 50 kW	\$67,255,470	12.78%	\$3,427,704	2,139,318,076	0	\$0.0016	
General Service 50 to 999 kW	\$156,294,314	29.71%	\$7,965,607	#####	26,935,191		\$0.2957
General Service 1,000 to 4,999 kW	\$51,343,590	9.76%	\$2,616,748	4,626,928,262	10,587,119		\$0.2472
Large Use	\$25,370,430	4.82%	\$1,293,015	2,376,778,323	4,993,733		\$0.2589
Street Lighting	\$11,789,364	2.24%	\$600,850	110,165,016	322,023		\$1.8659
Unmetered Scattered Load	\$3,419,900	0.65%	\$174,297	56,231,585	0	\$0.0031	
Unmetered Scattered Load	\$1,262,025	0.24%	\$64,320	0	0		
	\$526,055,380	100.00%	\$26,810,639				
	H		I				

Enter the above rate riders onto "Sheet 14. Proposed Rate_Riders" in the 2012 OEB IRM3 Rate Generator as an "Rate Rider for Incremental Capital"

ICM Values Calculation - 2012

	Net Fixed Asset	Amort. Exp	CCA
01 Underground Infrastructure	46,937,673	1,514,619	3,755,014
02 Paper Insulated Lead Covered Cable - Piece Outs and Leakers	17,323,056	435,394	1,385,844
03 Handwell Replacement	12,007,529	300,188	960,602
04 Overhead Infrastructure	29,426,642	770,352	2,354,131
05 Box Construction	10,201,306	263,295	816,104
06 Rear Lot Construction	34,365,703	971,829	2,749,256
07 Polymer SMD - 20 Switches	3,058,194	91,349	244,656
08 Scadamate R1 Switches	2,858,752	94,252	228,700
09 Network Vault & Roofs	13,565,230	468,264	1,085,218
10 Fibertop Network Units	8,589,925	412,117	687,194
11 Automatic Transfer Switches (ATS) % Reverse Power Breakers (RPB)	3,272,416	147,002	261,793
12 Stations Power Transformers	1,299,579	40,612	103,966
14 Stations Circuit Breakers	1,371,522	45,717	109,105
15 Stations Control & Communication Systems	1,149,495	76,633	229,899
16 Downtown Station Load Transfers	1,750,646	45,876	140,052
17 Bremner Transformer Station	31,732,860	736,900	1,938,355
18 Hydro One Capital Contributions	25,280,047	1,011,202	0
20 Metering	5,619,570	353,717	449,566
21 Externally-Initiated Plant Relocations and Expansions	24,268,546	739,900	1,941,484
22 GRID SOLUTION (Prorated)	1,676,140	251,421	905,116
22 Grid Solutions	2,398,000	359,700	1,294,920
22 GRID SOLUTION (Prorated)	721,860	108,279	389,804
19 Feeder Automation	7,820,666	254,014	625,653
13 Stations Switchgear	19,349,949	501,114	1,564,710
PCI Total	145,096,991	0	0
Total	448,744,297	9,634,046	22,926,222

Threshold CAPEX	\$ 172,989,465
------------------------	-----------------------

	Net Fixed Asset	Amort. Exp	CCA
Values Above Threshold for ICM Model	275,754,831	8,770,639	20,346,055
Threshold Values	172,989,465	863,407	2,580,167

Calculation of ICM Rate Rider on Days of Service Basis

Rate Class	Service Charge Rate Rider K = D / H / 12	Distribution Volumetric Rate kWh Rate Rider L = E / I	Distribution Volumetric Rate kW Rate Rider M = F / J	Service Charge Rate Rider (DOS)	Distribution Volumetric Rate kWh Rate Rider	Distribution Volumetric Rate kW Rate Rider (DOS)
Residential	\$0.9301	\$0.000768		\$0.917378	\$0.000768	
Residential Urban	\$0.3481	\$0.001307		\$0.343326	\$0.001307	
General Service Less Than 50 kW	\$1.2385	\$0.001145		\$1.221495	\$0.001145	
General Service 50 to 999 kW	\$1.8123	\$0.000000	\$0.2852	\$1.787505		\$0.281275
General Service 1,000 to 4,999 kW	\$34.9857	\$0.000000	\$0.2268	\$34.506472		\$0.223674
Large Use	\$153.3606	\$0.000000	\$0.2416	\$151.259756		\$0.238297
Street Lighting	\$0.0663	\$0.000000	\$1.4640	\$0.065347		\$1.443918
Unmetered Scattered Load	\$0.0250	\$0.003094		\$0.024631	\$0.003094	
Unmetered Scattered Load	\$0.2467			\$0.243294		





Ontario Energy Board
**Incremental Capital
 Workform**

Legend

DROP-DOWN MENU

INPUT FIELD

CALCULATION

Applicant Name	Toronto Hydro-Electric System Limited
Application Type	IRM3
LDC Licence Number	ED-2002-0497
Applied for Effective Date	May 1, 2012
Stretch Factor Group	III
Stretch Factor Value	0.6%
Last COS Re-based Year	2011
Last COS OEB Application Number	EB-2010-0142
ICM Billing Determinants for Growth - Numerator	2011 Re-Based Forecast
ICM Billing Determinants for Growth - Denominator	2010 Audited RRR



Table of Contents

Sheet Name	Purpose of Sheet
A1.1 LDC Information	Enter LDC Data
A2.1 Table of Contents	Table of Contents
B1.1 Re-Based Bill Det & Rates	Set Up Rate Classes and enter Re-Based Billing Determinants and Tariff Rates
B1.2 Removal of Rate Adders	Removal of Rate Adders
B1.3 Re-Based Rev From Rates	Calculated Re-Based Revenue From Rates
B1.4 Re-Based Rev Req	Detailed Re-Based Revenue From Rates
C1.1 Ld Act-Mst Rcent Yr	Enter Billing Determinants for most recent actual year
D1.1 Current Revenue from Rates	Enter Current Rates to calculate current rate allocation
E1.1 Threshold Parameters	Shows calculation of Price Cap and Growth used for incremental capital threshold calculation
E2.1 Threshold Test	Input sheet to calculate Threshold and Incremental Capital
E3.1 Summary of IC Projects	Summary of Incremental Capital Projects
E4.1 IncrementalCapitalAdjust	Shows Calculation of Incremental Capital Revenue Requirement
F1.1 Incr Cap RRider Opt A FV	Option A - Calculation of Incremental Capital Rate Rider - Fixed & Variable Split
F1.2 Incr Cap RRider Opt B Var	Option B - Calculation of Incremental Capital Rate Rider - Variable Allocation
Z1.0 OEB Control Sheet	Not Shown



Rate Class and Re-Based Billing Determinants & Rates

Select the appropriate Rate Groups and Rate Classes from the drop-down menus in Columns C and D respectively. Following your selection, all appropriate input cells will be shaded green.

Last COS Re-based Year: 2011
 Last COS OEB Application Number: EB-2010-0142

Rate Group	Rate Class	Fixed Metric	Vol Metric	Re-based Billed	Re-based	Re-based	Re-based	Re-based	Re-based
				Customers or Connections A	Billed kWh B	Billed kW C	Tariff Service Charge D	Tariff Distribution Volumetric Rate kWh E	Tariff Distribution Volumetric Rate kW F
RES	Residential	Customer	kWh	598,508	4,886,977,489		18.25	0.0151	
RES	Residential Urban	Customer	kWh	24,898	99,791,184		17.00	0.0257	
GSLT50	General Service Less Than 50 kW	Customer	kWh	65,792	2,139,318,076	0	24.30	0.0225	
GSGT50	General Service 50 to 999 kW	Customer	kW	13,067	10,116,374,153	26,935,191	35.56		5.5956
GSGT50	General Service 1,000 to 4,999 kW	Customer	kW	514	4,626,928,262	10,587,119	686.46		4.4497
LU	Large Use	Customer	kW	47	2,376,778,323	4,993,733	3,009.11		4.7406
SL	Street Lighting	Connection	kW	162,777	110,165,016	322,023	1.30		28.7248
USL	Unmetered Scattered Load	Connection	kWh	1,130	56,231,585		4.84	0.0607	
USL	Unmetered Scattered Load	Connection	kWh	21,729	0		0.49		
NA	Rate Class 10	NA	NA						
NA	Rate Class 11	NA	NA						
NA	Rate Class 12	NA	NA						
NA	Rate Class 13	NA	NA						
NA	Rate Class 14	NA	NA						
NA	Rate Class 15	NA	NA						
NA	Rate Class 16	NA	NA						
NA	Rate Class 17	NA	NA						
NA	Rate Class 18	NA	NA						
NA	Rate Class 19	NA	NA						
NA	Rate Class 20	NA	NA						
NA	Rate Class 21	NA	NA						
NA	Rate Class 22	NA	NA						
NA	Rate Class 23	NA	NA						
NA	Rate Class 24	NA	NA						
NA	Rate Class 25	NA	NA						



Ontario Energy Board
Incremental Capital Workform

Removal of Rate Adders

Last COS Re-based Year
 Last COS OEB Application Number

Rate Class	Re-based Tariff	Re-based Tariff		Re-based Tariff	Distribution		Distribution	Re-based Base	Re-based Base		Re-based Base
	Service Charge	Distribution	Volumetric	Distribution	Volumetric	kWh Rate	kWh Rate	Service Charge	Distribution	Volumetric	Distribution
	A	B	C	D	E	F	H = A - D	I = B - E	J = C - F		
Residential	18.25	0.0151	0.0000	0.00	0.0000	0.0000	18.25	0.0151	0.0000		
Residential Urban	17.00	0.0257	0.0000	0.00	0.0000	0.0000	17.00	0.0257	0.0000		
General Service Less Than 50 kW	24.30	0.0225	0.0000	0.00	0.0000	0.0000	24.30	0.0225	0.0000		
General Service 50 to 999 kW	35.56	0.0000	5.5956	0.00	0.0000	0.0000	35.56	0.0000	5.5956		
General Service 1,000 to 4,999 kW	686.46	0.0000	4.4497	0.00	0.0000	0.0000	686.46	0.0000	4.4497		
Large Use	3,009.11	0.0000	4.7406	0.00	0.0000	0.0000	3,009.11	0.0000	4.7406		
Street Lighting	1.30	0.0000	28.7248	0.00	0.0000	0.0000	1.30	0.0000	28.7248		
Unmetered Scattered Load	4.84	0.0607	0.0000	0.00	0.0000	0.0000	4.84	0.0607	0.0000		
Unmetered Scattered Load	0.49	0.0000	0.0000	0.00	0.0000	0.0000	0.49	0.0000	0.0000		



Calculated Re-Based Revenue From Rates

Last COS Re-based Year

Last COS OEB Application Number

Rate Class	Re-based Billed Customers or Connections	Re-based Billed kWh	Re-based Billed kW	Re-based Base Service Charge	Re-based Base Volumetric Rate kWh	Re-based Base Volumetric Rate kW	Service Charge Revenue	Distribution Volumetric Rate Revenue kWh	Distribution Volumetric Rate Revenue kW	Revenue Requirement from Rates
	A	B	C	D	E	F	G = A * D * 12	H = B * E	I = C * F	J = G + H + I
Residential	598,508	4,886,977,489	0	18.25	0.0151	0.0000	131,073,252	73,646,751	0	204,720,003
Residential Urban	24,898	99,791,184	0	17.00	0.0257	0.0000	5,079,192	2,559,644	0	7,638,836
General Service Less Than 50 kW	65,792	2,139,318,076	0	24.30	0.0225	0.0000	19,184,993	48,070,477	0	67,255,470
General Service 50 to 999 kW	13,067	10,116,374,153	26,935,191	35.56	0.0000	5.5956	5,575,758	0	150,718,556	156,294,314
General Service 1,000 to 4,999 kW	514	4,626,928,262	10,587,119	686.46	0.0000	4.4497	4,234,085	0	47,109,505	51,343,590
Large Use	47	2,376,778,323	4,993,733	3,009.11	0.0000	4.7406	1,697,138	0	23,673,292	25,370,430
Street Lighting	162,777	110,165,016	322,023	1.30	0.0000	28.7248	2,539,322	0	9,250,042	11,789,364
Unmetered Scattered Load	1,130	56,231,585	0	4.84	0.0607	0.0000	65,611	3,413,257	0	3,478,868
Unmetered Scattered Load	21,729	0	0	0.49	0.0000	0.0000	127,767	0	0	127,767
	O	P	Q				169,577,117	127,690,129	230,751,395	528,018,642



Detailed Re-Based Revenue From Rates

Last COS Re-based Year	2011
Last COS OEB Application Number	EB-2010-0142

Applicants Rate Base

Average Net Fixed Assets

Gross Fixed Assets - Re-based Opening	\$ 4,183,572,075	A		
Add: CWIP Re-based Opening	\$ 204,719,106	B		
Re-based Capital Additions	\$ 376,263,596	C		
Re-based Capital Disposals		D		
Re-based Capital Retirements		E		
Deduct: CWIP Re-based Closing	-\$ 232,060,508	F		
Gross Fixed Assets - Re-based Closing	\$ 4,532,494,269	G		
Average Gross Fixed Assets			\$ 4,358,033,172	H = (A + G) / 2

Accumulated Depreciation - Re-based Opening	\$ 2,285,733,698	I		
Re-based Depreciation Expense	\$ 138,815,781	J		
Re-based Disposals	\$ 2,807,234	K		
Re-based Retirements		L		
Accumulated Depreciation - Re-based Closing	\$ 2,427,356,713	M		
Average Accumulated Depreciation			\$ 2,356,545,206	N = (I + M) / 2

Average Net Fixed Assets

\$ 2,001,487,967 O = H - N

Working Capital Allowance

Working Capital Allowance Base	\$ 2,479,952,766	P		
Working Capital Allowance Rate	12.0%	Q		
Working Capital Allowance			\$ 296,739,314	R = P * Q

Rate Base

\$ 2,298,227,281 S = O + R

Return on Rate Base

Deemed ShortTerm Debt %	4.00%	T	\$ 91,929,091	W = S * T
Deemed Long Term Debt %	56.00%	U	\$ 1,287,007,277	X = S * U
Deemed Equity %	40.00%	V	\$ 919,290,912	Y = S * V
Short Term Interest	2.46%	Z	\$ 2,261,456	AC = W * Z
Long Term Interest	5.37%	AA	\$ 69,112,291	AD = X * AA
Return on Equity	9.58%	AB	\$ 88,068,069	AE = Y * AB
Return on Rate Base			\$ 159,441,816	AF = AC + AD + AE

Distribution Expenses

OM&A Expenses	\$ 231,014,224	AG		
Amortization	\$ 138,815,781	AH		
Ontario Capital Tax (F1.1 Z-Factor Tax Changes)	\$ 6,802,382	AI		
Grossed Up PILs (F1.1 Z-Factor Tax Changes)	\$ 11,791,223	AJ		
Low Voltage		AK		
Transformer Allowance	\$ 11,479,842	AL		
	\$ -	AM		
		AN		
		AO		
			\$ 399,903,452	AP = SUM (AG : AO)

Revenue Offsets

Specific Service Charges	-\$ 7,580,526	AQ		
Late Payment Charges	-\$ 4,900,000	AR		
Other Distribution Income	-\$ 7,240,556	AS		
Other Income and Deductions	-\$ 6,300,000	AT	\$ 26,021,082	AU = SUM (AQ : AT)

Revenue Requirement from Distribution Rates

\$ 533,324,186 AV = AF + AP + AU

Rate Classes Revenue

Rate Classes Revenue - Total (B1.1 Re-based Revenue - Gen) \$ 528,018,642 AW

Difference \$ 5,305,544 AZ = AV - AW

Difference (Percentage - should be less than 1%) 1.00% BA = AZ / AW



Load Actual - Most Recent Year

Rate Class	Fixed Metric	Vol Metric	Billed Customers or Connections			Base Distribution Volumetric Rate			Distribution Volumetric Rate			Total Revenue by Rate Class J = G + H + I
			A	B	C	D	E	F	G = A * D * 12	H = B * E	I = C * F	
Residential	Customer	kWh	591,496	5,105,974,275	0	\$18.25	\$0.0151	\$0.0000	\$129,537,624	\$76,947,032	\$0	\$206,484,656
Residential Urban	Customer	kWh	24,898	99,791,184	0	\$17.00	\$0.0257	\$0.0000	\$5,079,192	\$2,559,644	\$0	\$7,638,836
General Service Less Than 50 kW	Customer	kWh	65,799	2,095,343,918	0	\$24.30	\$0.0225	\$0.0000	\$19,186,988	\$47,082,378	\$0	\$66,269,366
General Service 50 to 999 kW	Customer	kW	12,873	10,189,051,346	26,712,248	\$35.56	\$0.0000	\$5.5956	\$5,493,167	\$0	\$149,471,055	\$154,964,221
General Service 1,000 to 4,999 kW	Customer	kW	509	4,828,382,733	10,972,419	\$686.46	\$0.0000	\$4.4497	\$4,192,898	\$0	\$48,823,974	\$53,016,871
Large Use	Customer	kW	47	2,263,227,585	5,267,224	\$3,009.11	\$0.0000	\$4.7406	\$1,697,138	\$0	\$24,969,801	\$26,666,940
Street Lighting	Connection	kW	162,964	112,727,603	321,995	\$1.30	\$0.0000	\$28.7248	\$2,542,238	\$0	\$9,249,232	\$11,791,471
Unmetered Scattered Load	Connection	kWh	1,107	52,097,299	0	\$4.84	\$0.0607	\$0.0000	\$64,295	\$3,162,306	\$0	\$3,226,601
Unmetered Scattered Load	Connection	kWh	12,159	0	0	\$0.49	\$0.0000	\$0.0000	\$71,495	\$0	\$0	\$71,495
									\$167,865,035	\$129,751,360	\$232,514,062	\$530,130,457



Ontario Energy Board
Incremental Capital Workform

This sheet is used to determine the applicants most current allocation of revenues (after the most recent revenue cost ratio adjustment, if applicable) to be used to calculate the incremental capital rate riders.

Current Revenue from Rates

Rate Class	Fixed Metric	Vol Metric	Current Base	Current Base	Current Base	Re-based Billed Customers or Connections D	Re-based Billed kWh E	Re-based Billed kW F	Current Base	Current Base Distribution	Current Base Distribution	Total Current Base Revenue J = G + H + I	Service Charge	Distribution	Distribution	Total % Revenue O = J / \$K
			Service Charge A	Distribution Rate kWh B	Volumetric Rate kW C				Revenue G = A * D * 12	Volumetric Rate kWh H = B * E	Volumetric Rate kW I = C * F		% Total Revenue L = G / \$K	% Total Revenue M = H / \$K	% Total Revenue N = I / \$K	
Residential	Customer	kWh	18.25	0.0151		598,508	4,886,977,489	0	131,073,252	73,646,751	0	204,720,003	24.9%	14.0%	0.0%	38.9%
Residential Urban	Customer	kWh	6.83	0.0257		24,898	99,791,184	0	2,040,640	2,559,644	0	4,600,284	0.4%	0.5%	0.0%	0.9%
General Service Less Than 50 kW	Customer	kWh	24.30	0.0225		65,792	2,139,318,076	0	19,184,993	48,070,477	0	67,255,470	3.6%	9.1%	0.0%	12.8%
General Service 50 to 999 kW	Customer	kW	35.56		5.5956	13,067	10,116,374,153	26,935,191	5,575,758	0	150,718,556	156,294,314	1.1%	0.0%	28.7%	29.7%
General Service 1,000 to 4,999 kW	Customer	kW	686.46		4.4497	514	4,626,928,262	10,587,119	4,234,085	0	47,109,505	51,343,590	0.8%	0.0%	9.0%	9.8%
Large Use	Customer	kW	3,009.11		4.7406	47	2,376,778,323	4,993,733	1,697,138	0	23,673,292	25,370,430	0.3%	0.0%	4.5%	4.8%
Street Lighting	Connection	kW	1.30		28.7248	162,777	110,165,016	322,023	2,539,322	0	9,250,042	11,789,364	0.5%	0.0%	1.8%	2.2%
Unmetered Scattered Load	Connection	kWh	0.49	0.0607		1,130	56,231,585	0	6,642	3,413,257	0	3,419,900	0.0%	0.6%	0.0%	0.7%
Unmetered Scattered Load	Connection	kWh	4.84			21,729	0	0	1,262,025	0	0	1,262,025	0.2%	0.0%	0.0%	0.2%
									167,613,855	127,690,129	230,751,395	526,055,380	31.9%	24.3%	43.9%	100.0%

K



Threshold Parameters

Price Cap Index

Price Escalator (GDP-IPI)	2.00%
Less Productivity Factor	-0.72%
Less Stretch Factor	-0.60%

Price Cap Index

0.68%

Growth

ICM Billing Determinants for Growth - Numerator : 2011 Re-Based Forecast	<u>\$528,018,642</u>	A
ICM Billing Determinants for Growth - Denominator : 2010 Audited RRR	<u>\$530,130,457</u>	B

Growth

-0.40% C = A / B



Ontario Energy Board

Incremental Capital Workform

Threshold Test

Year	2011	
Price Cap Index	0.68%	A
Growth	-0.40%	B
Dead Band	20%	C
Average Net Fixed Assets		
Gross Fixed Assets Opening	\$ 4,183,572,075	
Add: CWIP Opening	\$ 204,719,106	
Capital Additions	\$ 376,263,596	
Capital Disposals	\$ -	
Capital Retirements	\$ -	
Deduct: CWIP Closing	-\$ 232,060,508	
Gross Fixed Assets - Closing	\$ 4,532,494,269	
Average Gross Fixed Assets	<u>\$ 4,358,033,172</u>	
Accumulated Depreciation - Opening	\$ 2,285,733,698	
Depreciation Expense	\$ 138,815,781	D
Disposals	\$ 2,807,234	
Retirements		
Accumulated Depreciation - Closing	\$ 2,427,356,713	
Average Accumulated Depreciation	<u>\$ 2,356,545,206</u>	
Average Net Fixed Assets	<u>\$ 2,001,487,967</u>	E
Working Capital Allowance		
Working Capital Allowance Base	\$ 2,479,952,766	
Working Capital Allowance Rate	12%	
Working Capital Allowance	<u>\$ 296,739,314</u>	F
Rate Base	<u>\$ 2,298,227,281</u>	G = E + F
Depreciation	D \$ 138,815,781	H
Threshold Test	124.62%	I = 1 + (G / H) * (B + A * (1 + B)) + (
Threshold CAPEX	\$ 172,989,465	J = H * I

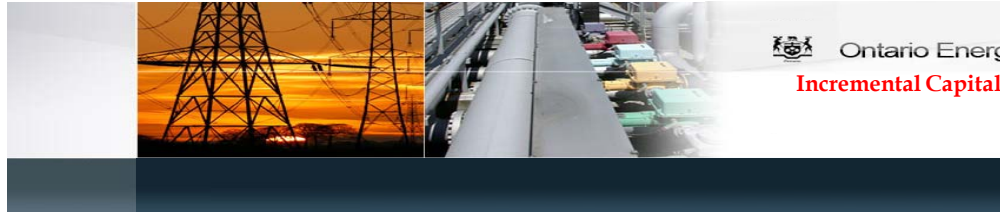


Summary of Incremental Capital Projects (ICPs)

Number of ICPs

1

Project ID #	Incremental Capital Non-Discretionary Project Description	Incremental Capital CAPEX	Amortization Expense	CCA
ICP 1	Summary of Projects (please see Schedule E02-2)	361,494,112	11,605,251	24,672,614
		<u>361,494,112</u>	<u>11,605,251</u>	<u>24,672,614</u>



Incremental Capital Adjustment

Current Revenue Requirement

Current Revenue Requirement - Total	\$533,324,186	A
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Return on Rate Base

Incremental Capital CAPEX		\$361,494,112	B
Depreciation Expense		\$ 11,605,251	C
Incremental Capital CAPEX to be included in Rate Base		\$349,888,861	D = B - C
Deemed Short Term Debt %	4.0%	E \$ 13,995,554	G = D * E
Deemed Long Term Debt %	56.0%	F \$ 195,937,762	H = D * F
Short Term Interest	2.46%	I \$ 344,291	K = G * I
Long Term Interest	5.37%	J \$ 10,521,858	L = H * J
Return on Rate Base - Interest		\$ 10,866,148	M = K + L
Deemed Equity %	40.0%	N \$ 139,955,544	P = D * N
Return on Rate Base -Equity	9.58%	O \$ 13,407,741	Q = P * O
Return on Rate Base - Total		\$ 24,273,890	R = M + Q

Amortization Expense

Amortization Expense - Incremental	C \$ 11,605,251	S
------------------------------------	-----------------	---

Grossed up PIL's

Regulatory Taxable Income	O \$ 13,407,741	T
Add Back Amortization Expense	S \$ 11,605,251	U
Deduct CCA	\$ 24,672,614	V
Incremental Taxable Income	\$ 340,378	W = T + U - V
Current Tax Rate (F1.1 Z-Factor Tax Changes)	26.4% X	
PIL's Before Gross Up	\$ 89,860	Y = W * X
Incremental Grossed Up PIL's	\$ 122,092	Z = Y / (1 - X)

Ontario Capital Tax

Incremental Capital CAPEX	\$361,494,112	AA
Less : Available Capital Exemption (if any)	\$ -	AB
Incremental Capital CAPEX subject to OCT	\$361,494,112	AC = AA - AB
Ontario Capital Tax Rate (F1.1 Z-Factor Tax Changes)	0.000% AD	
Incremental Ontario Capital Tax	\$ -	AE = AC * AD

Incremental Revenue Requirement

Return on Rate Base - Total	Q \$ 24,273,890	AF
Amortization Expense - Total	S \$ 11,605,251	AG
Incremental Grossed Up PIL's	Z \$ 122,092	AH
Incremental Ontario Capital Tax	AE \$ -	AI
Incremental Revenue Requirement	\$ 36,001,232	AJ = AF + AG + AH + AI



Calculation of Incremental Capital Rate Rider - Option A Fixed and Variable

Rate Class	Distribution Volumetric		Distribution Volumetric		Service Charge Revenue D = \$N * A	Distribution Volumetric Rate Revenue kWh E = \$N * B	Distribution Volumetric Rate Revenue kW F = \$N * C	Total Revenue by Rate Class G = D + E + F	Billed Customers or Connections H	Billed kWh I	Billed kW J	Service Charge Rate Rider K = D / H / 12	Distribution Volumetric Rate kWh L = E / I	Distribution Volumetric Rate kW M = F / J
	Service Charge % Revenue A	Rate % Revenue kWh B	Rate % Revenue kW C	Service Charge Revenue D = \$N * A										
Residential	24.9%	14.0%	0.0%	\$ 8,970,155.54	\$ 5,040,103.90	\$ -	\$ 14,010,259.44	598,508	4,886,977,489	0	\$1.248961	\$0.001031		
Residential Urban	0.4%	0.5%	0.0%	\$ 139,653.66	\$ 175,172.30	\$ -	\$ 314,825.96	24,898	99,791,184	0	\$0.467419	\$0.001755		
General Service Less Than 50 kW	3.6%	9.1%	0.0%	\$ 1,312,948.03	\$ 3,289,760.88	\$ -	\$ 4,602,708.91	65,792	2,139,318,076	0	\$1.663000	\$0.001538		
General Service 50 to 999 kW	1.1%	0.0%	28.7%	\$ 381,583.69	\$ -	\$ 10,314,605.55	\$ 10,696,189.24	13,067	10,116,374,153	26,935,191	\$2.433591	\$0.000000	\$0.382942	
General Service 1,000 to 4,999 kW	0.8%	0.0%	9.0%	\$ 289,764.72	\$ -	\$ 3,223,995.57	\$ 3,513,760.29	514	4,626,928,262	10,587,119	\$46.978715	\$0.000000	\$0.304521	
Large Use	0.3%	0.0%	4.5%	\$ 116,145.68	\$ -	\$ 1,620,110.20	\$ 1,736,255.88	47	2,376,778,323	4,993,733	\$205.932059	\$0.000000	\$0.324429	
Street Lighting	0.5%	0.0%	1.8%	\$ 173,781.53	\$ -	\$ 633,037.76	\$ 806,819.29	162,777	110,165,016	322,023	\$0.088967	\$0.000000	\$1.965816	
Unmetered Scattered Load	0.0%	0.6%	0.0%	\$ 454.58	\$ 233,590.36	\$ -	\$ 234,044.94	1,130	56,231,585	0	\$0.033534	\$0.004154		
Unmetered Scattered Load	0.2%	0.0%	0.0%	\$ 86,368.22	\$ -	\$ -	\$ 86,368.22	21,729	0	0	\$0.331231			
				\$11,470,855.64	\$ 8,738,627.45	\$ 15,791,749.08	\$ 36,001,232.17							

Enter the above rate riders onto "Sheet 14. Proposed Rate_Riders" in the 2012 OEB IRM3 Rate Generator as an "Rate Rider for Incremental Capital"



Ontario Energy Board

Incremental Capital Workform

Calculation of Incremental Capital Rate Rider - Option B Variable

Rate Class	Total Revenue \$ by Rate Class A	Total Revenue % by Rate Class B = A / \$H	Total Incremental Capital \$ by Rate Class C = \$I * B	Billed kWh D	Billed kW E	Distribution Volumetric Rate kWh Rate Rider F = C / D	Distribution Volumetric Rate kW Rate Rider G = C / E
Residential	\$204,720,003	38.92%	\$14,010,259	4,886,977,489	0	\$0.0029	
Residential Urban	\$4,600,284	0.87%	\$314,826	99,791,184	0	\$0.0032	
General Service Less Than 50 kW	\$67,255,470	12.78%	\$4,602,709	2,139,318,076	0	\$0.0022	
General Service 50 to 999 kW	\$156,294,314	29.71%	\$10,696,189	#####	26,935,191		\$0.3971
General Service 1,000 to 4,999 kW	\$51,343,590	9.76%	\$3,513,760	4,626,928,262	10,587,119		\$0.3319
Large Use	\$25,370,430	4.82%	\$1,736,256	2,376,778,323	4,993,733		\$0.3477
Street Lighting	\$11,789,364	2.24%	\$806,819	110,165,016	322,023		\$2.5055
Unmetered Scattered Load	\$3,419,900	0.65%	\$234,045	56,231,585	0	\$0.0042	
Unmetered Scattered Load	\$1,262,025	0.24%	\$86,368	0	0		
	<u>\$526,055,380</u> H	<u>100.00%</u>	<u>\$36,001,232</u> I				

Enter the above rate riders onto "Sheet 14. Proposed Rate_Riders" in the 2012 OEB IRM3 Rate Generator as an "Rate Rider for Incremental Capital"

ICM Values Calculation - 2013

	Net Fixed Asset	Amort. Exp	CCA
01 Underground Infrastructure	53,019,759	1,724,248	4,241,581
02 Paper Insulated Lead Covered Cable - Piece Outs and Leakers	5,179,019	141,840	414,321
03 Handwell Replacement	14,450,828	361,271	1,156,066
04 Overhead Infrastructure	53,018,072	1,421,159	4,241,446
05 Box Construction	20,535,926	523,324	1,642,874
06 Rear Lot Construction	20,734,567	660,170	1,658,765
07 Polymer SMD - 20 Switches	2,948,667	88,077	235,893
08 Scadamate R1 Switches	2,803,776	92,439	224,302
09 Network Vault & Roofs	12,309,785	384,084	984,783
10 Fibertop Network Units	8,778,013	419,666	702,241
11 Automatic Transfer Switches (ATS) % Reverse Power Breakers (RPB)	3,297,775	155,044	263,822
12 Stations Power Transformers	2,558,251	80,047	204,366
14 Stations Circuit Breakers	1,076,332	35,878	86,107
15 Stations Control & Communication Systems	2,154,380	143,625	430,876
16 Downtown Station Load Transfers	1,585,675	44,989	126,854
17 Bremner Transformer Station	69,382,972	1,759,544	4,111,852
18 Hydro One Capital Contributions	52,118,000	2,084,720	0
20 Metering	7,205,079	312,442	576,406
21 Externally-Initiated Plant Relocations and Expansions	17,670,845	521,762	1,413,668
22 Grid Solutions	3,597,000	389,675	1,390,840
19 FEEDER AUTOMATION (Prorated)	7,069,391	261,247	565,551
19 Feeder Automation	16,302,538	602,454	1,304,203
19 FEEDER AUTOMATION (Prorated)	9,233,147	341,207	738,652
13 Stations Switchgear	18,756,318	476,263	1,503,686
PCI Total	145,000,000	0	0
Total	534,483,577	12,422,721	26,914,952
Threshold CAPEX	\$ 172,989,465		
	Net Fixed Asset	Amort. Exp	CCA
Values Above Threshold for ICM Model	361,494,112	11,605,251	24,672,614
Threshold Values	172,989,465	817,470	2,242,338

Calculation of ICM Rate Rider on Days of Service Basis

Rate Class	Service Charge Rate Rider K = D / H / 12	Distribution Volumetric Rate kWh Rate Rider L = E / I	Distribution Volumetric Rate kW Rate Rider M = F / J	Service Charge Rate Rider (DOS)	Distribution Volumetric Rate kWh Rate Rider	Distribution Volumetric Rate kW Rate Rider (DOS)
Residential	\$1.2490	\$0.001031		\$1.231852	\$0.001031	
Residential Urban	\$0.4674	\$0.001755		\$0.461016	\$0.001755	
General Service Less Than 50 kW	\$1.6630	\$0.001538		\$1.640219	\$0.001538	
General Service 50 to 999 kW	\$2.4336	\$0.000000	\$0.3829	\$2.400254		\$0.377696
General Service 1,000 to 4,999 kW	\$46.9787	\$0.000000	\$0.3045	\$46.335171		\$0.300349
Large Use	\$205.9321	\$0.000000	\$0.3244	\$203.111072		\$0.319985
Street Lighting	\$0.0890	\$0.000000	\$1.9658	\$0.087748		\$1.938887
Unmetered Scattered Load	\$0.0335	\$0.004154		\$0.033075	\$0.004154	
Unmetered Scattered Load	\$0.3312			\$0.326694		



Ontario Energy Board

**Incremental Capital
 Workform**

Legend

DROP-DOWN MENU

INPUT FIELD

CALCULATION

Applicant Name	Toronto Hydro-Electric System Limited
Application Type	IRM3
LDC Licence Number	ED-2002-0497
Applied for Effective Date	May 1, 2012
Stretch Factor Group	III
Stretch Factor Value	0.6%
Last COS Re-based Year	2011
Last COS OEB Application Number	EB-2010-0142
ICM Billing Determinants for Growth - Numerator	2011 Re-Based Forecast
ICM Billing Determinants for Growth - Denominator	2010 Audited RRR



Table of Contents

Sheet Name	Purpose of Sheet
A1.1 LDC Information	Enter LDC Data
A2.1 Table of Contents	Table of Contents
B1.1 Re-Based Bill Det & Rates	Set Up Rate Classes and enter Re-Based Billing Determinants and Tariff Rates
B1.2 Removal of Rate Adders	Removal of Rate Adders
B1.3 Re-Based Rev From Rates	Calculated Re-Based Revenue From Rates
B1.4 Re-Based Rev Req	Detailed Re-Based Revenue From Rates
C1.1 Ld Act-Mst Rcent Yr	Enter Billing Determinants for most recent actual year
D1.1 Current Revenue from Rates	Enter Current Rates to calculate current rate allocation
E1.1 Threshold Parameters	Shows calculation of Price Cap and Growth used for incremental capital threshold calculation
E2.1 Threshold Test	Input sheet to calculate Threshold and Incremental Capital
E3.1 Summary of I C Projects	Summary of Incremental Capital Projects
E4.1 IncrementalCapitalAdjust	Shows Calculation of Incremental Capital Revenue Requirement
F1.1 Incr Cap RRider Opt A FV	Option A - Calculation of Incremental Capital Rate Rider - Fixed & Variable Split
F1.2 Incr Cap RRider Opt B Var	Option B - Calculation of Incremental Capital Rate Rider - Variable Allocation
Z1.0 OEB Control Sheet	Not Shown



Rate Class and Re-Based Billing Determinants & Rates

Select the appropriate Rate Groups and Rate Classes from the drop-down menus in Columns C and D respectively. Following your selection, all appropriate input cells will be shaded green.

Last COS Re-based Year				2011					
Last COS OEB Application Number				EB-2010-0142					
Rate Group	Rate Class	Fixed Metric	Vol Metric	Re-based Billed Customers or Connections A	Re-based Billed kWh B	Re-based Billed kW C	Re-based Tariff Service Charge D	Re-based Tariff Distribution Volumetric Rate kWh E	Re-based Tariff Distribution Volumetric Rate kW F
RES	Residential	Customer	kWh	598,508	4,886,977,489		18.25	0.0151	
RES	Residential Urban	Customer	kWh	24,898	99,791,184		17.00	0.0257	
GSLT50	General Service Less Than 50 kW	Customer	kWh	65,792	2,139,318,076	0	24.30	0.0225	
GSGT50	General Service 50 to 999 kW	Customer	kW	13,067	10,116,374,153	26,935,191	35.56		5.5956
GSGT50	General Service 1,000 to 4,999 kW	Customer	kW	514	4,626,928,262	10,587,119	686.46		4.4497
LU	Large Use	Customer	kW	47	2,376,778,323	4,993,733	3,009.11		4.7406
SL	Street Lighting	Connection	kW	162,777	110,165,016	322,023	1.30		28.7248
USL	Unmetered Scattered Load	Connection	kWh	1,130	56,231,585		4.84	0.0607	
USL	Unmetered Scattered Load	Connection	kWh	21,729	0		0.49		
NA	Rate Class 10	NA	NA						
NA	Rate Class 11	NA	NA						
NA	Rate Class 12	NA	NA						
NA	Rate Class 13	NA	NA						
NA	Rate Class 14	NA	NA						
NA	Rate Class 15	NA	NA						
NA	Rate Class 16	NA	NA						
NA	Rate Class 17	NA	NA						
NA	Rate Class 18	NA	NA						
NA	Rate Class 19	NA	NA						
NA	Rate Class 20	NA	NA						
NA	Rate Class 21	NA	NA						
NA	Rate Class 22	NA	NA						
NA	Rate Class 23	NA	NA						
NA	Rate Class 24	NA	NA						
NA	Rate Class 25	NA	NA						



Removal of Rate Adders

Last COS Re-based Year
 Last COS OEB Application Number

Rate Class	Re-based Tariff	Re-based Tariff		Re-based Tariff		Service Charge	Distribution		Distribution		Re-based Base	Re-based Base		Re-based Base	
	Service Charge	Distribution	Volumetric	Distribution	Volumetric		Volumetric kWh Rate	Volumetric kW Rate	Service Charge	Distribution		Volumetric	Distribution	Volumetric	Distribution
	A	B	C	C	C	D	E	F	H = A - D	I = B - E	J = C - F				
Residential	18.25	0.0151	0.0000	0.0000	0.0000	0.00	0.0000	0.0000	18.25	0.0151	0.0000				
Residential Urban	17.00	0.0257	0.0000	0.0000	0.0000	0.00	0.0000	0.0000	17.00	0.0257	0.0000				
General Service Less Than 50 kW	24.30	0.0225	0.0000	0.0000	0.0000	0.00	0.0000	0.0000	24.30	0.0225	0.0000				
General Service 50 to 999 kW	35.56	0.0000	5.5956	0.0000	0.0000	0.00	0.0000	0.0000	35.56	0.0000	5.5956				
General Service 1,000 to 4,999 kW	686.46	0.0000	4.4497	0.0000	0.0000	0.00	0.0000	0.0000	686.46	0.0000	4.4497				
Large Use	3,009.11	0.0000	4.7406	0.0000	0.0000	0.00	0.0000	0.0000	3,009.11	0.0000	4.7406				
Street Lighting	1.30	0.0000	28.7248	0.0000	0.0000	0.00	0.0000	0.0000	1.30	0.0000	28.7248				
Unmetered Scattered Load	4.84	0.0607	0.0000	0.0000	0.0000	0.00	0.0000	0.0000	4.84	0.0607	0.0000				
Unmetered Scattered Load	0.49	0.0000	0.0000	0.0000	0.0000	0.00	0.0000	0.0000	0.49	0.0000	0.0000				



Ontario Energy Board

Incremental Capital Workform

Calculated Re-Based Revenue From Rates

Last COS Re-based Year

2011

Last COS OEB Application Number

EB-2010-0142

Rate Class	Re-based Billed	Re-based Billed kWh	Re-based Billed kW	Re-based Base Service Charge	Re-based Base	Re-based Base	Distribution Volumetric Rate kWh	Distribution Volumetric Rate kW	Service Charge Revenue	Distribution	Distribution	Revenue Requirement from Rates
	Customers or Connections				Distribution Volumetric Rate kWh	Distribution Volumetric Rate kW				Rate kWh	Rate kW	
	A	B	C	D	E	F			G = A * D * 12	H = B * E	I = C * F	J = G + H + I
Residential	598,508	4,886,977,489	0	18.25	0.0151	0.0000			131,073,252	73,646,751	0	204,720,003
Residential Urban	24,898	99,791,184	0	17.00	0.0257	0.0000			5,079,192	2,559,644	0	7,638,836
General Service Less Than 50 kW	65,792	2,139,318,076	0	24.30	0.0225	0.0000			19,184,993	48,070,477	0	67,255,470
General Service 50 to 999 kW	13,067	10,116,374,153	26,935,191	35.56	0.0000	5.5956			5,575,758	0	150,718,556	156,294,314
General Service 1,000 to 4,999 kW	514	4,626,928,262	10,587,119	686.46	0.0000	4.4497			4,234,085	0	47,109,505	51,343,590
Large Use	47	2,376,778,323	4,993,733	3,009.11	0.0000	4.7406			1,697,138	0	23,673,292	25,370,430
Street Lighting	162,777	110,165,016	322,023	1.30	0.0000	28.7248			2,539,322	0	9,250,042	11,789,364
Unmetered Scattered Load	1,130	56,231,585	0	4.84	0.0607	0.0000			65,611	3,413,257	0	3,478,868
Unmetered Scattered Load	21,729	0	0	0.49	0.0000	0.0000			127,767	0	0	127,767
									169,577,117	127,690,129	230,751,395	528,018,642
	O	P	Q	R								



Ontario Energy Board
Incremental Capital Workform

Detailed Re-Based Revenue From Rates

Last COS Re-based Year	2011
Last COS OEB Application Number	EB-2010-0142

Applicants Rate Base

Average Net Fixed Assets

			Last Rate Re-based Amount	
Gross Fixed Assets - Re-based Opening	\$	4,183,572,075	A	
Add: CWIP Re-based Opening	\$	204,719,106	B	
Re-based Capital Additions	\$	376,263,596	C	
Re-based Capital Disposals			D	
Re-based Capital Retirements			E	
Deduct: CWIP Re-based Closing	-\$	232,060,508	F	
Gross Fixed Assets - Re-based Closing	\$	4,532,494,269	G	
Average Gross Fixed Assets				\$ 4,358,033,172 H = (A + G) / 2

Accumulated Depreciation - Re-based Opening	\$	2,285,733,698	I	
Re-based Depreciation Expense	\$	138,815,781	J	
Re-based Disposals	\$	2,807,234	K	
Re-based Retirements			L	
Accumulated Depreciation - Re-based Closing	\$	2,427,356,713	M	
Average Accumulated Depreciation				\$ 2,356,545,206 N = (I + M) / 2

Average Net Fixed Assets \$ **2,001,487,967** O = H - N

Working Capital Allowance

Working Capital Allowance Base	\$	2,479,952,766	P	
Working Capital Allowance Rate		12.0%	Q	

Working Capital Allowance \$ **296,739,314** R = P * Q

Rate Base \$ **2,298,227,281** S = O + R

Return on Rate Base

Deemed Short Term Debt %	4.00%	T	\$ 91,929,091	W = S * T
Deemed Long Term Debt %	56.00%	U	\$ 1,287,007,277	X = S * U
Deemed Equity %	40.00%	V	\$ 919,290,912	Y = S * V

Short Term Interest	2.46%	Z	\$ 2,261,456	AC = W * Z
Long Term Interest	5.37%	AA	\$ 69,112,291	AD = X * AA
Return on Equity	9.58%	AB	\$ 88,068,069	AE = Y * AB
Return on Rate Base			\$ 159,441,816	AF = AC + AD + AE

Distribution Expenses

OM&A Expenses	\$	231,014,224	AG	
Amortization	\$	138,815,781	AH	
Ontario Capital Tax (F1.1 Z-Factor Tax Changes)	\$	6,802,382	AI	
Grossed Up PILS (F1.1 Z-Factor Tax Changes)	\$	11,791,223	AJ	
Low Voltage			AK	
Transformer Allowance	\$	11,479,842	AL	
	\$	-	AM	
			AN	
			AO	
				\$ 399,903,452 AP = SUM (AG : AO)

Revenue Offsets

Specific Service Charges	-\$	7,580,526	AQ	
Late Payment Charges	-\$	4,900,000	AR	
Other Distribution Income	-\$	7,240,556	AS	
Other Income and Deductions	-\$	6,300,000	AT	
				26,021,082 AU = SUM (AQ : AT)

Revenue Requirement from Distribution Rates \$ **533,324,186** AV = AF + AP + AU

Rate Classes Revenue

Rate Classes Revenue - Total (B1.1 Re-based Revenue - Gen) \$ 528,018,642 AW

Difference \$ 5,305,544 AZ = AV - AW

Difference (Percentage - should be less than 1%) 1.00% BA = AZ / AW



 Ontario Energy Board
Incremental Capital Workform

Load Actual - Most Recent Year

Rate Class	Fixed Metric	Vol Metric	Billed Customers or Connections			Base Distribution Volumetric Rate			Distribution Volumetric Rate			Total Revenue by Rate Class
			A	B	C	Base Service Charge D	Volumetric Rate kWh E	Volumetric Rate kW F	Service Charge Revenue G = A * D * 12	Rate Revenue kWh H = B * E	Rate Revenue kW I = C * F	
Residential	Customer	kWh	591,496	5,105,974,275	0	\$18.25	\$0.0151	\$0.0000	\$129,537,624	\$76,947,032	\$0	\$206,484,656
Residential Urban	Customer	kWh	24,898	99,791,184	0	\$17.00	\$0.0257	\$0.0000	\$5,079,192	\$2,559,644	\$0	\$7,638,836
General Service Less Than 50 kW	Customer	kWh	65,799	2,095,343,918	0	\$24.30	\$0.0225	\$0.0000	\$19,186,988	\$47,082,378	\$0	\$66,269,366
General Service 50 to 999 kW	Customer	kW	12,873	10,189,051,346	26,712,248	\$35.56	\$0.0000	\$5.5956	\$5,493,167	\$0	\$149,471,055	\$154,964,221
General Service 1,000 to 4,999 kW	Customer	kW	509	4,828,382,733	10,972,419	\$686.46	\$0.0000	\$4.4497	\$4,192,898	\$0	\$48,823,974	\$53,016,871
Large Use	Customer	kW	47	2,263,227,585	5,267,224	\$3,009.11	\$0.0000	\$4.7406	\$1,697,138	\$0	\$24,969,801	\$26,666,940
Street Lighting	Connection	kW	162,964	112,727,603	321,995	\$1.30	\$0.0000	\$28.7248	\$2,542,238	\$0	\$9,249,232	\$11,791,471
Unmetered Scattered Load	Connection	kWh	1,107	52,097,299	0	\$4.84	\$0.0607	\$0.0000	\$64,295	\$3,162,306	\$0	\$3,226,601
Unmetered Scattered Load	Connection	kWh	12,159	0	0	\$0.49	\$0.0000	\$0.0000	\$71,495	\$0	\$0	\$71,495
									\$167,865,035	\$129,751,360	\$232,514,062	\$530,130,457

 Ontario Energy Board
Incremental Capital Workform

This sheet is used to determine the applicants most current allocation of revenues (after the most recent revenue cost ratio adjustment, if applicable) to be used to calculate the incremental capital rate riders.

Current Revenue from Rates

Rate Class	Fixed Metric	Vol Metric	Current Base Service Charge A	Current Base Distribution Volumetric Rate kWh B	Current Base Distribution Volumetric Rate kW C	Re-based Billed Customers or Connections D	Re-based Billed kWh E	Re-based Billed kW F	Current Base Service Charge Revenue G = A * D * 12	Current Base Distribution Volumetric Rate kWh Revenue H = B * E	Current Base Distribution Volumetric Rate kW Revenue I = C * F	Total Current Base Revenue J = G + H + I	Service Charge % Total Revenue L = G / \$K	Distribution Volumetric Rate % Total Revenue M = H / \$K	Distribution Volumetric Rate % Total Revenue N = I / \$K	Total % Revenue O = J / \$K
Residential	Customer	kWh	18.25	0.0151		598,508	4,886,977,489	0	131,073,252	73,646,751	0	204,720,003	24.9%	14.0%	0.0%	38.9%
Residential Urban	Customer	kWh	6.83	0.0257		24,898	99,791,184	0	2,040,640	2,559,644	0	4,600,284	0.4%	0.5%	0.0%	0.9%
General Service Less Than 50 kW	Customer	kWh	24.30	0.0225		65,792	2,139,318,076	0	19,184,993	48,070,477	0	67,255,470	3.6%	9.1%	0.0%	12.8%
General Service 50 to 999 kW	Customer	kW	35.56		5.5956	13,067	10,116,374,153	26,935,191	5,575,758	0	150,718,556	156,294,314	1.1%	0.0%	28.7%	29.7%
General Service 1,000 to 4,999 kW	Customer	kW	686.46		4.4497	514	4,626,928,262	10,587,119	4,234,085	0	47,109,505	51,343,590	0.8%	0.0%	9.0%	9.8%
Large Use	Customer	kW	3,009.11		4.7406	47	2,376,778,323	4,993,733	1,697,138	0	23,673,292	25,370,430	0.3%	0.0%	4.5%	4.8%
Street Lighting	Connection	kW	1.30		28.7248	162,777	110,165,016	322,023	2,539,322	0	9,250,042	11,789,364	0.5%	0.0%	1.8%	2.2%
Unmetered Scattered Load	Connection	kWh	0.49	0.0607		1,130	56,231,585	0	6,642	3,413,257	0	3,419,900	0.0%	0.6%	0.0%	0.7%
Unmetered Scattered Load	Connection	kWh	4.84			21,729	0	0	1,262,025	0	0	1,262,025	0.2%	0.0%	0.0%	0.2%
									167,613,855	127,690,129	230,751,395	526,055,380	31.9%	24.3%	43.9%	100.0%

K



Threshold Parameters

Price Cap Index

Price Escalator (GDP-IPI)	2.00%
Less Productivity Factor	-0.72%
Less Stretch Factor	-0.60%

Price Cap Index **0.68%**

Growth

ICM Billing Determinants for Growth - Numerator : 2011 Re-Based Forecast	<u>\$528,018,642</u>	A
ICM Billing Determinants for Growth - Denominator : 2010 Audited RRR	<u>\$530,130,457</u>	B

Growth **-0.40%** C = A / B



 Ontario Energy Board

Incremental Capital Workform

Threshold Test

Year	2011	
Price Cap Index	0.68%	A
Growth	-0.40%	B
Dead Band	20%	C
Average Net Fixed Assets		
Gross Fixed Assets Opening	\$ 4,183,572,075	
Add: CWIP Opening	\$ 204,719,106	
Capital Additions	\$ 376,263,596	
Capital Disposals	\$ -	
Capital Retirements	\$ -	
Deduct: CWIP Closing	-\$ 232,060,508	
Gross Fixed Assets - Closing	\$ 4,532,494,269	
Average Gross Fixed Assets	<u>\$ 4,358,033,172</u>	
Accumulated Depreciation - Opening	\$ 2,285,733,698	
Depreciation Expense	\$ 138,815,781	D
Disposals	\$ 2,807,234	
Retirements		
Accumulated Depreciation - Closing	\$ 2,427,356,713	
Average Accumulated Depreciation	<u>\$ 2,356,545,206</u>	
Average Net Fixed Assets	<u>\$ 2,001,487,967</u>	E
Working Capital Allowance		
Working Capital Allowance Base	\$ 2,479,952,766	
Working Capital Allowance Rate	12%	
Working Capital Allowance	<u>\$ 296,739,314</u>	F
Rate Base	<u>\$ 2,298,227,281</u>	G = E + F
Depreciation	D \$ 138,815,781	H
Threshold Test	124.62%	I = 1 + (G / H) * (B + A * (1 + B)) + C
Threshold CAPEX	\$ 172,989,465	J = H * I



Summary of Incremental Capital Projects (ICPs)

Number of ICPs

1

Project ID #	Incremental Capital Non-Discretionary Project Description	Incremental Capital CAPEX	Amortization Expense	CCA
ICP 1	Summary of Projects (please see Schedule E03-2)	133,239,694	4,494,789	9,336,431
		<u>133,239,694</u>	<u>4,494,789</u>	<u>9,336,431</u>



Incremental Capital Adjustment

Current Revenue Requirement

Current Revenue Requirement - Total	\$533,324,186	A
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Return on Rate Base

Incremental Capital CAPEX		\$133,239,694	B
Depreciation Expense		\$ 4,494,789	C
Incremental Capital CAPEX to be included in Rate Base		\$128,744,905	D = B - C
Deemed ShortTerm Debt %	4.0%	E \$ 5,149,796	G = D * E
Deemed Long Term Debt %	56.0%	F \$ 72,097,147	H = D * F
Short Term Interest	2.46%	I \$ 126,685	K = G * I
Long Term Interest	5.37%	J \$ 3,871,617	L = H * J
Return on Rate Base - Interest		\$ 3,998,302	M = K + L
Deemed Equity %	40.0%	N \$ 51,497,962	P = D * N
Return on Rate Base -Equity	9.58%	O \$ 4,933,505	Q = P * O
Return on Rate Base - Total		\$ 8,931,807	R = M + Q

Amortization Expense

Amortization Expense - Incremental	C \$ 4,494,789	S
------------------------------------	----------------	---

Grossed up PIL's

Regulatory Taxable Income	O \$ 4,933,505	T
Add Back Amortization Expense	S \$ 4,494,789	U
Deduct CCA	\$ 9,336,431	V
Incremental Taxable Income	\$ 91,862	W = T + U - V
Current Tax Rate (F1.1 Z-Factor Tax Changes)	26.4% X	
PIL's Before Gross Up	\$ 24,252	Y = W * X
Incremental Grossed Up PIL's	\$ 32,951	Z = Y / (1 - X)

Ontario Capital Tax

Incremental Capital CAPEX	\$133,239,694	AA
Less : Available Capital Exemption (if any)	\$ -	AB
Incremental Capital CAPEX subject to OCT	\$133,239,694	AC = AA - AB
Ontario Capital Tax Rate (F1.1 Z-Factor Tax Changes)	0.000% AD	
Incremental Ontario Capital Tax	\$ -	AE = AC * AD

Incremental Revenue Requirement

Return on Rate Base - Total	Q \$ 8,931,807	AF
Amortization Expense - Total	S \$ 4,494,789	AG
Incremental Grossed Up PIL's	Z \$ 32,951	AH
Incremental Ontario Capital Tax	AE \$ -	AI
Incremental Revenue Requirement	\$ 13,459,546	AJ = AF + AG + AH + AI



Ontario Energy Board
Incremental Capital Workform

Calculation of Incremental Capital Rate Rider - Option A Fixed and Variable

Rate Class	Distribution			Service Charge Revenue D = \$N * A	Distribution Volumetric Rate Revenue kWh E = \$N * B	Distribution Volumetric Rate Revenue kW F = \$N * C	Total Revenue by Rate Class G = D + E + F	Billed Customers or Connections			Service Charge Rate Rider K = D / H / 12	Distribution Volumetric Rate kWh Rate Rider L = E / I	Distribution Volumetric Rate kW Rate Rider M = F / J
	Service Charge % Revenue A	Distribution Volumetric Rate % Revenue kWh B	Distribution Volumetric Rate % Revenue kW C					Connections H	Billed kWh I	Billed kW J			
Residential	24.9%	14.0%	0.0%	\$ 3,353,613.60	\$ 1,884,310.81	\$ -	\$ 5,237,924.41	598,508	4,886,977,489	0	\$0.466941	\$0.000386	
Residential Urban	0.4%	0.5%	0.0%	\$ 52,211.40	\$ 65,490.53	\$ -	\$ 117,701.93	24,898	99,791,184	0	\$0.174751	\$0.000656	
General Service Less Than 50 kW	3.6%	9.1%	0.0%	\$ 490,863.33	\$ 1,229,921.47	\$ -	\$ 1,720,784.79	65,792	2,139,318,076	0	\$0.621735	\$0.000575	
General Service 50 to 999 kW	1.1%	0.0%	28.7%	\$ 142,660.21	\$ -	\$ 3,856,254.37	\$ 3,998,914.58	13,067	10,116,374,153	26,935,191	\$0.909831	\$0.000000	\$0.143168
General Service 1,000 to 4,999 kW	0.8%	0.0%	9.0%	\$ 108,332.45	\$ -	\$ 1,205,334.22	\$ 1,313,666.66	514	4,626,928,262	10,587,119	\$17.563626	\$0.000000	\$0.113849
Large Use	0.3%	0.0%	4.5%	\$ 43,422.63	\$ -	\$ 605,700.04	\$ 649,122.67	47	2,376,778,323	4,993,733	\$76.990477	\$0.000000	\$0.121292
Street Lighting	0.5%	0.0%	1.8%	\$ 64,970.57	\$ -	\$ 236,669.70	\$ 301,640.27	162,777	110,165,016	322,023	\$0.033262	\$0.000000	\$0.734947
Unmetered Scattered Load	0.0%	0.6%	0.0%	\$ 169.95	\$ 87,330.91	\$ -	\$ 87,500.86	1,130	56,231,585	0	\$0.012537	\$0.001553	
Unmetered Scattered Load	0.2%	0.0%	0.0%	\$ 32,289.92	\$ -	\$ -	\$ 32,289.92	21,729	0	0	\$0.123835		
				\$ 4,288,534.06	\$ 3,267,053.71	\$ 5,903,958.33	\$ 13,459,546.09						

Enter the above rate riders onto "Sheet 14. Proposed Rate_Riders" in the 2012 OEB IRM3 Rate Generator as an "Rate Rider for Incremental Capital"



Ontario Energy Board

Incremental Capital Workform

Calculation of Incremental Capital Rate Rider - Option B Variable

Rate Class	Total Revenue \$ by Rate Class A	Total Revenue % by Rate Class B = A / \$H	Total Incremental Capital \$ by Rate Class C = \$I * B	Billed kWh D	Billed kW E	Distribution Volumetric Rate kWh Rate Rider F = C / D	Distribution Volumetric Rate kW Rate Rider G = C / E
Residential	\$204,720,003	38.92%	\$5,237,924	4,886,977,489	0	\$0.0011	
Residential Urban	\$4,600,284	0.87%	\$117,702	99,791,184	0	\$0.0012	
General Service Less Than 50 kW	\$67,255,470	12.78%	\$1,720,785	2,139,318,076	0	\$0.0008	
General Service 50 to 999 kW	\$156,294,314	29.71%	\$3,998,915	#####	26,935,191		\$0.1485
General Service 1,000 to 4,999 kW	\$51,343,590	9.76%	\$1,313,667	4,626,928,262	10,587,119		\$0.1241
Large Use	\$25,370,430	4.82%	\$649,123	2,376,778,323	4,993,733		\$0.1300
Street Lighting	\$11,789,364	2.24%	\$301,640	110,165,016	322,023		\$0.9367
Unmetered Scattered Load	\$3,419,900	0.65%	\$87,501	56,231,585	0	\$0.0016	
Unmetered Scattered Load	\$1,262,025	0.24%	\$32,290	0	0		
	\$526,055,380	100.00%	\$13,459,546				
	H		I				

Enter the above rate riders onto "Sheet 14. Proposed Rate_Riders" in the 2012 OEB IRM3 Rate Generator as an "Rate Rider for Incremental Capital"

ICM Values Calculation - 2014 (NOTE: ICM Values reflect half-year rule)

	Net Fixed Asset	Amort. Exp	CCA
01 Underground Infrastructure	37,461,384	1,258,650	2,996,911
02 Paper Insulated Lead Covered Cable - Piece Outs and Leakers	733,306	18,333	58,665
18 Hydro One Capital Contributions	18,000,000	720,000	0
04 Overhead Infrastructure	10,056,813	267,000	804,545
05 Box Construction	13,881,105	357,242	1,110,489
06 Rear Lot Construction	5,515,970	213,747	441,278
07 Polymer SMD - 20 Switches	1,468,344	43,860	117,468
08 Scadamate R1 Switches	1,346,912	44,407	107,753
09 Network Vault & Roofs	7,787,313	216,045	622,985
10 Fibertop Network Units	4,678,787	223,823	374,303
11 Automatic Transfer Switches (ATS) % Reverse Power Breakers (RPB)	1,612,730	75,826	129,019
12 Stations Power Transformers	437,366	13,668	34,990
14 Stations Circuit Breakers	690,375	23,013	54,791
15 Stations Control & Communication Systems	668,356	44,557	133,671
16 Downtown Station Load Transfers	1,795,971	54,946	143,678
17 Bremner Transformer Station	11,508,278	342,579	769,948
03 Handwell Replacement	3,584,891	89,623	286,791
20 Metering	5,013,019	213,502	401,042
21 Externally-Initiated Plant Relocations and Expansions	6,671,463	220,785	533,717
22 Grid Solutions (Prorated)	327,316	53,189	214,392
22 Grid Solutions (Original)	959,200	155,870	628,276
22 Grid Solutions (Prorated)	304,567	49,492	199,492
19 Feeder Automation	7,376,248	245,558	590,100
13 Stations Switchgear	20,308,650	520,944	1,625,438
PCI Total	145,000,000	0	0
Total	306,229,159	5,310,783	11,751,461
Threshold CAPEX	\$ 172,989,465		
	Net Fixed Asset	Amort. Exp	CCA
Values Above Threshold for ICM Model	133,239,694	4,494,789	9,336,431
Threshold Values	172,989,465	815,994	2,415,030

Calculation of ICM Rate Rider on Days of Service Basis

Rate Class	Service Charge Rate Rider K = D / H / 12	Distribution Volumetric Rate kWh Rate Rider L = E / I	Distribution Volumetric Rate kW Rate Rider M = F / J	Service Charge Rate Rider (DOS)	Distribution Volumetric Rate kWh Rate Rider	Distribution Volumetric Rate kW Rate Rider (DOS)
Residential	\$0.4669	\$0.000386		\$0.460545	\$0.000386	
Residential Urban	\$0.1748	\$0.000656		\$0.172357	\$0.000656	
General Service Less Than 50 kW	\$0.6217	\$0.000575		\$0.613218	\$0.000575	
General Service 50 to 999 kW	\$0.9098	\$0.000000	\$0.1432	\$0.897368		\$0.141207
General Service 1,000 to 4,999 kW	\$17.5636	\$0.000000	\$0.1138	\$17.323028		\$0.112289
Large Use	\$76.9905	\$0.000000	\$0.1213	\$75.935813		\$0.119630
Street Lighting	\$0.0333	\$0.000000	\$0.7349	\$0.032806		\$0.724879
Unmetered Scattered Load	\$0.0125	\$0.001553		\$0.012365	\$0.001553	
Unmetered Scattered Load	\$0.1238			\$0.122139		



Incremental Capital Project Summary

Using the pull-down menu below, please identify what year of the IRM cycle you are in.

2nd Year of IRM Cycle

Name or General Description of Project

C1 Underground Infrastructure

Year

2012

Details of Project

C1 Underground Infrastructure

Number of Asset Components

14

Asset Component (Click on the Number to View the Component Details)	Capital Cost	Depreciation Rate	CCA Class	CCA Rate
1 1830_Poles Towers and Fixtures	1,179,996	3%	47	8%
2 1835_Overhead Conductors and Devices	860,906	2%	47	8%
3 1835_Overhead Conductors and Devices - Switches	862,523	3%	47	8%
4 1840_Underground Conduit - Cable Chamber	1,112,655	2%	47	8%
5 1840_Underground Conduit - Duct Bank	30,609,335	3%	47	8%
6 1840_Underground Conduit - Vault	553,130	3%	47	8%
7 1840_Underground Conduit - Vault Roof	51,151	5%	47	8%
8 1845_Underground Conductors and Devices	6,313,666	3%	47	8%
9 1845_Underground Conductors and Devices - Switch	2,897,681	5%	47	8%
10 1850_Line Transformers - OH	71,448	3%	47	8%
11 1850_Line Transformers - UG	1,746,294	3%	47	8%
12 1860_Meters - Smart Meters	11,030	7%	47	8%
13 1855_Services - UG	558,184	3%	47	8%
14 1855_Services - OH	109,675	2%	47	8%

	2012	2013	2014
Closing Net Fixed Asset	45,423,054	43,908,435	42,393,815
Amortization Expense	1,514,619	1,514,619	1,514,619
CCA	3,755,014	3,454,613	3,178,244



Incremental Capital Project Summary

[Return to Main Summary](#)

Fixed Asset Amortization and UCC 1

Name or General Description of Project

C1 Underground Infrastructure

Asset Component

1830_Poles Towers and Fixtures

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 1,179,996	\$ 1,179,996
Capital Investment	\$ 1,179,996	\$ -	\$ -
Closing Capital Investment	\$ 1,179,996	\$ 1,179,996	\$ 1,179,996
Opening Accumulated Amortization	\$ -	\$ 29,500	\$ 59,000
Amortization	3% \$ 29,500	\$ 29,500	\$ 29,500
Closing Accumulated Amortization	\$ 29,500	\$ 59,000	\$ 88,500
Opening Net Fixed Assets	\$ -	\$ 1,150,496	\$ 1,120,996
Closing Net Fixed Assets	\$ 1,150,496	\$ 1,120,996	\$ 1,091,496
Average Net Fixed Assets	\$ 575,248	\$ 1,135,746	\$ 1,106,246

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 1,085,596	\$ 998,748
Capital Additions	\$ 1,179,996	\$ -	\$ -
UCC Before Half Year Rule	\$ 1,179,996	\$ 1,085,596	\$ 998,748
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 1,179,996	\$ 1,085,596	\$ 998,748
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 94,400	\$ 86,848	\$ 79,900
Closing UCC	\$ 1,085,596	\$ 998,748	\$ 918,849



Incremental Capital Project Summary

[Return to Main Summary](#)

Fixed Asset Amortization and UCC 2

Name or General Description of Project

C1 Underground Infrastructure

Asset Component

1835 Overhead Conductors and Devices

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 860,906	\$ 860,906
Capital Investment	\$ 860,906	\$ -	\$ -
Closing Capital Investment	\$ 860,906	\$ 860,906	\$ 860,906
Opening Accumulated Amortization	\$ -	\$ 17,218	\$ 34,436
Amortization	2% \$ 17,218	\$ 17,218	\$ 17,218
Closing Accumulated Amortization	\$ 17,218	\$ 34,436	\$ 51,654
Opening Net Fixed Assets	\$ -	\$ 843,687	\$ 826,469
Closing Net Fixed Assets	\$ 843,687	\$ 826,469	\$ 809,251
Average Net Fixed Assets	\$ 421,844	\$ 835,078	\$ 817,860

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 792,033	\$ 728,670
Capital Additions	\$ 860,906	\$ -	\$ -
UCC Before Half Year Rule	\$ 860,906	\$ 792,033	\$ 728,670
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 860,906	\$ 792,033	\$ 728,670
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 68,872	\$ 63,363	\$ 58,294
Closing UCC	\$ 792,033	\$ 728,670	\$ 670,377



Incremental Capital Project Summary

[Return to Main Summary](#)

Fixed Asset Amortization and UCC 3

Name or General Description of Project

C1 Underground Infrastructure

Asset Component

1835_Overhead Conductors and Devices - Switches

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 862,523	\$ 862,523
Capital Investment	\$ 862,523	\$ -	\$ -
Closing Capital Investment	\$ 862,523	\$ 862,523	\$ 862,523
Opening Accumulated Amortization	\$ -	\$ 28,751	\$ 57,502
Amortization	3% \$ 28,751	\$ 28,751	\$ 28,751
Closing Accumulated Amortization	\$ 28,751	\$ 57,502	\$ 86,252
Opening Net Fixed Assets	\$ -	\$ 833,772	\$ 805,021
Closing Net Fixed Assets	\$ 833,772	\$ 805,021	\$ 776,270
Average Net Fixed Assets	\$ 416,886	\$ 819,396	\$ 790,646

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 793,521	\$ 730,039
Capital Additions	\$ 862,523	\$ -	\$ -
UCC Before Half Year Rule	\$ 862,523	\$ 793,521	\$ 730,039
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 862,523	\$ 793,521	\$ 730,039
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 69,002	\$ 63,482	\$ 58,403
Closing UCC	\$ 793,521	\$ 730,039	\$ 671,636



Incremental Capital Project Summary

[Return to Main Summary](#)

Fixed Asset Amortization and UCC 4

Name or General Description of Project

C1 Underground Infrastructure

Asset Component

1840 Underground Conduit - Cable Chamber

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 1,112,655	\$ 1,112,655
Capital Investment	\$ 1,112,655	\$ -	\$ -
Closing Capital Investment	\$ 1,112,655	\$ 1,112,655	\$ 1,112,655
Opening Accumulated Amortization	\$ -	\$ 22,253	\$ 44,506
Amortization	2% \$ 22,253	\$ 22,253	\$ 22,253
Closing Accumulated Amortization	\$ 22,253	\$ 44,506	\$ 66,759
Opening Net Fixed Assets	\$ -	\$ 1,090,402	\$ 1,068,149
Closing Net Fixed Assets	\$ 1,090,402	\$ 1,068,149	\$ 1,045,896
Average Net Fixed Assets	\$ 545,201	\$ 1,079,276	\$ 1,057,023

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 1,023,643	\$ 941,752
Capital Additions	\$ 1,112,655	\$ -	\$ -
UCC Before Half Year Rule	\$ 1,112,655	\$ 1,023,643	\$ 941,752
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 1,112,655	\$ 1,023,643	\$ 941,752
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 89,012	\$ 81,891	\$ 75,340
Closing UCC	\$ 1,023,643	\$ 941,752	\$ 866,411



Incremental Capital Project Summary

[Return to Main Summary](#)

Fixed Asset Amortization and UCC 5

Name or General Description of Project

C1 Underground Infrastructure

Asset Component

1840 Underground Conduit - Duct Bank

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 30,609,335	\$ 30,609,335
Capital Investment	\$ 30,609,335	\$ -	\$ -
Closing Capital Investment	\$ 30,609,335	\$ 30,609,335	\$ 30,609,335
Opening Accumulated Amortization	\$ -	\$ 1,020,311	\$ 2,040,622
Amortization	3% \$ 1,020,311	\$ 1,020,311	\$ 1,020,311
Closing Accumulated Amortization	\$ 1,020,311	\$ 2,040,622	\$ 3,060,934
Opening Net Fixed Assets	\$ -	\$ 29,589,024	\$ 28,568,713
Closing Net Fixed Assets	\$ 29,589,024	\$ 28,568,713	\$ 27,548,402
Average Net Fixed Assets	\$ 14,794,512	\$ 29,078,869	\$ 28,058,557

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 28,160,588	\$ 25,907,741
Capital Additions	\$ 30,609,335	\$ -	\$ -
UCC Before Half Year Rule	\$ 30,609,335	\$ 28,160,588	\$ 25,907,741
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 30,609,335	\$ 28,160,588	\$ 25,907,741
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 2,448,747	\$ 2,252,847	\$ 2,072,619
Closing UCC	\$ 28,160,588	\$ 25,907,741	\$ 23,835,122



Incremental Capital Project Summary

[Return to Main Summary](#)

Fixed Asset Amortization and UCC 6

Name or General Description of Project

C1 Underground Infrastructure

Asset Component

1840 Underground Conduit - Vault

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 553,130	\$ 553,130
Capital Investment	\$ 553,130	\$ -	\$ -
Closing Capital Investment	\$ 553,130	\$ 553,130	\$ 553,130
Opening Accumulated Amortization	\$ -	\$ 13,828	\$ 27,656
Amortization	3% \$ 13,828	\$ 13,828	\$ 13,828
Closing Accumulated Amortization	\$ 13,828	\$ 27,656	\$ 41,485
Opening Net Fixed Assets	\$ -	\$ 539,302	\$ 525,473
Closing Net Fixed Assets	\$ 539,302	\$ 525,473	\$ 511,645
Average Net Fixed Assets	\$ 269,651	\$ 532,388	\$ 518,559

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 508,880	\$ 468,169
Capital Additions	\$ 553,130	\$ -	\$ -
UCC Before Half Year Rule	\$ 553,130	\$ 508,880	\$ 468,169
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 553,130	\$ 508,880	\$ 468,169
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 44,250	\$ 40,710	\$ 37,454
Closing UCC	\$ 508,880	\$ 468,169	\$ 430,716



Incremental Capital Project Summary

[Return to Main Summary](#)

Fixed Asset Amortization and UCC 7

Name or General Description of Project

C1 Underground Infrastructure

Asset Component

1840 Underground Conduit - Vault Roof

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 51,151	\$ 51,151
Capital Investment	\$ 51,151	\$ -	\$ -
Closing Capital Investment	\$ 51,151	\$ 51,151	\$ 51,151
Opening Accumulated Amortization	\$ -	\$ 2,558	\$ 5,115
Amortization	5% \$ 2,558	\$ 2,558	\$ 2,558
Closing Accumulated Amortization	\$ 2,558	\$ 5,115	\$ 7,673
Opening Net Fixed Assets	\$ -	\$ 48,593	\$ 46,036
Closing Net Fixed Assets	\$ 48,593	\$ 46,036	\$ 43,478
Average Net Fixed Assets	\$ 24,297	\$ 47,315	\$ 44,757

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 47,059	\$ 43,294
Capital Additions	\$ 51,151	\$ -	\$ -
UCC Before Half Year Rule	\$ 51,151	\$ 47,059	\$ 43,294
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 51,151	\$ 47,059	\$ 43,294
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 4,092	\$ 3,765	\$ 3,464
Closing UCC	\$ 47,059	\$ 43,294	\$ 39,831



Incremental Capital Project Summary

[Return to Main Summary](#)

Fixed Asset Amortization and UCC 8

Name or General Description of Project

C1 Underground Infrastructure

Asset Component

1845 Underground Conductors and Devices

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 6,313,666	\$ 6,313,666
Capital Investment	\$ 6,313,666	\$ -	\$ -
Closing Capital Investment	\$ 6,313,666	\$ 6,313,666	\$ 6,313,666
Opening Accumulated Amortization	\$ -	\$ 157,842	\$ 315,683
Amortization	3% \$ 157,842	\$ 157,842	\$ 157,842
Closing Accumulated Amortization	\$ 157,842	\$ 315,683	\$ 473,525
Opening Net Fixed Assets	\$ -	\$ 6,155,825	\$ 5,997,983
Closing Net Fixed Assets	\$ 6,155,825	\$ 5,997,983	\$ 5,840,141
Average Net Fixed Assets	\$ 3,077,912	\$ 6,076,904	\$ 5,919,062

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 5,808,573	\$ 5,343,887
Capital Additions	\$ 6,313,666	\$ -	\$ -
UCC Before Half Year Rule	\$ 6,313,666	\$ 5,808,573	\$ 5,343,887
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 6,313,666	\$ 5,808,573	\$ 5,343,887
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 505,093	\$ 464,686	\$ 427,511
Closing UCC	\$ 5,808,573	\$ 5,343,887	\$ 4,916,376



Incremental Capital Project Summary

[Return to Main Summary](#)

Fixed Asset Amortization and UCC 9

Name or General Description of Project

C1 Underground Infrastructure

Asset Component

1845 Underground Conductors and Devices - Switch

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 2,897,681	\$ 2,897,681
Capital Investment	\$ 2,897,681	\$ -	\$ -
Closing Capital Investment	\$ 2,897,681	\$ 2,897,681	\$ 2,897,681
Opening Accumulated Amortization	\$ -	\$ 144,884	\$ 289,768
Amortization	5% \$ 144,884	\$ 144,884	\$ 144,884
Closing Accumulated Amortization	\$ 144,884	\$ 289,768	\$ 434,652
Opening Net Fixed Assets	\$ -	\$ 2,752,797	\$ 2,607,913
Closing Net Fixed Assets	\$ 2,752,797	\$ 2,607,913	\$ 2,463,029
Average Net Fixed Assets	\$ 1,376,399	\$ 2,680,355	\$ 2,535,471

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 2,665,867	\$ 2,452,597
Capital Additions	\$ 2,897,681	\$ -	\$ -
UCC Before Half Year Rule	\$ 2,897,681	\$ 2,665,867	\$ 2,452,597
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 2,897,681	\$ 2,665,867	\$ 2,452,597
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 231,814	\$ 213,269	\$ 196,208
Closing UCC	\$ 2,665,867	\$ 2,452,597	\$ 2,256,390



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 10

Name or General Description of Project

C1 Underground Infrastructure

Asset Component

1850 Line Transformers - OH

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 71,448	\$ 71,448
Capital Investment	\$ 71,448	\$ -	\$ -
Closing Capital Investment	\$ 71,448	\$ 71,448	\$ 71,448
Opening Accumulated Amortization	\$ -	\$ 2,382	\$ 4,763
Amortization	\$ 2,382	\$ 2,382	\$ 2,382
Closing Accumulated Amortization	\$ 2,382	\$ 4,763	\$ 7,145
Opening Net Fixed Assets	\$ -	\$ 69,066	\$ 66,685
Closing Net Fixed Assets	\$ 69,066	\$ 66,685	\$ 64,303
Average Net Fixed Assets	\$ 34,533	\$ 67,875	\$ 65,494

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 65,732	\$ 60,473
Capital Additions	\$ 71,448	\$ -	\$ -
UCC Before Half Year Rule	\$ 71,448	\$ 65,732	\$ 60,473
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 71,448	\$ 65,732	\$ 60,473
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 5,716	\$ 5,259	\$ 4,838
Closing UCC	\$ 65,732	\$ 60,473	\$ 55,636



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 11

Name or General Description of Project

C1 Underground Infrastructure

Asset Component

1850 Line Transformers - UG

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 1,746,294	\$ 1,746,294
Capital Investment	\$ 1,746,294	\$ -	\$ -
Closing Capital Investment	\$ 1,746,294	\$ 1,746,294	\$ 1,746,294
Opening Accumulated Amortization	\$ -	\$ 58,210	\$ 116,420
Amortization	3% \$ 58,210	\$ 58,210	\$ 58,210
Closing Accumulated Amortization	\$ 58,210	\$ 116,420	\$ 174,629
Opening Net Fixed Assets	\$ -	\$ 1,688,084	\$ 1,629,875
Closing Net Fixed Assets	\$ 1,688,084	\$ 1,629,875	\$ 1,571,665
Average Net Fixed Assets	\$ 844,042	\$ 1,658,980	\$ 1,600,770

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 1,606,591	\$ 1,478,063
Capital Additions	\$ 1,746,294	\$ -	\$ -
UCC Before Half Year Rule	\$ 1,746,294	\$ 1,606,591	\$ 1,478,063
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 1,746,294	\$ 1,606,591	\$ 1,478,063
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 139,704	\$ 128,527	\$ 118,245
Closing UCC	\$ 1,606,591	\$ 1,478,063	\$ 1,359,818



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 12

Name or General Description of Project

C1 Underground Infrastructure

Asset Component

1860 Meters - Smart Meters

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 11,030	\$ 11,030
Capital Investment	\$ 11,030	\$ -	\$ -
Closing Capital Investment	\$ 11,030	\$ 11,030	\$ 11,030
Opening Accumulated Amortization	\$ -	\$ 735	\$ 1,471
Amortization	\$ 735	\$ 735	\$ 735
Closing Accumulated Amortization	\$ 735	\$ 1,471	\$ 2,206
Opening Net Fixed Assets	\$ -	\$ 10,294	\$ 9,559
Closing Net Fixed Assets	\$ 10,294	\$ 9,559	\$ 8,824
Average Net Fixed Assets	\$ 5,147	\$ 9,927	\$ 9,192

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 10,147	\$ 9,336
Capital Additions	\$ 11,030	\$ -	\$ -
UCC Before Half Year Rule	\$ 11,030	\$ 10,147	\$ 9,336
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 11,030	\$ 10,147	\$ 9,336
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 882	\$ 812	\$ 747
Closing UCC	\$ 10,147	\$ 9,336	\$ 8,589



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 13

Name or General Description of Project

C1 Underground Infrastructure

Asset Component

1855_Services - UG

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 558,184	\$ 558,184
Capital Investment	\$ 558,184	\$ -	\$ -
Closing Capital Investment	\$ 558,184	\$ 558,184	\$ 558,184
Opening Accumulated Amortization	\$ -	\$ 13,955	\$ 27,909
Amortization	3% \$ 13,955	\$ 13,955	\$ 13,955
Closing Accumulated Amortization	\$ 13,955	\$ 27,909	\$ 41,864
Opening Net Fixed Assets	\$ -	\$ 544,229	\$ 530,275
Closing Net Fixed Assets	\$ 544,229	\$ 530,275	\$ 516,320
Average Net Fixed Assets	\$ 272,115	\$ 537,252	\$ 523,297

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 513,529	\$ 472,447
Capital Additions	\$ 558,184	\$ -	\$ -
UCC Before Half Year Rule	\$ 558,184	\$ 513,529	\$ 472,447
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 558,184	\$ 513,529	\$ 472,447
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 44,655	\$ 41,082	\$ 37,796
Closing UCC	\$ 513,529	\$ 472,447	\$ 434,651



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 14

Name or General Description of Project

C1 Underground Infrastructure

Asset Component

1855_Services - OH

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 109,675	\$ 109,675
Capital Investment	\$ 109,675	\$ -	\$ -
Closing Capital Investment	\$ 109,675	\$ 109,675	\$ 109,675
Opening Accumulated Amortization	\$ -	\$ 2,194	\$ 4,387
Amortization	2% \$ 2,194	\$ 2,194	\$ 2,194
Closing Accumulated Amortization	\$ 2,194	\$ 4,387	\$ 6,581
Opening Net Fixed Assets	\$ -	\$ 107,482	\$ 105,288
Closing Net Fixed Assets	\$ 107,482	\$ 105,288	\$ 103,095
Average Net Fixed Assets	\$ 53,741	\$ 106,385	\$ 104,191

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 100,901	\$ 92,829
Capital Additions	\$ 109,675	\$ -	\$ -
UCC Before Half Year Rule	\$ 109,675	\$ 100,901	\$ 92,829
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 109,675	\$ 100,901	\$ 92,829
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 8,774	\$ 8,072	\$ 7,426
Closing UCC	\$ 100,901	\$ 92,829	\$ 85,403



Incremental Capital Project Summary

Using the pull-down menu below, please identify what year of the IRM cycle you are in.

3rd Year of IRM Cycle

Name or General Description of Project

C1 Underground Infrastructure

Year

2013

Details of Project

C1 Underground Infrastructure

Number of Asset Components

13

Asset Component (Click on the Number to View the Component Details)	Capital Cost	Depreciation Rate	CCA Class	CCA Rate
1 1830_Poles Towers and Fixtures	263,293	3%	47	8%
2 1835_Overhead Conductors and Devices	444,689	2%	47	8%
3 1835_Overhead Conductors and Devices - Switches	642,593	3%	47	8%
4 1840_Underground Conduit - Cable Chamber	601,690	2%	47	8%
5 1840_Underground Conduit - Duct Bank	32,966,663	3%	47	8%
6 1840_Underground Conduit - Vault	1,498,879	3%	47	8%
7 1840_Underground Conduit - Vault Roof	29,528	5%	47	8%
8 1845_Underground Conductors and Devices	8,755,831	3%	47	8%
9 1845_Underground Conductors and Devices - Switch	2,763,903	5%	47	8%
10 1850_Line Transformers - UG	4,091,891	3%	47	8%
11 1860_Meters - Smart Meters	480,979	7%	47	8%
12 1855_Services - UG	466,492	3%	47	8%
13 1855_Services - OH	13,329	2%	47	8%

	2013	2014
Closing Net Fixed Asset	51,295,511	49,571,263
Amortization Expense	1,724,248	1,724,248
CCA	4,241,581	3,902,254



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 1

Name or General Description of Project

C1 Underground Infrastructure

Asset Component

1830_Poles Towers and Fixtures

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 263,293
Capital Investment	\$ 263,293	\$ -
Closing Capital Investment	\$ 263,293	\$ 263,293
Opening Accumulated Amortization	\$ -	\$ 6,582
Amortization	3% \$ 6,582	\$ 6,582
Closing Accumulated Amortization	\$ 6,582	\$ 13,165
Opening Net Fixed Assets	\$ -	\$ 256,711
Closing Net Fixed Assets	\$ 256,711	\$ 250,128
Average Net Fixed Assets	\$ 128,355	\$ 253,420

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 242,230
Capital Additions	\$ 263,293	\$ -
UCC Before Half Year Rule	\$ 263,293	\$ 242,230
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 263,293	\$ 242,230
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 21,063	\$ 19,378
Closing UCC	\$ 242,230	\$ 222,851



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 2

Name or General Description of Project

C1 Underground Infrastructure

Asset Component

1835_Overhead Conductors and Devices

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 444,689
Capital Investment	\$ 444,689	\$ -
Closing Capital Investment	\$ 444,689	\$ 444,689
Opening Accumulated Amortization	\$ -	\$ 8,894
Amortization	2% \$ 8,894	\$ 8,894
Closing Accumulated Amortization	\$ 8,894	\$ 17,788
Opening Net Fixed Assets	\$ -	\$ 435,795
Closing Net Fixed Assets	\$ 435,795	\$ 426,901
Average Net Fixed Assets	\$ 217,897	\$ 431,348

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 409,114
Capital Additions	\$ 444,689	\$ -
UCC Before Half Year Rule	\$ 444,689	\$ 409,114
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 444,689	\$ 409,114
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 35,575	\$ 32,729
Closing UCC	\$ 409,114	\$ 376,384



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 3

Name or General Description of Project

C1 Underground Infrastructure

Asset Component

1835 Overhead Conductors and Devices - Switches

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 642,593
Capital Investment	\$ 642,593	\$ -
Closing Capital Investment	\$ 642,593	\$ 642,593
Opening Accumulated Amortization	\$ -	\$ 21,420
Amortization	3% \$ 21,420	\$ 21,420
Closing Accumulated Amortization	\$ 21,420	\$ 42,840
Opening Net Fixed Assets	\$ -	\$ 621,173
Closing Net Fixed Assets	\$ 621,173	\$ 599,753
Average Net Fixed Assets	\$ 310,586	\$ 610,463

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 591,185
Capital Additions	\$ 642,593	\$ -
UCC Before Half Year Rule	\$ 642,593	\$ 591,185
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 642,593	\$ 591,185
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 51,407	\$ 47,295
Closing UCC	\$ 591,185	\$ 543,890



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 4

Name or General Description of Project

C1 Underground Infrastructure

Asset Component

1840 Underground Conduit - Cable Chamber

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 601,690
Capital Investment	\$ 601,690	\$ -
Closing Capital Investment	\$ 601,690	\$ 601,690
Opening Accumulated Amortization	\$ -	\$ 12,034
Amortization	2% \$ 12,034	\$ 12,034
Closing Accumulated Amortization	\$ 12,034	\$ 24,068
Opening Net Fixed Assets	\$ -	\$ 589,656
Closing Net Fixed Assets	\$ 589,656	\$ 577,622
Average Net Fixed Assets	\$ 294,828	\$ 583,639

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 553,554
Capital Additions	\$ 601,690	\$ -
UCC Before Half Year Rule	\$ 601,690	\$ 553,554
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 601,690	\$ 553,554
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 48,135	\$ 44,284
Closing UCC	\$ 553,554	\$ 509,270



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 5

Name or General Description of Project

C1 Underground Infrastructure

Asset Component

1840 Underground Conduit - Duct Bank

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 32,966,663
Capital Investment	\$ 32,966,663	\$ -
Closing Capital Investment	\$ 32,966,663	\$ 32,966,663
Opening Accumulated Amortization	\$ -	\$ 1,098,889
Amortization	3% \$ 1,098,889	\$ 1,098,889
Closing Accumulated Amortization	\$ 1,098,889	\$ 2,197,778
Opening Net Fixed Assets	\$ -	\$ 31,867,775
Closing Net Fixed Assets	\$ 31,867,775	\$ 30,768,886
Average Net Fixed Assets	\$ 15,933,887	\$ 31,318,330

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 30,329,330
Capital Additions	\$ 32,966,663	\$ -
UCC Before Half Year Rule	\$ 32,966,663	\$ 30,329,330
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 32,966,663	\$ 30,329,330
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 2,637,333	\$ 2,426,346
Closing UCC	\$ 30,329,330	\$ 27,902,984



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 6

Name or General Description of Project

C1 Underground Infrastructure

Asset Component

1840 Underground Conduit - Vault

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 1,498,879
Capital Investment	\$ 1,498,879	\$ -
Closing Capital Investment	\$ 1,498,879	\$ 1,498,879
Opening Accumulated Amortization	\$ -	\$ 37,472
Amortization	3% \$ 37,472	\$ 37,472
Closing Accumulated Amortization	\$ 37,472	\$ 74,944
Opening Net Fixed Assets	\$ -	\$ 1,461,407
Closing Net Fixed Assets	\$ 1,461,407	\$ 1,423,935
Average Net Fixed Assets	\$ 730,703	\$ 1,442,671

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 1,378,968
Capital Additions	\$ 1,498,879	\$ -
UCC Before Half Year Rule	\$ 1,498,879	\$ 1,378,968
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 1,498,879	\$ 1,378,968
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 119,910	\$ 110,317
Closing UCC	\$ 1,378,968	\$ 1,268,651



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 7

Name or General Description of Project

C1 Underground Infrastructure

Asset Component

1840 Underground Conduit - Vault Roof

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 29,528
Capital Investment	\$ 29,528	\$ -
Closing Capital Investment	\$ 29,528	\$ 29,528
Opening Accumulated Amortization	\$ -	\$ 1,476
Amortization	5% \$ 1,476	\$ 1,476
Closing Accumulated Amortization	\$ 1,476	\$ 2,953
Opening Net Fixed Assets	\$ -	\$ 28,051
Closing Net Fixed Assets	\$ 28,051	\$ 26,575
Average Net Fixed Assets	\$ 14,026	\$ 27,313

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 27,165
Capital Additions	\$ 29,528	\$ -
UCC Before Half Year Rule	\$ 29,528	\$ 27,165
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 29,528	\$ 27,165
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 2,362	\$ 2,173
Closing UCC	\$ 27,165	\$ 24,992



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 8

Name or General Description of Project

C1 Underground Infrastructure

Asset Component

1845 Underground Conductors and Devices

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 8,755,831
Capital Investment	\$ 8,755,831	\$ -
Closing Capital Investment	\$ 8,755,831	\$ 8,755,831
Opening Accumulated Amortization	\$ -	\$ 218,896
Amortization	3% \$ 218,896	\$ 218,896
Closing Accumulated Amortization	\$ 218,896	\$ 437,792
Opening Net Fixed Assets	\$ -	\$ 8,536,935
Closing Net Fixed Assets	\$ 8,536,935	\$ 8,318,040
Average Net Fixed Assets	\$ 4,268,468	\$ 8,427,488

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 8,055,365
Capital Additions	\$ 8,755,831	\$ -
UCC Before Half Year Rule	\$ 8,755,831	\$ 8,055,365
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 8,755,831	\$ 8,055,365
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 700,467	\$ 644,429
Closing UCC	\$ 8,055,365	\$ 7,410,936



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 9

Name or General Description of Project

C1 Underground Infrastructure

Asset Component

1845 Underground Conductors and Devices - Switch

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 2,763,903
Capital Investment	\$ 2,763,903	\$ -
Closing Capital Investment	\$ 2,763,903	\$ 2,763,903
Opening Accumulated Amortization	\$ -	\$ 138,195
Amortization	5% \$ 138,195	\$ 138,195
Closing Accumulated Amortization	\$ 138,195	\$ 276,390
Opening Net Fixed Assets	\$ -	\$ 2,625,708
Closing Net Fixed Assets	\$ 2,625,708	\$ 2,487,513
Average Net Fixed Assets	\$ 1,312,854	\$ 2,556,611

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 2,542,791
Capital Additions	\$ 2,763,903	\$ -
UCC Before Half Year Rule	\$ 2,763,903	\$ 2,542,791
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 2,763,903	\$ 2,542,791
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 221,112	\$ 203,423
Closing UCC	\$ 2,542,791	\$ 2,339,368



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 10

Name or General Description of Project

C1 Underground Infrastructure

Asset Component

1850_Line Transformers - UG

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 4,091,891
Capital Investment	\$ 4,091,891	\$ -
Closing Capital Investment	\$ 4,091,891	\$ 4,091,891
Opening Accumulated Amortization	\$ -	\$ 136,396
Amortization	3% \$ 136,396	\$ 136,396
Closing Accumulated Amortization	\$ 136,396	\$ 272,793
Opening Net Fixed Assets	\$ -	\$ 3,955,495
Closing Net Fixed Assets	\$ 3,955,495	\$ 3,819,098
Average Net Fixed Assets	\$ 1,977,747	\$ 3,887,296

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 3,764,540
Capital Additions	\$ 4,091,891	\$ -
UCC Before Half Year Rule	\$ 4,091,891	\$ 3,764,540
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 4,091,891	\$ 3,764,540
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 327,351	\$ 301,163
Closing UCC	\$ 3,764,540	\$ 3,463,377



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 11

Name or General Description of Project

C1 Underground Infrastructure

Asset Component

1860 Meters - Smart Meters

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 480,979
Capital Investment	\$ 480,979	\$ -
Closing Capital Investment	\$ 480,979	\$ 480,979
Opening Accumulated Amortization	\$ -	\$ 32,065
Amortization	7% \$ 32,065	\$ 32,065
Closing Accumulated Amortization	\$ 32,065	\$ 64,131
Opening Net Fixed Assets	\$ -	\$ 448,914
Closing Net Fixed Assets	\$ 448,914	\$ 416,848
Average Net Fixed Assets	\$ 224,457	\$ 432,881

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 442,501
Capital Additions	\$ 480,979	\$ -
UCC Before Half Year Rule	\$ 480,979	\$ 442,501
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 480,979	\$ 442,501
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 38,478	\$ 35,400
Closing UCC	\$ 442,501	\$ 407,101



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 12

Name or General Description of Project

C1 Underground Infrastructure

Asset Component

1855_Services - UG

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 466,492
Capital Investment	\$ 466,492	\$ -
Closing Capital Investment	\$ 466,492	\$ 466,492
Opening Accumulated Amortization	\$ -	\$ 11,662
Amortization	3% \$ 11,662	\$ 11,662
Closing Accumulated Amortization	\$ 11,662	\$ 23,325
Opening Net Fixed Assets	\$ -	\$ 454,830
Closing Net Fixed Assets	\$ 454,830	\$ 443,167
Average Net Fixed Assets	\$ 227,415	\$ 448,999

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 429,173
Capital Additions	\$ 466,492	\$ -
UCC Before Half Year Rule	\$ 466,492	\$ 429,173
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 466,492	\$ 429,173
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 37,319	\$ 34,334
Closing UCC	\$ 429,173	\$ 394,839



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 13

Name or General Description of Project

C1 Underground Infrastructure

Asset Component

1855_Services - OH

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 13,329
Capital Investment	\$ 13,329	\$ -
Closing Capital Investment	\$ 13,329	\$ 13,329
Opening Accumulated Amortization	\$ -	\$ 267
Amortization	2% \$ 267	\$ 267
Closing Accumulated Amortization	\$ 267	\$ 533
Opening Net Fixed Assets	\$ -	\$ 13,062
Closing Net Fixed Assets	\$ 13,062	\$ 12,796
Average Net Fixed Assets	\$ 6,531	\$ 12,929

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 12,263
Capital Additions	\$ 13,329	\$ -
UCC Before Half Year Rule	\$ 13,329	\$ 12,263
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 13,329	\$ 12,263
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 1,066	\$ 981
Closing UCC	\$ 12,263	\$ 11,282



Incremental Capital Project Summary

Using the pull-down menu below, please identify what year of the IRM cycle you are in.

4th Year of IRM Cycle

Name or General Description of Project

C1 Underground Infrastructure

Details of Project

C1 Underground Infrastructure

Year

2014

Number of Asset Components

14

Asset Component (Click on the Number to View the Component Details)	Capital Cost	Capital Cost (1/2 year rule applied)	Depreciation Rate	CCA Class	CCA Rate
1 1830_Poles Towers and Fixtures	950,249	475,124	3%	47	8%
2 1835_Overhead Conductors and Devices	866,337	433,168	2%	47	8%
3 1835_Overhead Conductors and Devices - Switches	1,350,324	675,162	3%	47	8%
4 1840_Underground Conduit - Cable Chamber	738,736	369,368	2%	47	8%
5 1840_Underground Conduit - Duct Bank	38,934,252	19,467,126	3%	47	8%
6 1840_Underground Conduit - Vault	984,890	492,445	3%	47	8%
7 1840_Underground Conduit - Vault Roof	19,184	9,592	5%	47	8%
8 1845_Underground Conductors and Devices	13,387,550	6,693,775	3%	47	8%
9 1845_Underground Conductors and Devices - Switch	6,768,595	3,384,298	5%	47	8%
10 1850_Line Transformers - OH	133,036	66,518	3%	47	8%
11 1850_Line Transformers - UG	5,698,388	2,849,194	3%	47	8%
12 1860_Meters - Smart Meters	2,360,399	1,180,200	7%	47	8%
13 1855_Services - UG	2,712,926	1,356,463	3%	47	8%
14 1855_Services - OH	17,901	8,950	2%	47	8%

Closing Net Fixed Asset	2014 36,202,734
Amortization Expense	1,258,649
CCA	2,996,911



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 1

Name or General Description of Project

C1 Underground Infrastructure

Asset Component

1830_Poles Towers and Fixtures

Average Net Fixed Assets

Net Fixed Assets

2014

Forecasted

Opening Capital Investment	\$	-
Capital Investment	\$	475,124
Closing Capital Investment	\$	475,124
Opening Accumulated Amortization	\$	-
Amortization	3%	\$ 11,878
Closing Accumulated Amortization	\$	11,878
Opening Net Fixed Assets	\$	-
Closing Net Fixed Assets	\$	463,246
Average Net Fixed Assets	\$	231,623

For PILs Calculation

UCC

2014

Forecasted

Opening UCC	\$	-
Capital Additions	\$	475,124
UCC Before Half Year Rule	\$	475,124
Half Year Rule (1/2 Additions - Disposals)	\$	-
Reduced UCC	\$	475,124
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$	38,010
Closing UCC	\$	437,114



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 2

Name or General Description of Project

C1 Underground Infrastructure

Asset Component

1835_Overhead Conductors and Devices

Average Net Fixed Assets

Net Fixed Assets

2014
Forecasted

Opening Capital Investment	\$	-
Capital Investment	\$	433,168
Closing Capital Investment	\$	433,168
Opening Accumulated Amortization	\$	-
Amortization	2%	\$ 8,663
Closing Accumulated Amortization	\$	8,663
Opening Net Fixed Assets	\$	-
Closing Net Fixed Assets	\$	424,505
Average Net Fixed Assets	\$	212,252

For PILs Calculation

UCC

2014
Forecasted

Opening UCC	\$	-
Capital Additions	\$	433,168
UCC Before Half Year Rule	\$	433,168
Half Year Rule (1/2 Additions - Disposals)	\$	-
Reduced UCC	\$	433,168
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$	34,653
Closing UCC	\$	398,515



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 3

Name or General Description of Project

C1 Underground Infrastructure

Asset Component

1835 Overhead Conductors and Devices - Switches

Average Net Fixed Assets

Net Fixed Assets

	2014 Forecasted
Opening Capital Investment	\$ -
Capital Investment	\$ 675,162
Closing Capital Investment	\$ 675,162
Opening Accumulated Amortization	\$ -
Amortization	3% \$ 22,505
Closing Accumulated Amortization	\$ 22,505
Opening Net Fixed Assets	\$ -
Closing Net Fixed Assets	\$ 652,656
Average Net Fixed Assets	\$ 326,328

For PILs Calculation

UCC

	2014 Forecasted
Opening UCC	\$ -
Capital Additions	\$ 675,162
UCC Before Half Year Rule	\$ 675,162
Half Year Rule (1/2 Additions - Disposals)	\$ -
Reduced UCC	\$ 675,162
CCA Rate Class	47
CCA Rate	8%
CCA	\$ 54,013
Closing UCC	\$ 621,149



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 4

Name or General Description of Project

C1 Underground Infrastructure

Asset Component

1840 Underground Conduit - Cable Chamber

Average Net Fixed Assets

Net Fixed Assets

2014

Forecasted

Opening Capital Investment	\$	-
Capital Investment	\$	369,368
Closing Capital Investment	\$	369,368
Opening Accumulated Amortization	\$	-
Amortization	2%	\$ 7,387
Closing Accumulated Amortization	\$	7,387
Opening Net Fixed Assets	\$	-
Closing Net Fixed Assets	\$	361,981
Average Net Fixed Assets	\$	180,990

For PILs Calculation

UCC

2014

Forecasted

Opening UCC	\$	-
Capital Additions	\$	369,368
UCC Before Half Year Rule	\$	369,368
Half Year Rule (1/2 Additions - Disposals)	\$	-
Reduced UCC	\$	369,368
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$	29,549
Closing UCC	\$	339,819



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 5

Name or General Description of Project

C1 Underground Infrastructure

Asset Component

1840 Underground Conduit - Duct Bank

Average Net Fixed Assets

Net Fixed Assets

2014

Forecasted

Opening Capital Investment		\$ -
Capital Investment		\$ 19,467,126
Closing Capital Investment		\$ 19,467,126
Opening Accumulated Amortization		\$ -
Amortization	3%	\$ 648,904
Closing Accumulated Amortization		\$ 648,904
Opening Net Fixed Assets		\$ -
Closing Net Fixed Assets		\$ 18,818,222
Average Net Fixed Assets		\$ 9,409,111

For PILs Calculation

UCC

2014

Forecasted

Opening UCC		\$ -
Capital Additions		\$ 19,467,126
UCC Before Half Year Rule		\$ 19,467,126
Half Year Rule (1/2 Additions - Disposals)		\$ -
Reduced UCC		\$ 19,467,126
CCA Rate Class	47	
CCA Rate	8%	
CCA		\$ 1,557,370
Closing UCC		\$ 17,909,756



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 6

Name or General Description of Project

C1 Underground Infrastructure

Asset Component

1840 Underground Conduit - Vault

Average Net Fixed Assets

Net Fixed Assets

2014
Forecasted

Opening Capital Investment	\$	-
Capital Investment	\$	492,445
Closing Capital Investment	\$	492,445
Opening Accumulated Amortization	\$	-
Amortization	3%	\$ 12,311
Closing Accumulated Amortization	\$	12,311
Opening Net Fixed Assets	\$	-
Closing Net Fixed Assets	\$	480,134
Average Net Fixed Assets	\$	240,067

For PILs Calculation

UCC

2014
Forecasted

Opening UCC	\$	-
Capital Additions	\$	492,445
UCC Before Half Year Rule	\$	492,445
Half Year Rule (1/2 Additions - Disposals)	\$	-
Reduced UCC	\$	492,445
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$	39,396
Closing UCC	\$	453,050



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 7

Name or General Description of Project

C1 Underground Infrastructure

Asset Component

1840 Underground Conduit - Vault Roof

Average Net Fixed Assets

Net Fixed Assets

2014
Forecasted

Opening Capital Investment	\$	-
Capital Investment	\$	9,592
Closing Capital Investment	\$	9,592
Opening Accumulated Amortization	\$	-
Amortization	5%	\$ 480
Closing Accumulated Amortization	\$	480
Opening Net Fixed Assets	\$	-
Closing Net Fixed Assets	\$	9,112
Average Net Fixed Assets	\$	4,556

For PILs Calculation

UCC

2014
Forecasted

Opening UCC	\$	-
Capital Additions	\$	9,592
UCC Before Half Year Rule	\$	9,592
Half Year Rule (1/2 Additions - Disposals)	\$	-
Reduced UCC	\$	9,592
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$	767
Closing UCC	\$	8,825



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 8

Name or General Description of Project

C1 Underground Infrastructure

Asset Component

1845 Underground Conductors and Devices

Average Net Fixed Assets

Net Fixed Assets

2014
Forecasted

Opening Capital Investment	\$	-
Capital Investment	\$	6,693,775
Closing Capital Investment	\$	6,693,775
Opening Accumulated Amortization	\$	-
Amortization	3%	\$ 167,344
Closing Accumulated Amortization	\$	167,344
Opening Net Fixed Assets	\$	-
Closing Net Fixed Assets	\$	6,526,431
Average Net Fixed Assets	\$	3,263,215

For PILs Calculation

UCC

2014
Forecasted

Opening UCC	\$	-
Capital Additions	\$	6,693,775
UCC Before Half Year Rule	\$	6,693,775
Half Year Rule (1/2 Additions - Disposals)	\$	-
Reduced UCC	\$	6,693,775
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$	535,502
Closing UCC	\$	6,158,273



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 9

Name or General Description of Project

C1 Underground Infrastructure

Asset Component

1845 Underground Conductors and Devices - Switch

Average Net Fixed Assets

Net Fixed Assets

2014

Forecasted

Opening Capital Investment	\$	-
Capital Investment	\$	3,384,298
Closing Capital Investment	\$	3,384,298
Opening Accumulated Amortization	\$	-
Amortization	5%	\$ 169,215
Closing Accumulated Amortization	\$	169,215
Opening Net Fixed Assets	\$	-
Closing Net Fixed Assets	\$	3,215,083
Average Net Fixed Assets	\$	1,607,541

For PILs Calculation

UCC

2014

Forecasted

Opening UCC	\$	-
Capital Additions	\$	3,384,298
UCC Before Half Year Rule	\$	3,384,298
Half Year Rule (1/2 Additions - Disposals)	\$	-
Reduced UCC	\$	3,384,298
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$	270,744
Closing UCC	\$	3,113,554



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 10

Name or General Description of Project

C1 Underground Infrastructure

Asset Component

1850_Line Transformers - OH

Average Net Fixed Assets

Net Fixed Assets

	2014 Forecasted
Opening Capital Investment	\$ -
Capital Investment	\$ 66,518
Closing Capital Investment	\$ 66,518
Opening Accumulated Amortization	\$ -
Amortization	3% \$ 2,217
Closing Accumulated Amortization	\$ 2,217
Opening Net Fixed Assets	\$ -
Closing Net Fixed Assets	\$ 64,301
Average Net Fixed Assets	\$ 32,150

For PILs Calculation

UCC

	2014 Forecasted
Opening UCC	\$ -
Capital Additions	\$ 66,518
UCC Before Half Year Rule	\$ 66,518
Half Year Rule (1/2 Additions - Disposals)	\$ -
Reduced UCC	\$ 66,518
CCA Rate Class	47
CCA Rate	8%
CCA	\$ 5,321
Closing UCC	\$ 61,196



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 11

Name or General Description of Project

C1 Underground Infrastructure

Asset Component

1850 Line Transformers - UG

Average Net Fixed Assets

Net Fixed Assets

2014
Forecasted

Opening Capital Investment	\$	-
Capital Investment	\$	2,849,194
Closing Capital Investment	\$	2,849,194
Opening Accumulated Amortization	\$	-
Amortization	3%	\$ 94,973
Closing Accumulated Amortization	\$	94,973
Opening Net Fixed Assets	\$	-
Closing Net Fixed Assets	\$	2,754,221
Average Net Fixed Assets	\$	1,377,110

For PILs Calculation

UCC

2014
Forecasted

Opening UCC	\$	-
Capital Additions	\$	2,849,194
UCC Before Half Year Rule	\$	2,849,194
Half Year Rule (1/2 Additions - Disposals)	\$	-
Reduced UCC	\$	2,849,194
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$	227,936
Closing UCC	\$	2,621,258



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 12

Name or General Description of Project

C1 Underground Infrastructure

Asset Component

1860 Meters - Smart Meters

Average Net Fixed Assets

Net Fixed Assets

2014

Forecasted

Opening Capital Investment	\$	-
Capital Investment	\$	1,180,200
Closing Capital Investment	\$	1,180,200
Opening Accumulated Amortization	\$	-
Amortization	7%	\$ 78,680
Closing Accumulated Amortization	\$	78,680
Opening Net Fixed Assets	\$	-
Closing Net Fixed Assets	\$	1,101,520
Average Net Fixed Assets	\$	550,760

For PILs Calculation

UCC

2014

Forecasted

Opening UCC	\$	-
Capital Additions	\$	1,180,200
UCC Before Half Year Rule	\$	1,180,200
Half Year Rule (1/2 Additions - Disposals)	\$	-
Reduced UCC	\$	1,180,200
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$	94,416
Closing UCC	\$	1,085,784



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 13

Name or General Description of Project

C1 Underground Infrastructure

Asset Component

1855_Services - UG

Average Net Fixed Assets

Net Fixed Assets

2014
Forecasted

Opening Capital Investment	\$ -
Capital Investment	\$ 1,356,463
Closing Capital Investment	\$ 1,356,463
Opening Accumulated Amortization	\$ -
Amortization	3% \$ 33,912
Closing Accumulated Amortization	\$ 33,912
Opening Net Fixed Assets	\$ -
Closing Net Fixed Assets	\$ 1,322,551
Average Net Fixed Assets	\$ 661,276

For PILs Calculation

UCC

2014
Forecasted

Opening UCC	\$ -
Capital Additions	\$ 1,356,463
UCC Before Half Year Rule	\$ 1,356,463
Half Year Rule (1/2 Additions - Disposals)	\$ -
Reduced UCC	\$ 1,356,463
CCA Rate Class	47
CCA Rate	8%
CCA	\$ 108,517
Closing UCC	\$ 1,247,946



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 14

Name or General Description of Project

C1 Underground Infrastructure

Asset Component

1855_Services - OH

Average Net Fixed Assets

Net Fixed Assets

2014
Forecasted

Opening Capital Investment	\$	-
Capital Investment	\$	8,950
Closing Capital Investment	\$	8,950
Opening Accumulated Amortization	\$	-
Amortization	2%	\$ 179
Closing Accumulated Amortization	\$	179
Opening Net Fixed Assets	\$	-
Closing Net Fixed Assets	\$	8,771
Average Net Fixed Assets	\$	4,386

For PILs Calculation

UCC

2014
Forecasted

Opening UCC	\$	-
Capital Additions	\$	8,950
UCC Before Half Year Rule	\$	8,950
Half Year Rule (1/2 Additions - Disposals)	\$	-
Reduced UCC	\$	8,950
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$	716
Closing UCC	\$	8,234



Incremental Capital Project Summary

Using the pull-down menu below, please identify what year of the IRM cycle you are in.

2nd Year of IRM Cycle

Name or General Description of Project

C2 Paper Insulated Lead Covered Cable - Piece Outs and Leakers

Year

2012

Details of Project

C2 Paper Insulated Lead Covered Cable - Piece Outs and Leakers

Number of Asset Components

9

Asset Component (Click on the Number to View the Component Details)	Capital Cost	Depreciation Rate	CCA Class	CCA Rate
1 1840_Underground Conduit - Cable Chamber	3,997	2%	47	8%
2 1840_Underground Conduit - Duct Bank	9,327	3%	47	8%
3 1840_Underground Conduit - Vault	8,974	3%	47	8%
4 1840_Underground Conduit - Vault Roof	3,997	5%	47	8%
5 1845_Underground Conductors and Devices	17,198,047	3%	47	8%
6 1845_Underground Conductors and Devices - Switch	61,799	5%	47	8%
7 1850_Line Transformers - UG	15,959	3%	47	8%
8 1850_Line Transformers - UG Network w/protector	19,293	5%	47	8%
9 1855_Services - UG	1,660	3%	47	8%

	2012	2013	2014
Closing Net Fixed Asset	16,887,662	16,452,267	16,016,873
Amortization Expense	435,394	435,394	435,394
CCA	1,385,844	1,274,977	1,172,979



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 1

Name or General Description of Project

C2 Paper Insulated Lead Covered Cable - Piece Outs and Leakers

Asset Component

1840_Underground Conduit - Cable Chamber

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 3,997	\$ 3,997
Capital Investment	\$ 3,997	\$ -	\$ -
Closing Capital Investment	\$ 3,997	\$ 3,997	\$ 3,997
Opening Accumulated Amortization	\$ -	\$ 80	\$ 160
Amortization	2% \$ 80	\$ 80	\$ 80
Closing Accumulated Amortization	\$ 80	\$ 160	\$ 240
Opening Net Fixed Assets	\$ -	\$ 3,917	\$ 3,838
Closing Net Fixed Assets	\$ 3,917	\$ 3,838	\$ 3,758
Average Net Fixed Assets	\$ 1,959	\$ 3,877	\$ 3,798

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 3,678	\$ 3,383
Capital Additions	\$ 3,997	\$ -	\$ -
UCC Before Half Year Rule	\$ 3,997	\$ 3,678	\$ 3,383
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 3,997	\$ 3,678	\$ 3,383
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 320	\$ 294	\$ 271
Closing UCC	\$ 3,678	\$ 3,383	\$ 3,113



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 2

Name or General Description of Project

C2 Paper Insulated Lead Covered Cable - Piece Outs and Leakers

Asset Component

1840 Underground Conduit - Duct Bank

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 9,327	\$ 9,327
Capital Investment	\$ 9,327	\$ -	\$ -
Closing Capital Investment	\$ 9,327	\$ 9,327	\$ 9,327
Opening Accumulated Amortization	\$ -	\$ 311	\$ 622
Amortization	3% \$ 311	\$ 311	\$ 311
Closing Accumulated Amortization	\$ 311	\$ 622	\$ 933
Opening Net Fixed Assets	\$ -	\$ 9,016	\$ 8,705
Closing Net Fixed Assets	\$ 9,016	\$ 8,705	\$ 8,395
Average Net Fixed Assets	\$ 4,508	\$ 8,861	\$ 8,550

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 8,581	\$ 7,895
Capital Additions	\$ 9,327	\$ -	\$ -
UCC Before Half Year Rule	\$ 9,327	\$ 8,581	\$ 7,895
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 9,327	\$ 8,581	\$ 7,895
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 746	\$ 686	\$ 632
Closing UCC	\$ 8,581	\$ 7,895	\$ 7,263



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 3

Name or General Description of Project

C2 Paper Insulated Lead Covered Cable - Piece Outs and Leakers

Asset Component

1840 Underground Conduit - Vault

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 8,974	\$ 8,974
Capital Investment	\$ 8,974	\$ -	\$ -
Closing Capital Investment	\$ 8,974	\$ 8,974	\$ 8,974
Opening Accumulated Amortization	\$ -	\$ 224	\$ 449
Amortization	3% \$ 224	\$ 224	\$ 224
Closing Accumulated Amortization	\$ 224	\$ 449	\$ 673
Opening Net Fixed Assets	\$ -	\$ 8,750	\$ 8,525
Closing Net Fixed Assets	\$ 8,750	\$ 8,525	\$ 8,301
Average Net Fixed Assets	\$ 4,375	\$ 8,637	\$ 8,413

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 8,256	\$ 7,596
Capital Additions	\$ 8,974	\$ -	\$ -
UCC Before Half Year Rule	\$ 8,974	\$ 8,256	\$ 7,596
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 8,974	\$ 8,256	\$ 7,596
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 718	\$ 660	\$ 608
Closing UCC	\$ 8,256	\$ 7,596	\$ 6,988



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 4

Name or General Description of Project

C2 Paper Insulated Lead Covered Cable - Piece Outs and Leakers

Asset Component

1840_Underground Conduit - Vault Roof

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 3,997	\$ 3,997
Capital Investment	\$ 3,997	\$ -	\$ -
Closing Capital Investment	\$ 3,997	\$ 3,997	\$ 3,997
Opening Accumulated Amortization	\$ -	\$ 200	\$ 400
Amortization	5% \$ 200	\$ 200	\$ 200
Closing Accumulated Amortization	\$ 200	\$ 400	\$ 600
Opening Net Fixed Assets	\$ -	\$ 3,798	\$ 3,598
Closing Net Fixed Assets	\$ 3,798	\$ 3,598	\$ 3,398
Average Net Fixed Assets	\$ 1,899	\$ 3,698	\$ 3,498

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 3,678	\$ 3,383
Capital Additions	\$ 3,997	\$ -	\$ -
UCC Before Half Year Rule	\$ 3,997	\$ 3,678	\$ 3,383
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 3,997	\$ 3,678	\$ 3,383
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 320	\$ 294	\$ 271
Closing UCC	\$ 3,678	\$ 3,383	\$ 3,113



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 5

Name or General Description of Project

C2 Paper Insulated Lead Covered Cable - Piece Outs and Leakers

Asset Component

1845_Underground Conductors and Devices

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 17,198,047	\$ 17,198,047
Capital Investment	\$ 17,198,047	\$ -	\$ -
Closing Capital Investment	\$ 17,198,047	\$ 17,198,047	\$ 17,198,047
Opening Accumulated Amortization	\$ -	\$ 429,951	\$ 859,902
Amortization	3% \$ 429,951	\$ 429,951	\$ 429,951
Closing Accumulated Amortization	\$ 429,951	\$ 859,902	\$ 1,289,854
Opening Net Fixed Assets	\$ -	\$ 16,768,096	\$ 16,338,145
Closing Net Fixed Assets	\$ 16,768,096	\$ 16,338,145	\$ 15,908,194
Average Net Fixed Assets	\$ 8,384,048	\$ 16,553,121	\$ 16,123,169

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 15,822,204	\$ 14,556,427
Capital Additions	\$ 17,198,047	\$ -	\$ -
UCC Before Half Year Rule	\$ 17,198,047	\$ 15,822,204	\$ 14,556,427
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 17,198,047	\$ 15,822,204	\$ 14,556,427
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 1,375,844	\$ 1,265,776	\$ 1,164,514
Closing UCC	\$ 15,822,204	\$ 14,556,427	\$ 13,391,913



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 6

Name or General Description of Project

C2 Paper Insulated Lead Covered Cable - Piece Outs and Leakers

Asset Component

1845 Underground Conductors and Devices - Switch

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 61,799	\$ 61,799
Capital Investment	\$ 61,799	\$ -	\$ -
Closing Capital Investment	\$ 61,799	\$ 61,799	\$ 61,799
Opening Accumulated Amortization	\$ -	\$ 3,090	\$ 6,180
Amortization	5% \$ 3,090	\$ 3,090	\$ 3,090
Closing Accumulated Amortization	\$ 3,090	\$ 6,180	\$ 9,270
Opening Net Fixed Assets	\$ -	\$ 58,710	\$ 55,620
Closing Net Fixed Assets	\$ 58,710	\$ 55,620	\$ 52,530
Average Net Fixed Assets	\$ 29,355	\$ 57,165	\$ 54,075

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 56,856	\$ 52,307
Capital Additions	\$ 61,799	\$ -	\$ -
UCC Before Half Year Rule	\$ 61,799	\$ 56,856	\$ 52,307
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 61,799	\$ 56,856	\$ 52,307
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 4,944	\$ 4,548	\$ 4,185
Closing UCC	\$ 56,856	\$ 52,307	\$ 48,123



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 7

Name or General Description of Project

C2 Paper Insulated Lead Covered Cable - Piece Outs and Leakers

Asset Component

1850 Line Transformers - UG

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 15,959	\$ 15,959
Capital Investment	\$ 15,959	\$ -	\$ -
Closing Capital Investment	\$ 15,959	\$ 15,959	\$ 15,959
Opening Accumulated Amortization	\$ -	\$ 532	\$ 1,064
Amortization	3% \$ 532	\$ 532	\$ 532
Closing Accumulated Amortization	\$ 532	\$ 1,064	\$ 1,596
Opening Net Fixed Assets	\$ -	\$ 15,427	\$ 14,895
Closing Net Fixed Assets	\$ 15,427	\$ 14,895	\$ 14,363
Average Net Fixed Assets	\$ 7,714	\$ 15,161	\$ 14,629

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 14,682	\$ 13,508
Capital Additions	\$ 15,959	\$ -	\$ -
UCC Before Half Year Rule	\$ 15,959	\$ 14,682	\$ 13,508
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 15,959	\$ 14,682	\$ 13,508
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 1,277	\$ 1,175	\$ 1,081
Closing UCC	\$ 14,682	\$ 13,508	\$ 12,427



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 8

Name or General Description of Project

C2 Paper Insulated Lead Covered Cable - Piece Outs and Leakers

Asset Component

1850 Line Transformers - UG Network w/protector

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 19,293	\$ 19,293
Capital Investment	\$ 19,293	\$ -	\$ -
Closing Capital Investment	\$ 19,293	\$ 19,293	\$ 19,293
Opening Accumulated Amortization	\$ -	\$ 965	\$ 1,929
Amortization	5% \$ 965	\$ 965	\$ 965
Closing Accumulated Amortization	\$ 965	\$ 1,929	\$ 2,894
Opening Net Fixed Assets	\$ -	\$ 18,329	\$ 17,364
Closing Net Fixed Assets	\$ 18,329	\$ 17,364	\$ 16,399
Average Net Fixed Assets	\$ 9,164	\$ 17,846	\$ 16,882

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 17,750	\$ 16,330
Capital Additions	\$ 19,293	\$ -	\$ -
UCC Before Half Year Rule	\$ 19,293	\$ 17,750	\$ 16,330
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 19,293	\$ 17,750	\$ 16,330
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 1,543	\$ 1,420	\$ 1,306
Closing UCC	\$ 17,750	\$ 16,330	\$ 15,024



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 9

Name or General Description of Project

C2 Paper Insulated Lead Covered Cable - Piece Outs and Leakers

Asset Component

1855_Services - UG

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 1,660	\$ 1,660
Capital Investment	\$ 1,660	\$ -	\$ -
Closing Capital Investment	\$ 1,660	\$ 1,660	\$ 1,660
Opening Accumulated Amortization	\$ -	\$ 42	\$ 83
Amortization	3% \$ 42	\$ 42	\$ 42
Closing Accumulated Amortization	\$ 42	\$ 83	\$ 125
Opening Net Fixed Assets	\$ -	\$ 1,619	\$ 1,577
Closing Net Fixed Assets	\$ 1,619	\$ 1,577	\$ 1,536
Average Net Fixed Assets	\$ 809	\$ 1,598	\$ 1,557

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 1,528	\$ 1,405
Capital Additions	\$ 1,660	\$ -	\$ -
UCC Before Half Year Rule	\$ 1,660	\$ 1,528	\$ 1,405
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 1,660	\$ 1,528	\$ 1,405
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 133	\$ 122	\$ 112
Closing UCC	\$ 1,528	\$ 1,405	\$ 1,293



Incremental Capital Project Summary

Using the pull-down menu below, please identify what year of the IRM cycle you are in.

3rd Year of IRM Cycle

Name or General Description of Project

C2 Paper Insulated Lead Covered Cable - Piece Outs and Leakers

Year

2013

Details of Project

C2 Paper Insulated Lead Covered Cable - Piece Outs and Leakers

Number of Asset Components

7

Asset Component (Click on the Number to View the Component Details)	Capital Cost	Depreciation Rate	CCA Class	CCA Rate
1 1840_Underground Conduit - Cable Chamber	207,581	2%	47	8%
2 1840_Underground Conduit - Duct Bank	1,596,416	3%	47	8%
3 1840_Underground Conduit - Vault	4,605	3%	47	8%
4 1840_Underground Conduit - Vault Roof	2,051	5%	47	8%
5 1845_Underground Conductors and Devices	3,365,017	3%	47	8%
6 1845_Underground Conductors and Devices - Switch	1,889	5%	47	8%
7 1855_Services - UG	1,460	3%	47	8%

	2013	2014
Closing Net Fixed Asset	5,037,179	4,895,339
Amortization Expense	141,840	141,840
CCA	414,321	381,176



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 1

Name or General Description of Project

C2 Paper Insulated Lead Covered Cable - Piece Outs and Leakers

Asset Component

1840_Underground Conduit - Cable Chamber

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 207,581
Capital Investment	\$ 207,581	\$ -
Closing Capital Investment	\$ 207,581	\$ 207,581
Opening Accumulated Amortization	\$ -	\$ 4,152
Amortization	2% \$ 4,152	\$ 4,152
Closing Accumulated Amortization	\$ 4,152	\$ 8,303
Opening Net Fixed Assets	\$ -	\$ 203,429
Closing Net Fixed Assets	\$ 203,429	\$ 199,278
Average Net Fixed Assets	\$ 101,715	\$ 201,353

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 190,974
Capital Additions	\$ 207,581	\$ -
UCC Before Half Year Rule	\$ 207,581	\$ 190,974
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 207,581	\$ 190,974
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 16,606	\$ 15,278
Closing UCC	\$ 190,974	\$ 175,696



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 2

Name or General Description of Project

C2 Paper Insulated Lead Covered Cable - Piece Outs and Leakers

Asset Component

1840 Underground Conduit - Duct Bank

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 1,596,416
Capital Investment	\$ 1,596,416	\$ -
Closing Capital Investment	\$ 1,596,416	\$ 1,596,416
Opening Accumulated Amortization	\$ -	\$ 53,214
Amortization	3% \$ 53,214	\$ 53,214
Closing Accumulated Amortization	\$ 53,214	\$ 106,428
Opening Net Fixed Assets	\$ -	\$ 1,543,202
Closing Net Fixed Assets	\$ 1,543,202	\$ 1,489,988
Average Net Fixed Assets	\$ 771,601	\$ 1,516,595

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 1,468,702
Capital Additions	\$ 1,596,416	\$ -
UCC Before Half Year Rule	\$ 1,596,416	\$ 1,468,702
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 1,596,416	\$ 1,468,702
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 127,713	\$ 117,496
Closing UCC	\$ 1,468,702	\$ 1,351,206



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 3

Name or General Description of Project

C2 Paper Insulated Lead Covered Cable - Piece Outs and Leakers

Asset Component

1840_Underground Conduit - Vault

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 4,605
Capital Investment	\$ 4,605	\$ -
Closing Capital Investment	\$ 4,605	\$ 4,605
Opening Accumulated Amortization	\$ -	\$ 115
Amortization	3% \$ 115	\$ 115
Closing Accumulated Amortization	\$ 115	\$ 230
Opening Net Fixed Assets	\$ -	\$ 4,489
Closing Net Fixed Assets	\$ 4,489	\$ 4,374
Average Net Fixed Assets	\$ 2,245	\$ 4,432

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 4,236
Capital Additions	\$ 4,605	\$ -
UCC Before Half Year Rule	\$ 4,605	\$ 4,236
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 4,605	\$ 4,236
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 368	\$ 339
Closing UCC	\$ 4,236	\$ 3,897



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 4

Name or General Description of Project

C2 Paper Insulated Lead Covered Cable - Piece Outs and Leakers

Asset Component

1840_Underground Conduit - Vault Roof

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 2,051
Capital Investment	\$ 2,051	\$ -
Closing Capital Investment	\$ 2,051	\$ 2,051
Opening Accumulated Amortization	\$ -	\$ 103
Amortization	5% \$ 103	\$ 103
Closing Accumulated Amortization	\$ 103	\$ 205
Opening Net Fixed Assets	\$ -	\$ 1,949
Closing Net Fixed Assets	\$ 1,949	\$ 1,846
Average Net Fixed Assets	\$ 974	\$ 1,897

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 1,887
Capital Additions	\$ 2,051	\$ -
UCC Before Half Year Rule	\$ 2,051	\$ 1,887
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 2,051	\$ 1,887
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 164	\$ 151
Closing UCC	\$ 1,887	\$ 1,736



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 5

Name or General Description of Project

C2 Paper Insulated Lead Covered Cable - Piece Outs and Leakers

Asset Component

1845_Underground Conductors and Devices

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 3,365,017
Capital Investment	\$ 3,365,017	\$ -
Closing Capital Investment	\$ 3,365,017	\$ 3,365,017
Opening Accumulated Amortization	\$ -	\$ 84,125
Amortization	3% \$ 84,125	\$ 84,125
Closing Accumulated Amortization	\$ 84,125	\$ 168,251
Opening Net Fixed Assets	\$ -	\$ 3,280,892
Closing Net Fixed Assets	\$ 3,280,892	\$ 3,196,766
Average Net Fixed Assets	\$ 1,640,446	\$ 3,238,829

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 3,095,816
Capital Additions	\$ 3,365,017	\$ -
UCC Before Half Year Rule	\$ 3,365,017	\$ 3,095,816
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 3,365,017	\$ 3,095,816
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 269,201	\$ 247,665
Closing UCC	\$ 3,095,816	\$ 2,848,151



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 6

Name or General Description of Project

C2 Paper Insulated Lead Covered Cable - Piece Outs and Leakers

Asset Component

1845_Underground Conductors and Devices - Switch

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 1,889
Capital Investment	\$ 1,889	\$ -
Closing Capital Investment	\$ 1,889	\$ 1,889
Opening Accumulated Amortization	\$ -	\$ 94
Amortization	5% \$ 94	\$ 94
Closing Accumulated Amortization	\$ 94	\$ 189
Opening Net Fixed Assets	\$ -	\$ 1,795
Closing Net Fixed Assets	\$ 1,795	\$ 1,700
Average Net Fixed Assets	\$ 897	\$ 1,747

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 1,738
Capital Additions	\$ 1,889	\$ -
UCC Before Half Year Rule	\$ 1,889	\$ 1,738
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 1,889	\$ 1,738
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 151	\$ 139
Closing UCC	\$ 1,738	\$ 1,599



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 7

Name or General Description of Project

C2 Paper Insulated Lead Covered Cable - Piece Outs and Leakers

Asset Component

1855_Services - UG

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 1,460
Capital Investment	\$ 1,460	\$ -
Closing Capital Investment	\$ 1,460	\$ 1,460
Opening Accumulated Amortization	\$ -	\$ 36
Amortization	3% \$ 36	\$ 36
Closing Accumulated Amortization	\$ 36	\$ 73
Opening Net Fixed Assets	\$ -	\$ 1,423
Closing Net Fixed Assets	\$ 1,423	\$ 1,387
Average Net Fixed Assets	\$ 712	\$ 1,405

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 1,343
Capital Additions	\$ 1,460	\$ -
UCC Before Half Year Rule	\$ 1,460	\$ 1,343
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 1,460	\$ 1,343
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 117	\$ 107
Closing UCC	\$ 1,343	\$ 1,235



Incremental Capital Project Summary

Using the pull-down menu below, please identify what year of the IRM cycle you are in.

4th Year of IRM Cycle

Name or General Description of Project

C2 Paper Insulated Lead Covered Cable - Piece Outs and Leakers

Year

2014

Details of Project

C2 Paper Insulated Lead Covered Cable - Piece Outs and Leakers

Number of Asset Components

1

Asset Component (Click on the Number to View the Component Details)	Capital Cost	Capital Cost (1/2 year rule applied)	Depreciation Rate	CCA Class	CCA Rate
1 1845_Underground Conductors and Devices	1,466,611	733,305	3%	47	8%
2014					
Closing Net Fixed Asset	714,973				
Amortization Expense	18,333				
CCA	58,664				



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 1

Name or General Description of Project

C2 Paper Insulated Lead Covered Cable - Piece Outs and Leakers

Asset Component

1845_Underground Conductors and Devices

Average Net Fixed Assets

Net Fixed Assets

	2014 Forecasted
Opening Capital Investment	\$ -
Capital Investment	\$ 733,305
Closing Capital Investment	\$ 733,305
Opening Accumulated Amortization	\$ -
Amortization	3% \$ 18,333
Closing Accumulated Amortization	\$ 18,333
Opening Net Fixed Assets	\$ -
Closing Net Fixed Assets	\$ 714,973
Average Net Fixed Assets	\$ 357,486

For PILs Calculation

UCC

	2014 Forecasted
Opening UCC	\$ -
Capital Additions	\$ 733,305
UCC Before Half Year Rule	\$ 733,305
Half Year Rule (1/2 Additions - Disposals)	\$ -
Reduced UCC	\$ 733,305
CCA Rate Class	47
CCA Rate	8%
CCA	\$ 58,664
Closing UCC	\$ 674,641



Incremental Capital Project Summary

Using the pull-down menu below, please identify what year of the IRM cycle you are in.

2nd Year of IRM Cycle

Name or General Description of Project

C3 Handwell Replacement

Year

2012

Details of Project

C3 Handwell Replacement

Number of Asset Components

1

Asset Component (Click on the Number to View the Component Details)

1 1830_Poles Towers and Fixtures

Capital Cost

12,007,529

Depreciation
Rate

3%

CCA Class

47

CCA Rate

8%

Closing Net Fixed Asset

2012
11,707,341

2013
11,407,153

2014
11,106,965

Amortization Expense

300,188

300,188

300,188

CCA

960,602

883,754

813,054



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 1

Name or General Description of Project

C3 Handwell Replacement

Asset Component

1830_Poles Towers and Fixtures

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 12,007,529	\$ 12,007,529
Capital Investment	\$ 12,007,529	\$ -	\$ -
Closing Capital Investment	\$ 12,007,529	\$ 12,007,529	\$ 12,007,529
Opening Accumulated Amortization	\$ -	\$ 300,188	\$ 600,376
Amortization	3% \$ 300,188	\$ 300,188	\$ 300,188
Closing Accumulated Amortization	\$ 300,188	\$ 600,376	\$ 900,565
Opening Net Fixed Assets	\$ -	\$ 11,707,341	\$ 11,407,153
Closing Net Fixed Assets	\$ 11,707,341	\$ 11,407,153	\$ 11,106,965
Average Net Fixed Assets	\$ 5,853,671	\$ 11,557,247	\$ 11,257,059

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 11,046,927	\$ 10,163,173
Capital Additions	\$ 12,007,529	\$ -	\$ -
UCC Before Half Year Rule	\$ 12,007,529	\$ 11,046,927	\$ 10,163,173
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 12,007,529	\$ 11,046,927	\$ 10,163,173
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 960,602	\$ 883,754	\$ 813,054
Closing UCC	\$ 11,046,927	\$ 10,163,173	\$ 9,350,119



Incremental Capital Project Summary

Using the pull-down menu below, please identify what year of the IRM cycle you are in.

3rd Year of IRM Cycle

Name or General Description of Project

C3 Handwell Replacement

Year

2013

Details of Project

C3 Handwell Replacement

Number of Asset Components

1

Asset Component (Click on the Number to View the Component Details)

1 1830_Poles Towers and Fixtures

Capital Cost

14,450,828

Depreciation
Rate

3%

CCA Class

47

CCA Rate

8%

2013

2014

Closing Net Fixed Asset

14,089,557

13,728,286

Amortization Expense

361,271

361,271

CCA

1,156,066

1,063,581



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 1

Name or General Description of Project

C3 Handwell Replacement

Asset Component

1830_Poles Towers and Fixtures

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 14,450,828
Capital Investment	\$ 14,450,828	\$ -
Closing Capital Investment	\$ 14,450,828	\$ 14,450,828
Opening Accumulated Amortization	\$ -	\$ 361,271
Amortization	3% \$ 361,271	\$ 361,271
Closing Accumulated Amortization	\$ 361,271	\$ 722,541
Opening Net Fixed Assets	\$ -	\$ 14,089,557
Closing Net Fixed Assets	\$ 14,089,557	\$ 13,728,286
Average Net Fixed Assets	\$ 7,044,778	\$ 13,908,922

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 13,294,761
Capital Additions	\$ 14,450,828	\$ -
UCC Before Half Year Rule	\$ 14,450,828	\$ 13,294,761
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 14,450,828	\$ 13,294,761
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 1,156,066	\$ 1,063,581
Closing UCC	\$ 13,294,761	\$ 12,231,180



Incremental Capital Project Summary

Using the pull-down menu below, please identify what year of the IRM cycle you are in.

4th Year of IRM Cycle

Name or General Description of Project

C3 Handwell Replacement

Year

2014

Details of Project

C3 Handwell Replacement

Number of Asset Components

1

Asset Component (Click on the Number to View the Component Details)	Capital Cost	Capital Cost (1/2 year rule applied)	Depreciation Rate	CCA Class	CCA Rate
1 1830_Poles Towers and Fixtures	7,169,780	3,584,890	3%	47	8%

Closing Net Fixed Asset 2014
 3,495,268

Amortization Expense
 89,622

CCA
 286,791



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 1

Name or General Description of Project

C3 Handwell Replacement

Asset Component

1830_Poles Towers and Fixtures

Average Net Fixed Assets

Net Fixed Assets

2014

Forecasted

Opening Capital Investment	\$	-
Capital Investment	\$	3,584,890
Closing Capital Investment	\$	3,584,890
Opening Accumulated Amortization	\$	-
Amortization	3%	\$ 89,622
Closing Accumulated Amortization	\$	89,622
Opening Net Fixed Assets	\$	-
Closing Net Fixed Assets	\$	3,495,268
Average Net Fixed Assets	\$	1,747,634

For PILs Calculation

UCC

2014

Forecasted

Opening UCC	\$	-
Capital Additions	\$	3,584,890
UCC Before Half Year Rule	\$	3,584,890
Half Year Rule (1/2 Additions - Disposals)	\$	-
Reduced UCC	\$	3,584,890
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$	286,791
Closing UCC	\$	3,298,099



Incremental Capital Project Summary

Using the pull-down menu below, please identify what year of the IRM cycle you are in.

2nd Year of IRM Cycle

Name or General Description of Project

C4 Overhead Infrastructure

Year

2012

Details of Project

C4 Overhead Infrastructure

Number of Asset Components

12

Asset Component (Click on the Number to View the Component Details)	Capital Cost	Depreciation Rate		CCA Class	CCA Rate
		2012	2013		
1 1830_Poles Towers and Fixtures	7,244,443	3%		47	8%
2 1835_Overhead Conductors and Devices	9,132,471	2%		47	8%
3 1835_Overhead Conductors and Devices - Switches	3,957,761	3%		47	8%
4 1840_Underground Conduit - Duct Bank	578,912	3%		47	8%
5 1840_Underground Conduit - Vault	27,779	3%		47	8%
6 1845_Underground Conductors and Devices	1,151,223	3%		47	8%
7 1845_Underground Conductors and Devices - Switch	187,366	5%		47	8%
8 1850_Line Transformers - OH	5,104,525	3%		47	8%
9 1850_Line Transformers - UG	372,287	3%		47	8%
10 1860_Meters - Smart Meters	11,794	7%		47	8%
11 1855_Services - UG	3,498	3%		47	8%
12 1855_Services - OH	1,654,583	2%		47	8%
Closing Net Fixed Asset	28,656,290	27,885,938	27,115,586		
Amortization Expense	770,352	770,352	770,352		
CCA	2,354,131	2,165,801	1,992,537		



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 1

Name or General Description of Project

C4 Overhead Infrastructure

Asset Component

1830_Poles Towers and Fixtures

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 7,244,443	\$ 7,244,443
Capital Investment	\$ 7,244,443	\$ -	\$ -
Closing Capital Investment	\$ 7,244,443	\$ 7,244,443	\$ 7,244,443
Opening Accumulated Amortization	\$ -	\$ 181,111	\$ 362,222
Amortization	3% \$ 181,111	\$ 181,111	\$ 181,111
Closing Accumulated Amortization	\$ 181,111	\$ 362,222	\$ 543,333
Opening Net Fixed Assets	\$ -	\$ 7,063,332	\$ 6,882,221
Closing Net Fixed Assets	\$ 7,063,332	\$ 6,882,221	\$ 6,701,110
Average Net Fixed Assets	\$ 3,531,666	\$ 6,972,776	\$ 6,791,665

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 6,664,888	\$ 6,131,697
Capital Additions	\$ 7,244,443	\$ -	\$ -
UCC Before Half Year Rule	\$ 7,244,443	\$ 6,664,888	\$ 6,131,697
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 7,244,443	\$ 6,664,888	\$ 6,131,697
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 579,555	\$ 533,191	\$ 490,536
Closing UCC	\$ 6,664,888	\$ 6,131,697	\$ 5,641,161



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 2

Name or General Description of Project

C4 Overhead Infrastructure

Asset Component

1835_Overhead Conductors and Devices

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 9,132,471	\$ 9,132,471
Capital Investment	\$ 9,132,471	\$ -	\$ -
Closing Capital Investment	\$ 9,132,471	\$ 9,132,471	\$ 9,132,471
Opening Accumulated Amortization	\$ -	\$ 182,649	\$ 365,299
Amortization	2% \$ 182,649	\$ 182,649	\$ 182,649
Closing Accumulated Amortization	\$ 182,649	\$ 365,299	\$ 547,948
Opening Net Fixed Assets	\$ -	\$ 8,949,821	\$ 8,767,172
Closing Net Fixed Assets	\$ 8,949,821	\$ 8,767,172	\$ 8,584,522
Average Net Fixed Assets	\$ 4,474,911	\$ 8,858,496	\$ 8,675,847

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 8,401,873	\$ 7,729,723
Capital Additions	\$ 9,132,471	\$ -	\$ -
UCC Before Half Year Rule	\$ 9,132,471	\$ 8,401,873	\$ 7,729,723
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 9,132,471	\$ 8,401,873	\$ 7,729,723
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 730,598	\$ 672,150	\$ 618,378
Closing UCC	\$ 8,401,873	\$ 7,729,723	\$ 7,111,345



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 3

Name or General Description of Project

C4 Overhead Infrastructure

Asset Component

1835_Overhead Conductors and Devices - Switches

Average Net Fixed Assets

Net Fixed Assets

Opening Capital Investment
 Capital Investment
 Closing Capital Investment

2012 2013 2014
 Forecasted Forecasted Forecasted

\$ -	\$ 3,957,761	\$ 3,957,761
\$ 3,957,761	\$ -	\$ -
\$ 3,957,761	\$ 3,957,761	\$ 3,957,761

Opening Accumulated Amortization
 Amortization
 Closing Accumulated Amortization

\$ -	\$ 131,925	\$ 263,851
3% \$ 131,925	\$ 131,925	\$ 131,925
\$ 131,925	\$ 263,851	\$ 395,776

Opening Net Fixed Assets
 Closing Net Fixed Assets
 Average Net Fixed Assets

\$ -	\$ 3,825,836	\$ 3,693,910
\$ 3,825,836	\$ 3,693,910	\$ 3,561,985
\$ 1,912,918	\$ 3,759,873	\$ 3,627,948

For PILs Calculation

UCC

Opening UCC
 Capital Additions
 UCC Before Half Year Rule
 Half Year Rule (1/2 Additions - Disposals)
 Reduced UCC
 CCA Rate Class
 CCA Rate
 CCA
 Closing UCC

2012 2013 2014
 Forecasted Forecasted Forecasted

\$ -	\$ 3,641,140	\$ 3,349,849
\$ 3,957,761	\$ -	\$ -
\$ 3,957,761	\$ 3,641,140	\$ 3,349,849
\$ -	\$ -	\$ -
\$ 3,957,761	\$ 3,641,140	\$ 3,349,849
47		
8%		
\$ 316,621	\$ 291,291	\$ 267,988
\$ 3,641,140	\$ 3,349,849	\$ 3,081,861



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 4

Name or General Description of Project

C4 Overhead Infrastructure

Asset Component

1840 Underground Conduit - Duct Bank

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 578,912	\$ 578,912
Capital Investment	\$ 578,912	\$ -	\$ -
Closing Capital Investment	\$ 578,912	\$ 578,912	\$ 578,912
Opening Accumulated Amortization	\$ -	\$ 19,297	\$ 38,594
Amortization	3% \$ 19,297	\$ 19,297	\$ 19,297
Closing Accumulated Amortization	\$ 19,297	\$ 38,594	\$ 57,891
Opening Net Fixed Assets	\$ -	\$ 559,615	\$ 540,318
Closing Net Fixed Assets	\$ 559,615	\$ 540,318	\$ 521,021
Average Net Fixed Assets	\$ 279,807	\$ 549,966	\$ 530,669

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 532,599	\$ 489,991
Capital Additions	\$ 578,912	\$ -	\$ -
UCC Before Half Year Rule	\$ 578,912	\$ 532,599	\$ 489,991
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 578,912	\$ 532,599	\$ 489,991
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 46,313	\$ 42,608	\$ 39,199
Closing UCC	\$ 532,599	\$ 489,991	\$ 450,792



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 5

Name or General Description of Project

C4 Overhead Infrastructure

Asset Component

1840 Underground Conduit - Vault

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 27,779	\$ 27,779
Capital Investment	\$ 27,779	\$ -	\$ -
Closing Capital Investment	\$ 27,779	\$ 27,779	\$ 27,779
Opening Accumulated Amortization	\$ -	\$ 694	\$ 1,389
Amortization	\$ 694	\$ 694	\$ 694
Closing Accumulated Amortization	\$ 694	\$ 1,389	\$ 2,083
Opening Net Fixed Assets	\$ -	\$ 27,084	\$ 26,390
Closing Net Fixed Assets	\$ 27,084	\$ 26,390	\$ 25,695
Average Net Fixed Assets	\$ 13,542	\$ 26,737	\$ 26,042

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 25,556	\$ 23,512
Capital Additions	\$ 27,779	\$ -	\$ -
UCC Before Half Year Rule	\$ 27,779	\$ 25,556	\$ 23,512
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 27,779	\$ 25,556	\$ 23,512
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 2,222	\$ 2,045	\$ 1,881
Closing UCC	\$ 25,556	\$ 23,512	\$ 21,631



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 6

Name or General Description of Project

C4 Overhead Infrastructure

Asset Component

1845 Underground Conductors and Devices

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 1,151,223	\$ 1,151,223
Capital Investment	\$ 1,151,223	\$ -	\$ -
Closing Capital Investment	\$ 1,151,223	\$ 1,151,223	\$ 1,151,223
Opening Accumulated Amortization	\$ -	\$ 28,781	\$ 57,561
Amortization	3% \$ 28,781	\$ 28,781	\$ 28,781
Closing Accumulated Amortization	\$ 28,781	\$ 57,561	\$ 86,342
Opening Net Fixed Assets	\$ -	\$ 1,122,442	\$ 1,093,661
Closing Net Fixed Assets	\$ 1,122,442	\$ 1,093,661	\$ 1,064,881
Average Net Fixed Assets	\$ 561,221	\$ 1,108,052	\$ 1,079,271

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 1,059,125	\$ 974,395
Capital Additions	\$ 1,151,223	\$ -	\$ -
UCC Before Half Year Rule	\$ 1,151,223	\$ 1,059,125	\$ 974,395
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 1,151,223	\$ 1,059,125	\$ 974,395
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 92,098	\$ 84,730	\$ 77,952
Closing UCC	\$ 1,059,125	\$ 974,395	\$ 896,443



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 7

Name or General Description of Project

C4 Overhead Infrastructure

Asset Component

1845 Underground Conductors and Devices - Switch

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 187,366	\$ 187,366
Capital Investment	\$ 187,366	\$ -	\$ -
Closing Capital Investment	\$ 187,366	\$ 187,366	\$ 187,366
Opening Accumulated Amortization	\$ -	\$ 9,368	\$ 18,737
Amortization	5% \$ 9,368	\$ 9,368	\$ 9,368
Closing Accumulated Amortization	\$ 9,368	\$ 18,737	\$ 28,105
Opening Net Fixed Assets	\$ -	\$ 177,998	\$ 168,629
Closing Net Fixed Assets	\$ 177,998	\$ 168,629	\$ 159,261
Average Net Fixed Assets	\$ 88,999	\$ 173,313	\$ 163,945

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 172,377	\$ 158,587
Capital Additions	\$ 187,366	\$ -	\$ -
UCC Before Half Year Rule	\$ 187,366	\$ 172,377	\$ 158,587
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 187,366	\$ 172,377	\$ 158,587
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 14,989	\$ 13,790	\$ 12,687
Closing UCC	\$ 172,377	\$ 158,587	\$ 145,900



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 8

Name or General Description of Project

C4 Overhead Infrastructure

Asset Component

1850 Line Transformers - OH

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 5,104,525	\$ 5,104,525
Capital Investment	\$ 5,104,525	\$ -	\$ -
Closing Capital Investment	\$ 5,104,525	\$ 5,104,525	\$ 5,104,525
Opening Accumulated Amortization	\$ -	\$ 170,151	\$ 340,302
Amortization	3% \$ 170,151	\$ 170,151	\$ 170,151
Closing Accumulated Amortization	\$ 170,151	\$ 340,302	\$ 510,453
Opening Net Fixed Assets	\$ -	\$ 4,934,375	\$ 4,764,224
Closing Net Fixed Assets	\$ 4,934,375	\$ 4,764,224	\$ 4,594,073
Average Net Fixed Assets	\$ 2,467,187	\$ 4,849,299	\$ 4,679,148

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 4,696,163	\$ 4,320,470
Capital Additions	\$ 5,104,525	\$ -	\$ -
UCC Before Half Year Rule	\$ 5,104,525	\$ 4,696,163	\$ 4,320,470
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 5,104,525	\$ 4,696,163	\$ 4,320,470
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 408,362	\$ 375,693	\$ 345,638
Closing UCC	\$ 4,696,163	\$ 4,320,470	\$ 3,974,833



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 9

Name or General Description of Project

C4 Overhead Infrastructure

Asset Component

1850 Line Transformers - UG

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 372,287	\$ 372,287
Capital Investment	\$ 372,287	\$ -	\$ -
Closing Capital Investment	\$ 372,287	\$ 372,287	\$ 372,287
Opening Accumulated Amortization	\$ -	\$ 12,410	\$ 24,819
Amortization	3% \$ 12,410	\$ 12,410	\$ 12,410
Closing Accumulated Amortization	\$ 12,410	\$ 24,819	\$ 37,229
Opening Net Fixed Assets	\$ -	\$ 359,878	\$ 347,468
Closing Net Fixed Assets	\$ 359,878	\$ 347,468	\$ 335,058
Average Net Fixed Assets	\$ 179,939	\$ 353,673	\$ 341,263

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 342,504	\$ 315,104
Capital Additions	\$ 372,287	\$ -	\$ -
UCC Before Half Year Rule	\$ 372,287	\$ 342,504	\$ 315,104
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 372,287	\$ 342,504	\$ 315,104
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 29,783	\$ 27,400	\$ 25,208
Closing UCC	\$ 342,504	\$ 315,104	\$ 289,896



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 10

Name or General Description of Project

C4 Overhead Infrastructure

Asset Component

1860 Meters - Smart Meters

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 11,794	\$ 11,794
Capital Investment	\$ 11,794	\$ -	\$ -
Closing Capital Investment	\$ 11,794	\$ 11,794	\$ 11,794
Opening Accumulated Amortization	\$ -	\$ 786	\$ 1,573
Amortization	7% \$ 786	\$ 786	\$ 786
Closing Accumulated Amortization	\$ 786	\$ 1,573	\$ 2,359
Opening Net Fixed Assets	\$ -	\$ 11,008	\$ 10,222
Closing Net Fixed Assets	\$ 11,008	\$ 10,222	\$ 9,435
Average Net Fixed Assets	\$ 5,504	\$ 10,615	\$ 9,829

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 10,851	\$ 9,983
Capital Additions	\$ 11,794	\$ -	\$ -
UCC Before Half Year Rule	\$ 11,794	\$ 10,851	\$ 9,983
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 11,794	\$ 10,851	\$ 9,983
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 944	\$ 868	\$ 799
Closing UCC	\$ 10,851	\$ 9,983	\$ 9,184



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 11

Name or General Description of Project

C4 Overhead Infrastructure

Asset Component

1855_Services - UG

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 3,498	\$ 3,498
Capital Investment	\$ 3,498	\$ -	\$ -
Closing Capital Investment	\$ 3,498	\$ 3,498	\$ 3,498
Opening Accumulated Amortization	\$ -	\$ 87	\$ 175
Amortization	3% \$ 87	\$ 87	\$ 87
Closing Accumulated Amortization	\$ 87	\$ 175	\$ 262
Opening Net Fixed Assets	\$ -	\$ 3,411	\$ 3,323
Closing Net Fixed Assets	\$ 3,411	\$ 3,323	\$ 3,236
Average Net Fixed Assets	\$ 1,705	\$ 3,367	\$ 3,280

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 3,218	\$ 2,961
Capital Additions	\$ 3,498	\$ -	\$ -
UCC Before Half Year Rule	\$ 3,498	\$ 3,218	\$ 2,961
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 3,498	\$ 3,218	\$ 2,961
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 280	\$ 257	\$ 237
Closing UCC	\$ 3,218	\$ 2,961	\$ 2,724



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 12

Name or General Description of Project

C4 Overhead Infrastructure

Asset Component

1855_Services - OH

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 1,654,583	\$ 1,654,583
Capital Investment	\$ 1,654,583	\$ -	\$ -
Closing Capital Investment	\$ 1,654,583	\$ 1,654,583	\$ 1,654,583
Opening Accumulated Amortization	\$ -	\$ 33,092	\$ 66,183
Amortization	2% \$ 33,092	\$ 33,092	\$ 33,092
Closing Accumulated Amortization	\$ 33,092	\$ 66,183	\$ 99,275
Opening Net Fixed Assets	\$ -	\$ 1,621,492	\$ 1,588,400
Closing Net Fixed Assets	\$ 1,621,492	\$ 1,588,400	\$ 1,555,308
Average Net Fixed Assets	\$ 810,746	\$ 1,604,946	\$ 1,571,854

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 1,522,217	\$ 1,400,439
Capital Additions	\$ 1,654,583	\$ -	\$ -
UCC Before Half Year Rule	\$ 1,654,583	\$ 1,522,217	\$ 1,400,439
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 1,654,583	\$ 1,522,217	\$ 1,400,439
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 132,367	\$ 121,777	\$ 112,035
Closing UCC	\$ 1,522,217	\$ 1,400,439	\$ 1,288,404



Incremental Capital Project Summary

Using the pull-down menu below, please identify what year of the IRM cycle you are in.

3rd Year of IRM Cycle

Name or General Description of Project

C4 Overhead Infrastructure

Year

2013

Details of Project

C4 Overhead Infrastructure

Number of Asset Components

14

Asset Component (Click on the Number to View the Component Details)	Capital Cost	Depreciation Rate	CCA Class	CCA Rate
1 1830_Poles Towers and Fixtures	18,620,793	3%	47	8%
2 1835_Overhead Conductors and Devices	13,316,361	2%	47	8%
3 1835_Overhead Conductors and Devices - Switches	3,014,856	3%	47	8%
4 1840_Underground Conduit - Cable Chamber	7,300	2%	47	8%
5 1840_Underground Conduit - Duct Bank	959,144	3%	47	8%
6 1840_Underground Conduit - Vault	4,180	3%	47	8%
7 1840_Underground Conduit - Vault Roof	1,862	5%	47	8%
8 1845_Underground Conductors and Devices	600,112	3%	47	8%
9 1845_Underground Conductors and Devices - Switch	168,443	5%	47	8%
10 1850_Line Transformers - OH	13,993,573	3%	47	8%
11 1850_Line Transformers - UG	851,284	3%	47	8%
12 1860_Meters - Smart Meters	173,623	7%	47	8%
13 1855_Services - UG	108,573	3%	47	8%
14 1855_Services - OH	1,197,971	2%	47	8%

	2013	2014
Closing Net Fixed Asset	51,596,913	50,175,754
Amortization Expense	1,421,159	1,421,159
CCA	4,241,446	3,902,130



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 1

Name or General Description of Project

C4 Overhead Infrastructure

Asset Component

1830_Poles Towers and Fixtures

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 18,620,793
Capital Investment	\$ 18,620,793	\$ -
Closing Capital Investment	\$ 18,620,793	\$ 18,620,793
Opening Accumulated Amortization	\$ -	\$ 465,520
Amortization	3% \$ 465,520	\$ 465,520
Closing Accumulated Amortization	\$ 465,520	\$ 931,040
Opening Net Fixed Assets	\$ -	\$ 18,155,274
Closing Net Fixed Assets	\$ 18,155,274	\$ 17,689,754
Average Net Fixed Assets	\$ 9,077,637	\$ 17,922,514

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 17,131,130
Capital Additions	\$ 18,620,793	\$ -
UCC Before Half Year Rule	\$ 18,620,793	\$ 17,131,130
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 18,620,793	\$ 17,131,130
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 1,489,663	\$ 1,370,490
Closing UCC	\$ 17,131,130	\$ 15,760,640



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 2

Name or General Description of Project

C4 Overhead Infrastructure

Asset Component

1835_Overhead Conductors and Devices

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 13,316,361
Capital Investment	\$ 13,316,361	\$ -
Closing Capital Investment	\$ 13,316,361	\$ 13,316,361
Opening Accumulated Amortization	\$ -	\$ 266,327
Amortization	2% \$ 266,327	\$ 266,327
Closing Accumulated Amortization	\$ 266,327	\$ 532,654
Opening Net Fixed Assets	\$ -	\$ 13,050,033
Closing Net Fixed Assets	\$ 13,050,033	\$ 12,783,706
Average Net Fixed Assets	\$ 6,525,017	\$ 12,916,870

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 12,251,052
Capital Additions	\$ 13,316,361	\$ -
UCC Before Half Year Rule	\$ 13,316,361	\$ 12,251,052
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 13,316,361	\$ 12,251,052
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 1,065,309	\$ 980,084
Closing UCC	\$ 12,251,052	\$ 11,270,968



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 3

Name or General Description of Project

C4 Overhead Infrastructure

Asset Component

1835_Overhead Conductors and Devices - Switches

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 3,014,856
Capital Investment	\$ 3,014,856	\$ -
Closing Capital Investment	\$ 3,014,856	\$ 3,014,856
Opening Accumulated Amortization	\$ -	\$ 100,495
Amortization	3% \$ 100,495	\$ 100,495
Closing Accumulated Amortization	\$ 100,495	\$ 200,990
Opening Net Fixed Assets	\$ -	\$ 2,914,361
Closing Net Fixed Assets	\$ 2,914,361	\$ 2,813,866
Average Net Fixed Assets	\$ 1,457,180	\$ 2,864,113

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 2,773,668
Capital Additions	\$ 3,014,856	\$ -
UCC Before Half Year Rule	\$ 3,014,856	\$ 2,773,668
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 3,014,856	\$ 2,773,668
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 241,188	\$ 221,893
Closing UCC	\$ 2,773,668	\$ 2,551,774



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 4

Name or General Description of Project

C4 Overhead Infrastructure

Asset Component

1840_Underground Conduit - Cable Chamber

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 7,300
Capital Investment	\$ 7,300	\$ -
Closing Capital Investment	\$ 7,300	\$ 7,300
Opening Accumulated Amortization	\$ -	\$ 146
Amortization	2% \$ 146	\$ 146
Closing Accumulated Amortization	\$ 146	\$ 292
Opening Net Fixed Assets	\$ -	\$ 7,154
Closing Net Fixed Assets	\$ 7,154	\$ 7,008
Average Net Fixed Assets	\$ 3,577	\$ 7,081

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 6,716
Capital Additions	\$ 7,300	\$ -
UCC Before Half Year Rule	\$ 7,300	\$ 6,716
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 7,300	\$ 6,716
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 584	\$ 537
Closing UCC	\$ 6,716	\$ 6,179



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 5

Name or General Description of Project

C4 Overhead Infrastructure

Asset Component

1840 Underground Conduit - Duct Bank

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 959,144
Capital Investment	\$ 959,144	\$ -
Closing Capital Investment	\$ 959,144	\$ 959,144
Opening Accumulated Amortization	\$ -	\$ 31,971
Amortization	3% \$ 31,971	\$ 31,971
Closing Accumulated Amortization	\$ 31,971	\$ 63,943
Opening Net Fixed Assets	\$ -	\$ 927,172
Closing Net Fixed Assets	\$ 927,172	\$ 895,201
Average Net Fixed Assets	\$ 463,586	\$ 911,186

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 882,412
Capital Additions	\$ 959,144	\$ -
UCC Before Half Year Rule	\$ 959,144	\$ 882,412
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 959,144	\$ 882,412
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 76,731	\$ 70,593
Closing UCC	\$ 882,412	\$ 811,819



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 6

Name or General Description of Project

C4 Overhead Infrastructure

Asset Component

1840_Underground Conduit - Vault

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 4,180
Capital Investment	\$ 4,180	\$ -
Closing Capital Investment	\$ 4,180	\$ 4,180
Opening Accumulated Amortization	\$ -	\$ 104
Amortization	3% \$ 104	\$ 104
Closing Accumulated Amortization	\$ 104	\$ 209
Opening Net Fixed Assets	\$ -	\$ 4,075
Closing Net Fixed Assets	\$ 4,075	\$ 3,971
Average Net Fixed Assets	\$ 2,038	\$ 4,023

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 3,845
Capital Additions	\$ 4,180	\$ -
UCC Before Half Year Rule	\$ 4,180	\$ 3,845
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 4,180	\$ 3,845
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 334	\$ 308
Closing UCC	\$ 3,845	\$ 3,538



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 7

Name or General Description of Project

C4 Overhead Infrastructure

Asset Component

1840_Underground Conduit - Vault Roof

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 1,862
Capital Investment	\$ 1,862	\$ -
Closing Capital Investment	\$ 1,862	\$ 1,862
Opening Accumulated Amortization	\$ -	\$ 93
Amortization	5% \$ 93	\$ 93
Closing Accumulated Amortization	\$ 93	\$ 186
Opening Net Fixed Assets	\$ -	\$ 1,769
Closing Net Fixed Assets	\$ 1,769	\$ 1,676
Average Net Fixed Assets	\$ 884	\$ 1,722

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 1,713
Capital Additions	\$ 1,862	\$ -
UCC Before Half Year Rule	\$ 1,862	\$ 1,713
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 1,862	\$ 1,713
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 149	\$ 137
Closing UCC	\$ 1,713	\$ 1,576



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 8

Name or General Description of Project

C4 Overhead Infrastructure

Asset Component

1845 Underground Conductors and Devices

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 600,112
Capital Investment	\$ 600,112	\$ -
Closing Capital Investment	\$ 600,112	\$ 600,112
Opening Accumulated Amortization	\$ -	\$ 15,003
Amortization	3% \$ 15,003	\$ 15,003
Closing Accumulated Amortization	\$ 15,003	\$ 30,006
Opening Net Fixed Assets	\$ -	\$ 585,109
Closing Net Fixed Assets	\$ 585,109	\$ 570,106
Average Net Fixed Assets	\$ 292,554	\$ 577,607

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 552,103
Capital Additions	\$ 600,112	\$ -
UCC Before Half Year Rule	\$ 600,112	\$ 552,103
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 600,112	\$ 552,103
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 48,009	\$ 44,168
Closing UCC	\$ 552,103	\$ 507,934



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 9

Name or General Description of Project

C4 Overhead Infrastructure

Asset Component

1845 Underground Conductors and Devices - Switch

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 168,443
Capital Investment	\$ 168,443	\$ -
Closing Capital Investment	\$ 168,443	\$ 168,443
Opening Accumulated Amortization	\$ -	\$ 8,422
Amortization	5% \$ 8,422	\$ 8,422
Closing Accumulated Amortization	\$ 8,422	\$ 16,844
Opening Net Fixed Assets	\$ -	\$ 160,020
Closing Net Fixed Assets	\$ 160,020	\$ 151,598
Average Net Fixed Assets	\$ 80,010	\$ 155,809

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 154,967
Capital Additions	\$ 168,443	\$ -
UCC Before Half Year Rule	\$ 168,443	\$ 154,967
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 168,443	\$ 154,967
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 13,475	\$ 12,397
Closing UCC	\$ 154,967	\$ 142,570



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 10

Name or General Description of Project

C4 Overhead Infrastructure

Asset Component

1850_Line Transformers - OH

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 13,993,573
Capital Investment	\$ 13,993,573	\$ -
Closing Capital Investment	\$ 13,993,573	\$ 13,993,573
Opening Accumulated Amortization	\$ -	\$ 466,452
Amortization	3% \$ 466,452	\$ 466,452
Closing Accumulated Amortization	\$ 466,452	\$ 932,905
Opening Net Fixed Assets	\$ -	\$ 13,527,120
Closing Net Fixed Assets	\$ 13,527,120	\$ 13,060,668
Average Net Fixed Assets	\$ 6,763,560	\$ 13,293,894

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 12,874,087
Capital Additions	\$ 13,993,573	\$ -
UCC Before Half Year Rule	\$ 13,993,573	\$ 12,874,087
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 13,993,573	\$ 12,874,087
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 1,119,486	\$ 1,029,927
Closing UCC	\$ 12,874,087	\$ 11,844,160



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 11

Name or General Description of Project

C4 Overhead Infrastructure

Asset Component

1850_Line Transformers - UG

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 851,284
Capital Investment	\$ 851,284	\$ -
Closing Capital Investment	\$ 851,284	\$ 851,284
Opening Accumulated Amortization	\$ -	\$ 28,376
Amortization	3% \$ 28,376	\$ 28,376
Closing Accumulated Amortization	\$ 28,376	\$ 56,752
Opening Net Fixed Assets	\$ -	\$ 822,908
Closing Net Fixed Assets	\$ 822,908	\$ 794,532
Average Net Fixed Assets	\$ 411,454	\$ 808,720

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 783,181
Capital Additions	\$ 851,284	\$ -
UCC Before Half Year Rule	\$ 851,284	\$ 783,181
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 851,284	\$ 783,181
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 68,103	\$ 62,655
Closing UCC	\$ 783,181	\$ 720,527



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 12

Name or General Description of Project

C4 Overhead Infrastructure

Asset Component

1860 Meters - Smart Meters

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 173,623
Capital Investment	\$ 173,623	\$ -
Closing Capital Investment	\$ 173,623	\$ 173,623
Opening Accumulated Amortization	\$ -	\$ 11,575
Amortization	7% \$ 11,575	\$ 11,575
Closing Accumulated Amortization	\$ 11,575	\$ 23,150
Opening Net Fixed Assets	\$ -	\$ 162,048
Closing Net Fixed Assets	\$ 162,048	\$ 150,473
Average Net Fixed Assets	\$ 81,024	\$ 156,261

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 159,733
Capital Additions	\$ 173,623	\$ -
UCC Before Half Year Rule	\$ 173,623	\$ 159,733
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 173,623	\$ 159,733
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 13,890	\$ 12,779
Closing UCC	\$ 159,733	\$ 146,954



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 13

Name or General Description of Project

C4 Overhead Infrastructure

Asset Component

1855_Services - UG

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 108,573
Capital Investment	\$ 108,573	\$ -
Closing Capital Investment	\$ 108,573	\$ 108,573
Opening Accumulated Amortization	\$ -	\$ 2,714
Amortization	3% \$ 2,714	\$ 2,714
Closing Accumulated Amortization	\$ 2,714	\$ 5,429
Opening Net Fixed Assets	\$ -	\$ 105,858
Closing Net Fixed Assets	\$ 105,858	\$ 103,144
Average Net Fixed Assets	\$ 52,929	\$ 104,501

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 99,887
Capital Additions	\$ 108,573	\$ -
UCC Before Half Year Rule	\$ 108,573	\$ 99,887
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 108,573	\$ 99,887
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 8,686	\$ 7,991
Closing UCC	\$ 99,887	\$ 91,896



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 14

Name or General Description of Project

C4 Overhead Infrastructure

Asset Component

1855_Services - OH

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 1,197,971
Capital Investment	\$ 1,197,971	\$ -
Closing Capital Investment	\$ 1,197,971	\$ 1,197,971
Opening Accumulated Amortization	\$ -	\$ 23,959
Amortization	2% \$ 23,959	\$ 23,959
Closing Accumulated Amortization	\$ 23,959	\$ 47,919
Opening Net Fixed Assets	\$ -	\$ 1,174,012
Closing Net Fixed Assets	\$ 1,174,012	\$ 1,150,052
Average Net Fixed Assets	\$ 587,006	\$ 1,162,032

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 1,102,133
Capital Additions	\$ 1,197,971	\$ -
UCC Before Half Year Rule	\$ 1,197,971	\$ 1,102,133
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 1,197,971	\$ 1,102,133
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 95,838	\$ 88,171
Closing UCC	\$ 1,102,133	\$ 1,013,963



Incremental Capital Project Summary

Using the pull-down menu below, please identify what year of the IRM cycle you are in.

4th Year of IRM Cycle

Name or General Description of Project

C4 Overhead Infrastructure

Details of Project

C4 Overhead Infrastructure

Year

2014

Number of Asset Components

14

Asset Component (Click on the Number to View the Component Details)	Capital Cost	Capital Cost (1/2 year rule applied)	Depreciation Rate	CCA Class	CCA Rate
1 1830_Poles Towers and Fixtures	6,957,006	3,478,503	3%	47	8%
2 1835_Overhead Conductors and Devices	4,704,827	2,352,413	2%	47	8%
3 1835_Overhead Conductors and Devices - Switches	1,714,563	857,282	3%	47	8%
4 1840_Underground Conduit - Cable Chamber	1,972	986	2%	47	8%
5 1840_Underground Conduit - Duct Bank	217,771	108,885	3%	47	8%
6 1840_Underground Conduit - Vault	62,831	31,416	3%	47	8%
7 1840_Underground Conduit - Vault Roof	1,972	986	5%	47	8%
8 1845_Underground Conductors and Devices	373,487	186,743	3%	47	8%
9 1845_Underground Conductors and Devices - Switch	98,821	49,411	5%	47	8%
10 1850_Line Transformers - OH	4,573,552	2,286,776	3%	47	8%
11 1850_Line Transformers - UG	225,280	112,640	3%	47	8%
12 1860_Meters - Smart Meters	36,374	18,187	7%	47	8%
13 1855_Services - UG	58,180	29,090	3%	47	8%
14 1855_Services - OH	1,086,988	543,494	2%	47	8%

Closing Net Fixed Asset	2014 9,789,812
Amortization Expense	267,000
CCA	804,545



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 1

Name or General Description of Project

C4 Overhead Infrastructure

Asset Component

1830_Poles Towers and Fixtures

Average Net Fixed Assets

Net Fixed Assets

2014
Forecasted

Opening Capital Investment	\$	-
Capital Investment	\$	3,478,503
Closing Capital Investment	\$	3,478,503
Opening Accumulated Amortization	\$	-
Amortization	3%	\$ 86,963
Closing Accumulated Amortization	\$	86,963
Opening Net Fixed Assets	\$	-
Closing Net Fixed Assets	\$	3,391,540
Average Net Fixed Assets	\$	1,695,770

For PILs Calculation

UCC

2014
Forecasted

Opening UCC	\$	-
Capital Additions	\$	3,478,503
UCC Before Half Year Rule	\$	3,478,503
Half Year Rule (1/2 Additions - Disposals)	\$	-
Reduced UCC	\$	3,478,503
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$	278,280
Closing UCC	\$	3,200,223



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 2

Name or General Description of Project

C4 Overhead Infrastructure

Asset Component

1835_Overhead Conductors and Devices

Average Net Fixed Assets

Net Fixed Assets

2014
Forecasted

Opening Capital Investment	\$	-
Capital Investment	\$	2,352,413
Closing Capital Investment	\$	2,352,413
Opening Accumulated Amortization	\$	-
Amortization	2%	\$ 47,048
Closing Accumulated Amortization	\$	47,048
Opening Net Fixed Assets	\$	-
Closing Net Fixed Assets	\$	2,305,365
Average Net Fixed Assets	\$	1,152,683

For PILs Calculation

UCC

2014
Forecasted

Opening UCC	\$	-
Capital Additions	\$	2,352,413
UCC Before Half Year Rule	\$	2,352,413
Half Year Rule (1/2 Additions - Disposals)	\$	-
Reduced UCC	\$	2,352,413
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$	188,193
Closing UCC	\$	2,164,220



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 3

Name or General Description of Project

C4 Overhead Infrastructure

Asset Component

1835_Overhead Conductors and Devices - Switches

Average Net Fixed Assets

Net Fixed Assets

2014

Forecasted

Opening Capital Investment	\$	-
Capital Investment	\$	857,282
Closing Capital Investment	\$	857,282
Opening Accumulated Amortization	\$	-
Amortization	3%	\$ 28,576
Closing Accumulated Amortization	\$	28,576
Opening Net Fixed Assets	\$	-
Closing Net Fixed Assets	\$	828,706
Average Net Fixed Assets	\$	414,353

For PILs Calculation

UCC

2014

Forecasted

Opening UCC	\$	-
Capital Additions	\$	857,282
UCC Before Half Year Rule	\$	857,282
Half Year Rule (1/2 Additions - Disposals)	\$	-
Reduced UCC	\$	857,282
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$	68,583
Closing UCC	\$	788,699



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 4

Name or General Description of Project

C4 Overhead Infrastructure

Asset Component

1840_Underground Conduit - Cable Chamber

Average Net Fixed Assets

Net Fixed Assets

2014
Forecasted

Opening Capital Investment		\$	-
Capital Investment		\$	986
Closing Capital Investment		\$	986
Opening Accumulated Amortization		\$	-
Amortization	2%	\$	20
Closing Accumulated Amortization		\$	20
Opening Net Fixed Assets		\$	-
Closing Net Fixed Assets		\$	966
Average Net Fixed Assets		\$	483

For PILs Calculation

UCC

2014
Forecasted

Opening UCC		\$	-
Capital Additions		\$	986
UCC Before Half Year Rule		\$	986
Half Year Rule (1/2 Additions - Disposals)		\$	-
Reduced UCC		\$	986
CCA Rate Class	47		
CCA Rate	8%		
CCA		\$	79
Closing UCC		\$	907



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 5

Name or General Description of Project

C4 Overhead Infrastructure

Asset Component

1840 Underground Conduit - Duct Bank

Average Net Fixed Assets

Net Fixed Assets

2014
Forecasted

Opening Capital Investment	\$	-
Capital Investment	\$	108,885
Closing Capital Investment	\$	108,885
Opening Accumulated Amortization	\$	-
Amortization	3%	\$ 3,630
Closing Accumulated Amortization	\$	3,630
Opening Net Fixed Assets	\$	-
Closing Net Fixed Assets	\$	105,256
Average Net Fixed Assets	\$	52,628

For PILs Calculation

UCC

2014
Forecasted

Opening UCC	\$	-
Capital Additions	\$	108,885
UCC Before Half Year Rule	\$	108,885
Half Year Rule (1/2 Additions - Disposals)	\$	-
Reduced UCC	\$	108,885
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$	8,711
Closing UCC	\$	100,175



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 6

Name or General Description of Project

C4 Overhead Infrastructure

Asset Component

1840 Underground Conduit - Vault

Average Net Fixed Assets

Net Fixed Assets

2014
Forecasted

Opening Capital Investment	\$	-
Capital Investment	\$	31,416
Closing Capital Investment	\$	31,416
Opening Accumulated Amortization	\$	-
Amortization	3%	\$ 785
Closing Accumulated Amortization	\$	785
Opening Net Fixed Assets	\$	-
Closing Net Fixed Assets	\$	30,630
Average Net Fixed Assets	\$	15,315

For PILs Calculation

UCC

2014
Forecasted

Opening UCC	\$	-
Capital Additions	\$	31,416
UCC Before Half Year Rule	\$	31,416
Half Year Rule (1/2 Additions - Disposals)	\$	-
Reduced UCC	\$	31,416
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$	2,513
Closing UCC	\$	28,902



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 7

Name or General Description of Project

C4 Overhead Infrastructure

Asset Component

1840_Underground Conduit - Vault Roof

Average Net Fixed Assets

Net Fixed Assets

2014
Forecasted

Opening Capital Investment	\$	-
Capital Investment	\$	986
Closing Capital Investment	\$	986
Opening Accumulated Amortization	\$	-
Amortization	5%	\$ 49
Closing Accumulated Amortization	\$	49
Opening Net Fixed Assets	\$	-
Closing Net Fixed Assets	\$	937
Average Net Fixed Assets	\$	468

For PILs Calculation

UCC

2014
Forecasted

Opening UCC	\$	-
Capital Additions	\$	986
UCC Before Half Year Rule	\$	986
Half Year Rule (1/2 Additions - Disposals)	\$	-
Reduced UCC	\$	986
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$	79
Closing UCC	\$	907



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 8

Name or General Description of Project

C4 Overhead Infrastructure

Asset Component

1845_Underground Conductors and Devices

Average Net Fixed Assets

Net Fixed Assets

	2014 Forecasted
Opening Capital Investment	\$ -
Capital Investment	\$ 186,743
Closing Capital Investment	\$ 186,743
Opening Accumulated Amortization	\$ -
Amortization	3% \$ 4,669
Closing Accumulated Amortization	\$ 4,669
Opening Net Fixed Assets	\$ -
Closing Net Fixed Assets	\$ 182,075
Average Net Fixed Assets	\$ 91,037

For PILs Calculation

UCC

	2014 Forecasted
Opening UCC	\$ -
Capital Additions	\$ 186,743
UCC Before Half Year Rule	\$ 186,743
Half Year Rule (1/2 Additions - Disposals)	\$ -
Reduced UCC	\$ 186,743
CCA Rate Class	47
CCA Rate	8%
CCA	\$ 14,939
Closing UCC	\$ 171,804



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 9

Name or General Description of Project

C4 Overhead Infrastructure

Asset Component

1845_Underground Conductors and Devices - Switch

Average Net Fixed Assets

Net Fixed Assets

	2014 Forecasted
Opening Capital Investment	\$ -
Capital Investment	\$ 49,411
Closing Capital Investment	\$ 49,411
Opening Accumulated Amortization	\$ -
Amortization	5% \$ 2,471
Closing Accumulated Amortization	\$ 2,471
Opening Net Fixed Assets	\$ -
Closing Net Fixed Assets	\$ 46,940
Average Net Fixed Assets	\$ 23,470

For PILs Calculation

UCC

	2014 Forecasted
Opening UCC	\$ -
Capital Additions	\$ 49,411
UCC Before Half Year Rule	\$ 49,411
Half Year Rule (1/2 Additions - Disposals)	\$ -
Reduced UCC	\$ 49,411
CCA Rate Class	47
CCA Rate	8%
CCA	\$ 3,953
Closing UCC	\$ 45,458



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 10

Name or General Description of Project

C4 Overhead Infrastructure

Asset Component

1850_Line Transformers - OH

Average Net Fixed Assets

Net Fixed Assets

2014

Forecasted

Opening Capital Investment	\$	-
Capital Investment	\$	2,286,776
Closing Capital Investment	\$	2,286,776
Opening Accumulated Amortization	\$	-
Amortization	3%	\$ 76,226
Closing Accumulated Amortization	\$	76,226
Opening Net Fixed Assets	\$	-
Closing Net Fixed Assets	\$	2,210,550
Average Net Fixed Assets	\$	1,105,275

For PILs Calculation

UCC

2014

Forecasted

Opening UCC	\$	-
Capital Additions	\$	2,286,776
UCC Before Half Year Rule	\$	2,286,776
Half Year Rule (1/2 Additions - Disposals)	\$	-
Reduced UCC	\$	2,286,776
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$	182,942
Closing UCC	\$	2,103,834



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 11

Name or General Description of Project

C4 Overhead Infrastructure

Asset Component

1850_Line Transformers - UG

Average Net Fixed Assets

Net Fixed Assets

2014
Forecasted

Opening Capital Investment	\$	-
Capital Investment	\$	112,640
Closing Capital Investment	\$	112,640
Opening Accumulated Amortization	\$	-
Amortization	3%	\$ 3,755
Closing Accumulated Amortization	\$	3,755
Opening Net Fixed Assets	\$	-
Closing Net Fixed Assets	\$	108,885
Average Net Fixed Assets	\$	54,443

For PILs Calculation

UCC

2014
Forecasted

Opening UCC	\$	-
Capital Additions	\$	112,640
UCC Before Half Year Rule	\$	112,640
Half Year Rule (1/2 Additions - Disposals)	\$	-
Reduced UCC	\$	112,640
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$	9,011
Closing UCC	\$	103,629



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 12

Name or General Description of Project

C4 Overhead Infrastructure

Asset Component

1860 Meters - Smart Meters

Average Net Fixed Assets

Net Fixed Assets

2014
Forecasted

Opening Capital Investment	\$	-
Capital Investment	\$	18,187
Closing Capital Investment	\$	18,187
Opening Accumulated Amortization	\$	-
Amortization	7%	\$ 1,212
Closing Accumulated Amortization	\$	1,212
Opening Net Fixed Assets	\$	-
Closing Net Fixed Assets	\$	16,975
Average Net Fixed Assets	\$	8,487

For PILs Calculation

UCC

2014
Forecasted

Opening UCC	\$	-
Capital Additions	\$	18,187
UCC Before Half Year Rule	\$	18,187
Half Year Rule (1/2 Additions - Disposals)	\$	-
Reduced UCC	\$	18,187
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$	1,455
Closing UCC	\$	16,732



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 13

Name or General Description of Project

C4 Overhead Infrastructure

Asset Component

1855_Services - UG

Average Net Fixed Assets

Net Fixed Assets

2014
Forecasted

Opening Capital Investment	\$	-
Capital Investment	\$	29,090
Closing Capital Investment	\$	29,090
Opening Accumulated Amortization	\$	-
Amortization	3%	\$ 727
Closing Accumulated Amortization	\$	727
Opening Net Fixed Assets	\$	-
Closing Net Fixed Assets	\$	28,363
Average Net Fixed Assets	\$	14,181

For PILs Calculation

UCC

2014
Forecasted

Opening UCC	\$	-
Capital Additions	\$	29,090
UCC Before Half Year Rule	\$	29,090
Half Year Rule (1/2 Additions - Disposals)	\$	-
Reduced UCC	\$	29,090
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$	2,327
Closing UCC	\$	26,763



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 14

Name or General Description of Project

C4 Overhead Infrastructure

Asset Component

1855_Services - OH

Average Net Fixed Assets

Net Fixed Assets

2014
Forecasted

Opening Capital Investment	\$	-
Capital Investment	\$	543,494
Closing Capital Investment	\$	543,494
Opening Accumulated Amortization	\$	-
Amortization	2%	\$ 10,870
Closing Accumulated Amortization	\$	10,870
Opening Net Fixed Assets	\$	-
Closing Net Fixed Assets	\$	532,624
Average Net Fixed Assets	\$	266,312

For PILs Calculation

UCC

2014
Forecasted

Opening UCC	\$	-
Capital Additions	\$	543,494
UCC Before Half Year Rule	\$	543,494
Half Year Rule (1/2 Additions - Disposals)	\$	-
Reduced UCC	\$	543,494
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$	43,480
Closing UCC	\$	500,014



Incremental Capital Project Summary

Using the pull-down menu below, please identify what year of the IRM cycle you are in.

2nd Year of IRM Cycle

Name or General Description of Project

C5 Box Construction

Year

2012

Details of Project

C5 Box Construction

Number of Asset Components

14

Asset Component (Click on the Number to View the Component Details)	Capital Cost	Depreciation Rate	CCA Class	CCA Rate
1 1830_Poles Towers and Fixtures	2,711,256	3%	47	8%
2 1835_Overhead Conductors and Devices	2,297,613	2%	47	8%
3 1835_Overhead Conductors and Devices - Switches	324,005	3%	47	8%
4 1840_Underground Conduit - Cable Chamber	18,271	2%	47	8%
5 1840_Underground Conduit - Duct Bank	71,217	3%	47	8%
6 1840_Underground Conduit - Vault	16,291	3%	47	8%
7 1840_Underground Conduit - Vault Roof	3,358	5%	47	8%
8 1845_Underground Conductors and Devices	1,181,321	3%	47	8%
9 1845_Underground Conductors and Devices - Switch	132,870	5%	47	8%
10 1850_Line Transformers - OH	1,974,854	3%	47	8%
11 1850_Line Transformers - UG	282,788	3%	47	8%
12 1860_Meters - Smart Meters	4,002	7%	47	8%
13 1855_Services - UG	15,858	3%	47	8%
14 1855_Services - OH	1,167,601	2%	47	8%

	2012	2013	2014
Closing Net Fixed Asset	9,938,011	9,674,716	9,411,421
Amortization Expense	263,295	263,295	263,295
CCA	816,104	750,816	690,751



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 1

Name or General Description of Project

C5 Box Construction

Asset Component

1830_Poles Towers and Fixtures

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 2,711,256	\$ 2,711,256
Capital Investment	\$ 2,711,256	\$ -	\$ -
Closing Capital Investment	\$ 2,711,256	\$ 2,711,256	\$ 2,711,256
Opening Accumulated Amortization	\$ -	\$ 67,781	\$ 135,563
Amortization	3% \$ 67,781	\$ 67,781	\$ 67,781
Closing Accumulated Amortization	\$ 67,781	\$ 135,563	\$ 203,344
Opening Net Fixed Assets	\$ -	\$ 2,643,475	\$ 2,575,694
Closing Net Fixed Assets	\$ 2,643,475	\$ 2,575,694	\$ 2,507,912
Average Net Fixed Assets	\$ 1,321,738	\$ 2,609,584	\$ 2,541,803

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 2,494,356	\$ 2,294,807
Capital Additions	\$ 2,711,256	\$ -	\$ -
UCC Before Half Year Rule	\$ 2,711,256	\$ 2,494,356	\$ 2,294,807
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 2,711,256	\$ 2,494,356	\$ 2,294,807
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 216,901	\$ 199,548	\$ 183,585
Closing UCC	\$ 2,494,356	\$ 2,294,807	\$ 2,111,223



Incremental Capital Project Summary

[Return to Main Summary](#)

Fixed Asset Amortization and UCC 2

Name or General Description of Project

C5 Box Construction

Asset Component

1835_Overhead Conductors and Devices

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 2,297,613	\$ 2,297,613
Capital Investment	\$ 2,297,613	\$ -	\$ -
Closing Capital Investment	\$ 2,297,613	\$ 2,297,613	\$ 2,297,613
Opening Accumulated Amortization	\$ -	\$ 45,952	\$ 91,905
Amortization	2% \$ 45,952	\$ 45,952	\$ 45,952
Closing Accumulated Amortization	\$ 45,952	\$ 91,905	\$ 137,857
Opening Net Fixed Assets	\$ -	\$ 2,251,661	\$ 2,205,709
Closing Net Fixed Assets	\$ 2,251,661	\$ 2,205,709	\$ 2,159,756
Average Net Fixed Assets	\$ 1,125,830	\$ 2,228,685	\$ 2,182,732

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 2,113,804	\$ 1,944,700
Capital Additions	\$ 2,297,613	\$ -	\$ -
UCC Before Half Year Rule	\$ 2,297,613	\$ 2,113,804	\$ 1,944,700
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 2,297,613	\$ 2,113,804	\$ 1,944,700
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 183,809	\$ 169,104	\$ 155,576
Closing UCC	\$ 2,113,804	\$ 1,944,700	\$ 1,789,124



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 3

Name or General Description of Project

C5 Box Construction

Asset Component

1835_Overhead Conductors and Devices - Switches

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 324,005	\$ 324,005
Capital Investment	\$ 324,005	\$ -	\$ -
Closing Capital Investment	\$ 324,005	\$ 324,005	\$ 324,005
Opening Accumulated Amortization	\$ -	\$ 10,800	\$ 21,600
Amortization	3% \$ 10,800	\$ 10,800	\$ 10,800
Closing Accumulated Amortization	\$ 10,800	\$ 21,600	\$ 32,400
Opening Net Fixed Assets	\$ -	\$ 313,205	\$ 302,405
Closing Net Fixed Assets	\$ 313,205	\$ 302,405	\$ 291,604
Average Net Fixed Assets	\$ 156,602	\$ 307,805	\$ 297,004

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 298,084	\$ 274,238
Capital Additions	\$ 324,005	\$ -	\$ -
UCC Before Half Year Rule	\$ 324,005	\$ 298,084	\$ 274,238
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 324,005	\$ 298,084	\$ 274,238
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 25,920	\$ 23,847	\$ 21,939
Closing UCC	\$ 298,084	\$ 274,238	\$ 252,299



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 4

Name or General Description of Project

C5 Box Construction

Asset Component

1840_Underground Conduit - Cable Chamber

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 18,271	\$ 18,271
Capital Investment	\$ 18,271	\$ -	\$ -
Closing Capital Investment	\$ 18,271	\$ 18,271	\$ 18,271
Opening Accumulated Amortization	\$ -	\$ 365	\$ 731
Amortization	2% \$ 365	\$ 365	\$ 365
Closing Accumulated Amortization	\$ 365	\$ 731	\$ 1,096
Opening Net Fixed Assets	\$ -	\$ 17,906	\$ 17,540
Closing Net Fixed Assets	\$ 17,906	\$ 17,540	\$ 17,175
Average Net Fixed Assets	\$ 8,953	\$ 17,723	\$ 17,358

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 16,810	\$ 15,465
Capital Additions	\$ 18,271	\$ -	\$ -
UCC Before Half Year Rule	\$ 18,271	\$ 16,810	\$ 15,465
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 18,271	\$ 16,810	\$ 15,465
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 1,462	\$ 1,345	\$ 1,237
Closing UCC	\$ 16,810	\$ 15,465	\$ 14,228



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 5

Name or General Description of Project

C5 Box Construction

Asset Component

1840 Underground Conduit - Duct Bank

Average Net Fixed Assets

Net Fixed Assets

	2012	2013	2014
	Forecasted	Forecasted	Forecasted
Opening Capital Investment	\$ -	\$ 71,217	\$ 71,217
Capital Investment	\$ 71,217	\$ -	\$ -
Closing Capital Investment	\$ 71,217	\$ 71,217	\$ 71,217
Opening Accumulated Amortization	\$ -	\$ 2,374	\$ 4,748
Amortization	3% \$ 2,374	\$ 2,374	\$ 2,374
Closing Accumulated Amortization	\$ 2,374	\$ 4,748	\$ 7,122
Opening Net Fixed Assets	\$ -	\$ 68,843	\$ 66,469
Closing Net Fixed Assets	\$ 68,843	\$ 66,469	\$ 64,095
Average Net Fixed Assets	\$ 34,421	\$ 67,656	\$ 65,282

For PILs Calculation

UCC

	2012	2013	2014
	Forecasted	Forecasted	Forecasted
Opening UCC	\$ -	\$ 65,519	\$ 60,278
Capital Additions	\$ 71,217	\$ -	\$ -
UCC Before Half Year Rule	\$ 71,217	\$ 65,519	\$ 60,278
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 71,217	\$ 65,519	\$ 60,278
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 5,697	\$ 5,242	\$ 4,822
Closing UCC	\$ 65,519	\$ 60,278	\$ 55,456



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 6

Name or General Description of Project

C5 Box Construction

Asset Component

1840_Underground Conduit - Vault

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 16,291	\$ 16,291
Capital Investment	\$ 16,291	\$ -	\$ -
Closing Capital Investment	\$ 16,291	\$ 16,291	\$ 16,291
Opening Accumulated Amortization	\$ -	\$ 407	\$ 815
Amortization	3% \$ 407	\$ 407	\$ 407
Closing Accumulated Amortization	\$ 407	\$ 815	\$ 1,222
Opening Net Fixed Assets	\$ -	\$ 15,883	\$ 15,476
Closing Net Fixed Assets	\$ 15,883	\$ 15,476	\$ 15,069
Average Net Fixed Assets	\$ 7,942	\$ 15,680	\$ 15,273

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 14,987	\$ 13,788
Capital Additions	\$ 16,291	\$ -	\$ -
UCC Before Half Year Rule	\$ 16,291	\$ 14,987	\$ 13,788
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 16,291	\$ 14,987	\$ 13,788
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 1,303	\$ 1,199	\$ 1,103
Closing UCC	\$ 14,987	\$ 13,788	\$ 12,685



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 7

Name or General Description of Project

C5 Box Construction

Asset Component

1840_Underground Conduit - Vault Roof

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 3,358	\$ 3,358
Capital Investment	\$ 3,358	\$ -	\$ -
Closing Capital Investment	\$ 3,358	\$ 3,358	\$ 3,358
Opening Accumulated Amortization	\$ -	\$ 168	\$ 336
Amortization	5% \$ 168	\$ 168	\$ 168
Closing Accumulated Amortization	\$ 168	\$ 336	\$ 504
Opening Net Fixed Assets	\$ -	\$ 3,190	\$ 3,022
Closing Net Fixed Assets	\$ 3,190	\$ 3,022	\$ 2,854
Average Net Fixed Assets	\$ 1,595	\$ 3,106	\$ 2,938

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 3,089	\$ 2,842
Capital Additions	\$ 3,358	\$ -	\$ -
UCC Before Half Year Rule	\$ 3,358	\$ 3,089	\$ 2,842
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 3,358	\$ 3,089	\$ 2,842
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 269	\$ 247	\$ 227
Closing UCC	\$ 3,089	\$ 2,842	\$ 2,615



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 8

Name or General Description of Project

C5 Box Construction

Asset Component

1845_Underground Conductors and Devices

Average Net Fixed Assets

Net Fixed Assets

	2012	2013	2014
	Forecasted	Forecasted	Forecasted
Opening Capital Investment	\$ -	\$ 1,181,321	\$ 1,181,321
Capital Investment	\$ 1,181,321	\$ -	\$ -
Closing Capital Investment	\$ 1,181,321	\$ 1,181,321	\$ 1,181,321
Opening Accumulated Amortization	\$ -	\$ 29,533	\$ 59,066
Amortization	3% \$ 29,533	\$ 29,533	\$ 29,533
Closing Accumulated Amortization	\$ 29,533	\$ 59,066	\$ 88,599
Opening Net Fixed Assets	\$ -	\$ 1,151,788	\$ 1,122,255
Closing Net Fixed Assets	\$ 1,151,788	\$ 1,122,255	\$ 1,092,722
Average Net Fixed Assets	\$ 575,894	\$ 1,137,021	\$ 1,107,488

For PILs Calculation

UCC

	2012	2013	2014
	Forecasted	Forecasted	Forecasted
Opening UCC	\$ -	\$ 1,086,815	\$ 999,870
Capital Additions	\$ 1,181,321	\$ -	\$ -
UCC Before Half Year Rule	\$ 1,181,321	\$ 1,086,815	\$ 999,870
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 1,181,321	\$ 1,086,815	\$ 999,870
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 94,506	\$ 86,945	\$ 79,990
Closing UCC	\$ 1,086,815	\$ 999,870	\$ 919,880



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 9

Name or General Description of Project

C5 Box Construction

Asset Component

1845_Underground Conductors and Devices - Switch

Average Net Fixed Assets

Net Fixed Assets

	2012	2013	2014
	Forecasted	Forecasted	Forecasted
Opening Capital Investment	\$ -	\$ 132,870	\$ 132,870
Capital Investment	\$ 132,870	\$ -	\$ -
Closing Capital Investment	\$ 132,870	\$ 132,870	\$ 132,870
Opening Accumulated Amortization	\$ -	\$ 6,644	\$ 13,287
Amortization	5% \$ 6,644	\$ 6,644	\$ 6,644
Closing Accumulated Amortization	\$ 6,644	\$ 13,287	\$ 19,931
Opening Net Fixed Assets	\$ -	\$ 126,227	\$ 119,583
Closing Net Fixed Assets	\$ 126,227	\$ 119,583	\$ 112,940
Average Net Fixed Assets	\$ 63,113	\$ 122,905	\$ 116,261

For PILs Calculation

UCC

	2012	2013	2014
	Forecasted	Forecasted	Forecasted
Opening UCC	\$ -	\$ 122,240	\$ 112,461
Capital Additions	\$ 132,870	\$ -	\$ -
UCC Before Half Year Rule	\$ 132,870	\$ 122,240	\$ 112,461
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 132,870	\$ 122,240	\$ 112,461
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 10,630	\$ 9,779	\$ 8,997
Closing UCC	\$ 122,240	\$ 112,461	\$ 103,464



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 10

Name or General Description of Project

C5 Box Construction

Asset Component

1850 Line Transformers - OH

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 1,974,854	\$ 1,974,854
Capital Investment	\$ 1,974,854	\$ -	\$ -
Closing Capital Investment	\$ 1,974,854	\$ 1,974,854	\$ 1,974,854
Opening Accumulated Amortization	\$ -	\$ 65,828	\$ 131,657
Amortization	3% \$ 65,828	\$ 65,828	\$ 65,828
Closing Accumulated Amortization	\$ 65,828	\$ 131,657	\$ 197,485
Opening Net Fixed Assets	\$ -	\$ 1,909,025	\$ 1,843,197
Closing Net Fixed Assets	\$ 1,909,025	\$ 1,843,197	\$ 1,777,368
Average Net Fixed Assets	\$ 954,513	\$ 1,876,111	\$ 1,810,282

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 1,816,865	\$ 1,671,516
Capital Additions	\$ 1,974,854	\$ -	\$ -
UCC Before Half Year Rule	\$ 1,974,854	\$ 1,816,865	\$ 1,671,516
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 1,974,854	\$ 1,816,865	\$ 1,671,516
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 157,988	\$ 145,349	\$ 133,721
Closing UCC	\$ 1,816,865	\$ 1,671,516	\$ 1,537,795



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 11

Name or General Description of Project

C5 Box Construction

Asset Component

1850 Line Transformers - UG

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 282,788	\$ 282,788
Capital Investment	\$ 282,788	\$ -	\$ -
Closing Capital Investment	\$ 282,788	\$ 282,788	\$ 282,788
Opening Accumulated Amortization	\$ -	\$ 9,426	\$ 18,853
Amortization	3% \$ 9,426	\$ 9,426	\$ 9,426
Closing Accumulated Amortization	\$ 9,426	\$ 18,853	\$ 28,279
Opening Net Fixed Assets	\$ -	\$ 273,362	\$ 263,936
Closing Net Fixed Assets	\$ 273,362	\$ 263,936	\$ 254,509
Average Net Fixed Assets	\$ 136,681	\$ 268,649	\$ 259,223

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 260,165	\$ 239,352
Capital Additions	\$ 282,788	\$ -	\$ -
UCC Before Half Year Rule	\$ 282,788	\$ 260,165	\$ 239,352
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 282,788	\$ 260,165	\$ 239,352
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 22,623	\$ 20,813	\$ 19,148
Closing UCC	\$ 260,165	\$ 239,352	\$ 220,204



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 12

Name or General Description of Project

C5 Box Construction

Asset Component

1860 Meters - Smart Meters

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 4,002	\$ 4,002
Capital Investment	\$ 4,002	\$ -	\$ -
Closing Capital Investment	\$ 4,002	\$ 4,002	\$ 4,002
Opening Accumulated Amortization	\$ -	\$ 267	\$ 534
Amortization	\$ 267	\$ 267	\$ 267
Closing Accumulated Amortization	\$ 267	\$ 534	\$ 800
Opening Net Fixed Assets	\$ -	\$ 3,735	\$ 3,468
Closing Net Fixed Assets	\$ 3,735	\$ 3,468	\$ 3,202
Average Net Fixed Assets	\$ 1,868	\$ 3,602	\$ 3,335

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 3,682	\$ 3,387
Capital Additions	\$ 4,002	\$ -	\$ -
UCC Before Half Year Rule	\$ 4,002	\$ 3,682	\$ 3,387
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 4,002	\$ 3,682	\$ 3,387
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 320	\$ 295	\$ 271
Closing UCC	\$ 3,682	\$ 3,387	\$ 3,116



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 13

Name or General Description of Project

C5 Box Construction

Asset Component

1855_Services - UG

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 15,858	\$ 15,858
Capital Investment	\$ 15,858	\$ -	\$ -
Closing Capital Investment	\$ 15,858	\$ 15,858	\$ 15,858
Opening Accumulated Amortization	\$ -	\$ 396	\$ 793
Amortization	3% \$ 396	\$ 396	\$ 396
Closing Accumulated Amortization	\$ 396	\$ 793	\$ 1,189
Opening Net Fixed Assets	\$ -	\$ 15,462	\$ 15,066
Closing Net Fixed Assets	\$ 15,462	\$ 15,066	\$ 14,669
Average Net Fixed Assets	\$ 7,731	\$ 15,264	\$ 14,867

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 14,590	\$ 13,423
Capital Additions	\$ 15,858	\$ -	\$ -
UCC Before Half Year Rule	\$ 15,858	\$ 14,590	\$ 13,423
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 15,858	\$ 14,590	\$ 13,423
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 1,269	\$ 1,167	\$ 1,074
Closing UCC	\$ 14,590	\$ 13,423	\$ 12,349



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 14

Name or General Description of Project

C5 Box Construction

Asset Component

1855_Services - OH

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 1,167,601	\$ 1,167,601
Capital Investment	\$ 1,167,601	\$ -	\$ -
Closing Capital Investment	\$ 1,167,601	\$ 1,167,601	\$ 1,167,601
Opening Accumulated Amortization	\$ -	\$ 23,352	\$ 46,704
Amortization	2% \$ 23,352	\$ 23,352	\$ 23,352
Closing Accumulated Amortization	\$ 23,352	\$ 46,704	\$ 70,056
Opening Net Fixed Assets	\$ -	\$ 1,144,249	\$ 1,120,897
Closing Net Fixed Assets	\$ 1,144,249	\$ 1,120,897	\$ 1,097,545
Average Net Fixed Assets	\$ 572,124	\$ 1,132,573	\$ 1,109,221

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 1,074,193	\$ 988,257
Capital Additions	\$ 1,167,601	\$ -	\$ -
UCC Before Half Year Rule	\$ 1,167,601	\$ 1,074,193	\$ 988,257
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 1,167,601	\$ 1,074,193	\$ 988,257
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 93,408	\$ 85,935	\$ 79,061
Closing UCC	\$ 1,074,193	\$ 988,257	\$ 909,197



Incremental Capital Project Summary

Using the pull-down menu below, please identify what year of the IRM cycle you are in.

3rd Year of IRM Cycle

Name or General Description of Project

C5 Box Construction

Year

2013

Details of Project

C5 Box Construction

Number of Asset Components

15

Asset Component (Click on the Number to View the Component Details)	Capital Cost	Depreciation Rate	CCA Class	CCA Rate
1 1830_Poles Towers and Fixtures	4,217,286	3%	47	8%
2 1835_Overhead Conductors and Devices	4,642,697	2%	47	8%
3 1835_Overhead Conductors and Devices - Switches	1,281,788	3%	47	8%
4 1840_Underground Conduit - Cable Chamber	1,351,522	2%	47	8%
5 1840_Underground Conduit - Duct Bank	277,256	3%	47	8%
6 1840_Underground Conduit - Vault	83,348	3%	47	8%
7 1840_Underground Conduit - Vault Roof	71,456	5%	47	8%
8 1845_Underground Conductors and Devices	2,711,184	3%	47	8%
9 1845_Underground Conductors and Devices - Switch	151,782	5%	47	8%
10 1850_Line Transformers - OH	2,915,989	3%	47	8%
11 1850_Line Transformers - UG	428,178	3%	47	8%
12 1850_Line Transformers - UG Network w/protector	115,671	5%	47	8%
13 1860_Meters - Smart Meters	29,075	7%	47	8%
14 1855_Services - UG	129,264	3%	47	8%
15 1855_Services - OH	2,129,432	2%	47	8%

	2013	2014
Closing Net Fixed Asset	20,012,602	19,489,278
Amortization Expense	523,324	523,324
CCA	1,642,874	1,511,444



Incremental Capital Project Summary

[Return to Main Summary](#)

Fixed Asset Amortization and UCC 1

Name or General Description of Project

C5 Box Construction

Asset Component

1830_Poles Towers and Fixtures

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 4,217,286
Capital Investment	\$ 4,217,286	\$ -
Closing Capital Investment	\$ 4,217,286	\$ 4,217,286
Opening Accumulated Amortization	\$ -	\$ 105,432
Amortization	3% \$ 105,432	\$ 105,432
Closing Accumulated Amortization	\$ 105,432	\$ 210,864
Opening Net Fixed Assets	\$ -	\$ 4,111,854
Closing Net Fixed Assets	\$ 4,111,854	\$ 4,006,422
Average Net Fixed Assets	\$ 2,055,927	\$ 4,059,138

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 3,879,903
Capital Additions	\$ 4,217,286	\$ -
UCC Before Half Year Rule	\$ 4,217,286	\$ 3,879,903
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 4,217,286	\$ 3,879,903
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 337,383	\$ 310,392
Closing UCC	\$ 3,879,903	\$ 3,569,511



Incremental Capital Project Summary

[Return to Main Summary](#)

Fixed Asset Amortization and UCC 2

Name or General Description of Project

C5 Box Construction

Asset Component

1835_Overhead Conductors and Devices

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 4,642,697
Capital Investment	\$ 4,642,697	\$ -
Closing Capital Investment	\$ 4,642,697	\$ 4,642,697
Opening Accumulated Amortization	\$ -	\$ 92,854
Amortization	2% \$ 92,854	\$ 92,854
Closing Accumulated Amortization	\$ 92,854	\$ 185,708
Opening Net Fixed Assets	\$ -	\$ 4,549,843
Closing Net Fixed Assets	\$ 4,549,843	\$ 4,456,989
Average Net Fixed Assets	\$ 2,274,921	\$ 4,503,416

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 4,271,281
Capital Additions	\$ 4,642,697	\$ -
UCC Before Half Year Rule	\$ 4,642,697	\$ 4,271,281
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 4,642,697	\$ 4,271,281
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 371,416	\$ 341,702
Closing UCC	\$ 4,271,281	\$ 3,929,578



Incremental Capital Project Summary

[Return to Main Summary](#)

Fixed Asset Amortization and UCC 3

Name or General Description of Project

C5 Box Construction

Asset Component

1835_Overhead Conductors and Devices - Switches

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 1,281,788
Capital Investment	\$ 1,281,788	\$ -
Closing Capital Investment	\$ 1,281,788	\$ 1,281,788
Opening Accumulated Amortization	\$ -	\$ 42,726
Amortization	3% \$ 42,726	\$ 42,726
Closing Accumulated Amortization	\$ 42,726	\$ 85,453
Opening Net Fixed Assets	\$ -	\$ 1,239,062
Closing Net Fixed Assets	\$ 1,239,062	\$ 1,196,335
Average Net Fixed Assets	\$ 619,531	\$ 1,217,699

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 1,179,245
Capital Additions	\$ 1,281,788	\$ -
UCC Before Half Year Rule	\$ 1,281,788	\$ 1,179,245
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 1,281,788	\$ 1,179,245
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 102,543	\$ 94,340
Closing UCC	\$ 1,179,245	\$ 1,084,905



Incremental Capital Project Summary

[Return to Main Summary](#)

Fixed Asset Amortization and UCC 4

Name or General Description of Project

C5 Box Construction

Asset Component

1840_Underground Conduit - Cable Chamber

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 1,351,522
Capital Investment	\$ 1,351,522	\$ -
Closing Capital Investment	\$ 1,351,522	\$ 1,351,522
Opening Accumulated Amortization	\$ -	\$ 27,030
Amortization	2% \$ 27,030	\$ 27,030
Closing Accumulated Amortization	\$ 27,030	\$ 54,061
Opening Net Fixed Assets	\$ -	\$ 1,324,491
Closing Net Fixed Assets	\$ 1,324,491	\$ 1,297,461
Average Net Fixed Assets	\$ 662,246	\$ 1,310,976

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 1,243,400
Capital Additions	\$ 1,351,522	\$ -
UCC Before Half Year Rule	\$ 1,351,522	\$ 1,243,400
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 1,351,522	\$ 1,243,400
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 108,122	\$ 99,472
Closing UCC	\$ 1,243,400	\$ 1,143,928



Incremental Capital Project Summary

[Return to Main Summary](#)

Fixed Asset Amortization and UCC 5

Name or General Description of Project

C5 Box Construction

Asset Component

1840 Underground Conduit - Duct Bank

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 277,256
Capital Investment	\$ 277,256	\$ -
Closing Capital Investment	\$ 277,256	\$ 277,256
Opening Accumulated Amortization	\$ -	\$ 9,242
Amortization	3% \$ 9,242	\$ 9,242
Closing Accumulated Amortization	\$ 9,242	\$ 18,484
Opening Net Fixed Assets	\$ -	\$ 268,014
Closing Net Fixed Assets	\$ 268,014	\$ 258,772
Average Net Fixed Assets	\$ 134,007	\$ 263,393

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 255,075
Capital Additions	\$ 277,256	\$ -
UCC Before Half Year Rule	\$ 277,256	\$ 255,075
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 277,256	\$ 255,075
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 22,180	\$ 20,406
Closing UCC	\$ 255,075	\$ 234,669



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 6

Name or General Description of Project

C5 Box Construction

Asset Component

1840_Underground Conduit - Vault

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 83,348
Capital Investment	\$ 83,348	\$ -
Closing Capital Investment	\$ 83,348	\$ 83,348
Opening Accumulated Amortization	\$ -	\$ 2,084
Amortization	3% \$ 2,084	\$ 2,084
Closing Accumulated Amortization	\$ 2,084	\$ 4,167
Opening Net Fixed Assets	\$ -	\$ 81,265
Closing Net Fixed Assets	\$ 81,265	\$ 79,181
Average Net Fixed Assets	\$ 40,632	\$ 80,223

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 76,680
Capital Additions	\$ 83,348	\$ -
UCC Before Half Year Rule	\$ 83,348	\$ 76,680
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 83,348	\$ 76,680
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 6,668	\$ 6,134
Closing UCC	\$ 76,680	\$ 70,546



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 7

Name or General Description of Project

C5 Box Construction

Asset Component

1840_Underground Conduit - Vault Roof

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 71,456
Capital Investment	\$ 71,456	\$ -
Closing Capital Investment	\$ 71,456	\$ 71,456
Opening Accumulated Amortization	\$ -	\$ 3,573
Amortization	5% \$ 3,573	\$ 3,573
Closing Accumulated Amortization	\$ 3,573	\$ 7,146
Opening Net Fixed Assets	\$ -	\$ 67,883
Closing Net Fixed Assets	\$ 67,883	\$ 64,310
Average Net Fixed Assets	\$ 33,942	\$ 66,097

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 65,740
Capital Additions	\$ 71,456	\$ -
UCC Before Half Year Rule	\$ 71,456	\$ 65,740
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 71,456	\$ 65,740
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 5,716	\$ 5,259
Closing UCC	\$ 65,740	\$ 60,480



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 8

Name or General Description of Project

C5 Box Construction

Asset Component

1845_Underground Conductors and Devices

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 2,711,184
Capital Investment	\$ 2,711,184	\$ -
Closing Capital Investment	\$ 2,711,184	\$ 2,711,184
Opening Accumulated Amortization	\$ -	\$ 67,780
Amortization	3% \$ 67,780	\$ 67,780
Closing Accumulated Amortization	\$ 67,780	\$ 135,559
Opening Net Fixed Assets	\$ -	\$ 2,643,404
Closing Net Fixed Assets	\$ 2,643,404	\$ 2,575,624
Average Net Fixed Assets	\$ 1,321,702	\$ 2,609,514

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 2,494,289
Capital Additions	\$ 2,711,184	\$ -
UCC Before Half Year Rule	\$ 2,711,184	\$ 2,494,289
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 2,711,184	\$ 2,494,289
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 216,895	\$ 199,543
Closing UCC	\$ 2,494,289	\$ 2,294,746



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 9

Name or General Description of Project

C5 Box Construction

Asset Component

1845_Underground Conductors and Devices - Switch

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 151,782
Capital Investment	\$ 151,782	\$ -
Closing Capital Investment	\$ 151,782	\$ 151,782
Opening Accumulated Amortization	\$ -	\$ 7,589
Amortization	5% \$ 7,589	\$ 7,589
Closing Accumulated Amortization	\$ 7,589	\$ 15,178
Opening Net Fixed Assets	\$ -	\$ 144,192
Closing Net Fixed Assets	\$ 144,192	\$ 136,603
Average Net Fixed Assets	\$ 72,096	\$ 140,398

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 139,639
Capital Additions	\$ 151,782	\$ -
UCC Before Half Year Rule	\$ 151,782	\$ 139,639
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 151,782	\$ 139,639
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 12,143	\$ 11,171
Closing UCC	\$ 139,639	\$ 128,468



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 10

Name or General Description of Project

C5 Box Construction

Asset Component

1850 Line Transformers - OH

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 2,915,989
Capital Investment	\$ 2,915,989	\$ -
Closing Capital Investment	\$ 2,915,989	\$ 2,915,989
Opening Accumulated Amortization	\$ -	\$ 97,200
Amortization	3% \$ 97,200	\$ 97,200
Closing Accumulated Amortization	\$ 97,200	\$ 194,399
Opening Net Fixed Assets	\$ -	\$ 2,818,789
Closing Net Fixed Assets	\$ 2,818,789	\$ 2,721,590
Average Net Fixed Assets	\$ 1,409,395	\$ 2,770,189

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 2,682,710
Capital Additions	\$ 2,915,989	\$ -
UCC Before Half Year Rule	\$ 2,915,989	\$ 2,682,710
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 2,915,989	\$ 2,682,710
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 233,279	\$ 214,617
Closing UCC	\$ 2,682,710	\$ 2,468,093



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 11

Name or General Description of Project

C5 Box Construction

Asset Component

1850_Line Transformers - UG

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 428,178
Capital Investment	\$ 428,178	\$ -
Closing Capital Investment	\$ 428,178	\$ 428,178
Opening Accumulated Amortization	\$ -	\$ 14,273
Amortization	3% \$ 14,273	\$ 14,273
Closing Accumulated Amortization	\$ 14,273	\$ 28,545
Opening Net Fixed Assets	\$ -	\$ 413,906
Closing Net Fixed Assets	\$ 413,906	\$ 399,633
Average Net Fixed Assets	\$ 206,953	\$ 406,769

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 393,924
Capital Additions	\$ 428,178	\$ -
UCC Before Half Year Rule	\$ 428,178	\$ 393,924
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 428,178	\$ 393,924
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 34,254	\$ 31,514
Closing UCC	\$ 393,924	\$ 362,410



Incremental Capital Project Summary

[Return to Main Summary](#)

Fixed Asset Amortization and UCC 12

Name or General Description of Project

C5 Box Construction

Asset Component

1850 Line Transformers - UG Network w/protector

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 115,671
Capital Investment	\$ 115,671	\$ -
Closing Capital Investment	\$ 115,671	\$ 115,671
Opening Accumulated Amortization	\$ -	\$ 5,784
Amortization	5% \$ 5,784	\$ 5,784
Closing Accumulated Amortization	\$ 5,784	\$ 11,567
Opening Net Fixed Assets	\$ -	\$ 109,888
Closing Net Fixed Assets	\$ 109,888	\$ 104,104
Average Net Fixed Assets	\$ 54,944	\$ 106,996

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 106,417
Capital Additions	\$ 115,671	\$ -
UCC Before Half Year Rule	\$ 115,671	\$ 106,417
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 115,671	\$ 106,417
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 9,254	\$ 8,513
Closing UCC	\$ 106,417	\$ 97,904



Incremental Capital Project Summary

[Return to Main Summary](#)

Fixed Asset Amortization and UCC 13

Name or General Description of Project

C5 Box Construction

Asset Component

1860 Meters - Smart Meters

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 29,075
Capital Investment	\$ 29,075	\$ -
Closing Capital Investment	\$ 29,075	\$ 29,075
Opening Accumulated Amortization	\$ -	\$ 1,938
Amortization	7% \$ 1,938	\$ 1,938
Closing Accumulated Amortization	\$ 1,938	\$ 3,877
Opening Net Fixed Assets	\$ -	\$ 27,137
Closing Net Fixed Assets	\$ 27,137	\$ 25,198
Average Net Fixed Assets	\$ 13,568	\$ 26,168

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 26,749
Capital Additions	\$ 29,075	\$ -
UCC Before Half Year Rule	\$ 29,075	\$ 26,749
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 29,075	\$ 26,749
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 2,326	\$ 2,140
Closing UCC	\$ 26,749	\$ 24,609



Incremental Capital Project Summary

[Return to Main Summary](#)

Fixed Asset Amortization and UCC 14

Name or General Description of Project

C5 Box Construction

Asset Component

1855_Services - UG

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 129,264
Capital Investment	\$ 129,264	\$ -
Closing Capital Investment	\$ 129,264	\$ 129,264
Opening Accumulated Amortization	\$ -	\$ 3,232
Amortization	3% \$ 3,232	\$ 3,232
Closing Accumulated Amortization	\$ 3,232	\$ 6,463
Opening Net Fixed Assets	\$ -	\$ 126,032
Closing Net Fixed Assets	\$ 126,032	\$ 122,800
Average Net Fixed Assets	\$ 63,016	\$ 124,416

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 118,923
Capital Additions	\$ 129,264	\$ -
UCC Before Half Year Rule	\$ 129,264	\$ 118,923
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 129,264	\$ 118,923
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 10,341	\$ 9,514
Closing UCC	\$ 118,923	\$ 109,409



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 15

Name or General Description of Project

C5 Box Construction

Asset Component

1855_Services - OH

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 2,129,432
Capital Investment	\$ 2,129,432	\$ -
Closing Capital Investment	\$ 2,129,432	\$ 2,129,432
Opening Accumulated Amortization	\$ -	\$ 42,589
Amortization	2% \$ 42,589	\$ 42,589
Closing Accumulated Amortization	\$ 42,589	\$ 85,177
Opening Net Fixed Assets	\$ -	\$ 2,086,843
Closing Net Fixed Assets	\$ 2,086,843	\$ 2,044,255
Average Net Fixed Assets	\$ 1,043,422	\$ 2,065,549

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 1,959,077
Capital Additions	\$ 2,129,432	\$ -
UCC Before Half Year Rule	\$ 2,129,432	\$ 1,959,077
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 2,129,432	\$ 1,959,077
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 170,355	\$ 156,726
Closing UCC	\$ 1,959,077	\$ 1,802,351



Incremental Capital Project Summary

Using the pull-down menu below, please identify what year of the IRM cycle you are in.

4th Year of IRM Cycle

Name or General Description of Project

C5 Box Construction

Details of Project

C5 Box Construction

Year

2014

Number of Asset Components

15

Asset Component (Click on the Number to View the Component Details)	Capital Cost	Capital Cost (1/2 year rule applied)	Depreciation Rate	CCA Class	CCA Rate
1 1830_Poles Towers and Fixtures	6,102,645	3,051,323	3%	47	8%
2 1835_Overhead Conductors and Devices	7,727,186	3,863,593	2%	47	8%
3 1835_Overhead Conductors and Devices - Switches	1,963,768	981,884	3%	47	8%
4 1840_Underground Conduit - Cable Chamber	6,995	3,498	2%	47	8%
5 1840_Underground Conduit - Duct Bank	65,474	32,737	3%	47	8%
6 1840_Underground Conduit - Vault	9,477	4,738	3%	47	8%
7 1840_Underground Conduit - Vault Roof	4,494	2,247	5%	47	8%
8 1845_Underground Conductors and Devices	2,081,749	1,040,875	3%	47	8%
9 1845_Underground Conductors and Devices - Switch	197,496	98,748	5%	47	8%
10 1850_Line Transformers - OH	5,138,306	2,569,153	3%	47	8%
11 1850_Line Transformers - UG	1,059,089	529,544	3%	47	8%
12 1850_Line Transformers - UG Network w/protector	47,282	23,641	5%	47	8%
13 1860_Meters - Smart Meters	20,042	10,021	7%	47	8%
14 1855_Services - UG	33,492	16,746	3%	47	8%
15 1855_Services - OH	3,304,715	1,652,358	2%	47	8%

Closing Net Fixed Asset

2014

13,523,863

Amortization Expense

357,241

CCA

1,110,488



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 1

Name or General Description of Project

C5 Box Construction

Asset Component

1830_Poles Towers and Fixtures

Average Net Fixed Assets

Net Fixed Assets

2014

Forecasted

Opening Capital Investment	\$	-
Capital Investment	\$	3,051,323
Closing Capital Investment	\$	3,051,323
Opening Accumulated Amortization	\$	-
Amortization	3%	\$ 76,283
Closing Accumulated Amortization	\$	76,283
Opening Net Fixed Assets	\$	-
Closing Net Fixed Assets	\$	2,975,040
Average Net Fixed Assets	\$	1,487,520

For PILs Calculation

UCC

2014

Forecasted

Opening UCC	\$	-
Capital Additions	\$	3,051,323
UCC Before Half Year Rule	\$	3,051,323
Half Year Rule (1/2 Additions - Disposals)	\$	-
Reduced UCC	\$	3,051,323
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$	244,106
Closing UCC	\$	2,807,217



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 2

Name or General Description of Project

C5 Box Construction

Asset Component

1835_Overhead Conductors and Devices

Average Net Fixed Assets

Net Fixed Assets

2014

Forecasted

Opening Capital Investment	\$	-
Capital Investment	\$	3,863,593
Closing Capital Investment	\$	3,863,593
Opening Accumulated Amortization	\$	-
Amortization	2%	\$ 77,272
Closing Accumulated Amortization	\$	77,272
Opening Net Fixed Assets	\$	-
Closing Net Fixed Assets	\$	3,786,321
Average Net Fixed Assets	\$	1,893,161

For PILs Calculation

UCC

2014

Forecasted

Opening UCC	\$	-
Capital Additions	\$	3,863,593
UCC Before Half Year Rule	\$	3,863,593
Half Year Rule (1/2 Additions - Disposals)	\$	-
Reduced UCC	\$	3,863,593
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$	309,087
Closing UCC	\$	3,554,506



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 3

Name or General Description of Project

C5 Box Construction

Asset Component

1835_Overhead Conductors and Devices - Switches

Average Net Fixed Assets

Net Fixed Assets

2014
 Forecasted

Opening Capital Investment	\$	-
Capital Investment	\$	981,884
Closing Capital Investment	\$	981,884
Opening Accumulated Amortization	\$	-
Amortization	3%	\$ 32,729
Closing Accumulated Amortization	\$	32,729
Opening Net Fixed Assets	\$	-
Closing Net Fixed Assets	\$	949,155
Average Net Fixed Assets	\$	474,577

For PILs Calculation

UCC

2014
 Forecasted

Opening UCC	\$	-
Capital Additions	\$	981,884
UCC Before Half Year Rule	\$	981,884
Half Year Rule (1/2 Additions - Disposals)	\$	-
Reduced UCC	\$	981,884
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$	78,551
Closing UCC	\$	903,334



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 4

Name or General Description of Project

C5 Box Construction

Asset Component

1840_Underground Conduit - Cable Chamber

Average Net Fixed Assets

Net Fixed Assets

2014
Forecasted

Opening Capital Investment	\$	-
Capital Investment	\$	3,498
Closing Capital Investment	\$	3,498
Opening Accumulated Amortization	\$	-
Amortization	2%	\$ 70
Closing Accumulated Amortization	\$	70
Opening Net Fixed Assets	\$	-
Closing Net Fixed Assets	\$	3,428
Average Net Fixed Assets	\$	1,714

For PILs Calculation

UCC

2014
Forecasted

Opening UCC	\$	-
Capital Additions	\$	3,498
UCC Before Half Year Rule	\$	3,498
Half Year Rule (1/2 Additions - Disposals)	\$	-
Reduced UCC	\$	3,498
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$	280
Closing UCC	\$	3,218



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 5

Name or General Description of Project

C5 Box Construction

Asset Component

1840_Underground Conduit - Duct Bank

Average Net Fixed Assets

Net Fixed Assets

2014
Forecasted

Opening Capital Investment	\$	-
Capital Investment	\$	32,737
Closing Capital Investment	\$	32,737
Opening Accumulated Amortization	\$	-
Amortization	3%	\$ 1,091
Closing Accumulated Amortization	\$	1,091
Opening Net Fixed Assets	\$	-
Closing Net Fixed Assets	\$	31,646
Average Net Fixed Assets	\$	15,823

For PILs Calculation

UCC

2014
Forecasted

Opening UCC	\$	-
Capital Additions	\$	32,737
UCC Before Half Year Rule	\$	32,737
Half Year Rule (1/2 Additions - Disposals)	\$	-
Reduced UCC	\$	32,737
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$	2,619
Closing UCC	\$	30,118



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 6

Name or General Description of Project

C5 Box Construction

Asset Component

1840_Underground Conduit - Vault

Average Net Fixed Assets

Net Fixed Assets

2014
Forecasted

Opening Capital Investment	\$	-
Capital Investment	\$	4,738
Closing Capital Investment	\$	4,738
Opening Accumulated Amortization	\$	-
Amortization	3%	\$ 118
Closing Accumulated Amortization	\$	118
Opening Net Fixed Assets	\$	-
Closing Net Fixed Assets	\$	4,620
Average Net Fixed Assets	\$	2,310

For PILs Calculation

UCC

2014
Forecasted

Opening UCC	\$	-
Capital Additions	\$	4,738
UCC Before Half Year Rule	\$	4,738
Half Year Rule (1/2 Additions - Disposals)	\$	-
Reduced UCC	\$	4,738
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$	379
Closing UCC	\$	4,359



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 7

Name or General Description of Project

C5 Box Construction

Asset Component

1840_Underground Conduit - Vault Roof

Average Net Fixed Assets

Net Fixed Assets

2014
Forecasted

Opening Capital Investment	\$	-
Capital Investment	\$	2,247
Closing Capital Investment	\$	2,247
Opening Accumulated Amortization	\$	-
Amortization	5%	\$ 112
Closing Accumulated Amortization	\$	112
Opening Net Fixed Assets	\$	-
Closing Net Fixed Assets	\$	2,134
Average Net Fixed Assets	\$	1,067

For PILs Calculation

UCC

2014
Forecasted

Opening UCC	\$	-
Capital Additions	\$	2,247
UCC Before Half Year Rule	\$	2,247
Half Year Rule (1/2 Additions - Disposals)	\$	-
Reduced UCC	\$	2,247
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$	180
Closing UCC	\$	2,067



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 8

Name or General Description of Project

C5 Box Construction

Asset Component

1845_Underground Conductors and Devices

Average Net Fixed Assets

Net Fixed Assets

2014
Forecasted

Opening Capital Investment	\$	-
Capital Investment	\$	1,040,875
Closing Capital Investment	\$	1,040,875
Opening Accumulated Amortization	\$	-
Amortization	3%	\$ 26,022
Closing Accumulated Amortization	\$	26,022
Opening Net Fixed Assets	\$	-
Closing Net Fixed Assets	\$	1,014,853
Average Net Fixed Assets	\$	507,426

For PILs Calculation

UCC

2014
Forecasted

Opening UCC	\$	-
Capital Additions	\$	1,040,875
UCC Before Half Year Rule	\$	1,040,875
Half Year Rule (1/2 Additions - Disposals)	\$	-
Reduced UCC	\$	1,040,875
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$	83,270
Closing UCC	\$	957,605



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 9

Name or General Description of Project

C5 Box Construction

Asset Component

1845 Underground Conductors and Devices - Switch

Average Net Fixed Assets

Net Fixed Assets

2014
 Forecasted

Opening Capital Investment	\$	-
Capital Investment	\$	98,748
Closing Capital Investment	\$	98,748
Opening Accumulated Amortization	\$	-
Amortization	5%	\$ 4,937
Closing Accumulated Amortization	\$	4,937
Opening Net Fixed Assets	\$	-
Closing Net Fixed Assets	\$	93,810
Average Net Fixed Assets	\$	46,905

For PILs Calculation

UCC

2014
 Forecasted

Opening UCC	\$	-
Capital Additions	\$	98,748
UCC Before Half Year Rule	\$	98,748
Half Year Rule (1/2 Additions - Disposals)	\$	-
Reduced UCC	\$	98,748
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$	7,900
Closing UCC	\$	90,848



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 10

Name or General Description of Project

C5 Box Construction

Asset Component

1850 Line Transformers - OH

Average Net Fixed Assets

Net Fixed Assets

2014

Forecasted

Opening Capital Investment		\$ -
Capital Investment		\$ 2,569,153
Closing Capital Investment		\$ 2,569,153
Opening Accumulated Amortization		\$ -
Amortization	3%	\$ 85,638
Closing Accumulated Amortization		\$ 85,638
Opening Net Fixed Assets		\$ -
Closing Net Fixed Assets		\$ 2,483,515
Average Net Fixed Assets		\$ 1,241,757

For PILs Calculation

UCC

2014

Forecasted

Opening UCC		\$ -
Capital Additions		\$ 2,569,153
UCC Before Half Year Rule		\$ 2,569,153
Half Year Rule (1/2 Additions - Disposals)		\$ -
Reduced UCC		\$ 2,569,153
CCA Rate Class	47	
CCA Rate	8%	
CCA		\$ 205,532
Closing UCC		\$ 2,363,621



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 11

Name or General Description of Project

C5 Box Construction

Asset Component

1850 Line Transformers - UG

Average Net Fixed Assets

Net Fixed Assets

2014
Forecasted

Opening Capital Investment	\$	-
Capital Investment	\$	529,544
Closing Capital Investment	\$	529,544
Opening Accumulated Amortization	\$	-
Amortization	3%	\$ 17,651
Closing Accumulated Amortization	\$	17,651
Opening Net Fixed Assets	\$	-
Closing Net Fixed Assets	\$	511,893
Average Net Fixed Assets	\$	255,946

For PILs Calculation

UCC

2014
Forecasted

Opening UCC	\$	-
Capital Additions	\$	529,544
UCC Before Half Year Rule	\$	529,544
Half Year Rule (1/2 Additions - Disposals)	\$	-
Reduced UCC	\$	529,544
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$	42,364
Closing UCC	\$	487,181



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 12

Name or General Description of Project

C5 Box Construction

Asset Component

1850 Line Transformers - UG Network w/protector

Average Net Fixed Assets

Net Fixed Assets

2014

Forecasted

Opening Capital Investment	\$	-
Capital Investment	\$	23,641
Closing Capital Investment	\$	23,641
Opening Accumulated Amortization	\$	-
Amortization	5%	\$ 1,182
Closing Accumulated Amortization	\$	1,182
Opening Net Fixed Assets	\$	-
Closing Net Fixed Assets	\$	22,459
Average Net Fixed Assets	\$	11,229

For PILs Calculation

UCC

2014

Forecasted

Opening UCC	\$	-
Capital Additions	\$	23,641
UCC Before Half Year Rule	\$	23,641
Half Year Rule (1/2 Additions - Disposals)	\$	-
Reduced UCC	\$	23,641
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$	1,891
Closing UCC	\$	21,750



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 13

Name or General Description of Project

C5 Box Construction

Asset Component

1860 Meters - Smart Meters

Average Net Fixed Assets

Net Fixed Assets

2014
Forecasted

Opening Capital Investment	\$	-
Capital Investment	\$	10,021
Closing Capital Investment	\$	10,021
Opening Accumulated Amortization	\$	-
Amortization	7%	\$ 668
Closing Accumulated Amortization	\$	668
Opening Net Fixed Assets	\$	-
Closing Net Fixed Assets	\$	9,353
Average Net Fixed Assets	\$	4,676

For PILs Calculation

UCC

2014
Forecasted

Opening UCC	\$	-
Capital Additions	\$	10,021
UCC Before Half Year Rule	\$	10,021
Half Year Rule (1/2 Additions - Disposals)	\$	-
Reduced UCC	\$	10,021
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$	802
Closing UCC	\$	9,219



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 14

Name or General Description of Project

C5 Box Construction

Asset Component

1855_Services - UG

Average Net Fixed Assets

Net Fixed Assets

2014

Forecasted

Opening Capital Investment	\$	-
Capital Investment	\$	16,746
Closing Capital Investment	\$	16,746
Opening Accumulated Amortization	\$	-
Amortization	3%	\$ 419
Closing Accumulated Amortization	\$	419
Opening Net Fixed Assets	\$	-
Closing Net Fixed Assets	\$	16,328
Average Net Fixed Assets	\$	8,164

For PILs Calculation

UCC

2014

Forecasted

Opening UCC	\$	-
Capital Additions	\$	16,746
UCC Before Half Year Rule	\$	16,746
Half Year Rule (1/2 Additions - Disposals)	\$	-
Reduced UCC	\$	16,746
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$	1,340
Closing UCC	\$	15,407



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 15

Name or General Description of Project

C5 Box Construction

Asset Component

1855_Services - OH

Average Net Fixed Assets

Net Fixed Assets

2014
 Forecasted

Opening Capital Investment	\$ -
Capital Investment	\$ 1,652,358
Closing Capital Investment	\$ 1,652,358
Opening Accumulated Amortization	\$ -
Amortization	2% \$ 33,047
Closing Accumulated Amortization	\$ 33,047
Opening Net Fixed Assets	\$ -
Closing Net Fixed Assets	\$ 1,619,311
Average Net Fixed Assets	\$ 809,655

For PILs Calculation

UCC

2014
 Forecasted

Opening UCC	\$ -
Capital Additions	\$ 1,652,358
UCC Before Half Year Rule	\$ 1,652,358
Half Year Rule (1/2 Additions - Disposals)	\$ -
Reduced UCC	\$ 1,652,358
CCA Rate Class	47
CCA Rate	8%
CCA	\$ 132,189
Closing UCC	\$ 1,520,169



Incremental Capital Project Summary

Using the pull-down menu below, please identify what year of the IRM cycle you are in.

2nd Year of IRM Cycle

Name or General Description of Project

C6 Rear Lot Construction

Year

2012

Details of Project

C6 Rear Lot Construction

Number of Asset Components

13

Asset Component (Click on the Number to View the Component Details)	Capital Cost	Depreciation Rate		CCA Class	CCA Rate
		2012	2013		
1 1830_Poles Towers and Fixtures	1,973,090	3%		47	8%
2 1835_Overhead Conductors and Devices	1,114,403	2%		47	8%
3 1835_Overhead Conductors and Devices - Switches	173,924	3%		47	8%
4 1840_Underground Conduit - Cable Chamber	374,760	2%		47	8%
5 1840_Underground Conduit - Duct Bank	7,158,922	3%		47	8%
6 1840_Underground Conduit - Vault	527,369	3%		47	8%
7 1845_Underground Conductors and Devices	9,695,330	3%		47	8%
8 1845_Underground Conductors and Devices - Switch	782,007	5%		47	8%
9 1850_Line Transformers - OH	721,385	3%		47	8%
10 1850_Line Transformers - UG	3,324,211	3%		47	8%
11 1860_Meters - Smart Meters	304,286	7%		47	8%
12 1855_Services - UG	6,832,650	3%		47	8%
13 1855_Services - OH	1,383,366	2%		47	8%
Closing Net Fixed Asset	33,393,874	32,422,045	31,450,216		
Amortization Expense	971,829	971,829	971,829		
CCA	2,749,256	2,529,316	2,326,970		



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 1

Name or General Description of Project

C6 Rear Lot Construction

Asset Component

1830_Poles Towers and Fixtures

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 1,973,090	\$ 1,973,090
Capital Investment	\$ 1,973,090	\$ -	\$ -
Closing Capital Investment	\$ 1,973,090	\$ 1,973,090	\$ 1,973,090
Opening Accumulated Amortization	\$ -	\$ 49,327	\$ 98,655
Amortization	3% \$ 49,327	\$ 49,327	\$ 49,327
Closing Accumulated Amortization	\$ 49,327	\$ 98,655	\$ 147,982
Opening Net Fixed Assets	\$ -	\$ 1,923,763	\$ 1,874,436
Closing Net Fixed Assets	\$ 1,923,763	\$ 1,874,436	\$ 1,825,108
Average Net Fixed Assets	\$ 961,881	\$ 1,899,099	\$ 1,849,772

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 1,815,243	\$ 1,670,024
Capital Additions	\$ 1,973,090	\$ -	\$ -
UCC Before Half Year Rule	\$ 1,973,090	\$ 1,815,243	\$ 1,670,024
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 1,973,090	\$ 1,815,243	\$ 1,670,024
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 157,847	\$ 145,219	\$ 133,602
Closing UCC	\$ 1,815,243	\$ 1,670,024	\$ 1,536,422



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 2

Name or General Description of Project

C6 Rear Lot Construction

Asset Component

1835_Overhead Conductors and Devices

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 1,114,403	\$ 1,114,403
Capital Investment	\$ 1,114,403	\$ -	\$ -
Closing Capital Investment	\$ 1,114,403	\$ 1,114,403	\$ 1,114,403
Opening Accumulated Amortization	\$ -	\$ 22,288	\$ 44,576
Amortization	2% \$ 22,288	\$ 22,288	\$ 22,288
Closing Accumulated Amortization	\$ 22,288	\$ 44,576	\$ 66,864
Opening Net Fixed Assets	\$ -	\$ 1,092,115	\$ 1,069,827
Closing Net Fixed Assets	\$ 1,092,115	\$ 1,069,827	\$ 1,047,539
Average Net Fixed Assets	\$ 546,058	\$ 1,080,971	\$ 1,058,683

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 1,025,251	\$ 943,231
Capital Additions	\$ 1,114,403	\$ -	\$ -
UCC Before Half Year Rule	\$ 1,114,403	\$ 1,025,251	\$ 943,231
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 1,114,403	\$ 1,025,251	\$ 943,231
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 89,152	\$ 82,020	\$ 75,458
Closing UCC	\$ 1,025,251	\$ 943,231	\$ 867,773



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 3

Name or General Description of Project

C6 Rear Lot Construction

Asset Component

1835_Overhead Conductors and Devices - Switches

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 173,924	\$ 173,924
Capital Investment	\$ 173,924	\$ -	\$ -
Closing Capital Investment	\$ 173,924	\$ 173,924	\$ 173,924
Opening Accumulated Amortization	\$ -	\$ 5,797	\$ 11,595
Amortization	3% \$ 5,797	\$ 5,797	\$ 5,797
Closing Accumulated Amortization	\$ 5,797	\$ 11,595	\$ 17,392
Opening Net Fixed Assets	\$ -	\$ 168,126	\$ 162,329
Closing Net Fixed Assets	\$ 168,126	\$ 162,329	\$ 156,531
Average Net Fixed Assets	\$ 84,063	\$ 165,227	\$ 159,430

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 160,010	\$ 147,209
Capital Additions	\$ 173,924	\$ -	\$ -
UCC Before Half Year Rule	\$ 173,924	\$ 160,010	\$ 147,209
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 173,924	\$ 160,010	\$ 147,209
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 13,914	\$ 12,801	\$ 11,777
Closing UCC	\$ 160,010	\$ 147,209	\$ 135,432



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 4

Name or General Description of Project

C6 Rear Lot Construction

Asset Component

1840_Underground Conduit - Cable Chamber

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 374,760	\$ 374,760
Capital Investment	\$ 374,760	\$ -	\$ -
Closing Capital Investment	\$ 374,760	\$ 374,760	\$ 374,760
Opening Accumulated Amortization	\$ -	\$ 7,495	\$ 14,990
Amortization	\$ 7,495	\$ 7,495	\$ 7,495
Closing Accumulated Amortization	\$ 7,495	\$ 14,990	\$ 22,486
Opening Net Fixed Assets	\$ -	\$ 367,265	\$ 359,770
Closing Net Fixed Assets	\$ 367,265	\$ 359,770	\$ 352,275
Average Net Fixed Assets	\$ 183,633	\$ 363,518	\$ 356,022

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 344,780	\$ 317,197
Capital Additions	\$ 374,760	\$ -	\$ -
UCC Before Half Year Rule	\$ 374,760	\$ 344,780	\$ 317,197
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 374,760	\$ 344,780	\$ 317,197
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 29,981	\$ 27,582	\$ 25,376
Closing UCC	\$ 344,780	\$ 317,197	\$ 291,821



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 5

Name or General Description of Project

C6 Rear Lot Construction

Asset Component

1840 Underground Conduit - Duct Bank

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 7,158,922	\$ 7,158,922
Capital Investment	\$ 7,158,922	\$ -	\$ -
Closing Capital Investment	\$ 7,158,922	\$ 7,158,922	\$ 7,158,922
Opening Accumulated Amortization	\$ -	\$ 238,631	\$ 477,261
Amortization	3% \$ 238,631	\$ 238,631	\$ 238,631
Closing Accumulated Amortization	\$ 238,631	\$ 477,261	\$ 715,892
Opening Net Fixed Assets	\$ -	\$ 6,920,291	\$ 6,681,660
Closing Net Fixed Assets	\$ 6,920,291	\$ 6,681,660	\$ 6,443,030
Average Net Fixed Assets	\$ 3,460,146	\$ 6,800,976	\$ 6,562,345

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 6,586,208	\$ 6,059,311
Capital Additions	\$ 7,158,922	\$ -	\$ -
UCC Before Half Year Rule	\$ 7,158,922	\$ 6,586,208	\$ 6,059,311
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 7,158,922	\$ 6,586,208	\$ 6,059,311
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 572,714	\$ 526,897	\$ 484,745
Closing UCC	\$ 6,586,208	\$ 6,059,311	\$ 5,574,567



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 6

Name or General Description of Project

C6 Rear Lot Construction

Asset Component

1840 Underground Conduit - Vault

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 527,369	\$ 527,369
Capital Investment	\$ 527,369	\$ -	\$ -
Closing Capital Investment	\$ 527,369	\$ 527,369	\$ 527,369
Opening Accumulated Amortization	\$ -	\$ 13,184	\$ 26,368
Amortization	3% \$ 13,184	\$ 13,184	\$ 13,184
Closing Accumulated Amortization	\$ 13,184	\$ 26,368	\$ 39,553
Opening Net Fixed Assets	\$ -	\$ 514,185	\$ 501,001
Closing Net Fixed Assets	\$ 514,185	\$ 501,001	\$ 487,817
Average Net Fixed Assets	\$ 257,093	\$ 507,593	\$ 494,409

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 485,180	\$ 446,366
Capital Additions	\$ 527,369	\$ -	\$ -
UCC Before Half Year Rule	\$ 527,369	\$ 485,180	\$ 446,366
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 527,369	\$ 485,180	\$ 446,366
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 42,190	\$ 38,814	\$ 35,709
Closing UCC	\$ 485,180	\$ 446,366	\$ 410,656



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 7

Name or General Description of Project

C6 Rear Lot Construction

Asset Component

1845 Underground Conductors and Devices

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 9,695,330	\$ 9,695,330
Capital Investment	\$ 9,695,330	\$ -	\$ -
Closing Capital Investment	\$ 9,695,330	\$ 9,695,330	\$ 9,695,330
Opening Accumulated Amortization	\$ -	\$ 242,383	\$ 484,767
Amortization	3% \$ 242,383	\$ 242,383	\$ 242,383
Closing Accumulated Amortization	\$ 242,383	\$ 484,767	\$ 727,150
Opening Net Fixed Assets	\$ -	\$ 9,452,947	\$ 9,210,564
Closing Net Fixed Assets	\$ 9,452,947	\$ 9,210,564	\$ 8,968,181
Average Net Fixed Assets	\$ 4,726,474	\$ 9,331,756	\$ 9,089,372

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 8,919,704	\$ 8,206,128
Capital Additions	\$ 9,695,330	\$ -	\$ -
UCC Before Half Year Rule	\$ 9,695,330	\$ 8,919,704	\$ 8,206,128
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 9,695,330	\$ 8,919,704	\$ 8,206,128
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 775,626	\$ 713,576	\$ 656,490
Closing UCC	\$ 8,919,704	\$ 8,206,128	\$ 7,549,638



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 8

Name or General Description of Project

C6 Rear Lot Construction

Asset Component

1845_Underground Conductors and Devices - Switch

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 782,007	\$ 782,007
Capital Investment	\$ 782,007	\$ -	\$ -
Closing Capital Investment	\$ 782,007	\$ 782,007	\$ 782,007
Opening Accumulated Amortization	\$ -	\$ 39,100	\$ 78,201
Amortization	5% \$ 39,100	\$ 39,100	\$ 39,100
Closing Accumulated Amortization	\$ 39,100	\$ 78,201	\$ 117,301
Opening Net Fixed Assets	\$ -	\$ 742,907	\$ 703,806
Closing Net Fixed Assets	\$ 742,907	\$ 703,806	\$ 664,706
Average Net Fixed Assets	\$ 371,453	\$ 723,357	\$ 684,256

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 719,447	\$ 661,891
Capital Additions	\$ 782,007	\$ -	\$ -
UCC Before Half Year Rule	\$ 782,007	\$ 719,447	\$ 661,891
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 782,007	\$ 719,447	\$ 661,891
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 62,561	\$ 57,556	\$ 52,951
Closing UCC	\$ 719,447	\$ 661,891	\$ 608,940



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 9

Name or General Description of Project

C6 Rear Lot Construction

Asset Component

1850 Line Transformers - OH

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 721,385	\$ 721,385
Capital Investment	\$ 721,385	\$ -	\$ -
Closing Capital Investment	\$ 721,385	\$ 721,385	\$ 721,385
Opening Accumulated Amortization	\$ -	\$ 24,046	\$ 48,092
Amortization	3% \$ 24,046	\$ 24,046	\$ 24,046
Closing Accumulated Amortization	\$ 24,046	\$ 48,092	\$ 72,138
Opening Net Fixed Assets	\$ -	\$ 697,338	\$ 673,292
Closing Net Fixed Assets	\$ 697,338	\$ 673,292	\$ 649,246
Average Net Fixed Assets	\$ 348,669	\$ 685,315	\$ 661,269

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 663,674	\$ 610,580
Capital Additions	\$ 721,385	\$ -	\$ -
UCC Before Half Year Rule	\$ 721,385	\$ 663,674	\$ 610,580
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 721,385	\$ 663,674	\$ 610,580
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 57,711	\$ 53,094	\$ 48,846
Closing UCC	\$ 663,674	\$ 610,580	\$ 561,734



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 10

Name or General Description of Project

C6 Rear Lot Construction

Asset Component

1850 Line Transformers - UG

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 3,324,211	\$ 3,324,211
Capital Investment	\$ 3,324,211	\$ -	\$ -
Closing Capital Investment	\$ 3,324,211	\$ 3,324,211	\$ 3,324,211
Opening Accumulated Amortization	\$ -	\$ 110,807	\$ 221,614
Amortization	3% \$ 110,807	\$ 110,807	\$ 110,807
Closing Accumulated Amortization	\$ 110,807	\$ 221,614	\$ 332,421
Opening Net Fixed Assets	\$ -	\$ 3,213,404	\$ 3,102,597
Closing Net Fixed Assets	\$ 3,213,404	\$ 3,102,597	\$ 2,991,790
Average Net Fixed Assets	\$ 1,606,702	\$ 3,158,000	\$ 3,047,193

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 3,058,274	\$ 2,813,612
Capital Additions	\$ 3,324,211	\$ -	\$ -
UCC Before Half Year Rule	\$ 3,324,211	\$ 3,058,274	\$ 2,813,612
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 3,324,211	\$ 3,058,274	\$ 2,813,612
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 265,937	\$ 244,662	\$ 225,089
Closing UCC	\$ 3,058,274	\$ 2,813,612	\$ 2,588,523



Incremental Capital Project Summary

[Return to Main Summary](#)

Fixed Asset Amortization and UCC 11

Name or General Description of Project

C6 Rear Lot Construction

Asset Component

1860 Meters - Smart Meters

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 304,286	\$ 304,286
Capital Investment	\$ 304,286	\$ -	\$ -
Closing Capital Investment	\$ 304,286	\$ 304,286	\$ 304,286
Opening Accumulated Amortization	\$ -	\$ 20,286	\$ 40,571
Amortization	7% \$ 20,286	\$ 20,286	\$ 20,286
Closing Accumulated Amortization	\$ 20,286	\$ 40,571	\$ 60,857
Opening Net Fixed Assets	\$ -	\$ 284,000	\$ 263,714
Closing Net Fixed Assets	\$ 284,000	\$ 263,714	\$ 243,428
Average Net Fixed Assets	\$ 142,000	\$ 273,857	\$ 253,571

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 279,943	\$ 257,547
Capital Additions	\$ 304,286	\$ -	\$ -
UCC Before Half Year Rule	\$ 304,286	\$ 279,943	\$ 257,547
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 304,286	\$ 279,943	\$ 257,547
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 24,343	\$ 22,395	\$ 20,604
Closing UCC	\$ 279,943	\$ 257,547	\$ 236,944



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 12

Name or General Description of Project

C6 Rear Lot Construction

Asset Component

1855_Services - UG

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 6,832,650	\$ 6,832,650
Capital Investment	\$ 6,832,650	\$ -	\$ -
Closing Capital Investment	\$ 6,832,650	\$ 6,832,650	\$ 6,832,650
Opening Accumulated Amortization	\$ -	\$ 170,816	\$ 341,632
Amortization	3% \$ 170,816	\$ 170,816	\$ 170,816
Closing Accumulated Amortization	\$ 170,816	\$ 341,632	\$ 512,449
Opening Net Fixed Assets	\$ -	\$ 6,661,833	\$ 6,491,017
Closing Net Fixed Assets	\$ 6,661,833	\$ 6,491,017	\$ 6,320,201
Average Net Fixed Assets	\$ 3,330,917	\$ 6,576,425	\$ 6,405,609

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 6,286,038	\$ 5,783,155
Capital Additions	\$ 6,832,650	\$ -	\$ -
UCC Before Half Year Rule	\$ 6,832,650	\$ 6,286,038	\$ 5,783,155
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 6,832,650	\$ 6,286,038	\$ 5,783,155
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 546,612	\$ 502,883	\$ 462,652
Closing UCC	\$ 6,286,038	\$ 5,783,155	\$ 5,320,502



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 13

Name or General Description of Project

C6 Rear Lot Construction

Asset Component

1855_Services - OH

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 1,383,366	\$ 1,383,366
Capital Investment	\$ 1,383,366	\$ -	\$ -
Closing Capital Investment	\$ 1,383,366	\$ 1,383,366	\$ 1,383,366
Opening Accumulated Amortization	\$ -	\$ 27,667	\$ 55,335
Amortization	2% \$ 27,667	\$ 27,667	\$ 27,667
Closing Accumulated Amortization	\$ 27,667	\$ 55,335	\$ 83,002
Opening Net Fixed Assets	\$ -	\$ 1,355,699	\$ 1,328,031
Closing Net Fixed Assets	\$ 1,355,699	\$ 1,328,031	\$ 1,300,364
Average Net Fixed Assets	\$ 677,849	\$ 1,341,865	\$ 1,314,198

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 1,272,697	\$ 1,170,881
Capital Additions	\$ 1,383,366	\$ -	\$ -
UCC Before Half Year Rule	\$ 1,383,366	\$ 1,272,697	\$ 1,170,881
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 1,383,366	\$ 1,272,697	\$ 1,170,881
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 110,669	\$ 101,816	\$ 93,670
Closing UCC	\$ 1,272,697	\$ 1,170,881	\$ 1,077,210



Incremental Capital Project Summary

Using the pull-down menu below, please identify what year of the IRM cycle you are in.

3rd Year of IRM Cycle

Name or General Description of Project

C6 Rear Lot Construction

Year

2013

Details of Project

C6 Rear Lot Construction

Number of Asset Components

11

Asset Component (Click on the Number to View the Component Details)	Capital Cost	Depreciation Rate	CCA Class	CCA Rate
1 1830_Poles Towers and Fixtures	720,137	3%	47	8%
2 1835_Overhead Conductors and Devices	1,188,075	2%	47	8%
3 1835_Overhead Conductors and Devices - Switches	24,072	3%	47	8%
4 1840_Underground Conduit - Duct Bank	14,231,392	3%	47	8%
5 1845_Underground Conductors and Devices	1,673,789	3%	47	8%
6 1845_Underground Conductors and Devices - Switch	102,362	5%	47	8%
7 1850_Line Transformers - OH	211,404	3%	47	8%
8 1850_Line Transformers - UG	674,345	3%	47	8%
9 1860_Meters - Smart Meters	475,584	7%	47	8%
10 1855_Services - UG	1,272,330	3%	47	8%
11 1855_Services - OH	161,077	2%	47	8%

	2013	2014
Closing Net Fixed Asset	20,074,397	19,414,227
Amortization Expense	660,170	660,170
CCA	1,658,765	1,526,064



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 1

Name or General Description of Project

C6 Rear Lot Construction

Asset Component

1830_Poles Towers and Fixtures

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 720,137
Capital Investment	\$ 720,137	\$ -
Closing Capital Investment	\$ 720,137	\$ 720,137
Opening Accumulated Amortization	\$ -	\$ 18,003
Amortization	3% \$ 18,003	\$ 18,003
Closing Accumulated Amortization	\$ 18,003	\$ 36,007
Opening Net Fixed Assets	\$ -	\$ 702,133
Closing Net Fixed Assets	\$ 702,133	\$ 684,130
Average Net Fixed Assets	\$ 351,067	\$ 693,131

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 662,526
Capital Additions	\$ 720,137	\$ -
UCC Before Half Year Rule	\$ 720,137	\$ 662,526
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 720,137	\$ 662,526
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 57,611	\$ 53,002
Closing UCC	\$ 662,526	\$ 609,524



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 2

Name or General Description of Project

C6 Rear Lot Construction

Asset Component

1835_Overhead Conductors and Devices

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 1,188,075
Capital Investment	\$ 1,188,075	\$ -
Closing Capital Investment	\$ 1,188,075	\$ 1,188,075
Opening Accumulated Amortization	\$ -	\$ 23,761
Amortization	2% \$ 23,761	\$ 23,761
Closing Accumulated Amortization	\$ 23,761	\$ 47,523
Opening Net Fixed Assets	\$ -	\$ 1,164,313
Closing Net Fixed Assets	\$ 1,164,313	\$ 1,140,552
Average Net Fixed Assets	\$ 582,157	\$ 1,152,432

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 1,093,029
Capital Additions	\$ 1,188,075	\$ -
UCC Before Half Year Rule	\$ 1,188,075	\$ 1,093,029
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 1,188,075	\$ 1,093,029
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 95,046	\$ 87,442
Closing UCC	\$ 1,093,029	\$ 1,005,586



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 3

Name or General Description of Project

C6 Rear Lot Construction

Asset Component

1835_Overhead Conductors and Devices - Switches

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 24,072
Capital Investment	\$ 24,072	\$ -
Closing Capital Investment	\$ 24,072	\$ 24,072
Opening Accumulated Amortization	\$ -	\$ 802
Amortization	3% \$ 802	\$ 802
Closing Accumulated Amortization	\$ 802	\$ 1,605
Opening Net Fixed Assets	\$ -	\$ 23,270
Closing Net Fixed Assets	\$ 23,270	\$ 22,467
Average Net Fixed Assets	\$ 11,635	\$ 22,868

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 22,146
Capital Additions	\$ 24,072	\$ -
UCC Before Half Year Rule	\$ 24,072	\$ 22,146
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 24,072	\$ 22,146
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 1,926	\$ 1,772
Closing UCC	\$ 22,146	\$ 20,375



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 4

Name or General Description of Project

C6 Rear Lot Construction

Asset Component

1840 Underground Conduit - Duct Bank

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 14,231,392
Capital Investment	\$ 14,231,392	\$ -
Closing Capital Investment	\$ 14,231,392	\$ 14,231,392
Opening Accumulated Amortization	\$ -	\$ 474,380
Amortization	3% \$ 474,380	\$ 474,380
Closing Accumulated Amortization	\$ 474,380	\$ 948,759
Opening Net Fixed Assets	\$ -	\$ 13,757,012
Closing Net Fixed Assets	\$ 13,757,012	\$ 13,282,632
Average Net Fixed Assets	\$ 6,878,506	\$ 13,519,822

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 13,092,880
Capital Additions	\$ 14,231,392	\$ -
UCC Before Half Year Rule	\$ 14,231,392	\$ 13,092,880
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 14,231,392	\$ 13,092,880
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 1,138,511	\$ 1,047,430
Closing UCC	\$ 13,092,880	\$ 12,045,450



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 5

Name or General Description of Project

C6 Rear Lot Construction

Asset Component

1845_Underground Conductors and Devices

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 1,673,789
Capital Investment	\$ 1,673,789	\$ -
Closing Capital Investment	\$ 1,673,789	\$ 1,673,789
Opening Accumulated Amortization	\$ -	\$ 41,845
Amortization	3% \$ 41,845	\$ 41,845
Closing Accumulated Amortization	\$ 41,845	\$ 83,689
Opening Net Fixed Assets	\$ -	\$ 1,631,945
Closing Net Fixed Assets	\$ 1,631,945	\$ 1,590,100
Average Net Fixed Assets	\$ 815,972	\$ 1,611,022

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 1,539,886
Capital Additions	\$ 1,673,789	\$ -
UCC Before Half Year Rule	\$ 1,673,789	\$ 1,539,886
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 1,673,789	\$ 1,539,886
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 133,903	\$ 123,191
Closing UCC	\$ 1,539,886	\$ 1,416,695



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 6

Name or General Description of Project

C6 Rear Lot Construction

Asset Component

1845_Underground Conductors and Devices - Switch

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 102,362
Capital Investment	\$ 102,362	\$ -
Closing Capital Investment	\$ 102,362	\$ 102,362
Opening Accumulated Amortization	\$ -	\$ 5,118
Amortization	5% \$ 5,118	\$ 5,118
Closing Accumulated Amortization	\$ 5,118	\$ 10,236
Opening Net Fixed Assets	\$ -	\$ 97,244
Closing Net Fixed Assets	\$ 97,244	\$ 92,126
Average Net Fixed Assets	\$ 48,622	\$ 94,685

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 94,173
Capital Additions	\$ 102,362	\$ -
UCC Before Half Year Rule	\$ 102,362	\$ 94,173
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 102,362	\$ 94,173
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 8,189	\$ 7,534
Closing UCC	\$ 94,173	\$ 86,640



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 7

Name or General Description of Project

C6 Rear Lot Construction

Asset Component

1850_Line Transformers - OH

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 211,404
Capital Investment	\$ 211,404	\$ -
Closing Capital Investment	\$ 211,404	\$ 211,404
Opening Accumulated Amortization	\$ -	\$ 7,047
Amortization	3% \$ 7,047	\$ 7,047
Closing Accumulated Amortization	\$ 7,047	\$ 14,094
Opening Net Fixed Assets	\$ -	\$ 204,357
Closing Net Fixed Assets	\$ 204,357	\$ 197,310
Average Net Fixed Assets	\$ 102,179	\$ 200,834

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 194,492
Capital Additions	\$ 211,404	\$ -
UCC Before Half Year Rule	\$ 211,404	\$ 194,492
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 211,404	\$ 194,492
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 16,912	\$ 15,559
Closing UCC	\$ 194,492	\$ 178,932



Incremental Capital Project Summary

[Return to Main Summary](#)

Fixed Asset Amortization and UCC 8

Name or General Description of Project

C6 Rear Lot Construction

Asset Component

1850_Line Transformers - UG

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 674,345
Capital Investment	\$ 674,345	\$ -
Closing Capital Investment	\$ 674,345	\$ 674,345
Opening Accumulated Amortization	\$ -	\$ 22,478
Amortization	3% \$ 22,478	\$ 22,478
Closing Accumulated Amortization	\$ 22,478	\$ 44,956
Opening Net Fixed Assets	\$ -	\$ 651,867
Closing Net Fixed Assets	\$ 651,867	\$ 629,389
Average Net Fixed Assets	\$ 325,934	\$ 640,628

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 620,398
Capital Additions	\$ 674,345	\$ -
UCC Before Half Year Rule	\$ 674,345	\$ 620,398
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 674,345	\$ 620,398
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 53,948	\$ 49,632
Closing UCC	\$ 620,398	\$ 570,766



Incremental Capital Project Summary

[Return to Main Summary](#)

Fixed Asset Amortization and UCC 9

Name or General Description of Project

C6 Rear Lot Construction

Asset Component

1860 Meters - Smart Meters

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 475,584
Capital Investment	\$ 475,584	\$ -
Closing Capital Investment	\$ 475,584	\$ 475,584
Opening Accumulated Amortization	\$ -	\$ 31,706
Amortization	7% \$ 31,706	\$ 31,706
Closing Accumulated Amortization	\$ 31,706	\$ 63,411
Opening Net Fixed Assets	\$ -	\$ 443,878
Closing Net Fixed Assets	\$ 443,878	\$ 412,173
Average Net Fixed Assets	\$ 221,939	\$ 428,026

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 437,537
Capital Additions	\$ 475,584	\$ -
UCC Before Half Year Rule	\$ 475,584	\$ 437,537
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 475,584	\$ 437,537
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 38,047	\$ 35,003
Closing UCC	\$ 437,537	\$ 402,534



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 10

Name or General Description of Project

C6 Rear Lot Construction

Asset Component

1855_Services - UG

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 1,272,330
Capital Investment	\$ 1,272,330	\$ -
Closing Capital Investment	\$ 1,272,330	\$ 1,272,330
Opening Accumulated Amortization	\$ -	\$ 31,808
Amortization	3% \$ 31,808	\$ 31,808
Closing Accumulated Amortization	\$ 31,808	\$ 63,617
Opening Net Fixed Assets	\$ -	\$ 1,240,522
Closing Net Fixed Assets	\$ 1,240,522	\$ 1,208,714
Average Net Fixed Assets	\$ 620,261	\$ 1,224,618

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 1,170,544
Capital Additions	\$ 1,272,330	\$ -
UCC Before Half Year Rule	\$ 1,272,330	\$ 1,170,544
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 1,272,330	\$ 1,170,544
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 101,786	\$ 93,644
Closing UCC	\$ 1,170,544	\$ 1,076,900



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 11

Name or General Description of Project

C6 Rear Lot Construction

Asset Component

1855_Services - OH

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 161,077
Capital Investment	\$ 161,077	\$ -
Closing Capital Investment	\$ 161,077	\$ 161,077
Opening Accumulated Amortization	\$ -	\$ 3,222
Amortization	2% \$ 3,222	\$ 3,222
Closing Accumulated Amortization	\$ 3,222	\$ 6,443
Opening Net Fixed Assets	\$ -	\$ 157,856
Closing Net Fixed Assets	\$ 157,856	\$ 154,634
Average Net Fixed Assets	\$ 78,928	\$ 156,245

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 148,191
Capital Additions	\$ 161,077	\$ -
UCC Before Half Year Rule	\$ 161,077	\$ 148,191
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 161,077	\$ 148,191
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 12,886	\$ 11,855
Closing UCC	\$ 148,191	\$ 136,336



Incremental Capital Project Summary

Using the pull-down menu below, please identify what year of the IRM cycle you are in.

4th Year of IRM Cycle

Name or General Description of Project

C6 Rear Lot Construction

Details of Project

C6 Rear Lot Construction

Year

2014

Number of Asset Components

12

Asset Component (Click on the Number to View the Component Details)	Capital Cost	Capital Cost (1/2 year rule applied)	Depreciation Rate	CCA Class	CCA Rate
1 1830_Poles Towers and Fixtures	24,088	12,044	3%	47	8%
2 1835_Overhead Conductors and Devices	11,485	5,743	2%	47	8%
3 1835_Overhead Conductors and Devices - Switches	114,563	57,281	3%	47	8%
4 1840_Underground Conduit - Cable Chamber	137,323	68,661	2%	47	8%
5 1840_Underground Conduit - Duct Bank	5,329,898	2,664,949	3%	47	8%
6 1840_Underground Conduit - Vault	156,388	78,194	3%	47	8%
7 1845_Underground Conductors and Devices	2,209,223	1,104,612	3%	47	8%
8 1845_Underground Conductors and Devices - Switch	333,613	166,807	5%	47	8%
9 1850_Line Transformers - UG	182,583	91,291	3%	47	8%
10 1860_Meters - Smart Meters	2,341,100	1,170,550	7%	47	8%
11 1855_Services - UG	123,811	61,906	3%	47	8%
12 1855_Services - OH	67,864	33,932	2%	47	8%

	2014
Closing Net Fixed Asset	5,302,223
Amortization Expense	213,747
CCA	441,278



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 1

Name or General Description of Project

C6 Rear Lot Construction

Asset Component

1830_Poles Towers and Fixtures

Average Net Fixed Assets

Net Fixed Assets

2014

Forecasted

Opening Capital Investment	\$	-
Capital Investment	\$	12,044
Closing Capital Investment	\$	12,044
Opening Accumulated Amortization	\$	-
Amortization	3%	\$ 301
Closing Accumulated Amortization	\$	301
Opening Net Fixed Assets	\$	-
Closing Net Fixed Assets	\$	11,743
Average Net Fixed Assets	\$	5,871

For PILs Calculation

UCC

2014

Forecasted

Opening UCC	\$	-
Capital Additions	\$	12,044
UCC Before Half Year Rule	\$	12,044
Half Year Rule (1/2 Additions - Disposals)	\$	-
Reduced UCC	\$	12,044
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$	964
Closing UCC	\$	11,080



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 2

Name or General Description of Project

C6 Rear Lot Construction

Asset Component

1835_Overhead Conductors and Devices

Average Net Fixed Assets

Net Fixed Assets

2014
Forecasted

Opening Capital Investment	\$	-
Capital Investment	\$	5,743
Closing Capital Investment	\$	5,743
Opening Accumulated Amortization	\$	-
Amortization	2%	\$ 115
Closing Accumulated Amortization	\$	115
Opening Net Fixed Assets	\$	-
Closing Net Fixed Assets	\$	5,628
Average Net Fixed Assets	\$	2,814

For PILs Calculation

UCC

2014
Forecasted

Opening UCC	\$	-
Capital Additions	\$	5,743
UCC Before Half Year Rule	\$	5,743
Half Year Rule (1/2 Additions - Disposals)	\$	-
Reduced UCC	\$	5,743
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$	459
Closing UCC	\$	5,283



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 3

Name or General Description of Project

C6 Rear Lot Construction

Asset Component

1835_Overhead Conductors and Devices - Switches

Average Net Fixed Assets

Net Fixed Assets

2014

Forecasted

Opening Capital Investment	\$	-
Capital Investment	\$	57,281
Closing Capital Investment	\$	57,281
Opening Accumulated Amortization	\$	-
Amortization	3%	\$ 1,909
Closing Accumulated Amortization	\$	1,909
Opening Net Fixed Assets	\$	-
Closing Net Fixed Assets	\$	55,372
Average Net Fixed Assets	\$	27,686

For PILs Calculation

UCC

2014

Forecasted

Opening UCC	\$	-
Capital Additions	\$	57,281
UCC Before Half Year Rule	\$	57,281
Half Year Rule (1/2 Additions - Disposals)	\$	-
Reduced UCC	\$	57,281
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$	4,583
Closing UCC	\$	52,699



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 4

Name or General Description of Project

C6 Rear Lot Construction

Asset Component

1840_Underground Conduit - Cable Chamber

Average Net Fixed Assets

Net Fixed Assets

2014
Forecasted

Opening Capital Investment	\$ -
Capital Investment	\$ 68,661
Closing Capital Investment	\$ 68,661
Opening Accumulated Amortization	\$ -
Amortization	2% \$ 1,373
Closing Accumulated Amortization	\$ 1,373
Opening Net Fixed Assets	\$ -
Closing Net Fixed Assets	\$ 67,288
Average Net Fixed Assets	\$ 33,644

For PILs Calculation

UCC

2014
Forecasted

Opening UCC	\$ -
Capital Additions	\$ 68,661
UCC Before Half Year Rule	\$ 68,661
Half Year Rule (1/2 Additions - Disposals)	\$ -
Reduced UCC	\$ 68,661
CCA Rate Class	47
CCA Rate	8%
CCA	\$ 5,493
Closing UCC	\$ 63,168



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 5

Name or General Description of Project

C6 Rear Lot Construction

Asset Component

1840 Underground Conduit - Duct Bank

Average Net Fixed Assets

Net Fixed Assets

2014
Forecasted

Opening Capital Investment	\$	-
Capital Investment	\$	2,664,949
Closing Capital Investment	\$	2,664,949
Opening Accumulated Amortization	\$	-
Amortization	3%	\$ 88,832
Closing Accumulated Amortization	\$	88,832
Opening Net Fixed Assets	\$	-
Closing Net Fixed Assets	\$	2,576,117
Average Net Fixed Assets	\$	1,288,059

For PILs Calculation

UCC

2014
Forecasted

Opening UCC	\$	-
Capital Additions	\$	2,664,949
UCC Before Half Year Rule	\$	2,664,949
Half Year Rule (1/2 Additions - Disposals)	\$	-
Reduced UCC	\$	2,664,949
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$	213,196
Closing UCC	\$	2,451,753



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 6

Name or General Description of Project

C6 Rear Lot Construction

Asset Component

1840_Underground Conduit - Vault

Average Net Fixed Assets

Net Fixed Assets

2014
Forecasted

Opening Capital Investment	\$	-
Capital Investment	\$	78,194
Closing Capital Investment	\$	78,194
Opening Accumulated Amortization	\$	-
Amortization	3%	\$ 1,955
Closing Accumulated Amortization	\$	1,955
Opening Net Fixed Assets	\$	-
Closing Net Fixed Assets	\$	76,239
Average Net Fixed Assets	\$	38,119

For PILs Calculation

UCC

2014
Forecasted

Opening UCC	\$	-
Capital Additions	\$	78,194
UCC Before Half Year Rule	\$	78,194
Half Year Rule (1/2 Additions - Disposals)	\$	-
Reduced UCC	\$	78,194
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$	6,256
Closing UCC	\$	71,938



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 7

Name or General Description of Project

C6 Rear Lot Construction

Asset Component

1845_Underground Conductors and Devices

Average Net Fixed Assets

Net Fixed Assets

2014
Forecasted

Opening Capital Investment	\$	-
Capital Investment	\$	1,104,612
Closing Capital Investment	\$	1,104,612
Opening Accumulated Amortization	\$	-
Amortization	3%	\$ 27,615
Closing Accumulated Amortization	\$	27,615
Opening Net Fixed Assets	\$	-
Closing Net Fixed Assets	\$	1,076,996
Average Net Fixed Assets	\$	538,498

For PILs Calculation

UCC

2014
Forecasted

Opening UCC	\$	-
Capital Additions	\$	1,104,612
UCC Before Half Year Rule	\$	1,104,612
Half Year Rule (1/2 Additions - Disposals)	\$	-
Reduced UCC	\$	1,104,612
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$	88,369
Closing UCC	\$	1,016,243



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 8

Name or General Description of Project

C6 Rear Lot Construction

Asset Component

1845_Underground Conductors and Devices - Switch

Average Net Fixed Assets

Net Fixed Assets

2014
Forecasted

Opening Capital Investment	\$	-
Capital Investment	\$	166,807
Closing Capital Investment	\$	166,807
Opening Accumulated Amortization	\$	-
Amortization	5%	\$ 8,340
Closing Accumulated Amortization	\$	8,340
Opening Net Fixed Assets	\$	-
Closing Net Fixed Assets	\$	158,466
Average Net Fixed Assets	\$	79,233

For PILs Calculation

UCC

2014
Forecasted

Opening UCC	\$	-
Capital Additions	\$	166,807
UCC Before Half Year Rule	\$	166,807
Half Year Rule (1/2 Additions - Disposals)	\$	-
Reduced UCC	\$	166,807
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$	13,345
Closing UCC	\$	153,462



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 9

Name or General Description of Project

C6 Rear Lot Construction

Asset Component

1850_Line Transformers - UG

Average Net Fixed Assets

Net Fixed Assets

	2014 Forecasted
Opening Capital Investment	\$ -
Capital Investment	\$ 91,291
Closing Capital Investment	\$ 91,291
Opening Accumulated Amortization	\$ -
Amortization	3% \$ 3,043
Closing Accumulated Amortization	\$ 3,043
Opening Net Fixed Assets	\$ -
Closing Net Fixed Assets	\$ 88,248
Average Net Fixed Assets	\$ 44,124

For PILs Calculation

UCC

	2014 Forecasted
Opening UCC	\$ -
Capital Additions	\$ 91,291
UCC Before Half Year Rule	\$ 91,291
Half Year Rule (1/2 Additions - Disposals)	\$ -
Reduced UCC	\$ 91,291
CCA Rate Class	47
CCA Rate	8%
CCA	\$ 7,303
Closing UCC	\$ 83,988



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 10

Name or General Description of Project

C6 Rear Lot Construction

Asset Component

1860 Meters - Smart Meters

Average Net Fixed Assets

Net Fixed Assets

2014
Forecasted

Opening Capital Investment	\$ -
Capital Investment	\$ 1,170,550
Closing Capital Investment	\$ 1,170,550
Opening Accumulated Amortization	\$ -
Amortization	7% \$ 78,037
Closing Accumulated Amortization	\$ 78,037
Opening Net Fixed Assets	\$ -
Closing Net Fixed Assets	\$ 1,092,513
Average Net Fixed Assets	\$ 546,257

For PILs Calculation

UCC

2014
Forecasted

Opening UCC	\$ -
Capital Additions	\$ 1,170,550
UCC Before Half Year Rule	\$ 1,170,550
Half Year Rule (1/2 Additions - Disposals)	\$ -
Reduced UCC	\$ 1,170,550
CCA Rate Class	47
CCA Rate	8%
CCA	\$ 93,644
Closing UCC	\$ 1,076,906



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 11

Name or General Description of Project

C6 Rear Lot Construction

Asset Component

1855_Services - UG

Average Net Fixed Assets

Net Fixed Assets

2014
Forecasted

Opening Capital Investment	\$	-
Capital Investment	\$	61,906
Closing Capital Investment	\$	61,906
Opening Accumulated Amortization	\$	-
Amortization	3%	\$ 1,548
Closing Accumulated Amortization	\$	1,548
Opening Net Fixed Assets	\$	-
Closing Net Fixed Assets	\$	60,358
Average Net Fixed Assets	\$	30,179

For PILs Calculation

UCC

2014
Forecasted

Opening UCC	\$	-
Capital Additions	\$	61,906
UCC Before Half Year Rule	\$	61,906
Half Year Rule (1/2 Additions - Disposals)	\$	-
Reduced UCC	\$	61,906
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$	4,952
Closing UCC	\$	56,953



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 12

Name or General Description of Project

C6 Rear Lot Construction

Asset Component

1855_Services - OH

Average Net Fixed Assets

Net Fixed Assets

2014
 Forecasted

Opening Capital Investment	\$	-
Capital Investment	\$	33,932
Closing Capital Investment	\$	33,932
Opening Accumulated Amortization	\$	-
Amortization	2%	\$ 679
Closing Accumulated Amortization	\$	679
Opening Net Fixed Assets	\$	-
Closing Net Fixed Assets	\$	33,253
Average Net Fixed Assets	\$	16,627

For PILs Calculation

UCC

2014
 Forecasted

Opening UCC	\$	-
Capital Additions	\$	33,932
UCC Before Half Year Rule	\$	33,932
Half Year Rule (1/2 Additions - Disposals)	\$	-
Reduced UCC	\$	33,932
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$	2,715
Closing UCC	\$	31,217



Incremental Capital Project Summary

Using the pull-down menu below, please identify what year of the IRM cycle you are in.

2nd Year of IRM Cycle

Name or General Description of Project

C7 Polymer SMD-20 Fuses

Year

2012

Details of Project

C7 Polymer SMD-20 Fuses

Number of Asset Components

4

Asset Component (Click on the Number to View the Component Details)	Capital Cost	Depreciation Rate	CCA Class	CCA Rate
1 1830_Poles Towers and Fixtures	522,068	3%	47	8%
2 1835_Overhead Conductors and Devices	390,953	2%	47	8%
3 1835_Overhead Conductors and Devices - Switches	2,068,100	3%	47	8%
4 1855_Services - OH	77,074	2%	47	8%

	2012	2013	2014
Closing Net Fixed Asset	2,966,845	2,875,497	2,784,148
Amortization Expense	91,349	91,349	91,349
CCA	244,656	225,083	207,076



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 1

Name or General Description of Project

C7 Polymer SMD-20 Fuses

Asset Component

1830_Poles Towers and Fixtures

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 522,068	\$ 522,068
Capital Investment	\$ 522,068	\$ -	\$ -
Closing Capital Investment	\$ 522,068	\$ 522,068	\$ 522,068
Opening Accumulated Amortization	\$ -	\$ 13,052	\$ 26,103
Amortization	3% \$ 13,052	\$ 13,052	\$ 13,052
Closing Accumulated Amortization	\$ 13,052	\$ 26,103	\$ 39,155
Opening Net Fixed Assets	\$ -	\$ 509,017	\$ 495,965
Closing Net Fixed Assets	\$ 509,017	\$ 495,965	\$ 482,913
Average Net Fixed Assets	\$ 254,508	\$ 502,491	\$ 489,439

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 480,303	\$ 441,879
Capital Additions	\$ 522,068	\$ -	\$ -
UCC Before Half Year Rule	\$ 522,068	\$ 480,303	\$ 441,879
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 522,068	\$ 480,303	\$ 441,879
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 41,765	\$ 38,424	\$ 35,350
Closing UCC	\$ 480,303	\$ 441,879	\$ 406,528



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 2

Name or General Description of Project

C7 Polymer SMD-20 Fuses

Asset Component

1835_Overhead Conductors and Devices

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 390,953	\$ 390,953
Capital Investment	\$ 390,953	\$ -	\$ -
Closing Capital Investment	\$ 390,953	\$ 390,953	\$ 390,953
Opening Accumulated Amortization	\$ -	\$ 7,819	\$ 15,638
Amortization	\$ 7,819	\$ 7,819	\$ 7,819
Closing Accumulated Amortization	\$ 7,819	\$ 15,638	\$ 23,457
Opening Net Fixed Assets	\$ -	\$ 383,133	\$ 375,314
Closing Net Fixed Assets	\$ 383,133	\$ 375,314	\$ 367,495
Average Net Fixed Assets	\$ 191,567	\$ 379,224	\$ 371,405

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 359,676	\$ 330,902
Capital Additions	\$ 390,953	\$ -	\$ -
UCC Before Half Year Rule	\$ 390,953	\$ 359,676	\$ 330,902
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 390,953	\$ 359,676	\$ 330,902
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 31,276	\$ 28,774	\$ 26,472
Closing UCC	\$ 359,676	\$ 330,902	\$ 304,430



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 3

Name or General Description of Project

C7 Polymer SMD-20 Fuses

Asset Component

1835_Overhead Conductors and Devices - Switches

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 2,068,100	\$ 2,068,100
Capital Investment	\$ 2,068,100	\$ -	\$ -
Closing Capital Investment	\$ 2,068,100	\$ 2,068,100	\$ 2,068,100
Opening Accumulated Amortization	\$ -	\$ 68,937	\$ 137,873
Amortization	3% \$ 68,937	\$ 68,937	\$ 68,937
Closing Accumulated Amortization	\$ 68,937	\$ 137,873	\$ 206,810
Opening Net Fixed Assets	\$ -	\$ 1,999,163	\$ 1,930,226
Closing Net Fixed Assets	\$ 1,999,163	\$ 1,930,226	\$ 1,861,290
Average Net Fixed Assets	\$ 999,582	\$ 1,964,695	\$ 1,895,758

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 1,902,652	\$ 1,750,440
Capital Additions	\$ 2,068,100	\$ -	\$ -
UCC Before Half Year Rule	\$ 2,068,100	\$ 1,902,652	\$ 1,750,440
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 2,068,100	\$ 1,902,652	\$ 1,750,440
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 165,448	\$ 152,212	\$ 140,035
Closing UCC	\$ 1,902,652	\$ 1,750,440	\$ 1,610,405



Incremental Capital Project Summary

[Return to Main Summary](#)

Fixed Asset Amortization and UCC 4

Name or General Description of Project

C7 Polymer SMD-20 Fuses

Asset Component

1855_Services - OH

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 77,074	\$ 77,074
Capital Investment	\$ 77,074	\$ -	\$ -
Closing Capital Investment	\$ 77,074	\$ 77,074	\$ 77,074
Opening Accumulated Amortization	\$ -	\$ 1,541	\$ 3,083
Amortization	2% \$ 1,541	\$ 1,541	\$ 1,541
Closing Accumulated Amortization	\$ 1,541	\$ 3,083	\$ 4,624
Opening Net Fixed Assets	\$ -	\$ 75,532	\$ 73,991
Closing Net Fixed Assets	\$ 75,532	\$ 73,991	\$ 72,449
Average Net Fixed Assets	\$ 37,766	\$ 74,762	\$ 73,220

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 70,908	\$ 65,235
Capital Additions	\$ 77,074	\$ -	\$ -
UCC Before Half Year Rule	\$ 77,074	\$ 70,908	\$ 65,235
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 77,074	\$ 70,908	\$ 65,235
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 6,166	\$ 5,673	\$ 5,219
Closing UCC	\$ 70,908	\$ 65,235	\$ 60,016



Incremental Capital Project Summary

Using the pull-down menu below, please identify what year of the IRM cycle you are in.

3rd Year of IRM Cycle

Name or General Description of Project

C7 Polymer SMD-20 Fuses

Year

2013

Details of Project

C7 Polymer SMD-20 Fuses

Number of Asset Components

4

Asset Component (Click on the Number to View the Component Details)	Capital Cost	Depreciation Rate	CCA Class	CCA Rate
1 1830_Poles Towers and Fixtures	503,371	3%	47	8%
2 1835_Overhead Conductors and Devices	376,951	2%	47	8%
3 1835_Overhead Conductors and Devices - Switches	1,994,033	3%	47	8%
4 1855_Services - OH	74,313	2%	47	8%

Closing Net Fixed Asset

2013	2014
2,860,590	2,772,513

Amortization Expense

88,077	88,077
--------	--------

CCA

235,893	217,022
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Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 1

Name or General Description of Project

C7 Polymer SMD-20 Fuses

Asset Component

1830_Poles Towers and Fixtures

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 503,371
Capital Investment	\$ 503,371	\$ -
Closing Capital Investment	\$ 503,371	\$ 503,371
Opening Accumulated Amortization	\$ -	\$ 12,584
Amortization	3% \$ 12,584	\$ 12,584
Closing Accumulated Amortization	\$ 12,584	\$ 25,169
Opening Net Fixed Assets	\$ -	\$ 490,786
Closing Net Fixed Assets	\$ 490,786	\$ 478,202
Average Net Fixed Assets	\$ 245,393	\$ 484,494

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 463,101
Capital Additions	\$ 503,371	\$ -
UCC Before Half Year Rule	\$ 503,371	\$ 463,101
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 503,371	\$ 463,101
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 40,270	\$ 37,048
Closing UCC	\$ 463,101	\$ 426,053



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 2

Name or General Description of Project

C7 Polymer SMD-20 Fuses

Asset Component

1835_Overhead Conductors and Devices

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 376,951
Capital Investment	\$ 376,951	\$ -
Closing Capital Investment	\$ 376,951	\$ 376,951
Opening Accumulated Amortization	\$ -	\$ 7,539
Amortization	2% \$ 7,539	\$ 7,539
Closing Accumulated Amortization	\$ 7,539	\$ 15,078
Opening Net Fixed Assets	\$ -	\$ 369,412
Closing Net Fixed Assets	\$ 369,412	\$ 361,873
Average Net Fixed Assets	\$ 184,706	\$ 365,642

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 346,795
Capital Additions	\$ 376,951	\$ -
UCC Before Half Year Rule	\$ 376,951	\$ 346,795
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 376,951	\$ 346,795
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 30,156	\$ 27,744
Closing UCC	\$ 346,795	\$ 319,051



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 3

Name or General Description of Project

C7 Polymer SMD-20 Fuses

Asset Component

1835_Overhead Conductors and Devices - Switches

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 1,994,033
Capital Investment	\$ 1,994,033	\$ -
Closing Capital Investment	\$ 1,994,033	\$ 1,994,033
Opening Accumulated Amortization	\$ -	\$ 66,468
Amortization	3% \$ 66,468	\$ 66,468
Closing Accumulated Amortization	\$ 66,468	\$ 132,936
Opening Net Fixed Assets	\$ -	\$ 1,927,565
Closing Net Fixed Assets	\$ 1,927,565	\$ 1,861,097
Average Net Fixed Assets	\$ 963,782	\$ 1,894,331

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 1,834,510
Capital Additions	\$ 1,994,033	\$ -
UCC Before Half Year Rule	\$ 1,994,033	\$ 1,834,510
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 1,994,033	\$ 1,834,510
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 159,523	\$ 146,761
Closing UCC	\$ 1,834,510	\$ 1,687,749



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 4

Name or General Description of Project

C7 Polymer SMD-20 Fuses

Asset Component

1855_Services - OH

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 74,313
Capital Investment	\$ 74,313	\$ -
Closing Capital Investment	\$ 74,313	\$ 74,313
Opening Accumulated Amortization	\$ -	\$ 1,486
Amortization	2% \$ 1,486	\$ 1,486
Closing Accumulated Amortization	\$ 1,486	\$ 2,973
Opening Net Fixed Assets	\$ -	\$ 72,827
Closing Net Fixed Assets	\$ 72,827	\$ 71,341
Average Net Fixed Assets	\$ 36,414	\$ 72,084

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 68,368
Capital Additions	\$ 74,313	\$ -
UCC Before Half Year Rule	\$ 74,313	\$ 68,368
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 74,313	\$ 68,368
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 5,945	\$ 5,469
Closing UCC	\$ 68,368	\$ 62,899



Incremental Capital Project Summary

Using the pull-down menu below, please identify what year of the IRM cycle you are in.

4th Year of IRM Cycle

Name or General Description of Project

C7 Polymer SMD-20 Fuses

Details of Project

C7 Polymer SMD-20 Fuses

Year

2014

Number of Asset Components

4

Asset Component (Click on the Number to View the Component Details)	Capital Cost	Capital Cost (1/2 year rule applied)	Depreciation Rate	CCA Class	CCA Rate
1 1830_Poles Towers and Fixtures	501,326	250,663	3%	47	8%
2 1835_Overhead Conductors and Devices	375,419	187,710	2%	47	8%
3 1835_Overhead Conductors and Devices - Switches	1,985,931	992,966	3%	47	8%
4 1855_Services - OH	74,012	37,006	2%	47	8%

Closing Net Fixed Asset

Amortization Expense

CCA



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 1

Name or General Description of Project

C7 Polymer SMD-20 Fuses

Asset Component

1830_Poles Towers and Fixtures

Average Net Fixed Assets

Net Fixed Assets

2014
Forecasted

Opening Capital Investment	\$	-
Capital Investment	\$	250,663
Closing Capital Investment	\$	250,663
Opening Accumulated Amortization	\$	-
Amortization	3%	\$ 6,267
Closing Accumulated Amortization	\$	6,267
Opening Net Fixed Assets	\$	-
Closing Net Fixed Assets	\$	244,396
Average Net Fixed Assets	\$	122,198

For PILs Calculation

UCC

2014
Forecasted

Opening UCC	\$	-
Capital Additions	\$	250,663
UCC Before Half Year Rule	\$	250,663
Half Year Rule (1/2 Additions - Disposals)	\$	-
Reduced UCC	\$	250,663
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$	20,053
Closing UCC	\$	230,610



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 2

Name or General Description of Project

C7 Polymer SMD-20 Fuses

Asset Component

1835_Overhead Conductors and Devices

Average Net Fixed Assets

Net Fixed Assets

2014
 Forecasted

Opening Capital Investment	\$	-
Capital Investment	\$	187,710
Closing Capital Investment	\$	187,710
Opening Accumulated Amortization	\$	-
Amortization	2%	\$ 3,754
Closing Accumulated Amortization	\$	3,754
Opening Net Fixed Assets	\$	-
Closing Net Fixed Assets	\$	183,955
Average Net Fixed Assets	\$	91,978

For PILs Calculation

UCC

2014
 Forecasted

Opening UCC	\$	-
Capital Additions	\$	187,710
UCC Before Half Year Rule	\$	187,710
Half Year Rule (1/2 Additions - Disposals)	\$	-
Reduced UCC	\$	187,710
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$	15,017
Closing UCC	\$	172,693



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 3

Name or General Description of Project

C7 Polymer SMD-20 Fuses

Asset Component

1835_Overhead Conductors and Devices - Switches

Average Net Fixed Assets

Net Fixed Assets

2014
Forecasted

Opening Capital Investment	\$	-
Capital Investment	\$	992,966
Closing Capital Investment	\$	992,966
Opening Accumulated Amortization	\$	-
Amortization	3%	\$ 33,099
Closing Accumulated Amortization	\$	33,099
Opening Net Fixed Assets	\$	-
Closing Net Fixed Assets	\$	959,867
Average Net Fixed Assets	\$	479,933

For PILs Calculation

UCC

2014
Forecasted

Opening UCC	\$	-
Capital Additions	\$	992,966
UCC Before Half Year Rule	\$	992,966
Half Year Rule (1/2 Additions - Disposals)	\$	-
Reduced UCC	\$	992,966
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$	79,437
Closing UCC	\$	913,528



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 4

Name or General Description of Project

C7 Polymer SMD-20 Fuses

Asset Component

1855_Services - OH

Average Net Fixed Assets

Net Fixed Assets

2014

Forecasted

Opening Capital Investment	\$	-
Capital Investment	\$	37,006
Closing Capital Investment	\$	37,006
Opening Accumulated Amortization	\$	-
Amortization	2%	\$ 740
Closing Accumulated Amortization	\$	740
Opening Net Fixed Assets	\$	-
Closing Net Fixed Assets	\$	36,266
Average Net Fixed Assets	\$	18,133

For PILs Calculation

UCC

2014

Forecasted

Opening UCC	\$	-
Capital Additions	\$	37,006
UCC Before Half Year Rule	\$	37,006
Half Year Rule (1/2 Additions - Disposals)	\$	-
Reduced UCC	\$	37,006
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$	2,960
Closing UCC	\$	34,045



Incremental Capital Project Summary

Using the pull-down menu below, please identify what year of the IRM cycle you are in.

2nd Year of IRM Cycle

Name or General Description of Project

C8 Scadamate R1 Switches

Year

2012

Details of Project

C8 Scadamate R1 Switches

Number of Asset Components

2

Asset Component (Click on the Number to View the Component Details)	Capital Cost	Depreciation Rate			CCA Class	CCA Rate
		2012	2013	2014		
1 1835_Overhead Conductors and Devices	78,008		2%	47	8%	
2 1835_Overhead Conductors and Devices - Switches	2,780,744		3%	47	8%	
Closing Net Fixed Asset	2,764,500	2,670,249	2,575,997			
Amortization Expense	94,252	94,252	94,252			
CCA	228,700	210,404	193,572			



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 1

Name or General Description of Project

C8 Scadamate R1 Switches

Asset Component

1835_Overhead Conductors and Devices

Average Net Fixed Assets

Net Fixed Assets

Opening Capital Investment
 Capital Investment
 Closing Capital Investment

2012 2013 2014
 Forecasted Forecasted Forecasted

\$ -	\$ 78,008	\$ 78,008
\$ 78,008	\$ -	\$ -
\$ 78,008	\$ 78,008	\$ 78,008

Opening Accumulated Amortization
 Amortization
 Closing Accumulated Amortization

\$ -	\$ 1,560	\$ 3,120
2% \$ 1,560	\$ 1,560	\$ 1,560
\$ 1,560	\$ 3,120	\$ 4,680

Opening Net Fixed Assets
 Closing Net Fixed Assets
 Average Net Fixed Assets

\$ -	\$ 76,448	\$ 74,888
\$ 76,448	\$ 74,888	\$ 73,327
\$ 38,224	\$ 75,668	\$ 74,107

For PILs Calculation

UCC

Opening UCC
 Capital Additions
 UCC Before Half Year Rule
 Half Year Rule (1/2 Additions - Disposals)
 Reduced UCC
 CCA Rate Class
 CCA Rate
 CCA
 Closing UCC

2012 2013 2014
 Forecasted Forecasted Forecasted

\$ -	\$ 71,767	\$ 66,026
\$ 78,008	\$ -	\$ -
\$ 78,008	\$ 71,767	\$ 66,026
\$ -	\$ -	\$ -
\$ 78,008	\$ 71,767	\$ 66,026
47		
8%		
\$ 6,241	\$ 5,741	\$ 5,282
\$ 71,767	\$ 66,026	\$ 60,744



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 2

Name or General Description of Project

C8 Scadamate R1 Switches

Asset Component

1835_Overhead Conductors and Devices - Switches

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 2,780,744	\$ 2,780,744
Capital Investment	\$ 2,780,744	\$ -	\$ -
Closing Capital Investment	\$ 2,780,744	\$ 2,780,744	\$ 2,780,744
Opening Accumulated Amortization	\$ -	\$ 92,691	\$ 185,383
Amortization	3% \$ 92,691	\$ 92,691	\$ 92,691
Closing Accumulated Amortization	\$ 92,691	\$ 185,383	\$ 278,074
Opening Net Fixed Assets	\$ -	\$ 2,688,053	\$ 2,595,361
Closing Net Fixed Assets	\$ 2,688,053	\$ 2,595,361	\$ 2,502,670
Average Net Fixed Assets	\$ 1,344,026	\$ 2,641,707	\$ 2,549,015

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 2,558,285	\$ 2,353,622
Capital Additions	\$ 2,780,744	\$ -	\$ -
UCC Before Half Year Rule	\$ 2,780,744	\$ 2,558,285	\$ 2,353,622
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 2,780,744	\$ 2,558,285	\$ 2,353,622
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 222,460	\$ 204,663	\$ 188,290
Closing UCC	\$ 2,558,285	\$ 2,353,622	\$ 2,165,332



Incremental Capital Project Summary

Using the pull-down menu below, please identify what year of the IRM cycle you are in.

3rd Year of IRM Cycle

Name or General Description of Project

C8 Scadamate R1 Switches

Year

2013

Details of Project

C8 Scadamate R1 Switches

Number of Asset Components

2

Asset Component (Click on the Number to View the Component Details)

1	1835_Overhead Conductors and Devices
2	1835_Overhead Conductors and Devices - Switches

Capital Cost

76,507
2,727,269

Depreciation Rate

2%
3%

CCA Class

47
47

CCA Rate

8%
8%

Closing Net Fixed Asset

2013	2014
2,711,337	2,618,898

Amortization Expense

92,439	92,439
--------	--------

CCA

224,302	206,358
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Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 1

Name or General Description of Project

C8 Scadamate R1 Switches

Asset Component

1835_Overhead Conductors and Devices

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 76,507
Capital Investment	\$ 76,507	\$ -
Closing Capital Investment	\$ 76,507	\$ 76,507
Opening Accumulated Amortization	\$ -	\$ 1,530
Amortization	2% \$ 1,530	\$ 1,530
Closing Accumulated Amortization	\$ 1,530	\$ 3,060
Opening Net Fixed Assets	\$ -	\$ 74,977
Closing Net Fixed Assets	\$ 74,977	\$ 73,447
Average Net Fixed Assets	\$ 37,489	\$ 74,212

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 70,387
Capital Additions	\$ 76,507	\$ -
UCC Before Half Year Rule	\$ 76,507	\$ 70,387
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 76,507	\$ 70,387
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 6,121	\$ 5,631
Closing UCC	\$ 70,387	\$ 64,756



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 2

Name or General Description of Project

C8 Scadamate R1 Switches

Asset Component

1835_Overhead Conductors and Devices - Switches

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 2,727,269
Capital Investment	\$ 2,727,269	\$ -
Closing Capital Investment	\$ 2,727,269	\$ 2,727,269
Opening Accumulated Amortization	\$ -	\$ 90,909
Amortization	3% \$ 90,909	\$ 90,909
Closing Accumulated Amortization	\$ 90,909	\$ 181,818
Opening Net Fixed Assets	\$ -	\$ 2,636,360
Closing Net Fixed Assets	\$ 2,636,360	\$ 2,545,451
Average Net Fixed Assets	\$ 1,318,180	\$ 2,590,905

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 2,509,087
Capital Additions	\$ 2,727,269	\$ -
UCC Before Half Year Rule	\$ 2,727,269	\$ 2,509,087
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 2,727,269	\$ 2,509,087
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 218,182	\$ 200,727
Closing UCC	\$ 2,509,087	\$ 2,308,360



Incremental Capital Project Summary

Using the pull-down menu below, please identify what year of the IRM cycle you are in.

4th Year of IRM Cycle

Name or General Description of Project

C8 Scadamate R1 Switches

Details of Project

C8 Scadamate R1 Switches

Year

2014

Number of Asset Components

2

Asset Component (Click on the Number to View the Component Details)	Capital Cost	Capital Cost (1/2 year rule applied)	Depreciation Rate	CCA Class	CCA Rate
1 1835_Overhead Conductors and Devices	73,507	36,753	2%	47	8%
2 1835_Overhead Conductors and Devices - Switches	2,620,317	1,310,159	3%	47	8%

2014

Closing Net Fixed Asset

1,302,505

Amortization Expense

44,407

CCA

107,753



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 1

Name or General Description of Project

C8 Scadamate R1 Switches

Asset Component

1835_Overhead Conductors and Devices

Average Net Fixed Assets

Net Fixed Assets

2014
Forecasted

Opening Capital Investment	\$	-
Capital Investment	\$	36,753
Closing Capital Investment	\$	36,753
Opening Accumulated Amortization	\$	-
Amortization	2%	\$ 735
Closing Accumulated Amortization	\$	735
Opening Net Fixed Assets	\$	-
Closing Net Fixed Assets	\$	36,018
Average Net Fixed Assets	\$	18,009

For PILs Calculation

UCC

2014
Forecasted

Opening UCC	\$	-
Capital Additions	\$	36,753
UCC Before Half Year Rule	\$	36,753
Half Year Rule (1/2 Additions - Disposals)	\$	-
Reduced UCC	\$	36,753
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$	2,940
Closing UCC	\$	33,813



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 2

Name or General Description of Project

C8 Scadamate R1 Switches

Asset Component

1835_Overhead Conductors and Devices - Switches

Average Net Fixed Assets

Net Fixed Assets

2014

Forecasted

Opening Capital Investment	\$	-
Capital Investment	\$	1,310,159
Closing Capital Investment	\$	1,310,159
Opening Accumulated Amortization	\$	-
Amortization	3%	\$ 43,672
Closing Accumulated Amortization	\$	43,672
Opening Net Fixed Assets	\$	-
Closing Net Fixed Assets	\$	1,266,487
Average Net Fixed Assets	\$	633,243

For PILs Calculation

UCC

2014

Forecasted

Opening UCC	\$	-
Capital Additions	\$	1,310,159
UCC Before Half Year Rule	\$	1,310,159
Half Year Rule (1/2 Additions - Disposals)	\$	-
Reduced UCC	\$	1,310,159
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$	104,813
Closing UCC	\$	1,205,346



Incremental Capital Project Summary

Using the pull-down menu below, please identify what year of the IRM cycle you are in.

2nd Year of IRM Cycle

Name or General Description of Project

C9 Network Vault & Roofs

Year

2012

Details of Project

C9 Network Vault & Roofs

Number of Asset Components

14

Asset Component (Click on the Number to View the Component Details)	Capital Cost	Depreciation Rate	CCA Class	CCA Rate
1 1830_Poles Towers and Fixtures	15,245	3%	47	8%
2 1835_Overhead Conductors and Devices	11,417	2%	47	8%
3 1835_Overhead Conductors and Devices - Switches	57,918	3%	47	8%
4 1840_Underground Conduit - Cable Chamber	1,131,633	2%	47	8%
5 1840_Underground Conduit - Duct Bank	840,597	3%	47	8%
6 1840_Underground Conduit - Vault	4,201,534	3%	47	8%
7 1840_Underground Conduit - Vault Roof	3,307	5%	47	8%
8 1845_Underground Conductors and Devices	2,142,686	3%	47	8%
9 1845_Underground Conductors and Devices - Switch	2,138,167	5%	47	8%
10 1850_Line Transformers - OH	17,882	3%	47	8%
11 1850_Line Transformers - UG	26,439	3%	47	8%
12 1850_Line Transformers - UG Network w/protector	2,938,655	5%	47	8%
13 1855_Services - UG	37,501	3%	47	8%
14 1855_Services - OH	2,251	2%	47	8%

	2012	2013	2014
Closing Net Fixed Asset	13,096,966	12,628,701	12,160,437
Amortization Expense	468,264	468,264	468,264
CCA	1,085,218	998,401	918,529



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 1

Name or General Description of Project

C9 Network Vault & Roofs

Asset Component

1830_Poles Towers and Fixtures

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 15,245	\$ 15,245
Capital Investment	\$ 15,245	\$ -	\$ -
Closing Capital Investment	\$ 15,245	\$ 15,245	\$ 15,245
Opening Accumulated Amortization	\$ -	\$ 381	\$ 762
Amortization	\$ 381	\$ 381	\$ 381
Closing Accumulated Amortization	\$ 381	\$ 762	\$ 1,143
Opening Net Fixed Assets	\$ -	\$ 14,864	\$ 14,483
Closing Net Fixed Assets	\$ 14,864	\$ 14,483	\$ 14,102
Average Net Fixed Assets	\$ 7,432	\$ 14,674	\$ 14,292

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 14,026	\$ 12,904
Capital Additions	\$ 15,245	\$ -	\$ -
UCC Before Half Year Rule	\$ 15,245	\$ 14,026	\$ 12,904
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 15,245	\$ 14,026	\$ 12,904
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 1,220	\$ 1,122	\$ 1,032
Closing UCC	\$ 14,026	\$ 12,904	\$ 11,871



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 2

Name or General Description of Project

C9 Network Vault & Roofs

Asset Component

1835_Overhead Conductors and Devices

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 11,417	\$ 11,417
Capital Investment	\$ 11,417	\$ -	\$ -
Closing Capital Investment	\$ 11,417	\$ 11,417	\$ 11,417
Opening Accumulated Amortization	\$ -	\$ 228	\$ 457
Amortization	\$ 228	\$ 228	\$ 228
Closing Accumulated Amortization	\$ 228	\$ 457	\$ 685
Opening Net Fixed Assets	\$ -	\$ 11,188	\$ 10,960
Closing Net Fixed Assets	\$ 11,188	\$ 10,960	\$ 10,732
Average Net Fixed Assets	\$ 5,594	\$ 11,074	\$ 10,846

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 10,503	\$ 9,663
Capital Additions	\$ 11,417	\$ -	\$ -
UCC Before Half Year Rule	\$ 11,417	\$ 10,503	\$ 9,663
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 11,417	\$ 10,503	\$ 9,663
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 913	\$ 840	\$ 773
Closing UCC	\$ 10,503	\$ 9,663	\$ 8,890



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 3

Name or General Description of Project

C9 Network Vault & Roofs

Asset Component

1835_Overhead Conductors and Devices - Switches

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 57,918	\$ 57,918
Capital Investment	\$ 57,918	\$ -	\$ -
Closing Capital Investment	\$ 57,918	\$ 57,918	\$ 57,918
Opening Accumulated Amortization	\$ -	\$ 1,931	\$ 3,861
Amortization	\$ 1,931	\$ 1,931	\$ 1,931
Closing Accumulated Amortization	\$ 1,931	\$ 3,861	\$ 5,792
Opening Net Fixed Assets	\$ -	\$ 55,987	\$ 54,056
Closing Net Fixed Assets	\$ 55,987	\$ 54,056	\$ 52,126
Average Net Fixed Assets	\$ 27,994	\$ 55,022	\$ 53,091

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 53,284	\$ 49,021
Capital Additions	\$ 57,918	\$ -	\$ -
UCC Before Half Year Rule	\$ 57,918	\$ 53,284	\$ 49,021
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 57,918	\$ 53,284	\$ 49,021
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 4,633	\$ 4,263	\$ 3,922
Closing UCC	\$ 53,284	\$ 49,021	\$ 45,100



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 4

Name or General Description of Project

C9 Network Vault & Roofs

Asset Component

1840_Underground Conduit - Cable Chamber

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 1,131,633	\$ 1,131,633
Capital Investment	\$ 1,131,633	\$ -	\$ -
Closing Capital Investment	\$ 1,131,633	\$ 1,131,633	\$ 1,131,633
Opening Accumulated Amortization	\$ -	\$ 22,633	\$ 45,265
Amortization	2% \$ 22,633	\$ 22,633	\$ 22,633
Closing Accumulated Amortization	\$ 22,633	\$ 45,265	\$ 67,898
Opening Net Fixed Assets	\$ -	\$ 1,109,001	\$ 1,086,368
Closing Net Fixed Assets	\$ 1,109,001	\$ 1,086,368	\$ 1,063,735
Average Net Fixed Assets	\$ 554,500	\$ 1,097,684	\$ 1,075,052

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 1,041,103	\$ 957,814
Capital Additions	\$ 1,131,633	\$ -	\$ -
UCC Before Half Year Rule	\$ 1,131,633	\$ 1,041,103	\$ 957,814
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 1,131,633	\$ 1,041,103	\$ 957,814
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 90,531	\$ 83,288	\$ 76,625
Closing UCC	\$ 1,041,103	\$ 957,814	\$ 881,189



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 5

Name or General Description of Project

C9 Network Vault & Roofs

Asset Component

1840 Underground Conduit - Duct Bank

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 840,597	\$ 840,597
Capital Investment	\$ 840,597	\$ -	\$ -
Closing Capital Investment	\$ 840,597	\$ 840,597	\$ 840,597
Opening Accumulated Amortization	\$ -	\$ 28,020	\$ 56,040
Amortization	3% \$ 28,020	\$ 28,020	\$ 28,020
Closing Accumulated Amortization	\$ 28,020	\$ 56,040	\$ 84,060
Opening Net Fixed Assets	\$ -	\$ 812,577	\$ 784,557
Closing Net Fixed Assets	\$ 812,577	\$ 784,557	\$ 756,537
Average Net Fixed Assets	\$ 406,288	\$ 798,567	\$ 770,547

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 773,349	\$ 711,481
Capital Additions	\$ 840,597	\$ -	\$ -
UCC Before Half Year Rule	\$ 840,597	\$ 773,349	\$ 711,481
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 840,597	\$ 773,349	\$ 711,481
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 67,248	\$ 61,868	\$ 56,918
Closing UCC	\$ 773,349	\$ 711,481	\$ 654,563



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 6

Name or General Description of Project

C9 Network Vault & Roofs

Asset Component

1840_Underground Conduit - Vault

Average Net Fixed Assets

Net Fixed Assets

	2012	2013	2014
	Forecasted	Forecasted	Forecasted
Opening Capital Investment	\$ -	\$ 4,201,534	\$ 4,201,534
Capital Investment	\$ 4,201,534	\$ -	\$ -
Closing Capital Investment	\$ 4,201,534	\$ 4,201,534	\$ 4,201,534
Opening Accumulated Amortization	\$ -	\$ 105,038	\$ 210,077
Amortization	3% \$ 105,038	\$ 105,038	\$ 105,038
Closing Accumulated Amortization	\$ 105,038	\$ 210,077	\$ 315,115
Opening Net Fixed Assets	\$ -	\$ 4,096,495	\$ 3,991,457
Closing Net Fixed Assets	\$ 4,096,495	\$ 3,991,457	\$ 3,886,418
Average Net Fixed Assets	\$ 2,048,248	\$ 4,043,976	\$ 3,938,938

For PILs Calculation

UCC

	2012	2013	2014
	Forecasted	Forecasted	Forecasted
Opening UCC	\$ -	\$ 3,865,411	\$ 3,556,178
Capital Additions	\$ 4,201,534	\$ -	\$ -
UCC Before Half Year Rule	\$ 4,201,534	\$ 3,865,411	\$ 3,556,178
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 4,201,534	\$ 3,865,411	\$ 3,556,178
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 336,123	\$ 309,233	\$ 284,494
Closing UCC	\$ 3,865,411	\$ 3,556,178	\$ 3,271,684



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 7

Name or General Description of Project

C9 Network Vault & Roofs

Asset Component

1840_Underground Conduit - Vault Roof

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 3,307	\$ 3,307
Capital Investment	\$ 3,307	\$ -	\$ -
Closing Capital Investment	\$ 3,307	\$ 3,307	\$ 3,307
Opening Accumulated Amortization	\$ -	\$ 165	\$ 331
Amortization	5% \$ 165	\$ 165	\$ 165
Closing Accumulated Amortization	\$ 165	\$ 331	\$ 496
Opening Net Fixed Assets	\$ -	\$ 3,142	\$ 2,976
Closing Net Fixed Assets	\$ 3,142	\$ 2,976	\$ 2,811
Average Net Fixed Assets	\$ 1,571	\$ 3,059	\$ 2,894

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 3,042	\$ 2,799
Capital Additions	\$ 3,307	\$ -	\$ -
UCC Before Half Year Rule	\$ 3,307	\$ 3,042	\$ 2,799
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 3,307	\$ 3,042	\$ 2,799
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 265	\$ 243	\$ 224
Closing UCC	\$ 3,042	\$ 2,799	\$ 2,575



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 8

Name or General Description of Project

C9 Network Vault & Roofs

Asset Component

1845_Underground Conductors and Devices

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 2,142,686	\$ 2,142,686
Capital Investment	\$ 2,142,686	\$ -	\$ -
Closing Capital Investment	\$ 2,142,686	\$ 2,142,686	\$ 2,142,686
Opening Accumulated Amortization	\$ -	\$ 53,567	\$ 107,134
Amortization	3% \$ 53,567	\$ 53,567	\$ 53,567
Closing Accumulated Amortization	\$ 53,567	\$ 107,134	\$ 160,701
Opening Net Fixed Assets	\$ -	\$ 2,089,119	\$ 2,035,552
Closing Net Fixed Assets	\$ 2,089,119	\$ 2,035,552	\$ 1,981,985
Average Net Fixed Assets	\$ 1,044,560	\$ 2,062,335	\$ 2,008,768

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 1,971,271	\$ 1,813,570
Capital Additions	\$ 2,142,686	\$ -	\$ -
UCC Before Half Year Rule	\$ 2,142,686	\$ 1,971,271	\$ 1,813,570
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 2,142,686	\$ 1,971,271	\$ 1,813,570
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 171,415	\$ 157,702	\$ 145,086
Closing UCC	\$ 1,971,271	\$ 1,813,570	\$ 1,668,484



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 9

Name or General Description of Project

C9 Network Vault & Roofs

Asset Component

1845_Underground Conductors and Devices - Switch

Average Net Fixed Assets

Net Fixed Assets

	2012	2013	2014
	Forecasted	Forecasted	Forecasted
Opening Capital Investment	\$ -	\$ 2,138,167	\$ 2,138,167
Capital Investment	\$ 2,138,167	\$ -	\$ -
Closing Capital Investment	\$ 2,138,167	\$ 2,138,167	\$ 2,138,167
Opening Accumulated Amortization	\$ -	\$ 106,908	\$ 213,817
Amortization	5% \$ 106,908	\$ 106,908	\$ 106,908
Closing Accumulated Amortization	\$ 106,908	\$ 213,817	\$ 320,725
Opening Net Fixed Assets	\$ -	\$ 2,031,258	\$ 1,924,350
Closing Net Fixed Assets	\$ 2,031,258	\$ 1,924,350	\$ 1,817,442
Average Net Fixed Assets	\$ 1,015,629	\$ 1,977,804	\$ 1,870,896

For PILs Calculation

UCC

	2012	2013	2014
	Forecasted	Forecasted	Forecasted
Opening UCC	\$ -	\$ 1,967,113	\$ 1,809,744
Capital Additions	\$ 2,138,167	\$ -	\$ -
UCC Before Half Year Rule	\$ 2,138,167	\$ 1,967,113	\$ 1,809,744
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 2,138,167	\$ 1,967,113	\$ 1,809,744
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 171,053	\$ 157,369	\$ 144,780
Closing UCC	\$ 1,967,113	\$ 1,809,744	\$ 1,664,965



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 10

Name or General Description of Project

C9 Network Vault & Roofs

Asset Component

1850 Line Transformers - OH

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 17,882	\$ 17,882
Capital Investment	\$ 17,882	\$ -	\$ -
Closing Capital Investment	\$ 17,882	\$ 17,882	\$ 17,882
Opening Accumulated Amortization	\$ -	\$ 596	\$ 1,192
Amortization	3% \$ 596	\$ 596	\$ 596
Closing Accumulated Amortization	\$ 596	\$ 1,192	\$ 1,788
Opening Net Fixed Assets	\$ -	\$ 17,286	\$ 16,690
Closing Net Fixed Assets	\$ 17,286	\$ 16,690	\$ 16,094
Average Net Fixed Assets	\$ 8,643	\$ 16,988	\$ 16,392

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 16,451	\$ 15,135
Capital Additions	\$ 17,882	\$ -	\$ -
UCC Before Half Year Rule	\$ 17,882	\$ 16,451	\$ 15,135
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 17,882	\$ 16,451	\$ 15,135
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 1,431	\$ 1,316	\$ 1,211
Closing UCC	\$ 16,451	\$ 15,135	\$ 13,924



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 11

Name or General Description of Project

C9 Network Vault & Roofs

Asset Component

1850 Line Transformers - UG

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 26,439	\$ 26,439
Capital Investment	\$ 26,439	\$ -	\$ -
Closing Capital Investment	\$ 26,439	\$ 26,439	\$ 26,439
Opening Accumulated Amortization	\$ -	\$ 881	\$ 1,763
Amortization	\$ 881	\$ 881	\$ 881
Closing Accumulated Amortization	\$ 881	\$ 1,763	\$ 2,644
Opening Net Fixed Assets	\$ -	\$ 25,558	\$ 24,677
Closing Net Fixed Assets	\$ 25,558	\$ 24,677	\$ 23,795
Average Net Fixed Assets	\$ 12,779	\$ 25,117	\$ 24,236

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 24,324	\$ 22,378
Capital Additions	\$ 26,439	\$ -	\$ -
UCC Before Half Year Rule	\$ 26,439	\$ 24,324	\$ 22,378
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 26,439	\$ 24,324	\$ 22,378
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 2,115	\$ 1,946	\$ 1,790
Closing UCC	\$ 24,324	\$ 22,378	\$ 20,588



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 12

Name or General Description of Project

C9 Network Vault & Roofs

Asset Component

1850 Line Transformers - UG Network w/protector

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 2,938,655	\$ 2,938,655
Capital Investment	\$ 2,938,655	\$ -	\$ -
Closing Capital Investment	\$ 2,938,655	\$ 2,938,655	\$ 2,938,655
Opening Accumulated Amortization	\$ -	\$ 146,933	\$ 293,865
Amortization	5% \$ 146,933	\$ 146,933	\$ 146,933
Closing Accumulated Amortization	\$ 146,933	\$ 293,865	\$ 440,798
Opening Net Fixed Assets	\$ -	\$ 2,791,722	\$ 2,644,789
Closing Net Fixed Assets	\$ 2,791,722	\$ 2,644,789	\$ 2,497,857
Average Net Fixed Assets	\$ 1,395,861	\$ 2,718,256	\$ 2,571,323

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 2,703,562	\$ 2,487,277
Capital Additions	\$ 2,938,655	\$ -	\$ -
UCC Before Half Year Rule	\$ 2,938,655	\$ 2,703,562	\$ 2,487,277
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 2,938,655	\$ 2,703,562	\$ 2,487,277
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 235,092	\$ 216,285	\$ 198,982
Closing UCC	\$ 2,703,562	\$ 2,487,277	\$ 2,288,295



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 13

Name or General Description of Project

C9 Network Vault & Roofs

Asset Component

1855_Services - UG

Average Net Fixed Assets

Net Fixed Assets

Opening Capital Investment
 Capital Investment
 Closing Capital Investment

2012 2013 2014
 Forecasted Forecasted Forecasted

\$ -	\$ 37,501	\$ 37,501
\$ 37,501	\$ -	\$ -
\$ 37,501	\$ 37,501	\$ 37,501

Opening Accumulated Amortization
 Amortization
 Closing Accumulated Amortization

\$ -	\$ 938	\$ 1,875
3% \$ 938	\$ 938	\$ 938
\$ 938	\$ 1,875	\$ 2,813

Opening Net Fixed Assets
 Closing Net Fixed Assets
 Average Net Fixed Assets

\$ -	\$ 36,563	\$ 35,626
\$ 36,563	\$ 35,626	\$ 34,688
\$ 18,282	\$ 36,094	\$ 35,157

For PILs Calculation

UCC

Opening UCC
 Capital Additions
 UCC Before Half Year Rule
 Half Year Rule (1/2 Additions - Disposals)
 Reduced UCC
 CCA Rate Class
 CCA Rate
 CCA
 Closing UCC

2012 2013 2014
 Forecasted Forecasted Forecasted

\$ -	\$ 34,500	\$ 31,740
\$ 37,501	\$ -	\$ -
\$ 37,501	\$ 34,500	\$ 31,740
\$ -	\$ -	\$ -
\$ 37,501	\$ 34,500	\$ 31,740

47		
8%		
\$ 3,000	\$ 2,760	\$ 2,539
\$ 34,500	\$ 31,740	\$ 29,201



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 14

Name or General Description of Project

C9 Network Vault & Roofs

Asset Component

1855_Services - OH

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 2,251	\$ 2,251
Capital Investment	\$ 2,251	\$ -	\$ -
Closing Capital Investment	\$ 2,251	\$ 2,251	\$ 2,251
Opening Accumulated Amortization	\$ -	\$ 45	\$ 90
Amortization	2% \$ 45	\$ 45	\$ 45
Closing Accumulated Amortization	\$ 45	\$ 90	\$ 135
Opening Net Fixed Assets	\$ -	\$ 2,206	\$ 2,161
Closing Net Fixed Assets	\$ 2,206	\$ 2,161	\$ 2,116
Average Net Fixed Assets	\$ 1,103	\$ 2,183	\$ 2,138

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 2,071	\$ 1,905
Capital Additions	\$ 2,251	\$ -	\$ -
UCC Before Half Year Rule	\$ 2,251	\$ 2,071	\$ 1,905
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 2,251	\$ 2,071	\$ 1,905
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 180	\$ 166	\$ 152
Closing UCC	\$ 2,071	\$ 1,905	\$ 1,753



Incremental Capital Project Summary

Using the pull-down menu below, please identify what year of the IRM cycle you are in.

3rd Year of IRM Cycle

Name or General Description of Project

C9 Network Vault & Roofs

Year

2013

Details of Project

C9 Network Vault & Roofs

Number of Asset Components

14

Asset Component (Click on the Number to View the Component Details)	Capital Cost	Depreciation Rate	CCA Class	CCA Rate
1 1830_Poles Towers and Fixtures	37,097	3%	47	8%
2 1835_Overhead Conductors and Devices	27,781	2%	47	8%
3 1835_Overhead Conductors and Devices - Switches	140,935	3%	47	8%
4 1840_Underground Conduit - Cable Chamber	1,170,083	2%	47	8%
5 1840_Underground Conduit - Duct Bank	644,158	3%	47	8%
6 1840_Underground Conduit - Vault	2,495,128	3%	47	8%
7 1840_Underground Conduit - Vault Roof	116,514	5%	47	8%
8 1845_Underground Conductors and Devices	3,381,936	3%	47	8%
9 1845_Underground Conductors and Devices - Switch	587,999	5%	47	8%
10 1850_Line Transformers - OH	43,513	3%	47	8%
11 1850_Line Transformers - UG	86,733	3%	47	8%
12 1850_Line Transformers - UG Network w/protector	2,284,610	5%	47	8%
13 1855_Services - UG	1,287,821	3%	47	8%
14 1855_Services - OH	5,477	2%	47	8%

	2013	2014
Closing Net Fixed Asset	11,925,701	11,541,617
Amortization Expense	384,084	384,084
CCA	984,783	906,000



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 1

Name or General Description of Project

C9 Network Vault & Roofs

Asset Component

1830_Poles Towers and Fixtures

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 37,097
Capital Investment	\$ 37,097	\$ -
Closing Capital Investment	\$ 37,097	\$ 37,097
Opening Accumulated Amortization	\$ -	\$ 927
Amortization	3% \$ 927	\$ 927
Closing Accumulated Amortization	\$ 927	\$ 1,855
Opening Net Fixed Assets	\$ -	\$ 36,170
Closing Net Fixed Assets	\$ 36,170	\$ 35,242
Average Net Fixed Assets	\$ 18,085	\$ 35,706

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 34,130
Capital Additions	\$ 37,097	\$ -
UCC Before Half Year Rule	\$ 37,097	\$ 34,130
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 37,097	\$ 34,130
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 2,968	\$ 2,730
Closing UCC	\$ 34,130	\$ 31,399



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 2

Name or General Description of Project

C9 Network Vault & Roofs

Asset Component

1835_Overhead Conductors and Devices

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 27,781
Capital Investment	\$ 27,781	\$ -
Closing Capital Investment	\$ 27,781	\$ 27,781
Opening Accumulated Amortization	\$ -	\$ 556
Amortization	2% \$ 556	\$ 556
Closing Accumulated Amortization	\$ 556	\$ 1,111
Opening Net Fixed Assets	\$ -	\$ 27,225
Closing Net Fixed Assets	\$ 27,225	\$ 26,670
Average Net Fixed Assets	\$ 13,613	\$ 26,948

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 25,559
Capital Additions	\$ 27,781	\$ -
UCC Before Half Year Rule	\$ 27,781	\$ 25,559
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 27,781	\$ 25,559
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 2,222	\$ 2,045
Closing UCC	\$ 25,559	\$ 23,514



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 3

Name or General Description of Project

C9 Network Vault & Roofs

Asset Component

1835_Overhead Conductors and Devices - Switches

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 140,935
Capital Investment	\$ 140,935	\$ -
Closing Capital Investment	\$ 140,935	\$ 140,935
Opening Accumulated Amortization	\$ -	\$ 4,698
Amortization	3% \$ 4,698	\$ 4,698
Closing Accumulated Amortization	\$ 4,698	\$ 9,396
Opening Net Fixed Assets	\$ -	\$ 136,237
Closing Net Fixed Assets	\$ 136,237	\$ 131,539
Average Net Fixed Assets	\$ 68,118	\$ 133,888

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 129,660
Capital Additions	\$ 140,935	\$ -
UCC Before Half Year Rule	\$ 140,935	\$ 129,660
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 140,935	\$ 129,660
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 11,275	\$ 10,373
Closing UCC	\$ 129,660	\$ 119,287



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 4

Name or General Description of Project

C9 Network Vault & Roofs

Asset Component

1840_Underground Conduit - Cable Chamber

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 1,170,083
Capital Investment	\$ 1,170,083	\$ -
Closing Capital Investment	\$ 1,170,083	\$ 1,170,083
Opening Accumulated Amortization	\$ -	\$ 23,402
Amortization	2% \$ 23,402	\$ 23,402
Closing Accumulated Amortization	\$ 23,402	\$ 46,803
Opening Net Fixed Assets	\$ -	\$ 1,146,681
Closing Net Fixed Assets	\$ 1,146,681	\$ 1,123,280
Average Net Fixed Assets	\$ 573,341	\$ 1,134,981

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 1,076,476
Capital Additions	\$ 1,170,083	\$ -
UCC Before Half Year Rule	\$ 1,170,083	\$ 1,076,476
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 1,170,083	\$ 1,076,476
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 93,607	\$ 86,118
Closing UCC	\$ 1,076,476	\$ 990,358



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 5

Name or General Description of Project

C9 Network Vault & Roofs

Asset Component

1840 Underground Conduit - Duct Bank

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 644,158
Capital Investment	\$ 644,158	\$ -
Closing Capital Investment	\$ 644,158	\$ 644,158
Opening Accumulated Amortization	\$ -	\$ 21,472
Amortization	3% \$ 21,472	\$ 21,472
Closing Accumulated Amortization	\$ 21,472	\$ 42,944
Opening Net Fixed Assets	\$ -	\$ 622,686
Closing Net Fixed Assets	\$ 622,686	\$ 601,214
Average Net Fixed Assets	\$ 311,343	\$ 611,950

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 592,625
Capital Additions	\$ 644,158	\$ -
UCC Before Half Year Rule	\$ 644,158	\$ 592,625
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 644,158	\$ 592,625
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 51,533	\$ 47,410
Closing UCC	\$ 592,625	\$ 545,215



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 6

Name or General Description of Project

C9 Network Vault & Roofs

Asset Component

1840 Underground Conduit - Vault

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 2,495,128
Capital Investment	\$ 2,495,128	\$ -
Closing Capital Investment	\$ 2,495,128	\$ 2,495,128
Opening Accumulated Amortization	\$ -	\$ 62,378
Amortization	3% \$ 62,378	\$ 62,378
Closing Accumulated Amortization	\$ 62,378	\$ 124,756
Opening Net Fixed Assets	\$ -	\$ 2,432,750
Closing Net Fixed Assets	\$ 2,432,750	\$ 2,370,372
Average Net Fixed Assets	\$ 1,216,375	\$ 2,401,561

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 2,295,518
Capital Additions	\$ 2,495,128	\$ -
UCC Before Half Year Rule	\$ 2,495,128	\$ 2,295,518
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 2,495,128	\$ 2,295,518
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 199,610	\$ 183,641
Closing UCC	\$ 2,295,518	\$ 2,111,876



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 7

Name or General Description of Project

C9 Network Vault & Roofs

Asset Component

1840_Underground Conduit - Vault Roof

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 116,514
Capital Investment	\$ 116,514	\$ -
Closing Capital Investment	\$ 116,514	\$ 116,514
Opening Accumulated Amortization	\$ -	\$ 5,826
Amortization	5% \$ 5,826	\$ 5,826
Closing Accumulated Amortization	\$ 5,826	\$ 11,651
Opening Net Fixed Assets	\$ -	\$ 110,688
Closing Net Fixed Assets	\$ 110,688	\$ 104,862
Average Net Fixed Assets	\$ 55,344	\$ 107,775

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 107,193
Capital Additions	\$ 116,514	\$ -
UCC Before Half Year Rule	\$ 116,514	\$ 107,193
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 116,514	\$ 107,193
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 9,321	\$ 8,575
Closing UCC	\$ 107,193	\$ 98,617



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 8

Name or General Description of Project

C9 Network Vault & Roofs

Asset Component

1845 Underground Conductors and Devices

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 3,381,936
Capital Investment	\$ 3,381,936	\$ -
Closing Capital Investment	\$ 3,381,936	\$ 3,381,936
Opening Accumulated Amortization	\$ -	\$ 84,548
Amortization	3% \$ 84,548	\$ 84,548
Closing Accumulated Amortization	\$ 84,548	\$ 169,097
Opening Net Fixed Assets	\$ -	\$ 3,297,388
Closing Net Fixed Assets	\$ 3,297,388	\$ 3,212,839
Average Net Fixed Assets	\$ 1,648,694	\$ 3,255,114

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 3,111,381
Capital Additions	\$ 3,381,936	\$ -
UCC Before Half Year Rule	\$ 3,381,936	\$ 3,111,381
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 3,381,936	\$ 3,111,381
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 270,555	\$ 248,910
Closing UCC	\$ 3,111,381	\$ 2,862,471



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 9

Name or General Description of Project

C9 Network Vault & Roofs

Asset Component

1845_Underground Conductors and Devices - Switch

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 587,999
Capital Investment	\$ 587,999	\$ -
Closing Capital Investment	\$ 587,999	\$ 587,999
Opening Accumulated Amortization	\$ -	\$ 29,400
Amortization	5% \$ 29,400	\$ 29,400
Closing Accumulated Amortization	\$ 29,400	\$ 58,800
Opening Net Fixed Assets	\$ -	\$ 558,599
Closing Net Fixed Assets	\$ 558,599	\$ 529,199
Average Net Fixed Assets	\$ 279,299	\$ 543,899

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 540,959
Capital Additions	\$ 587,999	\$ -
UCC Before Half Year Rule	\$ 587,999	\$ 540,959
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 587,999	\$ 540,959
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 47,040	\$ 43,277
Closing UCC	\$ 540,959	\$ 497,682



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 10

Name or General Description of Project

C9 Network Vault & Roofs

Asset Component

1850 Line Transformers - OH

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 43,513
Capital Investment	\$ 43,513	\$ -
Closing Capital Investment	\$ 43,513	\$ 43,513
Opening Accumulated Amortization	\$ -	\$ 1,450
Amortization	3% \$ 1,450	\$ 1,450
Closing Accumulated Amortization	\$ 1,450	\$ 2,901
Opening Net Fixed Assets	\$ -	\$ 42,063
Closing Net Fixed Assets	\$ 42,063	\$ 40,612
Average Net Fixed Assets	\$ 21,031	\$ 41,337

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 40,032
Capital Additions	\$ 43,513	\$ -
UCC Before Half Year Rule	\$ 43,513	\$ 40,032
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 43,513	\$ 40,032
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 3,481	\$ 3,203
Closing UCC	\$ 40,032	\$ 36,829



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 11

Name or General Description of Project

C9 Network Vault & Roofs

Asset Component

1850 Line Transformers - UG

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 86,733
Capital Investment	\$ 86,733	\$ -
Closing Capital Investment	\$ 86,733	\$ 86,733
Opening Accumulated Amortization	\$ -	\$ 2,891
Amortization	3% \$ 2,891	\$ 2,891
Closing Accumulated Amortization	\$ 2,891	\$ 5,782
Opening Net Fixed Assets	\$ -	\$ 83,842
Closing Net Fixed Assets	\$ 83,842	\$ 80,951
Average Net Fixed Assets	\$ 41,921	\$ 82,396

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 79,794
Capital Additions	\$ 86,733	\$ -
UCC Before Half Year Rule	\$ 86,733	\$ 79,794
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 86,733	\$ 79,794
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 6,939	\$ 6,384
Closing UCC	\$ 79,794	\$ 73,411



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 12

Name or General Description of Project

C9 Network Vault & Roofs

Asset Component

1850 Line Transformers - UG Network w/protector

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 2,284,610
Capital Investment	\$ 2,284,610	\$ -
Closing Capital Investment	\$ 2,284,610	\$ 2,284,610
Opening Accumulated Amortization	\$ -	\$ 114,231
Amortization	5% \$ 114,231	\$ 114,231
Closing Accumulated Amortization	\$ 114,231	\$ 228,461
Opening Net Fixed Assets	\$ -	\$ 2,170,380
Closing Net Fixed Assets	\$ 2,170,380	\$ 2,056,149
Average Net Fixed Assets	\$ 1,085,190	\$ 2,113,264

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 2,101,841
Capital Additions	\$ 2,284,610	\$ -
UCC Before Half Year Rule	\$ 2,284,610	\$ 2,101,841
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 2,284,610	\$ 2,101,841
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 182,769	\$ 168,147
Closing UCC	\$ 2,101,841	\$ 1,933,694



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 13

Name or General Description of Project

C9 Network Vault & Roofs

Asset Component

1855_Services - UG

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 1,287,821
Capital Investment	\$ 1,287,821	\$ -
Closing Capital Investment	\$ 1,287,821	\$ 1,287,821
Opening Accumulated Amortization	\$ -	\$ 32,196
Amortization	3% \$ 32,196	\$ 32,196
Closing Accumulated Amortization	\$ 32,196	\$ 64,391
Opening Net Fixed Assets	\$ -	\$ 1,255,626
Closing Net Fixed Assets	\$ 1,255,626	\$ 1,223,430
Average Net Fixed Assets	\$ 627,813	\$ 1,239,528

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 1,184,795
Capital Additions	\$ 1,287,821	\$ -
UCC Before Half Year Rule	\$ 1,287,821	\$ 1,184,795
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 1,287,821	\$ 1,184,795
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 103,026	\$ 94,784
Closing UCC	\$ 1,184,795	\$ 1,090,012



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 14

Name or General Description of Project

C9 Network Vault & Roofs

Asset Component

1855_Services - OH

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 5,477
Capital Investment	\$ 5,477	\$ -
Closing Capital Investment	\$ 5,477	\$ 5,477
Opening Accumulated Amortization	\$ -	\$ 110
Amortization	2% \$ 110	\$ 110
Closing Accumulated Amortization	\$ 110	\$ 219
Opening Net Fixed Assets	\$ -	\$ 5,367
Closing Net Fixed Assets	\$ 5,367	\$ 5,258
Average Net Fixed Assets	\$ 2,684	\$ 5,312

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 5,039
Capital Additions	\$ 5,477	\$ -
UCC Before Half Year Rule	\$ 5,477	\$ 5,039
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 5,477	\$ 5,039
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 438	\$ 403
Closing UCC	\$ 5,039	\$ 4,635



Incremental Capital Project Summary

Using the pull-down menu below, please identify what year of the IRM cycle you are in.

4th Year of IRM Cycle

Name or General Description of Project

C9 Network Vault & Roofs

Details of Project

C9 Network Vault & Roofs

Year

2014

Number of Asset Components

14

Asset Component (Click on the Number to View the Component Details)	Capital Cost	Capital Cost (1/2 year rule applied)	Depreciation Rate	CCA Class	CCA Rate
1 1830_Poles Towers and Fixtures	8,109	4,055	3%	47	8%
2 1835_Overhead Conductors and Devices	6,073	3,036	2%	47	8%
3 1835_Overhead Conductors and Devices - Switches	30,807	15,404	3%	47	8%
4 1840_Underground Conduit - Cable Chamber	4,416	2,208	2%	47	8%
5 1840_Underground Conduit - Duct Bank	10,303	5,152	3%	47	8%
6 1840_Underground Conduit - Vault	13,753,667	6,876,833	3%	47	8%
7 1840_Underground Conduit - Vault Roof	21,783	10,891	5%	47	8%
8 1845_Underground Conductors and Devices	45,236	22,618	3%	47	8%
9 1845_Underground Conductors and Devices - Switch	1,650,826	825,413	5%	47	8%
10 1850_Line Transformers - OH	9,512	4,756	3%	47	8%
11 1850_Line Transformers - UG	14,137	7,068	3%	47	8%
12 1850_Line Transformers - UG Network w/protector	17,091	8,545	5%	47	8%
13 1855_Services - UG	1,471	735	3%	47	8%
14 1855_Services - OH	1,197	599	2%	47	8%

Closing Net Fixed Asset	2014 7,571,269
Amortization Expense	216,045
CCA	622,985



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 1

Name or General Description of Project

C9 Network Vault & Roofs

Asset Component

1830_Poles Towers and Fixtures

Average Net Fixed Assets

Net Fixed Assets

2014
Forecasted

Opening Capital Investment	\$	-
Capital Investment	\$	4,055
Closing Capital Investment	\$	4,055
Opening Accumulated Amortization	\$	-
Amortization	3%	\$ 101
Closing Accumulated Amortization	\$	101
Opening Net Fixed Assets	\$	-
Closing Net Fixed Assets	\$	3,953
Average Net Fixed Assets	\$	1,977

For PILs Calculation

UCC

2014
Forecasted

Opening UCC	\$	-
Capital Additions	\$	4,055
UCC Before Half Year Rule	\$	4,055
Half Year Rule (1/2 Additions - Disposals)	\$	-
Reduced UCC	\$	4,055
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$	324
Closing UCC	\$	3,730



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 2

Name or General Description of Project

C9 Network Vault & Roofs

Asset Component

1835_Overhead Conductors and Devices

Average Net Fixed Assets

Net Fixed Assets

2014
 Forecasted

Opening Capital Investment	\$	-
Capital Investment	\$	3,036
Closing Capital Investment	\$	3,036
Opening Accumulated Amortization	\$	-
Amortization	2%	\$ 61
Closing Accumulated Amortization	\$	61
Opening Net Fixed Assets	\$	-
Closing Net Fixed Assets	\$	2,976
Average Net Fixed Assets	\$	1,488

For PILs Calculation

UCC

2014
 Forecasted

Opening UCC	\$	-
Capital Additions	\$	3,036
UCC Before Half Year Rule	\$	3,036
Half Year Rule (1/2 Additions - Disposals)	\$	-
Reduced UCC	\$	3,036
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$	243
Closing UCC	\$	2,793



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 3

Name or General Description of Project

C9 Network Vault & Roofs

Asset Component

1835_Overhead Conductors and Devices - Switches

Average Net Fixed Assets

Net Fixed Assets

2014
Forecasted

Opening Capital Investment	\$	-
Capital Investment	\$	15,404
Closing Capital Investment	\$	15,404
Opening Accumulated Amortization	\$	-
Amortization	3%	\$ 513
Closing Accumulated Amortization	\$	513
Opening Net Fixed Assets	\$	-
Closing Net Fixed Assets	\$	14,890
Average Net Fixed Assets	\$	7,445

For PILs Calculation

UCC

2014
Forecasted

Opening UCC	\$	-
Capital Additions	\$	15,404
UCC Before Half Year Rule	\$	15,404
Half Year Rule (1/2 Additions - Disposals)	\$	-
Reduced UCC	\$	15,404
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$	1,232
Closing UCC	\$	14,171



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 4

Name or General Description of Project

C9 Network Vault & Roofs

Asset Component

1840_Underground Conduit - Cable Chamber

Average Net Fixed Assets

Net Fixed Assets

2014
Forecasted

Opening Capital Investment	\$	-
Capital Investment	\$	2,208
Closing Capital Investment	\$	2,208
Opening Accumulated Amortization	\$	-
Amortization	2%	\$ 44
Closing Accumulated Amortization	\$	44
Opening Net Fixed Assets	\$	-
Closing Net Fixed Assets	\$	2,164
Average Net Fixed Assets	\$	1,082

For PILs Calculation

UCC

2014
Forecasted

Opening UCC	\$	-
Capital Additions	\$	2,208
UCC Before Half Year Rule	\$	2,208
Half Year Rule (1/2 Additions - Disposals)	\$	-
Reduced UCC	\$	2,208
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$	177
Closing UCC	\$	2,031



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 5

Name or General Description of Project

C9 Network Vault & Roofs

Asset Component

1840 Underground Conduit - Duct Bank

Average Net Fixed Assets

Net Fixed Assets

2014
Forecasted

Opening Capital Investment	\$	-
Capital Investment	\$	5,152
Closing Capital Investment	\$	5,152
Opening Accumulated Amortization	\$	-
Amortization	3%	\$ 172
Closing Accumulated Amortization	\$	172
Opening Net Fixed Assets	\$	-
Closing Net Fixed Assets	\$	4,980
Average Net Fixed Assets	\$	2,490

For PILs Calculation

UCC

2014
Forecasted

Opening UCC	\$	-
Capital Additions	\$	5,152
UCC Before Half Year Rule	\$	5,152
Half Year Rule (1/2 Additions - Disposals)	\$	-
Reduced UCC	\$	5,152
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$	412
Closing UCC	\$	4,739



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 6

Name or General Description of Project

C9 Network Vault & Roofs

Asset Component

1840 Underground Conduit - Vault

Average Net Fixed Assets

Net Fixed Assets

2014

Forecasted

Opening Capital Investment	\$	-
Capital Investment	\$	6,876,833
Closing Capital Investment	\$	6,876,833
Opening Accumulated Amortization	\$	-
Amortization	3%	\$ 171,921
Closing Accumulated Amortization	\$	171,921
Opening Net Fixed Assets	\$	-
Closing Net Fixed Assets	\$	6,704,913
Average Net Fixed Assets	\$	3,352,456

For PILs Calculation

UCC

2014

Forecasted

Opening UCC	\$	-
Capital Additions	\$	6,876,833
UCC Before Half Year Rule	\$	6,876,833
Half Year Rule (1/2 Additions - Disposals)	\$	-
Reduced UCC	\$	6,876,833
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$	550,147
Closing UCC	\$	6,326,687



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 7

Name or General Description of Project

C9 Network Vault & Roofs

Asset Component

1840_Underground Conduit - Vault Roof

Average Net Fixed Assets

Net Fixed Assets

2014

Forecasted

Opening Capital Investment	\$	-
Capital Investment	\$	10,891
Closing Capital Investment	\$	10,891
Opening Accumulated Amortization	\$	-
Amortization	5%	\$ 545
Closing Accumulated Amortization	\$	545
Opening Net Fixed Assets	\$	-
Closing Net Fixed Assets	\$	10,347
Average Net Fixed Assets	\$	5,173

For PILs Calculation

UCC

2014

Forecasted

Opening UCC	\$	-
Capital Additions	\$	10,891
UCC Before Half Year Rule	\$	10,891
Half Year Rule (1/2 Additions - Disposals)	\$	-
Reduced UCC	\$	10,891
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$	871
Closing UCC	\$	10,020



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 8

Name or General Description of Project

C9 Network Vault & Roofs

Asset Component

1845_Underground Conductors and Devices

Average Net Fixed Assets

Net Fixed Assets

2014
Forecasted

Opening Capital Investment	\$	-
Capital Investment	\$	22,618
Closing Capital Investment	\$	22,618
Opening Accumulated Amortization	\$	-
Amortization	3%	\$ 565
Closing Accumulated Amortization	\$	565
Opening Net Fixed Assets	\$	-
Closing Net Fixed Assets	\$	22,053
Average Net Fixed Assets	\$	11,026

For PILs Calculation

UCC

2014
Forecasted

Opening UCC	\$	-
Capital Additions	\$	22,618
UCC Before Half Year Rule	\$	22,618
Half Year Rule (1/2 Additions - Disposals)	\$	-
Reduced UCC	\$	22,618
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$	1,809
Closing UCC	\$	20,809



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 9

Name or General Description of Project

C9 Network Vault & Roofs

Asset Component

1845_Underground Conductors and Devices - Switch

Average Net Fixed Assets

Net Fixed Assets

2014

Forecasted

Opening Capital Investment	\$	-
Capital Investment	\$	825,413
Closing Capital Investment	\$	825,413
Opening Accumulated Amortization	\$	-
Amortization	5%	\$ 41,271
Closing Accumulated Amortization	\$	41,271
Opening Net Fixed Assets	\$	-
Closing Net Fixed Assets	\$	784,142
Average Net Fixed Assets	\$	392,071

For PILs Calculation

UCC

2014

Forecasted

Opening UCC	\$	-
Capital Additions	\$	825,413
UCC Before Half Year Rule	\$	825,413
Half Year Rule (1/2 Additions - Disposals)	\$	-
Reduced UCC	\$	825,413
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$	66,033
Closing UCC	\$	759,380



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 10

Name or General Description of Project

C9 Network Vault & Roofs

Asset Component

1850_Line Transformers - OH

Average Net Fixed Assets

Net Fixed Assets

2014
 Forecasted

Opening Capital Investment	\$	-
Capital Investment	\$	4,756
Closing Capital Investment	\$	4,756
Opening Accumulated Amortization	\$	-
Amortization	3%	\$ 159
Closing Accumulated Amortization	\$	159
Opening Net Fixed Assets	\$	-
Closing Net Fixed Assets	\$	4,597
Average Net Fixed Assets	\$	2,299

For PILs Calculation

UCC

2014
 Forecasted

Opening UCC	\$	-
Capital Additions	\$	4,756
UCC Before Half Year Rule	\$	4,756
Half Year Rule (1/2 Additions - Disposals)	\$	-
Reduced UCC	\$	4,756
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$	380
Closing UCC	\$	4,375



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 11

Name or General Description of Project

C9 Network Vault & Roofs

Asset Component

1850 Line Transformers - UG

Average Net Fixed Assets

Net Fixed Assets

2014
Forecasted

Opening Capital Investment	\$	-
Capital Investment	\$	7,068
Closing Capital Investment	\$	7,068
Opening Accumulated Amortization	\$	-
Amortization	3%	\$ 236
Closing Accumulated Amortization	\$	236
Opening Net Fixed Assets	\$	-
Closing Net Fixed Assets	\$	6,833
Average Net Fixed Assets	\$	3,416

For PILs Calculation

UCC

2014
Forecasted

Opening UCC	\$	-
Capital Additions	\$	7,068
UCC Before Half Year Rule	\$	7,068
Half Year Rule (1/2 Additions - Disposals)	\$	-
Reduced UCC	\$	7,068
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$	565
Closing UCC	\$	6,503



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 12

Name or General Description of Project

C9 Network Vault & Roofs

Asset Component

1850 Line Transformers - UG Network w/protector

Average Net Fixed Assets

Net Fixed Assets

2014

Forecasted

Opening Capital Investment	\$	-
Capital Investment	\$	8,545
Closing Capital Investment	\$	8,545
Opening Accumulated Amortization	\$	-
Amortization	5%	\$ 427
Closing Accumulated Amortization	\$	427
Opening Net Fixed Assets	\$	-
Closing Net Fixed Assets	\$	8,118
Average Net Fixed Assets	\$	4,059

For PILs Calculation

UCC

2014

Forecasted

Opening UCC	\$	-
Capital Additions	\$	8,545
UCC Before Half Year Rule	\$	8,545
Half Year Rule (1/2 Additions - Disposals)	\$	-
Reduced UCC	\$	8,545
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$	684
Closing UCC	\$	7,862



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 13

Name or General Description of Project

C9 Network Vault & Roofs

Asset Component

1855_Services - UG

Average Net Fixed Assets

Net Fixed Assets

2014
Forecasted

Opening Capital Investment	\$	-
Capital Investment	\$	735
Closing Capital Investment	\$	735
Opening Accumulated Amortization	\$	-
Amortization	3%	\$ 18
Closing Accumulated Amortization	\$	18
Opening Net Fixed Assets	\$	-
Closing Net Fixed Assets	\$	717
Average Net Fixed Assets	\$	358

For PILs Calculation

UCC

2014
Forecasted

Opening UCC	\$	-
Capital Additions	\$	735
UCC Before Half Year Rule	\$	735
Half Year Rule (1/2 Additions - Disposals)	\$	-
Reduced UCC	\$	735
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$	59
Closing UCC	\$	676



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 14

Name or General Description of Project

C9 Network Vault & Roofs

Asset Component

1855_Services - OH

Average Net Fixed Assets

Net Fixed Assets

2014
Forecasted

Opening Capital Investment	\$	-
Capital Investment	\$	599
Closing Capital Investment	\$	599
Opening Accumulated Amortization	\$	-
Amortization	2%	\$ 12
Closing Accumulated Amortization	\$	12
Opening Net Fixed Assets	\$	-
Closing Net Fixed Assets	\$	587
Average Net Fixed Assets	\$	293

For PILs Calculation

UCC

2014
Forecasted

Opening UCC	\$	-
Capital Additions	\$	599
UCC Before Half Year Rule	\$	599
Half Year Rule (1/2 Additions - Disposals)	\$	-
Reduced UCC	\$	599
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$	48
Closing UCC	\$	551



Incremental Capital Project Summary

Using the pull-down menu below, please identify what year of the IRM cycle you are in.

2nd Year of IRM Cycle

Name or General Description of Project

C10 Fibertop Network Units

Year

2012

Details of Project

C10 Fibertop Network Units

Number of Asset Components

3

Asset Component (Click on the Number to View the Component Details)	Capital Cost	Depreciation Rate		CCA Class	CCA Rate
		2012	2013		
1 1840_Underground Conduit - Vault	70,780	3%		47	8%
2 1845_Underground Conductors and Devices	624,398	3%		47	8%
3 1850_Line Transformers - UG Network w/protector	7,894,747	5%		47	8%
	2012	2013		2014	
Closing Net Fixed Asset	8,177,808	7,765,691		7,353,574	
Amortization Expense	412,117	412,117		412,117	
CCA	687,194	632,218		581,641	



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 1

Name or General Description of Project

C10 Fibertop Network Units

Asset Component

1840 Underground Conduit - Vault

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 70,780	\$ 70,780
Capital Investment	\$ 70,780	\$ -	\$ -
Closing Capital Investment	\$ 70,780	\$ 70,780	\$ 70,780
Opening Accumulated Amortization	\$ -	\$ 1,770	\$ 3,539
Amortization	\$ 1,770	\$ 1,770	\$ 1,770
Closing Accumulated Amortization	\$ 1,770	\$ 3,539	\$ 5,309
Opening Net Fixed Assets	\$ -	\$ 69,011	\$ 67,241
Closing Net Fixed Assets	\$ 69,011	\$ 67,241	\$ 65,472
Average Net Fixed Assets	\$ 34,505	\$ 68,126	\$ 66,357

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 65,118	\$ 59,909
Capital Additions	\$ 70,780	\$ -	\$ -
UCC Before Half Year Rule	\$ 70,780	\$ 65,118	\$ 59,909
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 70,780	\$ 65,118	\$ 59,909
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 5,662	\$ 5,209	\$ 4,793
Closing UCC	\$ 65,118	\$ 59,909	\$ 55,116



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 2

Name or General Description of Project

C10 Fibertop Network Units

Asset Component

1845 Underground Conductors and Devices

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 624,398	\$ 624,398
Capital Investment	\$ 624,398	\$ -	\$ -
Closing Capital Investment	\$ 624,398	\$ 624,398	\$ 624,398
Opening Accumulated Amortization	\$ -	\$ 15,610	\$ 31,220
Amortization	3% \$ 15,610	\$ 15,610	\$ 15,610
Closing Accumulated Amortization	\$ 15,610	\$ 31,220	\$ 46,830
Opening Net Fixed Assets	\$ -	\$ 608,788	\$ 593,178
Closing Net Fixed Assets	\$ 608,788	\$ 593,178	\$ 577,568
Average Net Fixed Assets	\$ 304,394	\$ 600,983	\$ 585,373

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 574,446	\$ 528,490
Capital Additions	\$ 624,398	\$ -	\$ -
UCC Before Half Year Rule	\$ 624,398	\$ 574,446	\$ 528,490
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 624,398	\$ 574,446	\$ 528,490
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 49,952	\$ 45,956	\$ 42,279
Closing UCC	\$ 574,446	\$ 528,490	\$ 486,211



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 3

Name or General Description of Project

C10 Fibertop Network Units

Asset Component

1850 Line Transformers - UG Network w/protector

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 7,894,747	\$ 7,894,747
Capital Investment	\$ 7,894,747	\$ -	\$ -
Closing Capital Investment	\$ 7,894,747	\$ 7,894,747	\$ 7,894,747
Opening Accumulated Amortization	\$ -	\$ 394,737	\$ 789,475
Amortization	5% \$ 394,737	\$ 394,737	\$ 394,737
Closing Accumulated Amortization	\$ 394,737	\$ 789,475	\$ 1,184,212
Opening Net Fixed Assets	\$ -	\$ 7,500,009	\$ 7,105,272
Closing Net Fixed Assets	\$ 7,500,009	\$ 7,105,272	\$ 6,710,535
Average Net Fixed Assets	\$ 3,750,005	\$ 7,302,641	\$ 6,907,903

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 7,263,167	\$ 6,682,114
Capital Additions	\$ 7,894,747	\$ -	\$ -
UCC Before Half Year Rule	\$ 7,894,747	\$ 7,263,167	\$ 6,682,114
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 7,894,747	\$ 7,263,167	\$ 6,682,114
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 631,580	\$ 581,053	\$ 534,569
Closing UCC	\$ 7,263,167	\$ 6,682,114	\$ 6,147,545



Incremental Capital Project Summary

Using the pull-down menu below, please identify what year of the IRM cycle you are in.

3rd Year of IRM Cycle

Name or General Description of Project

C10 Fibertop Network Units

Year

2013

Details of Project

C10 Fibertop Network Units

Number of Asset Components

3

Asset Component (Click on the Number to View the Component Details)	Capital Cost	Depreciation Rate	CCA Class	CCA Rate
1 1840_Underground Conduit - Vault	75,118	3%	47	8%
2 1845_Underground Conductors and Devices	694,264	3%	47	8%
3 1850_Line Transformers - UG Network w/protector	8,008,632	5%	47	8%

	2013	2014
Closing Net Fixed Asset	8,358,347	7,938,681
Amortization Expense	419,666	419,666
CCA	702,241	646,062



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 1

Name or General Description of Project

C10 Fibertop Network Units

Asset Component

1840 Underground Conduit - Vault

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 75,118
Capital Investment	\$ 75,118	\$ -
Closing Capital Investment	\$ 75,118	\$ 75,118
Opening Accumulated Amortization	\$ -	\$ 1,878
Amortization	3% \$ 1,878	\$ 1,878
Closing Accumulated Amortization	\$ 1,878	\$ 3,756
Opening Net Fixed Assets	\$ -	\$ 73,240
Closing Net Fixed Assets	\$ 73,240	\$ 71,362
Average Net Fixed Assets	\$ 36,620	\$ 72,301

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 69,108
Capital Additions	\$ 75,118	\$ -
UCC Before Half Year Rule	\$ 75,118	\$ 69,108
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 75,118	\$ 69,108
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 6,009	\$ 5,529
Closing UCC	\$ 69,108	\$ 63,580



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 2

Name or General Description of Project

C10 Fibertop Network Units

Asset Component

1845 Underground Conductors and Devices

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 694,264
Capital Investment	\$ 694,264	\$ -
Closing Capital Investment	\$ 694,264	\$ 694,264
Opening Accumulated Amortization	\$ -	\$ 17,357
Amortization	3% \$ 17,357	\$ 17,357
Closing Accumulated Amortization	\$ 17,357	\$ 34,713
Opening Net Fixed Assets	\$ -	\$ 676,907
Closing Net Fixed Assets	\$ 676,907	\$ 659,551
Average Net Fixed Assets	\$ 338,454	\$ 668,229

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 638,723
Capital Additions	\$ 694,264	\$ -
UCC Before Half Year Rule	\$ 694,264	\$ 638,723
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 694,264	\$ 638,723
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 55,541	\$ 51,098
Closing UCC	\$ 638,723	\$ 587,625



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 3

Name or General Description of Project

C10 Fibertop Network Units

Asset Component

1850 Line Transformers - UG Network w/protector

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 8,008,632
Capital Investment	\$ 8,008,632	\$ -
Closing Capital Investment	\$ 8,008,632	\$ 8,008,632
Opening Accumulated Amortization	\$ -	\$ 400,432
Amortization	5% \$ 400,432	\$ 400,432
Closing Accumulated Amortization	\$ 400,432	\$ 800,863
Opening Net Fixed Assets	\$ -	\$ 7,608,200
Closing Net Fixed Assets	\$ 7,608,200	\$ 7,207,769
Average Net Fixed Assets	\$ 3,804,100	\$ 7,407,984

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 7,367,941
Capital Additions	\$ 8,008,632	\$ -
UCC Before Half Year Rule	\$ 8,008,632	\$ 7,367,941
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 8,008,632	\$ 7,367,941
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 640,691	\$ 589,435
Closing UCC	\$ 7,367,941	\$ 6,778,506



Incremental Capital Project Summary

Using the pull-down menu below, please identify what year of the IRM cycle you are in.

4th Year of IRM Cycle

Name or General Description of Project

C10 Fibertop Network Units

Details of Project

C10 Fibertop Network Units

Year

2014

Number of Asset Components

3

Asset Component (Click on the Number to View the Component Details)	Capital Cost	Capital Cost (1/2 year rule applied)	Depreciation Rate	CCA Class	CCA Rate
1 1840_Underground Conduit - Vault	78,917	39,458	3%	47	8%
2 1845_Underground Conductors and Devices	730,416	365,208	3%	47	8%
3 1850_Line Transformers - UG Network w/protector	8,548,242	4,274,121	5%	47	8%

2014

Closing Net Fixed Asset 4,454,965

Amortization Expense 223,823

CCA 374,303



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 1

Name or General Description of Project

C10 Fibertop Network Units

Asset Component

1840 Underground Conduit - Vault

Average Net Fixed Assets

Net Fixed Assets

2014
Forecasted

Opening Capital Investment	\$	-
Capital Investment	\$	39,458
Closing Capital Investment	\$	39,458
Opening Accumulated Amortization	\$	-
Amortization	3%	\$ 986
Closing Accumulated Amortization	\$	986
Opening Net Fixed Assets	\$	-
Closing Net Fixed Assets	\$	38,472
Average Net Fixed Assets	\$	19,236

For PILs Calculation

UCC

2014
Forecasted

Opening UCC	\$	-
Capital Additions	\$	39,458
UCC Before Half Year Rule	\$	39,458
Half Year Rule (1/2 Additions - Disposals)	\$	-
Reduced UCC	\$	39,458
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$	3,157
Closing UCC	\$	36,302



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 2

Name or General Description of Project

C10 Fibertop Network Units

Asset Component

1845 Underground Conductors and Devices

Average Net Fixed Assets

Net Fixed Assets

2014
Forecasted

Opening Capital Investment	\$	-
Capital Investment	\$	365,208
Closing Capital Investment	\$	365,208
Opening Accumulated Amortization	\$	-
Amortization	3%	\$ 9,130
Closing Accumulated Amortization	\$	9,130
Opening Net Fixed Assets	\$	-
Closing Net Fixed Assets	\$	356,078
Average Net Fixed Assets	\$	178,039

For PILs Calculation

UCC

2014
Forecasted

Opening UCC	\$	-
Capital Additions	\$	365,208
UCC Before Half Year Rule	\$	365,208
Half Year Rule (1/2 Additions - Disposals)	\$	-
Reduced UCC	\$	365,208
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$	29,217
Closing UCC	\$	335,991



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 3

Name or General Description of Project

C10 Fibertop Network Units

Asset Component

1850 Line Transformers - UG Network w/protector

Average Net Fixed Assets

Net Fixed Assets

2014

Forecasted

Opening Capital Investment	\$ -
Capital Investment	\$ 4,274,121
Closing Capital Investment	\$ 4,274,121
Opening Accumulated Amortization	\$ -
Amortization	5% \$ 213,706
Closing Accumulated Amortization	\$ 213,706
Opening Net Fixed Assets	\$ -
Closing Net Fixed Assets	\$ 4,060,415
Average Net Fixed Assets	\$ 2,030,207

For PILs Calculation

UCC

2014

Forecasted

Opening UCC	\$ -
Capital Additions	\$ 4,274,121
UCC Before Half Year Rule	\$ 4,274,121
Half Year Rule (1/2 Additions - Disposals)	\$ -
Reduced UCC	\$ 4,274,121
CCA Rate Class	47
CCA Rate	8%
CCA	\$ 341,930
Closing UCC	\$ 3,932,191



Incremental Capital Project Summary

Using the pull-down menu below, please identify what year of the IRM cycle you are in.

2nd Year of IRM Cycle

Name or General Description of Project

C11 Automatic Transfer Switches (ATS) & Reverse Power Breakers (RPB)

Year

2012

Details of Project

C11 Automatic Transfer Switches (ATS) & Reverse Power Breakers (RPB)

Number of Asset Components

12

Asset Component (Click on the Number to View the Component Details)	Capital Cost	Depreciation Rate	CCA Class	CCA Rate
1 1830_Poles Towers and Fixtures	9,214	3%	47	8%
2 1835_Overhead Conductors and Devices	6,900	2%	47	8%
3 1835_Overhead Conductors and Devices - Switches	35,005	3%	47	8%
4 1840_Underground Conduit - Duct Bank	7,298	3%	47	8%
5 1840_Underground Conduit - Vault	31,956	3%	47	8%
6 1845_Underground Conductors and Devices	413,167	3%	47	8%
7 1845_Underground Conductors and Devices - Switch	426,249	5%	47	8%
8 1850_Line Transformers - OH	10,808	3%	47	8%
9 1850_Line Transformers - UG	245,152	3%	47	8%
10 1850_Line Transformers - UG Network w/protector	2,083,630	5%	47	8%
11 1855_Services - UG	1,677	3%	47	8%
12 1855_Services - OH	1,360	2%	47	8%

	2012	2013	2014
Closing Net Fixed Asset	3,125,414	2,978,413	2,831,411
Amortization Expense	147,002	147,002	147,002
CCA	261,793	240,850	221,582



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 1

Name or General Description of Project

C11 Automatic Transfer Switches (ATS) & Reverse Power Breakers (RPB)

Asset Component

1830_Poles Towers and Fixtures

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 9,214	\$ 9,214
Capital Investment	\$ 9,214	\$ -	\$ -
Closing Capital Investment	\$ 9,214	\$ 9,214	\$ 9,214
Opening Accumulated Amortization	\$ -	\$ 230	\$ 461
Amortization	3% \$ 230	\$ 230	\$ 230
Closing Accumulated Amortization	\$ 230	\$ 461	\$ 691
Opening Net Fixed Assets	\$ -	\$ 8,984	\$ 8,753
Closing Net Fixed Assets	\$ 8,984	\$ 8,753	\$ 8,523
Average Net Fixed Assets	\$ 4,492	\$ 8,869	\$ 8,638

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 8,477	\$ 7,799
Capital Additions	\$ 9,214	\$ -	\$ -
UCC Before Half Year Rule	\$ 9,214	\$ 8,477	\$ 7,799
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 9,214	\$ 8,477	\$ 7,799
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 737	\$ 678	\$ 624
Closing UCC	\$ 8,477	\$ 7,799	\$ 7,175



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 2

Name or General Description of Project

C11 Automatic Transfer Switches (ATS) & Reverse Power Breakers (RPB)

Asset Component

1835_Overhead Conductors and Devices

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 6,900	\$ 6,900
Capital Investment	\$ 6,900	\$ -	\$ -
Closing Capital Investment	\$ 6,900	\$ 6,900	\$ 6,900
Opening Accumulated Amortization	\$ -	\$ 138	\$ 276
Amortization	2% \$ 138	\$ 138	\$ 138
Closing Accumulated Amortization	\$ 138	\$ 276	\$ 414
Opening Net Fixed Assets	\$ -	\$ 6,762	\$ 6,624
Closing Net Fixed Assets	\$ 6,762	\$ 6,624	\$ 6,486
Average Net Fixed Assets	\$ 3,381	\$ 6,693	\$ 6,555

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 6,348	\$ 5,840
Capital Additions	\$ 6,900	\$ -	\$ -
UCC Before Half Year Rule	\$ 6,900	\$ 6,348	\$ 5,840
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 6,900	\$ 6,348	\$ 5,840
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 552	\$ 508	\$ 467
Closing UCC	\$ 6,348	\$ 5,840	\$ 5,373



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 3

Name or General Description of Project

C11 Automatic Transfer Switches (ATS) & Reverse Power Breakers (RPB)

Asset Component

1835_Overhead Conductors and Devices - Switches

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 35,005	\$ 35,005
Capital Investment	\$ 35,005	\$ -	\$ -
Closing Capital Investment	\$ 35,005	\$ 35,005	\$ 35,005
Opening Accumulated Amortization	\$ -	\$ 1,167	\$ 2,334
Amortization	\$ 1,167	\$ 1,167	\$ 1,167
Closing Accumulated Amortization	\$ 1,167	\$ 2,334	\$ 3,501
Opening Net Fixed Assets	\$ -	\$ 33,838	\$ 32,671
Closing Net Fixed Assets	\$ 33,838	\$ 32,671	\$ 31,505
Average Net Fixed Assets	\$ 16,919	\$ 33,255	\$ 32,088

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 32,205	\$ 29,628
Capital Additions	\$ 35,005	\$ -	\$ -
UCC Before Half Year Rule	\$ 35,005	\$ 32,205	\$ 29,628
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 35,005	\$ 32,205	\$ 29,628
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 2,800	\$ 2,576	\$ 2,370
Closing UCC	\$ 32,205	\$ 29,628	\$ 27,258



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 4

Name or General Description of Project

C11 Automatic Transfer Switches (ATS) & Reverse Power Breakers (RPB)

Asset Component

1840 Underground Conduit - Duct Bank

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 7,298	\$ 7,298
Capital Investment	\$ 7,298	\$ -	\$ -
Closing Capital Investment	\$ 7,298	\$ 7,298	\$ 7,298
Opening Accumulated Amortization	\$ -	\$ 243	\$ 487
Amortization	3% \$ 243	\$ 243	\$ 243
Closing Accumulated Amortization	\$ 243	\$ 487	\$ 730
Opening Net Fixed Assets	\$ -	\$ 7,054	\$ 6,811
Closing Net Fixed Assets	\$ 7,054	\$ 6,811	\$ 6,568
Average Net Fixed Assets	\$ 3,527	\$ 6,933	\$ 6,689

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 6,714	\$ 6,177
Capital Additions	\$ 7,298	\$ -	\$ -
UCC Before Half Year Rule	\$ 7,298	\$ 6,714	\$ 6,177
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 7,298	\$ 6,714	\$ 6,177
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 584	\$ 537	\$ 494
Closing UCC	\$ 6,714	\$ 6,177	\$ 5,682



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 5

Name or General Description of Project

C11 Automatic Transfer Switches (ATS) & Reverse Power Breakers (RPB)

Asset Component

1840 Underground Conduit - Vault

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 31,956	\$ 31,956
Capital Investment	\$ 31,956	\$ -	\$ -
Closing Capital Investment	\$ 31,956	\$ 31,956	\$ 31,956
Opening Accumulated Amortization	\$ -	\$ 799	\$ 1,598
Amortization	3% \$ 799	\$ 799	\$ 799
Closing Accumulated Amortization	\$ 799	\$ 1,598	\$ 2,397
Opening Net Fixed Assets	\$ -	\$ 31,157	\$ 30,358
Closing Net Fixed Assets	\$ 31,157	\$ 30,358	\$ 29,559
Average Net Fixed Assets	\$ 15,579	\$ 30,758	\$ 29,959

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 29,399	\$ 27,047
Capital Additions	\$ 31,956	\$ -	\$ -
UCC Before Half Year Rule	\$ 31,956	\$ 29,399	\$ 27,047
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 31,956	\$ 29,399	\$ 27,047
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 2,556	\$ 2,352	\$ 2,164
Closing UCC	\$ 29,399	\$ 27,047	\$ 24,884



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 6

Name or General Description of Project

C11 Automatic Transfer Switches (ATS) & Reverse Power Breakers (RPB)

Asset Component

1845 Underground Conductors and Devices

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 413,167	\$ 413,167
Capital Investment	\$ 413,167	\$ -	\$ -
Closing Capital Investment	\$ 413,167	\$ 413,167	\$ 413,167
Opening Accumulated Amortization	\$ -	\$ 10,329	\$ 20,658
Amortization	3% \$ 10,329	\$ 10,329	\$ 10,329
Closing Accumulated Amortization	\$ 10,329	\$ 20,658	\$ 30,988
Opening Net Fixed Assets	\$ -	\$ 402,838	\$ 392,509
Closing Net Fixed Assets	\$ 402,838	\$ 392,509	\$ 382,179
Average Net Fixed Assets	\$ 201,419	\$ 397,673	\$ 387,344

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 380,114	\$ 349,704
Capital Additions	\$ 413,167	\$ -	\$ -
UCC Before Half Year Rule	\$ 413,167	\$ 380,114	\$ 349,704
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 413,167	\$ 380,114	\$ 349,704
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 33,053	\$ 30,409	\$ 27,976
Closing UCC	\$ 380,114	\$ 349,704	\$ 321,728



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 7

Name or General Description of Project

C11 Automatic Transfer Switches (ATS) & Reverse Power Breakers (RPB)

Asset Component

1845_Underground Conductors and Devices - Switch

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 426,249	\$ 426,249
Capital Investment	\$ 426,249	\$ -	\$ -
Closing Capital Investment	\$ 426,249	\$ 426,249	\$ 426,249
Opening Accumulated Amortization	\$ -	\$ 21,312	\$ 42,625
Amortization	5% \$ 21,312	\$ 21,312	\$ 21,312
Closing Accumulated Amortization	\$ 21,312	\$ 42,625	\$ 63,937
Opening Net Fixed Assets	\$ -	\$ 404,936	\$ 383,624
Closing Net Fixed Assets	\$ 404,936	\$ 383,624	\$ 362,312
Average Net Fixed Assets	\$ 202,468	\$ 394,280	\$ 372,968

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 392,149	\$ 360,777
Capital Additions	\$ 426,249	\$ -	\$ -
UCC Before Half Year Rule	\$ 426,249	\$ 392,149	\$ 360,777
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 426,249	\$ 392,149	\$ 360,777
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 34,100	\$ 31,372	\$ 28,862
Closing UCC	\$ 392,149	\$ 360,777	\$ 331,915



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 8

Name or General Description of Project

C11 Automatic Transfer Switches (ATS) & Reverse Power Breakers (RPB)

Asset Component

1850 Line Transformers - OH

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 10,808	\$ 10,808
Capital Investment	\$ 10,808	\$ -	\$ -
Closing Capital Investment	\$ 10,808	\$ 10,808	\$ 10,808
Opening Accumulated Amortization	\$ -	\$ 360	\$ 721
Amortization	3% \$ 360	\$ 360	\$ 360
Closing Accumulated Amortization	\$ 360	\$ 721	\$ 1,081
Opening Net Fixed Assets	\$ -	\$ 10,447	\$ 10,087
Closing Net Fixed Assets	\$ 10,447	\$ 10,087	\$ 9,727
Average Net Fixed Assets	\$ 5,224	\$ 10,267	\$ 9,907

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 9,943	\$ 9,148
Capital Additions	\$ 10,808	\$ -	\$ -
UCC Before Half Year Rule	\$ 10,808	\$ 9,943	\$ 9,148
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 10,808	\$ 9,943	\$ 9,148
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 865	\$ 795	\$ 732
Closing UCC	\$ 9,943	\$ 9,148	\$ 8,416



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 9

Name or General Description of Project

C11 Automatic Transfer Switches (ATS) & Reverse Power Breakers (RPB)

Asset Component

1850 Line Transformers - UG

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 245,152	\$ 245,152
Capital Investment	\$ 245,152	\$ -	\$ -
Closing Capital Investment	\$ 245,152	\$ 245,152	\$ 245,152
Opening Accumulated Amortization	\$ -	\$ 8,172	\$ 16,343
Amortization	3% \$ 8,172	\$ 8,172	\$ 8,172
Closing Accumulated Amortization	\$ 8,172	\$ 16,343	\$ 24,515
Opening Net Fixed Assets	\$ -	\$ 236,980	\$ 228,808
Closing Net Fixed Assets	\$ 236,980	\$ 228,808	\$ 220,637
Average Net Fixed Assets	\$ 118,490	\$ 232,894	\$ 224,722

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 225,540	\$ 207,496
Capital Additions	\$ 245,152	\$ -	\$ -
UCC Before Half Year Rule	\$ 245,152	\$ 225,540	\$ 207,496
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 245,152	\$ 225,540	\$ 207,496
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 19,612	\$ 18,043	\$ 16,600
Closing UCC	\$ 225,540	\$ 207,496	\$ 190,897



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 10

Name or General Description of Project

C11 Automatic Transfer Switches (ATS) & Reverse Power Breakers (RPB)

Asset Component

1850 Line Transformers - UG Network w/protector

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 2,083,630	\$ 2,083,630
Capital Investment	\$ 2,083,630	\$ -	\$ -
Closing Capital Investment	\$ 2,083,630	\$ 2,083,630	\$ 2,083,630
Opening Accumulated Amortization	\$ -	\$ 104,182	\$ 208,363
Amortization	5% \$ 104,182	\$ 104,182	\$ 104,182
Closing Accumulated Amortization	\$ 104,182	\$ 208,363	\$ 312,545
Opening Net Fixed Assets	\$ -	\$ 1,979,449	\$ 1,875,267
Closing Net Fixed Assets	\$ 1,979,449	\$ 1,875,267	\$ 1,771,086
Average Net Fixed Assets	\$ 989,724	\$ 1,927,358	\$ 1,823,176

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 1,916,940	\$ 1,763,585
Capital Additions	\$ 2,083,630	\$ -	\$ -
UCC Before Half Year Rule	\$ 2,083,630	\$ 1,916,940	\$ 1,763,585
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 2,083,630	\$ 1,916,940	\$ 1,763,585
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 166,690	\$ 153,355	\$ 141,087
Closing UCC	\$ 1,916,940	\$ 1,763,585	\$ 1,622,498



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 11

Name or General Description of Project

C11 Automatic Transfer Switches (ATS) & Reverse Power Breakers (RPB)

Asset Component

1855_Services - UG

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 1,677	\$ 1,677
Capital Investment	\$ 1,677	\$ -	\$ -
Closing Capital Investment	\$ 1,677	\$ 1,677	\$ 1,677
Opening Accumulated Amortization	\$ -	\$ 42	\$ 84
Amortization	3% \$ 42	\$ 42	\$ 42
Closing Accumulated Amortization	\$ 42	\$ 84	\$ 126
Opening Net Fixed Assets	\$ -	\$ 1,636	\$ 1,594
Closing Net Fixed Assets	\$ 1,636	\$ 1,594	\$ 1,552
Average Net Fixed Assets	\$ 818	\$ 1,615	\$ 1,573

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 1,543	\$ 1,420
Capital Additions	\$ 1,677	\$ -	\$ -
UCC Before Half Year Rule	\$ 1,677	\$ 1,543	\$ 1,420
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 1,677	\$ 1,543	\$ 1,420
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 134	\$ 123	\$ 114
Closing UCC	\$ 1,543	\$ 1,420	\$ 1,306



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 12

Name or General Description of Project

C11 Automatic Transfer Switches (ATS) & Reverse Power Breakers (RPB)

Asset Component

1855_Services - OH

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 1,360	\$ 1,360
Capital Investment	\$ 1,360	\$ -	\$ -
Closing Capital Investment	\$ 1,360	\$ 1,360	\$ 1,360
Opening Accumulated Amortization	\$ -	\$ 27	\$ 54
Amortization	\$ 27	\$ 27	\$ 27
Closing Accumulated Amortization	\$ 27	\$ 54	\$ 82
Opening Net Fixed Assets	\$ -	\$ 1,333	\$ 1,306
Closing Net Fixed Assets	\$ 1,333	\$ 1,306	\$ 1,279
Average Net Fixed Assets	\$ 667	\$ 1,319	\$ 1,292

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 1,251	\$ 1,151
Capital Additions	\$ 1,360	\$ -	\$ -
UCC Before Half Year Rule	\$ 1,360	\$ 1,251	\$ 1,151
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 1,360	\$ 1,251	\$ 1,151
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 109	\$ 100	\$ 92
Closing UCC	\$ 1,251	\$ 1,151	\$ 1,059



Incremental Capital Project Summary

Using the pull-down menu below, please identify what year of the IRM cycle you are in.

3rd Year of IRM Cycle

Name or General Description of Project

C11 Automatic Transfer Switches (ATS) & Reverse Power Breakers (RPB)

Year

2013

Details of Project

C11 Automatic Transfer Switches (ATS) & Reverse Power Breakers (RPB)

Number of Asset Components

5

Asset Component (Click on the Number to View the Component Details)	Capital Cost	Depreciation Rate		CCA Class	CCA Rate
		2013	2014		
1 1840_Underground Conduit - Duct Bank	10,161	3%		47	8%
2 1840_Underground Conduit - Vault	30,483	3%		47	8%
3 1845_Underground Conductors and Devices	356,540	3%		47	8%
4 1845_Underground Conductors and Devices - Switch	292,158	5%		47	8%
5 1850_Line Transformers - UG Network w/protector	2,608,433	5%		47	8%
Closing Net Fixed Asset	3,142,731		2,987,687		
Amortization Expense	155,044		155,044		
CCA	263,822		242,716		



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 1

Name or General Description of Project

C11 Automatic Transfer Switches (ATS) & Reverse Power Breakers (RPB)

Asset Component

1840 Underground Conduit - Duct Bank

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 10,161
Capital Investment	\$ 10,161	\$ -
Closing Capital Investment	\$ 10,161	\$ 10,161
Opening Accumulated Amortization	\$ -	\$ 339
Amortization	3% \$ 339	\$ 339
Closing Accumulated Amortization	\$ 339	\$ 677
Opening Net Fixed Assets	\$ -	\$ 9,822
Closing Net Fixed Assets	\$ 9,822	\$ 9,483
Average Net Fixed Assets	\$ 4,911	\$ 9,653

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 9,348
Capital Additions	\$ 10,161	\$ -
UCC Before Half Year Rule	\$ 10,161	\$ 9,348
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 10,161	\$ 9,348
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 813	\$ 748
Closing UCC	\$ 9,348	\$ 8,600



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 2

Name or General Description of Project

C11 Automatic Transfer Switches (ATS) & Reverse Power Breakers (RPB)

Asset Component

1840 Underground Conduit - Vault

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 30,483
Capital Investment	\$ 30,483	\$ -
Closing Capital Investment	\$ 30,483	\$ 30,483
Opening Accumulated Amortization	\$ -	\$ 762
Amortization	3% \$ 762	\$ 762
Closing Accumulated Amortization	\$ 762	\$ 1,524
Opening Net Fixed Assets	\$ -	\$ 29,721
Closing Net Fixed Assets	\$ 29,721	\$ 28,958
Average Net Fixed Assets	\$ 14,860	\$ 29,340

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 28,044
Capital Additions	\$ 30,483	\$ -
UCC Before Half Year Rule	\$ 30,483	\$ 28,044
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 30,483	\$ 28,044
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 2,439	\$ 2,244
Closing UCC	\$ 28,044	\$ 25,800



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 3

Name or General Description of Project

C11 Automatic Transfer Switches (ATS) & Reverse Power Breakers (RPB)

Asset Component

1845_Underground Conductors and Devices

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 356,540
Capital Investment	\$ 356,540	\$ -
Closing Capital Investment	\$ 356,540	\$ 356,540
Opening Accumulated Amortization	\$ -	\$ 8,914
Amortization	3% \$ 8,914	\$ 8,914
Closing Accumulated Amortization	\$ 8,914	\$ 17,827
Opening Net Fixed Assets	\$ -	\$ 347,627
Closing Net Fixed Assets	\$ 347,627	\$ 338,713
Average Net Fixed Assets	\$ 173,813	\$ 343,170

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 328,017
Capital Additions	\$ 356,540	\$ -
UCC Before Half Year Rule	\$ 356,540	\$ 328,017
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 356,540	\$ 328,017
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 28,523	\$ 26,241
Closing UCC	\$ 328,017	\$ 301,776



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 4

Name or General Description of Project

C11 Automatic Transfer Switches (ATS) & Reverse Power Breakers (RPB)

Asset Component

1845_Underground Conductors and Devices - Switch

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 292,158
Capital Investment	\$ 292,158	\$ -
Closing Capital Investment	\$ 292,158	\$ 292,158
Opening Accumulated Amortization	\$ -	\$ 14,608
Amortization	5% \$ 14,608	\$ 14,608
Closing Accumulated Amortization	\$ 14,608	\$ 29,216
Opening Net Fixed Assets	\$ -	\$ 277,550
Closing Net Fixed Assets	\$ 277,550	\$ 262,942
Average Net Fixed Assets	\$ 138,775	\$ 270,246

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 268,785
Capital Additions	\$ 292,158	\$ -
UCC Before Half Year Rule	\$ 292,158	\$ 268,785
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 292,158	\$ 268,785
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 23,373	\$ 21,503
Closing UCC	\$ 268,785	\$ 247,283



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 5

Name or General Description of Project

C11 Automatic Transfer Switches (ATS) & Reverse Power Breakers (RPB)

Asset Component

1850 Line Transformers - UG Network w/protector

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 2,608,433
Capital Investment	\$ 2,608,433	\$ -
Closing Capital Investment	\$ 2,608,433	\$ 2,608,433
Opening Accumulated Amortization	\$ -	\$ 130,422
Amortization	5% \$ 130,422	\$ 130,422
Closing Accumulated Amortization	\$ 130,422	\$ 260,843
Opening Net Fixed Assets	\$ -	\$ 2,478,011
Closing Net Fixed Assets	\$ 2,478,011	\$ 2,347,590
Average Net Fixed Assets	\$ 1,239,006	\$ 2,412,800

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 2,399,758
Capital Additions	\$ 2,608,433	\$ -
UCC Before Half Year Rule	\$ 2,608,433	\$ 2,399,758
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 2,608,433	\$ 2,399,758
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 208,675	\$ 191,981
Closing UCC	\$ 2,399,758	\$ 2,207,778



Incremental Capital Project Summary

Using the pull-down menu below, please identify what year of the IRM cycle you are in.

4th Year of IRM Cycle

Name or General Description of Project

C11 Automatic Transfer Switches (ATS) & Reverse Power Breakers (RPB)

Details of Project

C11 Automatic Transfer Switches (ATS) & Reverse Power Breakers (RPB)

Year

2014

Number of Asset Components

5

Asset Component (Click on the Number to View the Component Details)	Capital Cost	Capital Cost (1/2 year rule applied)	Depreciation Rate	CCA Class	CCA Rate
1 1840_Underground Conduit - Duct Bank	9,877	4,939	3%	47	8%
2 1840_Underground Conduit - Vault	29,632	14,816	3%	47	8%
3 1845_Underground Conductors and Devices	348,650	174,325	3%	47	8%
4 1845_Underground Conductors and Devices - Switch	286,378	143,189	5%	47	8%
5 1850_Line Transformers - UG Network w/protector	2,550,923	1,275,461	5%	47	8%
2014					
Closing Net Fixed Asset	1,536,905				
Amortization Expense	75,826				
CCA	129,018				



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 1

Name or General Description of Project

C11 Automatic Transfer Switches (ATS) & Reverse Power Breakers (RPB)

Asset Component

1840 Underground Conduit - Duct Bank

Average Net Fixed Assets

Net Fixed Assets

	2014 Forecasted
Opening Capital Investment	\$ -
Capital Investment	\$ 4,939
Closing Capital Investment	\$ 4,939
Opening Accumulated Amortization	\$ -
Amortization	3% \$ 165
Closing Accumulated Amortization	\$ 165
Opening Net Fixed Assets	\$ -
Closing Net Fixed Assets	\$ 4,774
Average Net Fixed Assets	\$ 2,387

For PILs Calculation

UCC

	2014 Forecasted
Opening UCC	\$ -
Capital Additions	\$ 4,939
UCC Before Half Year Rule	\$ 4,939
Half Year Rule (1/2 Additions - Disposals)	\$ -
Reduced UCC	\$ 4,939
CCA Rate Class	47
CCA Rate	8%
CCA	\$ 395
Closing UCC	\$ 4,544



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 2

Name or General Description of Project

C11 Automatic Transfer Switches (ATS) & Reverse Power Breakers (RPB)

Asset Component

1840 Underground Conduit - Vault

Average Net Fixed Assets

Net Fixed Assets

	2014 Forecasted
Opening Capital Investment	\$ -
Capital Investment	\$ 14,816
Closing Capital Investment	\$ 14,816
Opening Accumulated Amortization	\$ -
Amortization	3% \$ 370
Closing Accumulated Amortization	\$ 370
Opening Net Fixed Assets	\$ -
Closing Net Fixed Assets	\$ 14,446
Average Net Fixed Assets	\$ 7,223

For PILs Calculation

UCC

	2014 Forecasted
Opening UCC	\$ -
Capital Additions	\$ 14,816
UCC Before Half Year Rule	\$ 14,816
Half Year Rule (1/2 Additions - Disposals)	\$ -
Reduced UCC	\$ 14,816
CCA Rate Class	47
CCA Rate	8%
CCA	\$ 1,185
Closing UCC	\$ 13,631



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 3

Name or General Description of Project

C11 Automatic Transfer Switches (ATS) & Reverse Power Breakers (RPB)

Asset Component

1845_Underground Conductors and Devices

Average Net Fixed Assets

Net Fixed Assets

	2014 Forecasted
Opening Capital Investment	\$ -
Capital Investment	\$ 174,325
Closing Capital Investment	\$ 174,325
Opening Accumulated Amortization	\$ -
Amortization	3% \$ 4,358
Closing Accumulated Amortization	\$ 4,358
Opening Net Fixed Assets	\$ -
Closing Net Fixed Assets	\$ 169,967
Average Net Fixed Assets	\$ 84,983

For PILs Calculation

UCC

	2014 Forecasted
Opening UCC	\$ -
Capital Additions	\$ 174,325
UCC Before Half Year Rule	\$ 174,325
Half Year Rule (1/2 Additions - Disposals)	\$ -
Reduced UCC	\$ 174,325
CCA Rate Class	47
CCA Rate	8%
CCA	\$ 13,946
Closing UCC	\$ 160,379



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 4

Name or General Description of Project

C11 Automatic Transfer Switches (ATS) & Reverse Power Breakers (RPB)

Asset Component

1845_Underground Conductors and Devices - Switch

Average Net Fixed Assets

Net Fixed Assets

	2014 Forecasted
Opening Capital Investment	\$ -
Capital Investment	\$ 143,189
Closing Capital Investment	\$ 143,189
Opening Accumulated Amortization	\$ -
Amortization	5% \$ 7,159
Closing Accumulated Amortization	\$ 7,159
Opening Net Fixed Assets	\$ -
Closing Net Fixed Assets	\$ 136,030
Average Net Fixed Assets	\$ 68,015

For PILs Calculation

UCC

	2014 Forecasted
Opening UCC	\$ -
Capital Additions	\$ 143,189
UCC Before Half Year Rule	\$ 143,189
Half Year Rule (1/2 Additions - Disposals)	\$ -
Reduced UCC	\$ 143,189
CCA Rate Class	47
CCA Rate	8%
CCA	\$ 11,455
Closing UCC	\$ 131,734



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 5

Name or General Description of Project

C11 Automatic Transfer Switches (ATS) & Reverse Power Breakers (RPB)

Asset Component

1850 Line Transformers - UG Network w/protector

Average Net Fixed Assets

Net Fixed Assets

	2014 Forecasted
Opening Capital Investment	\$ -
Capital Investment	\$ 1,275,461
Closing Capital Investment	\$ 1,275,461
Opening Accumulated Amortization	\$ -
Amortization	5% \$ 63,773
Closing Accumulated Amortization	\$ 63,773
Opening Net Fixed Assets	\$ -
Closing Net Fixed Assets	\$ 1,211,688
Average Net Fixed Assets	\$ 605,844

For PILs Calculation

UCC

	2014 Forecasted
Opening UCC	\$ -
Capital Additions	\$ 1,275,461
UCC Before Half Year Rule	\$ 1,275,461
Half Year Rule (1/2 Additions - Disposals)	\$ -
Reduced UCC	\$ 1,275,461
CCA Rate Class	47
CCA Rate	8%
CCA	\$ 102,037
Closing UCC	\$ 1,173,424



Incremental Capital Project Summary

Using the pull-down menu below, please identify what year of the IRM cycle you are in.

2nd Year of IRM Cycle

Name or General Description of Project

C12 Stations Power Transformers

Year

2012

Details of Project

C12 Stations Power Transformers

Number of Asset Components

1

Asset Component (Click on the Number to View the Component Details)

1 1820_DS Equip - Normally Primary below 50 kV - Power Transformer

Capital Cost

1,299,579

Depreciation
Rate

3%

CCA Class

47

CCA Rate

8%

2012

2013

2014

Closing Net Fixed Asset

1,258,967

1,218,355

1,177,743

Amortization Expense

40,612

40,612

40,612

CCA

103,966

95,649

87,997



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 1

Name or General Description of Project

C12 Stations Power Transformers

Asset Component

1820_DS Equip - Normally Primary below 50 kV - Power Transformer

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 1,299,579	\$ 1,299,579
Capital Investment	\$ 1,299,579	\$ -	\$ -
Closing Capital Investment	\$ 1,299,579	\$ 1,299,579	\$ 1,299,579
Opening Accumulated Amortization	\$ -	\$ 40,612	\$ 81,224
Amortization	3% \$ 40,612	\$ 40,612	\$ 40,612
Closing Accumulated Amortization	\$ 40,612	\$ 81,224	\$ 121,836
Opening Net Fixed Assets	\$ -	\$ 1,258,967	\$ 1,218,355
Closing Net Fixed Assets	\$ 1,258,967	\$ 1,218,355	\$ 1,177,743
Average Net Fixed Assets	\$ 629,484	\$ 1,238,661	\$ 1,198,049

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 1,195,613	\$ 1,099,964
Capital Additions	\$ 1,299,579	\$ -	\$ -
UCC Before Half Year Rule	\$ 1,299,579	\$ 1,195,613	\$ 1,099,964
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 1,299,579	\$ 1,195,613	\$ 1,099,964
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 103,966	\$ 95,649	\$ 87,997
Closing UCC	\$ 1,195,613	\$ 1,099,964	\$ 1,011,967



Incremental Capital Project Summary

Using the pull-down menu below, please identify what year of the IRM cycle you are in.

3rd Year of IRM Cycle

Name or General Description of Project

C12 Stations Power Transformers

Year

2013

Details of Project

C12 Stations Power Transformers

Number of Asset Components

3

Asset Component (Click on the Number to View the Component Details)	Capital Cost	Depreciation Rate	CCA Class	CCA Rate
1 1808_Buildings and Fixtures - Stn Shell Site	7,352	3%	01	4%
2 1820_DS Equip - Normally Primary below 50 kV - Power Transformer	2,509,523	3%	47	8%
3 1840_Underground Conduit - Duct Bank	41,376	3%	47	8%

	2013	2014
Closing Net Fixed Asset	2,478,204	2,398,158
Amortization Expense	80,047	80,047
CCA	204,366	188,029



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 1

Name or General Description of Project

C12 Stations Power Transformers

Asset Component

1808_Buildings and Fixtures - Stn Shell Site

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 7,352
Capital Investment	\$ 7,352	\$ -
Closing Capital Investment	\$ 7,352	\$ 7,352
Opening Accumulated Amortization	\$ -	\$ 245
Amortization	3% \$ 245	\$ 245
Closing Accumulated Amortization	\$ 245	\$ 490
Opening Net Fixed Assets	\$ -	\$ 7,107
Closing Net Fixed Assets	\$ 7,107	\$ 6,862
Average Net Fixed Assets	\$ 3,554	\$ 6,985

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 7,058
Capital Additions	\$ 7,352	\$ -
UCC Before Half Year Rule	\$ 7,352	\$ 7,058
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 7,352	\$ 7,058
CCA Rate Class	01	
CCA Rate	4%	
CCA	\$ 294	\$ 282
Closing UCC	\$ 7,058	\$ 6,776



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 2

Name or General Description of Project

C12 Stations Power Transformers

Asset Component

1820_DS Equip - Normally Primary below 50 kV - Power Transformer

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 2,509,523
Capital Investment	\$ 2,509,523	\$ -
Closing Capital Investment	\$ 2,509,523	\$ 2,509,523
Opening Accumulated Amortization	\$ -	\$ 78,423
Amortization	3% \$ 78,423	\$ 78,423
Closing Accumulated Amortization	\$ 78,423	\$ 156,845
Opening Net Fixed Assets	\$ -	\$ 2,431,100
Closing Net Fixed Assets	\$ 2,431,100	\$ 2,352,678
Average Net Fixed Assets	\$ 1,215,550	\$ 2,391,889

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 2,308,761
Capital Additions	\$ 2,509,523	\$ -
UCC Before Half Year Rule	\$ 2,509,523	\$ 2,308,761
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 2,509,523	\$ 2,308,761
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 200,762	\$ 184,701
Closing UCC	\$ 2,308,761	\$ 2,124,060



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 3

Name or General Description of Project

C12 Stations Power Transformers

Asset Component

1840 Underground Conduit - Duct Bank

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 41,376
Capital Investment	\$ 41,376	\$ -
Closing Capital Investment	\$ 41,376	\$ 41,376
Opening Accumulated Amortization	\$ -	\$ 1,379
Amortization	3% \$ 1,379	\$ 1,379
Closing Accumulated Amortization	\$ 1,379	\$ 2,758
Opening Net Fixed Assets	\$ -	\$ 39,997
Closing Net Fixed Assets	\$ 39,997	\$ 38,618
Average Net Fixed Assets	\$ 19,999	\$ 39,308

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 38,066
Capital Additions	\$ 41,376	\$ -
UCC Before Half Year Rule	\$ 41,376	\$ 38,066
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 41,376	\$ 38,066
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 3,310	\$ 3,045
Closing UCC	\$ 38,066	\$ 35,021



Incremental Capital Project Summary

Using the pull-down menu below, please identify what year of the IRM cycle you are in.

4th Year of IRM Cycle

Name or General Description of Project

C12 Stations Power Transformers

Year

2014

Details of Project

C12 Stations Power Transformers

Number of Asset Components

1

Asset Component (Click on the Number to View the Component Details)	Capital Cost	Capital Cost (1/2 year rule applied)	Depreciation Rate	CCA Class	CCA Rate
1 1820_DS Equip - Normally Primary below 50 kV - Power Transformer	874,733	437,366	3%	47	8%

2014
 Closing Net Fixed Asset 423,699

Amortization Expense 13,668

CCA 34,989



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 1

Name or General Description of Project

C12 Stations Power Transformers

Asset Component

1820_DS Equip - Normally Primary below 50 kV - Power Transformer

Average Net Fixed Assets

Net Fixed Assets

2014

Forecasted

Opening Capital Investment	\$	-
Capital Investment	\$	437,366
Closing Capital Investment	\$	437,366
Opening Accumulated Amortization	\$	-
Amortization	3%	\$ 13,668
Closing Accumulated Amortization	\$	13,668
Opening Net Fixed Assets	\$	-
Closing Net Fixed Assets	\$	423,699
Average Net Fixed Assets	\$	211,849

For PILs Calculation

UCC

2014

Forecasted

Opening UCC	\$	-
Capital Additions	\$	437,366
UCC Before Half Year Rule	\$	437,366
Half Year Rule (1/2 Additions - Disposals)	\$	-
Reduced UCC	\$	437,366
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$	34,989
Closing UCC	\$	402,377



Incremental Capital Project Summary

Using the pull-down menu below, please identify what year of the IRM cycle you are in.

2nd Year of IRM Cycle

Name or General Description of Project

C13 Stations Switchgear

Year

2012

Details of Project

C13 Stations Switchgear

Number of Asset Components

12

Asset Component (Click on the Number to View the Component Details)	Capital Cost	Depreciation Rate		CCA Class	CCA Rate
		2012	2013		
1 1808_Buildings and Fixtures - Stn Shell Site	156,692	3%		01	4%
2 1820_DS Equip - Normally Primary below 50 kV - Indoor Breaker	45,766	3%		47	8%
3 1820_DS Equip - Normally Primary below 50 kV - Stn Service Batteries	5,886	10%		47	8%
4 1820_DS Equip - Normally Primary below 50 kV - Stn Service Chargers	7,063	5%		47	8%
5 1820_DS Equip - Normally Primary below 50 kV - Switchgear Air	16,842,016	3%		47	8%
6 1830_Poles Towers and Fixtures	54,593	3%		47	8%
7 1835_Overhead Conductors and Devices	146,834	2%		47	8%
8 1835_Overhead Conductors and Devices - Switches	393,681	3%		47	8%
9 1840_Underground Conduit - Cable Chamber	105,572	2%		47	8%
10 1840_Underground Conduit - Duct Bank	607,419	3%		47	8%
11 1845_Underground Conductors and Devices	792,915	3%		47	8%
12 1980_System Supervisory Equipment	191,513	7%		08	20%
Closing Net Fixed Asset	18,848,835	18,347,721	17,846,607		
Amortization Expense	501,114	501,114	501,114		
CCA	1,564,710	1,435,187	1,316,936		



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 1

Name or General Description of Project

C13 Stations Switchgear

Asset Component

1808_Buildings and Fixtures - Stn Shell Site

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 156,692	\$ 156,692
Capital Investment	\$ 156,692	\$ -	\$ -
Closing Capital Investment	\$ 156,692	\$ 156,692	\$ 156,692
Opening Accumulated Amortization	\$ -	\$ 5,223	\$ 10,446
Amortization	3% \$ 5,223	\$ 5,223	\$ 5,223
Closing Accumulated Amortization	\$ 5,223	\$ 10,446	\$ 15,669
Opening Net Fixed Assets	\$ -	\$ 151,468	\$ 146,245
Closing Net Fixed Assets	\$ 151,468	\$ 146,245	\$ 141,022
Average Net Fixed Assets	\$ 75,734	\$ 148,857	\$ 143,634

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 150,424	\$ 144,407
Capital Additions	\$ 156,692	\$ -	\$ -
UCC Before Half Year Rule	\$ 156,692	\$ 150,424	\$ 144,407
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 156,692	\$ 150,424	\$ 144,407
CCA Rate Class	01		
CCA Rate	4%		
CCA	\$ 6,268	\$ 6,017	\$ 5,776
Closing UCC	\$ 150,424	\$ 144,407	\$ 138,631



Incremental Capital Project Summary

[Return to Main Summary](#)

Fixed Asset Amortization and UCC 2

Name or General Description of Project

C13 Stations Switchgear

Asset Component

1820_DS Equip - Normally Primary below 50 kV - Indoor Breaker

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 45,766	\$ 45,766
Capital Investment	\$ 45,766	\$ -	\$ -
Closing Capital Investment	\$ 45,766	\$ 45,766	\$ 45,766
Opening Accumulated Amortization	\$ -	\$ 1,526	\$ 3,051
Amortization	\$ 1,526	\$ 1,526	\$ 1,526
Closing Accumulated Amortization	\$ 1,526	\$ 3,051	\$ 4,577
Opening Net Fixed Assets	\$ -	\$ 44,240	\$ 42,715
Closing Net Fixed Assets	\$ 44,240	\$ 42,715	\$ 41,189
Average Net Fixed Assets	\$ 22,120	\$ 43,478	\$ 41,952

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 42,105	\$ 38,736
Capital Additions	\$ 45,766	\$ -	\$ -
UCC Before Half Year Rule	\$ 45,766	\$ 42,105	\$ 38,736
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 45,766	\$ 42,105	\$ 38,736
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 3,661	\$ 3,368	\$ 3,099
Closing UCC	\$ 42,105	\$ 38,736	\$ 35,637



Incremental Capital Project Summary

[Return to Main Summary](#)

Fixed Asset Amortization and UCC 3

Name or General Description of Project

C13 Stations Switchgear

Asset Component

1820_DS Equip - Normally Primary below 50 kV - Stn Service Batteries

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 5,886	\$ 5,886
Capital Investment	\$ 5,886	\$ -	\$ -
Closing Capital Investment	\$ 5,886	\$ 5,886	\$ 5,886
Opening Accumulated Amortization	\$ -	\$ 589	\$ 1,177
Amortization	10% \$ 589	\$ 589	\$ 589
Closing Accumulated Amortization	\$ 589	\$ 1,177	\$ 1,766
Opening Net Fixed Assets	\$ -	\$ 5,297	\$ 4,709
Closing Net Fixed Assets	\$ 5,297	\$ 4,709	\$ 4,120
Average Net Fixed Assets	\$ 2,649	\$ 5,003	\$ 4,415

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 5,415	\$ 4,982
Capital Additions	\$ 5,886	\$ -	\$ -
UCC Before Half Year Rule	\$ 5,886	\$ 5,415	\$ 4,982
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 5,886	\$ 5,415	\$ 4,982
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 471	\$ 433	\$ 399
Closing UCC	\$ 5,415	\$ 4,982	\$ 4,583



Incremental Capital Project Summary

[Return to Main Summary](#)

Fixed Asset Amortization and UCC 4

Name or General Description of Project

C13 Stations Switchgear

Asset Component

1820_DS Equip - Normally Primary below 50 kV - Stn Service Chargers

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 7,063	\$ 7,063
Capital Investment	\$ 7,063	\$ -	\$ -
Closing Capital Investment	\$ 7,063	\$ 7,063	\$ 7,063
Opening Accumulated Amortization	\$ -	\$ 353	\$ 706
Amortization	5% \$ 353	\$ 353	\$ 353
Closing Accumulated Amortization	\$ 353	\$ 706	\$ 1,059
Opening Net Fixed Assets	\$ -	\$ 6,710	\$ 6,357
Closing Net Fixed Assets	\$ 6,710	\$ 6,357	\$ 6,004
Average Net Fixed Assets	\$ 3,355	\$ 6,533	\$ 6,180

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 6,498	\$ 5,978
Capital Additions	\$ 7,063	\$ -	\$ -
UCC Before Half Year Rule	\$ 7,063	\$ 6,498	\$ 5,978
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 7,063	\$ 6,498	\$ 5,978
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 565	\$ 520	\$ 478
Closing UCC	\$ 6,498	\$ 5,978	\$ 5,500



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 5

Name or General Description of Project

C13 Stations Switchgear

Asset Component

1820_DS Equip - Normally Primary below 50 kV - Switchgear Air

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 16,842,016	\$ 16,842,016
Capital Investment	\$ 16,842,016	\$ -	\$ -
Closing Capital Investment	\$ 16,842,016	\$ 16,842,016	\$ 16,842,016
Opening Accumulated Amortization	\$ -	\$ 421,050	\$ 842,101
Amortization	3% \$ 421,050	\$ 421,050	\$ 421,050
Closing Accumulated Amortization	\$ 421,050	\$ 842,101	\$ 1,263,151
Opening Net Fixed Assets	\$ -	\$ 16,420,966	\$ 15,999,915
Closing Net Fixed Assets	\$ 16,420,966	\$ 15,999,915	\$ 15,578,865
Average Net Fixed Assets	\$ 8,210,483	\$ 16,210,441	\$ 15,789,390

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 15,494,655	\$ 14,255,082
Capital Additions	\$ 16,842,016	\$ -	\$ -
UCC Before Half Year Rule	\$ 16,842,016	\$ 15,494,655	\$ 14,255,082
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 16,842,016	\$ 15,494,655	\$ 14,255,082
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 1,347,361	\$ 1,239,572	\$ 1,140,407
Closing UCC	\$ 15,494,655	\$ 14,255,082	\$ 13,114,676



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 6

Name or General Description of Project

C13 Stations Switchgear

Asset Component

1830_Poles Towers and Fixtures

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 54,593	\$ 54,593
Capital Investment	\$ 54,593	\$ -	\$ -
Closing Capital Investment	\$ 54,593	\$ 54,593	\$ 54,593
Opening Accumulated Amortization	\$ -	\$ 1,365	\$ 2,730
Amortization	3% \$ 1,365	\$ 1,365	\$ 1,365
Closing Accumulated Amortization	\$ 1,365	\$ 2,730	\$ 4,094
Opening Net Fixed Assets	\$ -	\$ 53,228	\$ 51,863
Closing Net Fixed Assets	\$ 53,228	\$ 51,863	\$ 50,498
Average Net Fixed Assets	\$ 26,614	\$ 52,546	\$ 51,181

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 50,226	\$ 46,207
Capital Additions	\$ 54,593	\$ -	\$ -
UCC Before Half Year Rule	\$ 54,593	\$ 50,226	\$ 46,207
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 54,593	\$ 50,226	\$ 46,207
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 4,367	\$ 4,018	\$ 3,697
Closing UCC	\$ 50,226	\$ 46,207	\$ 42,511



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 7

Name or General Description of Project

C13 Stations Switchgear

Asset Component

1835_Overhead Conductors and Devices

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 146,834	\$ 146,834
Capital Investment	\$ 146,834	\$ -	\$ -
Closing Capital Investment	\$ 146,834	\$ 146,834	\$ 146,834
Opening Accumulated Amortization	\$ -	\$ 2,937	\$ 5,873
Amortization	\$ 2,937	\$ 2,937	\$ 2,937
Closing Accumulated Amortization	\$ 2,937	\$ 5,873	\$ 8,810
Opening Net Fixed Assets	\$ -	\$ 143,897	\$ 140,960
Closing Net Fixed Assets	\$ 143,897	\$ 140,960	\$ 138,024
Average Net Fixed Assets	\$ 71,949	\$ 142,429	\$ 139,492

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 135,087	\$ 124,280
Capital Additions	\$ 146,834	\$ -	\$ -
UCC Before Half Year Rule	\$ 146,834	\$ 135,087	\$ 124,280
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 146,834	\$ 135,087	\$ 124,280
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 11,747	\$ 10,807	\$ 9,942
Closing UCC	\$ 135,087	\$ 124,280	\$ 114,338



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 8

Name or General Description of Project

C13 Stations Switchgear

Asset Component

1835_Overhead Conductors and Devices - Switches

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 393,681	\$ 393,681
Capital Investment	\$ 393,681	\$ -	\$ -
Closing Capital Investment	\$ 393,681	\$ 393,681	\$ 393,681
Opening Accumulated Amortization	\$ -	\$ 13,123	\$ 26,245
Amortization	3% \$ 13,123	\$ 13,123	\$ 13,123
Closing Accumulated Amortization	\$ 13,123	\$ 26,245	\$ 39,368
Opening Net Fixed Assets	\$ -	\$ 380,558	\$ 367,436
Closing Net Fixed Assets	\$ 380,558	\$ 367,436	\$ 354,313
Average Net Fixed Assets	\$ 190,279	\$ 373,997	\$ 360,874

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 362,187	\$ 333,212
Capital Additions	\$ 393,681	\$ -	\$ -
UCC Before Half Year Rule	\$ 393,681	\$ 362,187	\$ 333,212
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 393,681	\$ 362,187	\$ 333,212
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 31,494	\$ 28,975	\$ 26,657
Closing UCC	\$ 362,187	\$ 333,212	\$ 306,555



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 9

Name or General Description of Project

C13 Stations Switchgear

Asset Component

1840 Underground Conduit - Cable Chamber

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 105,572	\$ 105,572
Capital Investment	\$ 105,572	\$ -	\$ -
Closing Capital Investment	\$ 105,572	\$ 105,572	\$ 105,572
Opening Accumulated Amortization	\$ -	\$ 2,111	\$ 4,223
Amortization	\$ 2,111	\$ 2,111	\$ 2,111
Closing Accumulated Amortization	\$ 2,111	\$ 4,223	\$ 6,334
Opening Net Fixed Assets	\$ -	\$ 103,460	\$ 101,349
Closing Net Fixed Assets	\$ 103,460	\$ 101,349	\$ 99,237
Average Net Fixed Assets	\$ 51,730	\$ 102,404	\$ 100,293

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 97,126	\$ 89,356
Capital Additions	\$ 105,572	\$ -	\$ -
UCC Before Half Year Rule	\$ 105,572	\$ 97,126	\$ 89,356
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 105,572	\$ 97,126	\$ 89,356
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 8,446	\$ 7,770	\$ 7,148
Closing UCC	\$ 97,126	\$ 89,356	\$ 82,207



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 10

Name or General Description of Project

C13 Stations Switchgear

Asset Component

1840 Underground Conduit - Duct Bank

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 607,419	\$ 607,419
Capital Investment	\$ 607,419	\$ -	\$ -
Closing Capital Investment	\$ 607,419	\$ 607,419	\$ 607,419
Opening Accumulated Amortization	\$ -	\$ 20,247	\$ 40,495
Amortization	3% \$ 20,247	\$ 20,247	\$ 20,247
Closing Accumulated Amortization	\$ 20,247	\$ 40,495	\$ 60,742
Opening Net Fixed Assets	\$ -	\$ 587,171	\$ 566,924
Closing Net Fixed Assets	\$ 587,171	\$ 566,924	\$ 546,677
Average Net Fixed Assets	\$ 293,586	\$ 577,048	\$ 556,800

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 558,825	\$ 514,119
Capital Additions	\$ 607,419	\$ -	\$ -
UCC Before Half Year Rule	\$ 607,419	\$ 558,825	\$ 514,119
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 607,419	\$ 558,825	\$ 514,119
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 48,593	\$ 44,706	\$ 41,130
Closing UCC	\$ 558,825	\$ 514,119	\$ 472,990



Incremental Capital Project Summary

[Return to Main Summary](#)

Fixed Asset Amortization and UCC 11

Name or General Description of Project

C13 Stations Switchgear

Asset Component

1845 Underground Conductors and Devices

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 792,915	\$ 792,915
Capital Investment	\$ 792,915	\$ -	\$ -
Closing Capital Investment	\$ 792,915	\$ 792,915	\$ 792,915
Opening Accumulated Amortization	\$ -	\$ 19,823	\$ 39,646
Amortization	3% \$ 19,823	\$ 19,823	\$ 19,823
Closing Accumulated Amortization	\$ 19,823	\$ 39,646	\$ 59,469
Opening Net Fixed Assets	\$ -	\$ 773,092	\$ 753,270
Closing Net Fixed Assets	\$ 773,092	\$ 753,270	\$ 733,447
Average Net Fixed Assets	\$ 386,546	\$ 763,181	\$ 743,358

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 729,482	\$ 671,124
Capital Additions	\$ 792,915	\$ -	\$ -
UCC Before Half Year Rule	\$ 792,915	\$ 729,482	\$ 671,124
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 792,915	\$ 729,482	\$ 671,124
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 63,433	\$ 58,359	\$ 53,690
Closing UCC	\$ 729,482	\$ 671,124	\$ 617,434



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 12

Name or General Description of Project

C13 Stations Switchgear

Asset Component

1980 System Supervisory Equipment

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 191,513	\$ 191,513
Capital Investment	\$ 191,513	\$ -	\$ -
Closing Capital Investment	\$ 191,513	\$ 191,513	\$ 191,513
Opening Accumulated Amortization	\$ -	\$ 12,768	\$ 25,535
Amortization	7% \$ 12,768	\$ 12,768	\$ 12,768
Closing Accumulated Amortization	\$ 12,768	\$ 25,535	\$ 38,303
Opening Net Fixed Assets	\$ -	\$ 178,745	\$ 165,978
Closing Net Fixed Assets	\$ 178,745	\$ 165,978	\$ 153,210
Average Net Fixed Assets	\$ 89,373	\$ 172,361	\$ 159,594

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 153,210	\$ 122,568
Capital Additions	\$ 191,513	\$ -	\$ -
UCC Before Half Year Rule	\$ 191,513	\$ 153,210	\$ 122,568
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 191,513	\$ 153,210	\$ 122,568
CCA Rate Class	08		
CCA Rate	20%		
CCA	\$ 38,303	\$ 30,642	\$ 24,514
Closing UCC	\$ 153,210	\$ 122,568	\$ 98,055



Incremental Capital Project Summary

Using the pull-down menu below, please identify what year of the IRM cycle you are in.

3rd Year of IRM Cycle

Name or General Description of Project

C13 Stations Switchgear

Year

2013

Details of Project

C13 Stations Switchgear

Number of Asset Components

16

Asset Component (Click on the Number to View the Component Details)	Capital Cost	Depreciation Rate	CCA Class	CCA Rate
1 1808_Buildings and Fixtures - Stn Shell Site	18,747	3%	01	4%
2 1820_DS Equip - Normally Primary below 50 kV - Stn Service Batteries	3,990	10%	47	8%
3 1820_DS Equip - Normally Primary below 50 kV - Switchgear Air	9,363,371	3%	47	8%
4 1820_DS Equip - Normally Primary below 50 kV - Switchgear GIS	6,901,748	3%	47	8%
5 1830_Poles Towers and Fixtures	99,710	3%	47	8%
6 1835_Overhead Conductors and Devices	156,808	2%	47	8%
7 1835_Overhead Conductors and Devices - Switches	334,802	3%	47	8%
8 1840_Underground Conduit - Cable Chamber	292,191	2%	47	8%
9 1840_Underground Conduit - Duct Bank	574,467	3%	47	8%
10 1840_Underground Conduit - Vault	4,167	3%	47	8%
11 1840_Underground Conduit - Vault Roof	1,856	5%	47	8%
12 1845_Underground Conductors and Devices	961,947	3%	47	8%
13 1845_Underground Conductors and Devices - Switch	6,491	5%	47	8%
14 1980_System Supervisory Equipment	32,751	7%	08	20%
15 1855_Services - UG	2,019	3%	47	8%
16 1855_Services - OH	1,253	2%	47	8%

	2013	2014
Closing Net Fixed Asset	18,280,055	17,803,793
Amortization Expense	476,263	476,263
CCA	1,503,686	1,382,635



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 1

Name or General Description of Project

C13 Stations Switchgear

Asset Component

1808_Buildings and Fixtures - Stn Shell Site

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 18,747
Capital Investment	\$ 18,747	\$ -
Closing Capital Investment	\$ 18,747	\$ 18,747
Opening Accumulated Amortization	\$ -	\$ 625
Amortization	3% \$ 625	\$ 625
Closing Accumulated Amortization	\$ 625	\$ 1,250
Opening Net Fixed Assets	\$ -	\$ 18,122
Closing Net Fixed Assets	\$ 18,122	\$ 17,497
Average Net Fixed Assets	\$ 9,061	\$ 17,810

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 17,997
Capital Additions	\$ 18,747	\$ -
UCC Before Half Year Rule	\$ 18,747	\$ 17,997
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 18,747	\$ 17,997
CCA Rate Class	01	
CCA Rate	4%	
CCA	\$ 750	\$ 720
Closing UCC	\$ 17,997	\$ 17,277



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 2

Name or General Description of Project

C13 Stations Switchgear

Asset Component

1820_DS Equip - Normally Primary below 50 kV - Stn Service Batteries

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 3,990
Capital Investment	\$ 3,990	\$ -
Closing Capital Investment	\$ 3,990	\$ 3,990
Opening Accumulated Amortization	\$ -	\$ 399
Amortization	10% \$ 399	\$ 399
Closing Accumulated Amortization	\$ 399	\$ 798
Opening Net Fixed Assets	\$ -	\$ 3,591
Closing Net Fixed Assets	\$ 3,591	\$ 3,192
Average Net Fixed Assets	\$ 1,795	\$ 3,391

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 3,670
Capital Additions	\$ 3,990	\$ -
UCC Before Half Year Rule	\$ 3,990	\$ 3,670
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 3,990	\$ 3,670
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 319	\$ 294
Closing UCC	\$ 3,670	\$ 3,377



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 3

Name or General Description of Project

C13 Stations Switchgear

Asset Component

1820_DS Equip - Normally Primary below 50 kV - Switchgear Air

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 9,363,371
Capital Investment	\$ 9,363,371	\$ -
Closing Capital Investment	\$ 9,363,371	\$ 9,363,371
Opening Accumulated Amortization	\$ -	\$ 234,084
Amortization	3% \$ 234,084	\$ 234,084
Closing Accumulated Amortization	\$ 234,084	\$ 468,169
Opening Net Fixed Assets	\$ -	\$ 9,129,286
Closing Net Fixed Assets	\$ 9,129,286	\$ 8,895,202
Average Net Fixed Assets	\$ 4,564,643	\$ 9,012,244

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 8,614,301
Capital Additions	\$ 9,363,371	\$ -
UCC Before Half Year Rule	\$ 9,363,371	\$ 8,614,301
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 9,363,371	\$ 8,614,301
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 749,070	\$ 689,144
Closing UCC	\$ 8,614,301	\$ 7,925,157



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 4

Name or General Description of Project

C13 Stations Switchgear

Asset Component

1820_DS Equip - Normally Primary below 50 kV - Switchgear GIS

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 6,901,748
Capital Investment	\$ 6,901,748	\$ -
Closing Capital Investment	\$ 6,901,748	\$ 6,901,748
Opening Accumulated Amortization	\$ -	\$ 172,544
Amortization	3% \$ 172,544	\$ 172,544
Closing Accumulated Amortization	\$ 172,544	\$ 345,087
Opening Net Fixed Assets	\$ -	\$ 6,729,205
Closing Net Fixed Assets	\$ 6,729,205	\$ 6,556,661
Average Net Fixed Assets	\$ 3,364,602	\$ 6,642,933

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 6,349,609
Capital Additions	\$ 6,901,748	\$ -
UCC Before Half Year Rule	\$ 6,901,748	\$ 6,349,609
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 6,901,748	\$ 6,349,609
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 552,140	\$ 507,969
Closing UCC	\$ 6,349,609	\$ 5,841,640



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 5

Name or General Description of Project

C13 Stations Switchgear

Asset Component

1830_Poles Towers and Fixtures

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 99,710
Capital Investment	\$ 99,710	\$ -
Closing Capital Investment	\$ 99,710	\$ 99,710
Opening Accumulated Amortization	\$ -	\$ 2,493
Amortization	3% \$ 2,493	\$ 2,493
Closing Accumulated Amortization	\$ 2,493	\$ 4,985
Opening Net Fixed Assets	\$ -	\$ 97,217
Closing Net Fixed Assets	\$ 97,217	\$ 94,724
Average Net Fixed Assets	\$ 48,608	\$ 95,970

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 91,733
Capital Additions	\$ 99,710	\$ -
UCC Before Half Year Rule	\$ 99,710	\$ 91,733
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 99,710	\$ 91,733
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 7,977	\$ 7,339
Closing UCC	\$ 91,733	\$ 84,394



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 6

Name or General Description of Project

C13 Stations Switchgear

Asset Component

1835_Overhead Conductors and Devices

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 156,808
Capital Investment	\$ 156,808	\$ -
Closing Capital Investment	\$ 156,808	\$ 156,808
Opening Accumulated Amortization	\$ -	\$ 3,136
Amortization	2% \$ 3,136	\$ 3,136
Closing Accumulated Amortization	\$ 3,136	\$ 6,272
Opening Net Fixed Assets	\$ -	\$ 153,672
Closing Net Fixed Assets	\$ 153,672	\$ 150,536
Average Net Fixed Assets	\$ 76,836	\$ 152,104

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 144,264
Capital Additions	\$ 156,808	\$ -
UCC Before Half Year Rule	\$ 156,808	\$ 144,264
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 156,808	\$ 144,264
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 12,545	\$ 11,541
Closing UCC	\$ 144,264	\$ 132,723



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 7

Name or General Description of Project

C13 Stations Switchgear

Asset Component

1835_Overhead Conductors and Devices - Switches

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 334,802
Capital Investment	\$ 334,802	\$ -
Closing Capital Investment	\$ 334,802	\$ 334,802
Opening Accumulated Amortization	\$ -	\$ 11,160
Amortization	3% \$ 11,160	\$ 11,160
Closing Accumulated Amortization	\$ 11,160	\$ 22,320
Opening Net Fixed Assets	\$ -	\$ 323,642
Closing Net Fixed Assets	\$ 323,642	\$ 312,482
Average Net Fixed Assets	\$ 161,821	\$ 318,062

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 308,018
Capital Additions	\$ 334,802	\$ -
UCC Before Half Year Rule	\$ 334,802	\$ 308,018
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 334,802	\$ 308,018
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 26,784	\$ 24,641
Closing UCC	\$ 308,018	\$ 283,377



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 8

Name or General Description of Project

C13 Stations Switchgear

Asset Component

1840_Underground Conduit - Cable Chamber

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 292,191
Capital Investment	\$ 292,191	\$ -
Closing Capital Investment	\$ 292,191	\$ 292,191
Opening Accumulated Amortization	\$ -	\$ 5,844
Amortization	2% \$ 5,844	\$ 5,844
Closing Accumulated Amortization	\$ 5,844	\$ 11,688
Opening Net Fixed Assets	\$ -	\$ 286,347
Closing Net Fixed Assets	\$ 286,347	\$ 280,503
Average Net Fixed Assets	\$ 143,173	\$ 283,425

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 268,815
Capital Additions	\$ 292,191	\$ -
UCC Before Half Year Rule	\$ 292,191	\$ 268,815
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 292,191	\$ 268,815
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 23,375	\$ 21,505
Closing UCC	\$ 268,815	\$ 247,310



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 9

Name or General Description of Project

C13 Stations Switchgear

Asset Component

1840 Underground Conduit - Duct Bank

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 574,467
Capital Investment	\$ 574,467	\$ -
Closing Capital Investment	\$ 574,467	\$ 574,467
Opening Accumulated Amortization	\$ -	\$ 19,149
Amortization	3% \$ 19,149	\$ 19,149
Closing Accumulated Amortization	\$ 19,149	\$ 38,298
Opening Net Fixed Assets	\$ -	\$ 555,318
Closing Net Fixed Assets	\$ 555,318	\$ 536,169
Average Net Fixed Assets	\$ 277,659	\$ 545,743

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 528,509
Capital Additions	\$ 574,467	\$ -
UCC Before Half Year Rule	\$ 574,467	\$ 528,509
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 574,467	\$ 528,509
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 45,957	\$ 42,281
Closing UCC	\$ 528,509	\$ 486,229



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 10

Name or General Description of Project

C13 Stations Switchgear

Asset Component

1840_Underground Conduit - Vault

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 4,167
Capital Investment	\$ 4,167	\$ -
Closing Capital Investment	\$ 4,167	\$ 4,167
Opening Accumulated Amortization	\$ -	\$ 104
Amortization	3% \$ 104	\$ 104
Closing Accumulated Amortization	\$ 104	\$ 208
Opening Net Fixed Assets	\$ -	\$ 4,063
Closing Net Fixed Assets	\$ 4,063	\$ 3,959
Average Net Fixed Assets	\$ 2,032	\$ 4,011

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 3,834
Capital Additions	\$ 4,167	\$ -
UCC Before Half Year Rule	\$ 4,167	\$ 3,834
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 4,167	\$ 3,834
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 333	\$ 307
Closing UCC	\$ 3,834	\$ 3,527



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 11

Name or General Description of Project

C13 Stations Switchgear

Asset Component

1840 Underground Conduit - Vault Roof

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 1,856
Capital Investment	\$ 1,856	\$ -
Closing Capital Investment	\$ 1,856	\$ 1,856
Opening Accumulated Amortization	\$ -	\$ 93
Amortization	5% \$ 93	\$ 93
Closing Accumulated Amortization	\$ 93	\$ 186
Opening Net Fixed Assets	\$ -	\$ 1,763
Closing Net Fixed Assets	\$ 1,763	\$ 1,671
Average Net Fixed Assets	\$ 882	\$ 1,717

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 1,708
Capital Additions	\$ 1,856	\$ -
UCC Before Half Year Rule	\$ 1,856	\$ 1,708
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 1,856	\$ 1,708
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 149	\$ 137
Closing UCC	\$ 1,708	\$ 1,571



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 12

Name or General Description of Project

C13 Stations Switchgear

Asset Component

1845 Underground Conductors and Devices

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 961,947
Capital Investment	\$ 961,947	\$ -
Closing Capital Investment	\$ 961,947	\$ 961,947
Opening Accumulated Amortization	\$ -	\$ 24,049
Amortization	3% \$ 24,049	\$ 24,049
Closing Accumulated Amortization	\$ 24,049	\$ 48,097
Opening Net Fixed Assets	\$ -	\$ 937,899
Closing Net Fixed Assets	\$ 937,899	\$ 913,850
Average Net Fixed Assets	\$ 468,949	\$ 925,874

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 884,991
Capital Additions	\$ 961,947	\$ -
UCC Before Half Year Rule	\$ 961,947	\$ 884,991
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 961,947	\$ 884,991
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 76,956	\$ 70,799
Closing UCC	\$ 884,991	\$ 814,192



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 13

Name or General Description of Project

C13 Stations Switchgear

Asset Component

1845_Underground Conductors and Devices - Switch

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 6,491
Capital Investment	\$ 6,491	\$ -
Closing Capital Investment	\$ 6,491	\$ 6,491
Opening Accumulated Amortization	\$ -	\$ 325
Amortization	5% \$ 325	\$ 325
Closing Accumulated Amortization	\$ 325	\$ 649
Opening Net Fixed Assets	\$ -	\$ 6,167
Closing Net Fixed Assets	\$ 6,167	\$ 5,842
Average Net Fixed Assets	\$ 3,083	\$ 6,005

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 5,972
Capital Additions	\$ 6,491	\$ -
UCC Before Half Year Rule	\$ 6,491	\$ 5,972
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 6,491	\$ 5,972
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 519	\$ 478
Closing UCC	\$ 5,972	\$ 5,494



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 14

Name or General Description of Project

C13 Stations Switchgear

Asset Component

1980_System Supervisory Equipment

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 32,751
Capital Investment	\$ 32,751	\$ -
Closing Capital Investment	\$ 32,751	\$ 32,751
Opening Accumulated Amortization	\$ -	\$ 2,183
Amortization	7% \$ 2,183	\$ 2,183
Closing Accumulated Amortization	\$ 2,183	\$ 4,367
Opening Net Fixed Assets	\$ -	\$ 30,568
Closing Net Fixed Assets	\$ 30,568	\$ 28,384
Average Net Fixed Assets	\$ 15,284	\$ 29,476

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 26,201
Capital Additions	\$ 32,751	\$ -
UCC Before Half Year Rule	\$ 32,751	\$ 26,201
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 32,751	\$ 26,201
CCA Rate Class	08	
CCA Rate	20%	
CCA	\$ 6,550	\$ 5,240
Closing UCC	\$ 26,201	\$ 20,961



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 15

Name or General Description of Project

C13 Stations Switchgear

Asset Component

1855_Services - UG

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 2,019
Capital Investment	\$ 2,019	\$ -
Closing Capital Investment	\$ 2,019	\$ 2,019
Opening Accumulated Amortization	\$ -	\$ 50
Amortization	3% \$ 50	\$ 50
Closing Accumulated Amortization	\$ 50	\$ 101
Opening Net Fixed Assets	\$ -	\$ 1,968
Closing Net Fixed Assets	\$ 1,968	\$ 1,918
Average Net Fixed Assets	\$ 984	\$ 1,943

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 1,857
Capital Additions	\$ 2,019	\$ -
UCC Before Half Year Rule	\$ 2,019	\$ 1,857
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 2,019	\$ 1,857
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 161	\$ 149
Closing UCC	\$ 1,857	\$ 1,709



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 16

Name or General Description of Project

C13 Stations Switchgear

Asset Component

1855_Services - OH

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 1,253
Capital Investment	\$ 1,253	\$ -
Closing Capital Investment	\$ 1,253	\$ 1,253
Opening Accumulated Amortization	\$ -	\$ 25
Amortization	2% \$ 25	\$ 25
Closing Accumulated Amortization	\$ 25	\$ 50
Opening Net Fixed Assets	\$ -	\$ 1,228
Closing Net Fixed Assets	\$ 1,228	\$ 1,203
Average Net Fixed Assets	\$ 614	\$ 1,215

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 1,153
Capital Additions	\$ 1,253	\$ -
UCC Before Half Year Rule	\$ 1,253	\$ 1,153
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 1,253	\$ 1,153
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 100	\$ 92
Closing UCC	\$ 1,153	\$ 1,061



Incremental Capital Project Summary

Using the pull-down menu below, please identify what year of the IRM cycle you are in.

4th Year of IRM Cycle

Name or General Description of Project

C13 Stations Switchgear

Details of Project

C13 Stations Switchgear

Year

2014

Number of Asset Components

9

Asset Component (Click on the Number to View the Component Details)	Capital Cost	Capital Cost (1/2 year rule applied)	Depreciation Rate	CCA Class	CCA Rate
1 1808_Buildings and Fixtures - Stn Shell Site	441,261	220,630	3%	01	4%
2 1820_DS Equip - Normally Primary below 50 kV - Switchgear Air	18,674,331	9,337,165	3%	47	8%
3 1830_Poles Towers and Fixtures	19,882	9,941	3%	47	8%
4 1835_Overhead Conductors and Devices	66,964	33,482	2%	47	8%
5 1835_Overhead Conductors and Devices - Switches	200,463	100,232	3%	47	8%
6 1840_Underground Conduit - Duct Bank	184,135	92,067	3%	47	8%
7 1845_Underground Conductors and Devices	556,616	278,308	3%	47	8%
8 1845_Underground Conductors and Devices - Switch	11,692	5,846	5%	47	8%
9 1980_System Supervisory Equipment	153,307	76,653	7%	08	20%
2014					
Closing Net Fixed Asset	9,893,853				
Amortization Expense	260,472				
CCA	812,719				



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 1

Name or General Description of Project

C13 Stations Switchgear

Asset Component

1808_Buildings and Fixtures - Stn Shell Site

Average Net Fixed Assets

Net Fixed Assets

2014
Forecasted

Opening Capital Investment	\$	-
Capital Investment	\$	220,630
Closing Capital Investment	\$	220,630
Opening Accumulated Amortization	\$	-
Amortization	3%	\$ 7,354
Closing Accumulated Amortization	\$	7,354
Opening Net Fixed Assets	\$	-
Closing Net Fixed Assets	\$	213,276
Average Net Fixed Assets	\$	106,638

For PILs Calculation

UCC

2014
Forecasted

Opening UCC	\$	-
Capital Additions	\$	220,630
UCC Before Half Year Rule	\$	220,630
Half Year Rule (1/2 Additions - Disposals)	\$	-
Reduced UCC	\$	220,630
CCA Rate Class	01	
CCA Rate	4%	
CCA	\$	8,825
Closing UCC	\$	211,805



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 2

Name or General Description of Project

C13 Stations Switchgear

Asset Component

1820_DS Equip - Normally Primary below 50 kV - Switchgear Air

Average Net Fixed Assets

Net Fixed Assets

2014
Forecasted

Opening Capital Investment	\$ -
Capital Investment	\$ 9,337,165
Closing Capital Investment	\$ 9,337,165
Opening Accumulated Amortization	\$ -
Amortization	3% \$ 233,429
Closing Accumulated Amortization	\$ 233,429
Opening Net Fixed Assets	\$ -
Closing Net Fixed Assets	\$ 9,103,736
Average Net Fixed Assets	\$ 4,551,868

For PILs Calculation

UCC

2014
Forecasted

Opening UCC	\$ -
Capital Additions	\$ 9,337,165
UCC Before Half Year Rule	\$ 9,337,165
Half Year Rule (1/2 Additions - Disposals)	\$ -
Reduced UCC	\$ 9,337,165
CCA Rate Class	47
CCA Rate	8%
CCA	\$ 746,973
Closing UCC	\$ 8,590,192



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 3

Name or General Description of Project

C13 Stations Switchgear

Asset Component

1830_Poles Towers and Fixtures

Average Net Fixed Assets

Net Fixed Assets

2014
Forecasted

Opening Capital Investment	\$	-
Capital Investment	\$	9,941
Closing Capital Investment	\$	9,941
Opening Accumulated Amortization	\$	-
Amortization	3%	\$ 249
Closing Accumulated Amortization	\$	249
Opening Net Fixed Assets	\$	-
Closing Net Fixed Assets	\$	9,693
Average Net Fixed Assets	\$	4,846

For PILs Calculation

UCC

2014
Forecasted

Opening UCC	\$	-
Capital Additions	\$	9,941
UCC Before Half Year Rule	\$	9,941
Half Year Rule (1/2 Additions - Disposals)	\$	-
Reduced UCC	\$	9,941
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$	795
Closing UCC	\$	9,146



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 4

Name or General Description of Project

C13 Stations Switchgear

Asset Component

1835_Overhead Conductors and Devices

Average Net Fixed Assets

Net Fixed Assets

2014
Forecasted

Opening Capital Investment	\$	-
Capital Investment	\$	33,482
Closing Capital Investment	\$	33,482
Opening Accumulated Amortization	\$	-
Amortization	2%	\$ 670
Closing Accumulated Amortization	\$	670
Opening Net Fixed Assets	\$	-
Closing Net Fixed Assets	\$	32,812
Average Net Fixed Assets	\$	16,406

For PILs Calculation

UCC

2014
Forecasted

Opening UCC	\$	-
Capital Additions	\$	33,482
UCC Before Half Year Rule	\$	33,482
Half Year Rule (1/2 Additions - Disposals)	\$	-
Reduced UCC	\$	33,482
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$	2,679
Closing UCC	\$	30,803



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 5

Name or General Description of Project

C13 Stations Switchgear

Asset Component

1835_Overhead Conductors and Devices - Switches

Average Net Fixed Assets

Net Fixed Assets

2014

Forecasted

Opening Capital Investment	\$	-
Capital Investment	\$	100,232
Closing Capital Investment	\$	100,232
Opening Accumulated Amortization	\$	-
Amortization	3%	\$ 3,341
Closing Accumulated Amortization	\$	3,341
Opening Net Fixed Assets	\$	-
Closing Net Fixed Assets	\$	96,891
Average Net Fixed Assets	\$	48,445

For PILs Calculation

UCC

2014

Forecasted

Opening UCC	\$	-
Capital Additions	\$	100,232
UCC Before Half Year Rule	\$	100,232
Half Year Rule (1/2 Additions - Disposals)	\$	-
Reduced UCC	\$	100,232
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$	8,019
Closing UCC	\$	92,213



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 6

Name or General Description of Project

C13 Stations Switchgear

Asset Component

1840 Underground Conduit - Duct Bank

Average Net Fixed Assets

Net Fixed Assets

2014
Forecasted

Opening Capital Investment	\$	-
Capital Investment	\$	92,067
Closing Capital Investment	\$	92,067
Opening Accumulated Amortization	\$	-
Amortization	3%	\$ 3,069
Closing Accumulated Amortization	\$	3,069
Opening Net Fixed Assets	\$	-
Closing Net Fixed Assets	\$	88,998
Average Net Fixed Assets	\$	44,499

For PILs Calculation

UCC

2014
Forecasted

Opening UCC	\$	-
Capital Additions	\$	92,067
UCC Before Half Year Rule	\$	92,067
Half Year Rule (1/2 Additions - Disposals)	\$	-
Reduced UCC	\$	92,067
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$	7,365
Closing UCC	\$	84,702



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 7

Name or General Description of Project

C13 Stations Switchgear

Asset Component

1845 Underground Conductors and Devices

Average Net Fixed Assets

Net Fixed Assets

2014
Forecasted

Opening Capital Investment	\$	-
Capital Investment	\$	278,308
Closing Capital Investment	\$	278,308
Opening Accumulated Amortization	\$	-
Amortization	3%	\$ 6,958
Closing Accumulated Amortization	\$	6,958
Opening Net Fixed Assets	\$	-
Closing Net Fixed Assets	\$	271,350
Average Net Fixed Assets	\$	135,675

For PILs Calculation

UCC

2014
Forecasted

Opening UCC	\$	-
Capital Additions	\$	278,308
UCC Before Half Year Rule	\$	278,308
Half Year Rule (1/2 Additions - Disposals)	\$	-
Reduced UCC	\$	278,308
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$	22,265
Closing UCC	\$	256,043



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 8

Name or General Description of Project

C13 Stations Switchgear

Asset Component

1845_Underground Conductors and Devices - Switch

Average Net Fixed Assets

Net Fixed Assets

2014
Forecasted

Opening Capital Investment	\$	-
Capital Investment	\$	5,846
Closing Capital Investment	\$	5,846
Opening Accumulated Amortization	\$	-
Amortization	5%	\$ 292
Closing Accumulated Amortization	\$	292
Opening Net Fixed Assets	\$	-
Closing Net Fixed Assets	\$	5,553
Average Net Fixed Assets	\$	2,777

For PILs Calculation

UCC

2014
Forecasted

Opening UCC	\$	-
Capital Additions	\$	5,846
UCC Before Half Year Rule	\$	5,846
Half Year Rule (1/2 Additions - Disposals)	\$	-
Reduced UCC	\$	5,846
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$	468
Closing UCC	\$	5,378



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 9

Name or General Description of Project

C13 Stations Switchgear

Asset Component

1980 System Supervisory Equipment

Average Net Fixed Assets

Net Fixed Assets

2014
Forecasted

Opening Capital Investment	\$	-
Capital Investment	\$	76,653
Closing Capital Investment	\$	76,653
Opening Accumulated Amortization	\$	-
Amortization	7%	\$ 5,110
Closing Accumulated Amortization	\$	5,110
Opening Net Fixed Assets	\$	-
Closing Net Fixed Assets	\$	71,543
Average Net Fixed Assets	\$	35,772

For PILs Calculation

UCC

2014
Forecasted

Opening UCC	\$	-
Capital Additions	\$	76,653
UCC Before Half Year Rule	\$	76,653
Half Year Rule (1/2 Additions - Disposals)	\$	-
Reduced UCC	\$	76,653
CCA Rate Class	08	
CCA Rate	20%	
CCA	\$	15,331
Closing UCC	\$	61,323



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 1

Name or General Description of Project

C14 Stations Circuit Breakers

Asset Component

1808 Buildings and Fixtures - Stn Shell Site

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 15,415	\$ 15,415
Capital Investment	\$ 15,415	\$ -	\$ -
Closing Capital Investment	\$ 15,415	\$ 15,415	\$ 15,415
Opening Accumulated Amortization	\$ -	\$ 514	\$ 1,028
Amortization	3% \$ 514	\$ 514	\$ 514
Closing Accumulated Amortization	\$ 514	\$ 1,028	\$ 1,542
Opening Net Fixed Assets	\$ -	\$ 14,901	\$ 14,387
Closing Net Fixed Assets	\$ 14,901	\$ 14,387	\$ 13,874
Average Net Fixed Assets	\$ 7,451	\$ 14,644	\$ 14,131

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 14,798	\$ 14,207
Capital Additions	\$ 15,415	\$ -	\$ -
UCC Before Half Year Rule	\$ 15,415	\$ 14,798	\$ 14,207
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 15,415	\$ 14,798	\$ 14,207
CCA Rate Class	01		
CCA Rate	4%		
CCA	\$ 617	\$ 592	\$ 568
Closing UCC	\$ 14,798	\$ 14,207	\$ 13,638



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 2

Name or General Description of Project

C14 Stations Circuit Breakers

Asset Component

1820_DS Equip - Normally Primary below 50 kV - Outdoor Breaker

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 1,338,326	\$ 1,338,326
Capital Investment	\$ 1,338,326	\$ -	\$ -
Closing Capital Investment	\$ 1,338,326	\$ 1,338,326	\$ 1,338,326
Opening Accumulated Amortization	\$ -	\$ 44,611	\$ 89,222
Amortization	3% \$ 44,611	\$ 44,611	\$ 44,611
Closing Accumulated Amortization	\$ 44,611	\$ 89,222	\$ 133,833
Opening Net Fixed Assets	\$ -	\$ 1,293,715	\$ 1,249,104
Closing Net Fixed Assets	\$ 1,293,715	\$ 1,249,104	\$ 1,204,493
Average Net Fixed Assets	\$ 646,857	\$ 1,271,409	\$ 1,226,799

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 1,231,260	\$ 1,132,759
Capital Additions	\$ 1,338,326	\$ -	\$ -
UCC Before Half Year Rule	\$ 1,338,326	\$ 1,231,260	\$ 1,132,759
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 1,338,326	\$ 1,231,260	\$ 1,132,759
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 107,066	\$ 98,501	\$ 90,621
Closing UCC	\$ 1,231,260	\$ 1,132,759	\$ 1,042,138



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 3

Name or General Description of Project

C14 Stations Circuit Breakers

Asset Component

1840 Underground Conduit - Duct Bank

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 17,781	\$ 17,781
Capital Investment	\$ 17,781	\$ -	\$ -
Closing Capital Investment	\$ 17,781	\$ 17,781	\$ 17,781
Opening Accumulated Amortization	\$ -	\$ 593	\$ 1,185
Amortization	\$ 593	\$ 593	\$ 593
Closing Accumulated Amortization	\$ 593	\$ 1,185	\$ 1,778
Opening Net Fixed Assets	\$ -	\$ 17,189	\$ 16,596
Closing Net Fixed Assets	\$ 17,189	\$ 16,596	\$ 16,003
Average Net Fixed Assets	\$ 8,594	\$ 16,892	\$ 16,300

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 16,359	\$ 15,050
Capital Additions	\$ 17,781	\$ -	\$ -
UCC Before Half Year Rule	\$ 17,781	\$ 16,359	\$ 15,050
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 17,781	\$ 16,359	\$ 15,050
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 1,423	\$ 1,309	\$ 1,204
Closing UCC	\$ 16,359	\$ 15,050	\$ 13,846



Incremental Capital Project Summary

Using the pull-down menu below, please identify what year of the IRM cycle you are in.

3rd Year of IRM Cycle

Name or General Description of Project

C14 Stations Circuit Breakers

Year

2013

Details of Project

C14 Stations Circuit Breakers

Number of Asset Components

1

Asset Component (Click on the Number to View the Component Details)

1 1820_DS Equip - Normally Primary below 50 kV - Outdoor Breaker

Capital Cost

1,076,332

Depreciation
Rate

3%

CCA Class

47

CCA Rate

8%

2013

2014

Closing Net Fixed Asset

1,040,454

1,004,576

Amortization Expense

35,878

35,878

CCA

86,107

79,218



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 1

Name or General Description of Project

C14 Stations Circuit Breakers

Asset Component

1820_DS Equip - Normally Primary below 50 kV - Outdoor Breaker

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 1,076,332
Capital Investment	\$ 1,076,332	\$ -
Closing Capital Investment	\$ 1,076,332	\$ 1,076,332
Opening Accumulated Amortization	\$ -	\$ 35,878
Amortization	3% \$ 35,878	\$ 35,878
Closing Accumulated Amortization	\$ 35,878	\$ 71,755
Opening Net Fixed Assets	\$ -	\$ 1,040,454
Closing Net Fixed Assets	\$ 1,040,454	\$ 1,004,576
Average Net Fixed Assets	\$ 520,227	\$ 1,022,515

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 990,225
Capital Additions	\$ 1,076,332	\$ -
UCC Before Half Year Rule	\$ 1,076,332	\$ 990,225
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 1,076,332	\$ 990,225
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 86,107	\$ 79,218
Closing UCC	\$ 990,225	\$ 911,007



Incremental Capital Project Summary

Using the pull-down menu below, please identify what year of the IRM cycle you are in.

4th Year of IRM Cycle

Name or General Description of Project

C14 Stations Circuit Breakers

Year

2014

Details of Project

C14 Stations Circuit Breakers

Number of Asset Components

2

Asset Component (Click on the Number to View the Component Details)	Capital Cost	Capital Cost (1/2 year rule applied)	Depreciation Rate	CCA Class	CCA Rate
1 1808_Buildings and Fixtures - Stn Shell Site	21,948	10,974	3%	01	4%
2 1820_DS Equip - Normally Primary below 50 kV - Outdoor Breaker	1,358,801	679,400	3%	47	8%
Closing Net Fixed Asset	667,362				
Amortization Expense	23,012				
CCA	54,791				



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 1

Name or General Description of Project

C14 Stations Circuit Breakers

Asset Component

1808_Buildings and Fixtures - Stn Shell Site

Average Net Fixed Assets

Net Fixed Assets

	2014 Forecasted
Opening Capital Investment	\$ -
Capital Investment	\$ 10,974
Closing Capital Investment	\$ 10,974
Opening Accumulated Amortization	\$ -
Amortization	3% \$ 366
Closing Accumulated Amortization	\$ 366
Opening Net Fixed Assets	\$ -
Closing Net Fixed Assets	\$ 10,608
Average Net Fixed Assets	\$ 5,304

For PILs Calculation

UCC

	2014 Forecasted
Opening UCC	\$ -
Capital Additions	\$ 10,974
UCC Before Half Year Rule	\$ 10,974
Half Year Rule (1/2 Additions - Disposals)	\$ -
Reduced UCC	\$ 10,974
CCA Rate Class	01
CCA Rate	4%
CCA	\$ 439
Closing UCC	\$ 10,535



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 2

Name or General Description of Project

C14 Stations Circuit Breakers

Asset Component

1820_DS Equip - Normally Primary below 50 kV - Outdoor Breaker

Average Net Fixed Assets

Net Fixed Assets

	2014 Forecasted
Opening Capital Investment	\$ -
Capital Investment	\$ 679,400
Closing Capital Investment	\$ 679,400
Opening Accumulated Amortization	\$ -
Amortization	3% \$ 22,647
Closing Accumulated Amortization	\$ 22,647
Opening Net Fixed Assets	\$ -
Closing Net Fixed Assets	\$ 656,754
Average Net Fixed Assets	\$ 328,377

For PILs Calculation

UCC

	2014 Forecasted
Opening UCC	\$ -
Capital Additions	\$ 679,400
UCC Before Half Year Rule	\$ 679,400
Half Year Rule (1/2 Additions - Disposals)	\$ -
Reduced UCC	\$ 679,400
CCA Rate Class	47
CCA Rate	8%
CCA	\$ 54,352
Closing UCC	\$ 625,048



Incremental Capital Project Summary

Using the pull-down menu below, please identify what year of the IRM cycle you are in.

2nd Year of IRM Cycle

Name or General Description of Project

C15 Stations Control & Communicaton Systems

Year

2012

Details of Project

C15 Stations Control & Communicaton Systems

Number of Asset Components

1

Asset Component (Click on the Number to View the Component Details)

1 1980_System Supervisory Equipment

Capital Cost

1,149,495

Depreciation
Rate

7%

CCA Class

08

CCA Rate

20%

Closing Net Fixed Asset

2012

1,072,862

2013

996,229

2014

919,596

Amortization Expense

76,633

76,633

76,633

CCA

229,899

183,919

147,135



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 1

Name or General Description of Project

C15 Stations Control & Communicaton Systems

Asset Component

1980_System Supervisory Equipment

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 1,149,495	\$ 1,149,495
Capital Investment	\$ 1,149,495	\$ -	\$ -
Closing Capital Investment	\$ 1,149,495	\$ 1,149,495	\$ 1,149,495
Opening Accumulated Amortization	\$ -	\$ 76,633	\$ 153,266
Amortization	7% \$ 76,633	\$ 76,633	\$ 76,633
Closing Accumulated Amortization	\$ 76,633	\$ 153,266	\$ 229,899
Opening Net Fixed Assets	\$ -	\$ 1,072,862	\$ 996,229
Closing Net Fixed Assets	\$ 1,072,862	\$ 996,229	\$ 919,596
Average Net Fixed Assets	\$ 536,431	\$ 1,034,545	\$ 957,912

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 919,596	\$ 735,677
Capital Additions	\$ 1,149,495	\$ -	\$ -
UCC Before Half Year Rule	\$ 1,149,495	\$ 919,596	\$ 735,677
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 1,149,495	\$ 919,596	\$ 735,677
CCA Rate Class	08		
CCA Rate	20%		
CCA	\$ 229,899	\$ 183,919	\$ 147,135
Closing UCC	\$ 919,596	\$ 735,677	\$ 588,541



Incremental Capital Project Summary

Using the pull-down menu below, please identify what year of the IRM cycle you are in.

3rd Year of IRM Cycle

Name or General Description of Project

C15 Stations Control & Communicaton Systems

Year

2013

Details of Project

C15 Stations Control & Communicaton Systems

Number of Asset Components

1

Asset Component (Click on the Number to View the Component Details)

1 1980_System Supervisory Equipment

Capital Cost

2,154,381

Depreciation
Rate

7%

CCA Class

08

CCA Rate

20%

2013

2014

Closing Net Fixed Asset

2,010,755

1,867,130

Amortization Expense

143,625

143,625

CCA

430,876

344,701



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 1

Name or General Description of Project

C15 Stations Control & Communicaton Systems

Asset Component

1980_System Supervisory Equipment

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 2,154,381
Capital Investment	\$ 2,154,381	\$ -
Closing Capital Investment	\$ 2,154,381	\$ 2,154,381
Opening Accumulated Amortization	\$ -	\$ 143,625
Amortization	7% \$ 143,625	\$ 143,625
Closing Accumulated Amortization	\$ 143,625	\$ 287,251
Opening Net Fixed Assets	\$ -	\$ 2,010,755
Closing Net Fixed Assets	\$ 2,010,755	\$ 1,867,130
Average Net Fixed Assets	\$ 1,005,378	\$ 1,938,943

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 1,723,505
Capital Additions	\$ 2,154,381	\$ -
UCC Before Half Year Rule	\$ 2,154,381	\$ 1,723,505
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 2,154,381	\$ 1,723,505
CCA Rate Class	08	
CCA Rate	20%	
CCA	\$ 430,876	\$ 344,701
Closing UCC	\$ 1,723,505	\$ 1,378,804



Incremental Capital Project Summary

Using the pull-down menu below, please identify what year of the IRM cycle you are in.

4th Year of IRM Cycle

Name or General Description of Project

C15 Stations Control & Communicaton Systems

Year

2014

Details of Project

C15 Stations Control & Communicaton Systems

Number of Asset Components

1

Asset Component (Click on the Number to View the Component Details)	Capital Cost	Capital Cost (1/2 year rule applied)	Depreciation Rate	CCA Class	CCA Rate
1 1980_System Supervisory Equipment	1,336,711	668,355	7%	08	20%

Closing Net Fixed Asset 2014
 623,798

Amortization Expense
 44,557

CCA
 133,671



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 1

Name or General Description of Project

C15 Stations Control & Communicaton Systems

Asset Component

1980_System Supervisory Equipment

Average Net Fixed Assets

Net Fixed Assets

2014
Forecasted

Opening Capital Investment	\$	-
Capital Investment	\$	668,355
Closing Capital Investment	\$	668,355
Opening Accumulated Amortization	\$	-
Amortization	7%	\$ 44,557
Closing Accumulated Amortization	\$	44,557
Opening Net Fixed Assets	\$	-
Closing Net Fixed Assets	\$	623,798
Average Net Fixed Assets	\$	311,899

For PILs Calculation

UCC

2014
Forecasted

Opening UCC	\$	-
Capital Additions	\$	668,355
UCC Before Half Year Rule	\$	668,355
Half Year Rule (1/2 Additions - Disposals)	\$	-
Reduced UCC	\$	668,355
CCA Rate Class	08	
CCA Rate	20%	
CCA	\$	133,671
Closing UCC	\$	534,684



Incremental Capital Project Summary

Using the pull-down menu below, please identify what year of the IRM cycle you are in.

2nd Year of IRM Cycle

Name or General Description of Project

C16 Downtown Station Load Transfers

Year

2012

Details of Project

C16 Downtown Station Load Transfers

Number of Asset Components

6

Asset Component (Click on the Number to View the Component Details)	Capital Cost	Depreciation Rate	CCA Class	CCA Rate
1 1840_Underground Conduit - Cable Chamber	107,041	2%	47	8%
2 1840_Underground Conduit - Duct Bank	13,127	3%	47	8%
3 1840_Underground Conduit - Vault	4,547	3%	47	8%
4 1840_Underground Conduit - Vault Roof	2,026	5%	47	8%
5 1845_Underground Conductors and Devices	1,524,521	3%	47	8%
6 1845_Underground Conductors and Devices - Switch	99,384	5%	47	8%

	2012	2013	2014
Closing Net Fixed Asset	1,704,770	1,658,894	1,613,019
Amortization Expense	45,876	45,876	45,876
CCA	140,052	128,848	118,540



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 1

Name or General Description of Project

C16 Downtown Station Load Transfers

Asset Component

1840 Underground Conduit - Cable Chamber

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 107,041	\$ 107,041
Capital Investment	\$ 107,041	\$ -	\$ -
Closing Capital Investment	\$ 107,041	\$ 107,041	\$ 107,041
Opening Accumulated Amortization	\$ -	\$ 2,141	\$ 4,282
Amortization	2% \$ 2,141	\$ 2,141	\$ 2,141
Closing Accumulated Amortization	\$ 2,141	\$ 4,282	\$ 6,422
Opening Net Fixed Assets	\$ -	\$ 104,900	\$ 102,759
Closing Net Fixed Assets	\$ 104,900	\$ 102,759	\$ 100,618
Average Net Fixed Assets	\$ 52,450	\$ 103,829	\$ 101,689

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 98,477	\$ 90,599
Capital Additions	\$ 107,041	\$ -	\$ -
UCC Before Half Year Rule	\$ 107,041	\$ 98,477	\$ 90,599
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 107,041	\$ 98,477	\$ 90,599
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 8,563	\$ 7,878	\$ 7,248
Closing UCC	\$ 98,477	\$ 90,599	\$ 83,351



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 2

Name or General Description of Project

C16 Downtown Station Load Transfers

Asset Component

1840 Underground Conduit - Duct Bank

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 13,127	\$ 13,127
Capital Investment	\$ 13,127	\$ -	\$ -
Closing Capital Investment	\$ 13,127	\$ 13,127	\$ 13,127
Opening Accumulated Amortization	\$ -	\$ 438	\$ 875
Amortization	3% \$ 438	\$ 438	\$ 438
Closing Accumulated Amortization	\$ 438	\$ 875	\$ 1,313
Opening Net Fixed Assets	\$ -	\$ 12,689	\$ 12,252
Closing Net Fixed Assets	\$ 12,689	\$ 12,252	\$ 11,814
Average Net Fixed Assets	\$ 6,345	\$ 12,471	\$ 12,033

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 12,077	\$ 11,111
Capital Additions	\$ 13,127	\$ -	\$ -
UCC Before Half Year Rule	\$ 13,127	\$ 12,077	\$ 11,111
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 13,127	\$ 12,077	\$ 11,111
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 1,050	\$ 966	\$ 889
Closing UCC	\$ 12,077	\$ 11,111	\$ 10,222



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 3

Name or General Description of Project

C16 Downtown Station Load Transfers

Asset Component

1840 Underground Conduit - Vault

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 4,547	\$ 4,547
Capital Investment	\$ 4,547	\$ -	\$ -
Closing Capital Investment	\$ 4,547	\$ 4,547	\$ 4,547
Opening Accumulated Amortization	\$ -	\$ 114	\$ 227
Amortization	3% \$ 114	\$ 114	\$ 114
Closing Accumulated Amortization	\$ 114	\$ 227	\$ 341
Opening Net Fixed Assets	\$ -	\$ 4,434	\$ 4,320
Closing Net Fixed Assets	\$ 4,434	\$ 4,320	\$ 4,206
Average Net Fixed Assets	\$ 2,217	\$ 4,377	\$ 4,263

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 4,184	\$ 3,849
Capital Additions	\$ 4,547	\$ -	\$ -
UCC Before Half Year Rule	\$ 4,547	\$ 4,184	\$ 3,849
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 4,547	\$ 4,184	\$ 3,849
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 364	\$ 335	\$ 308
Closing UCC	\$ 4,184	\$ 3,849	\$ 3,541



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 4

Name or General Description of Project

C16 Downtown Station Load Transfers

Asset Component

1840 Underground Conduit - Vault Roof

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 2,026	\$ 2,026
Capital Investment	\$ 2,026	\$ -	\$ -
Closing Capital Investment	\$ 2,026	\$ 2,026	\$ 2,026
Opening Accumulated Amortization	\$ -	\$ 101	\$ 203
Amortization	5% \$ 101	\$ 101	\$ 101
Closing Accumulated Amortization	\$ 101	\$ 203	\$ 304
Opening Net Fixed Assets	\$ -	\$ 1,924	\$ 1,823
Closing Net Fixed Assets	\$ 1,924	\$ 1,823	\$ 1,722
Average Net Fixed Assets	\$ 962	\$ 1,874	\$ 1,772

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 1,864	\$ 1,714
Capital Additions	\$ 2,026	\$ -	\$ -
UCC Before Half Year Rule	\$ 2,026	\$ 1,864	\$ 1,714
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 2,026	\$ 1,864	\$ 1,714
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 162	\$ 149	\$ 137
Closing UCC	\$ 1,864	\$ 1,714	\$ 1,577



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 5

Name or General Description of Project

C16 Downtown Station Load Transfers

Asset Component

1845 Underground Conductors and Devices

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 1,524,521	\$ 1,524,521
Capital Investment	\$ 1,524,521	\$ -	\$ -
Closing Capital Investment	\$ 1,524,521	\$ 1,524,521	\$ 1,524,521
Opening Accumulated Amortization	\$ -	\$ 38,113	\$ 76,226
Amortization	3% \$ 38,113	\$ 38,113	\$ 38,113
Closing Accumulated Amortization	\$ 38,113	\$ 76,226	\$ 114,339
Opening Net Fixed Assets	\$ -	\$ 1,486,408	\$ 1,448,295
Closing Net Fixed Assets	\$ 1,486,408	\$ 1,448,295	\$ 1,410,182
Average Net Fixed Assets	\$ 743,204	\$ 1,467,352	\$ 1,429,239

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 1,402,560	\$ 1,290,355
Capital Additions	\$ 1,524,521	\$ -	\$ -
UCC Before Half Year Rule	\$ 1,524,521	\$ 1,402,560	\$ 1,290,355
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 1,524,521	\$ 1,402,560	\$ 1,290,355
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 121,962	\$ 112,205	\$ 103,228
Closing UCC	\$ 1,402,560	\$ 1,290,355	\$ 1,187,127



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 6

Name or General Description of Project

C16 Downtown Station Load Transfers

Asset Component

1845 Underground Conductors and Devices - Switch

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 99,384	\$ 99,384
Capital Investment	\$ 99,384	\$ -	\$ -
Closing Capital Investment	\$ 99,384	\$ 99,384	\$ 99,384
Opening Accumulated Amortization	\$ -	\$ 4,969	\$ 9,938
Amortization	5% \$ 4,969	\$ 4,969	\$ 4,969
Closing Accumulated Amortization	\$ 4,969	\$ 9,938	\$ 14,908
Opening Net Fixed Assets	\$ -	\$ 94,414	\$ 89,445
Closing Net Fixed Assets	\$ 94,414	\$ 89,445	\$ 84,476
Average Net Fixed Assets	\$ 47,207	\$ 91,930	\$ 86,961

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 91,433	\$ 84,118
Capital Additions	\$ 99,384	\$ -	\$ -
UCC Before Half Year Rule	\$ 99,384	\$ 91,433	\$ 84,118
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 99,384	\$ 91,433	\$ 84,118
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 7,951	\$ 7,315	\$ 6,729
Closing UCC	\$ 91,433	\$ 84,118	\$ 77,389



Incremental Capital Project Summary

Using the pull-down menu below, please identify what year of the IRM cycle you are in.

3rd Year of IRM Cycle

Name or General Description of Project

C16 Downtown Station Load Transfers

Year

2013

Details of Project

C16 Downtown Station Load Transfers

Number of Asset Components

13

Asset Component (Click on the Number to View the Component Details)	Capital Cost	Depreciation Rate	CCA Class	CCA Rate
1 1830_Poles Towers and Fixtures	134,123	3%	47	8%
2 1835_Overhead Conductors and Devices	217,273	2%	47	8%
3 1835_Overhead Conductors and Devices - Switches	373,758	3%	47	8%
4 1840_Underground Conduit - Cable Chamber	45,004	2%	47	8%
5 1840_Underground Conduit - Duct Bank	273,826	3%	47	8%
6 1840_Underground Conduit - Vault	64,975	3%	47	8%
7 1840_Underground Conduit - Vault Roof	44,985	5%	47	8%
8 1845_Underground Conductors and Devices	417,130	3%	47	8%
9 1850_Line Transformers - OH	819	3%	47	8%
10 1850_Line Transformers - UG	647	3%	47	8%
11 1850_Line Transformers - UG Network w/protector	3,235	5%	47	8%
12 1860_Meters - Smart Meters	2,001	7%	47	8%
13 1855_Services - OH	7,899	2%	47	8%

	2013	2014
Closing Net Fixed Asset	1,540,686	1,495,698
Amortization Expense	44,989	44,989
CCA	126,854	116,706



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 1

Name or General Description of Project

C16 Downtown Station Load Transfers

Asset Component

1830_Poles Towers and Fixtures

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 134,123
Capital Investment	\$ 134,123	\$ -
Closing Capital Investment	\$ 134,123	\$ 134,123
Opening Accumulated Amortization	\$ -	\$ 3,353
Amortization	3% \$ 3,353	\$ 3,353
Closing Accumulated Amortization	\$ 3,353	\$ 6,706
Opening Net Fixed Assets	\$ -	\$ 130,770
Closing Net Fixed Assets	\$ 130,770	\$ 127,417
Average Net Fixed Assets	\$ 65,385	\$ 129,093

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 123,393
Capital Additions	\$ 134,123	\$ -
UCC Before Half Year Rule	\$ 134,123	\$ 123,393
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 134,123	\$ 123,393
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 10,730	\$ 9,871
Closing UCC	\$ 123,393	\$ 113,522



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 2

Name or General Description of Project

C16 Downtown Station Load Transfers

Asset Component

1835_Overhead Conductors and Devices

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 217,273
Capital Investment	\$ 217,273	\$ -
Closing Capital Investment	\$ 217,273	\$ 217,273
Opening Accumulated Amortization	\$ -	\$ 4,345
Amortization	2% \$ 4,345	\$ 4,345
Closing Accumulated Amortization	\$ 4,345	\$ 8,691
Opening Net Fixed Assets	\$ -	\$ 212,928
Closing Net Fixed Assets	\$ 212,928	\$ 208,582
Average Net Fixed Assets	\$ 106,464	\$ 210,755

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 199,891
Capital Additions	\$ 217,273	\$ -
UCC Before Half Year Rule	\$ 217,273	\$ 199,891
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 217,273	\$ 199,891
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 17,382	\$ 15,991
Closing UCC	\$ 199,891	\$ 183,900



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 3

Name or General Description of Project

C16 Downtown Station Load Transfers

Asset Component

1835_Overhead Conductors and Devices - Switches

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 373,758
Capital Investment	\$ 373,758	\$ -
Closing Capital Investment	\$ 373,758	\$ 373,758
Opening Accumulated Amortization	\$ -	\$ 12,459
Amortization	3% \$ 12,459	\$ 12,459
Closing Accumulated Amortization	\$ 12,459	\$ 24,917
Opening Net Fixed Assets	\$ -	\$ 361,299
Closing Net Fixed Assets	\$ 361,299	\$ 348,841
Average Net Fixed Assets	\$ 180,650	\$ 355,070

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 343,857
Capital Additions	\$ 373,758	\$ -
UCC Before Half Year Rule	\$ 373,758	\$ 343,857
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 373,758	\$ 343,857
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 29,901	\$ 27,509
Closing UCC	\$ 343,857	\$ 316,349



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 4

Name or General Description of Project

C16 Downtown Station Load Transfers

Asset Component

1840 Underground Conduit - Cable Chamber

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 45,004
Capital Investment	\$ 45,004	\$ -
Closing Capital Investment	\$ 45,004	\$ 45,004
Opening Accumulated Amortization	\$ -	\$ 900
Amortization	2% \$ 900	\$ 900
Closing Accumulated Amortization	\$ 900	\$ 1,800
Opening Net Fixed Assets	\$ -	\$ 44,104
Closing Net Fixed Assets	\$ 44,104	\$ 43,204
Average Net Fixed Assets	\$ 22,052	\$ 43,654

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 41,403
Capital Additions	\$ 45,004	\$ -
UCC Before Half Year Rule	\$ 45,004	\$ 41,403
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 45,004	\$ 41,403
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 3,600	\$ 3,312
Closing UCC	\$ 41,403	\$ 38,091



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 5

Name or General Description of Project

C16 Downtown Station Load Transfers

Asset Component

1840 Underground Conduit - Duct Bank

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 273,826
Capital Investment	\$ 273,826	\$ -
Closing Capital Investment	\$ 273,826	\$ 273,826
Opening Accumulated Amortization	\$ -	\$ 9,128
Amortization	3% \$ 9,128	\$ 9,128
Closing Accumulated Amortization	\$ 9,128	\$ 18,255
Opening Net Fixed Assets	\$ -	\$ 264,699
Closing Net Fixed Assets	\$ 264,699	\$ 255,571
Average Net Fixed Assets	\$ 132,349	\$ 260,135

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 251,920
Capital Additions	\$ 273,826	\$ -
UCC Before Half Year Rule	\$ 273,826	\$ 251,920
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 273,826	\$ 251,920
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 21,906	\$ 20,154
Closing UCC	\$ 251,920	\$ 231,767



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 6

Name or General Description of Project

C16 Downtown Station Load Transfers

Asset Component

1840 Underground Conduit - Vault

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 64,975
Capital Investment	\$ 64,975	\$ -
Closing Capital Investment	\$ 64,975	\$ 64,975
Opening Accumulated Amortization	\$ -	\$ 1,624
Amortization	3% \$ 1,624	\$ 1,624
Closing Accumulated Amortization	\$ 1,624	\$ 3,249
Opening Net Fixed Assets	\$ -	\$ 63,351
Closing Net Fixed Assets	\$ 63,351	\$ 61,726
Average Net Fixed Assets	\$ 31,675	\$ 62,538

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 59,777
Capital Additions	\$ 64,975	\$ -
UCC Before Half Year Rule	\$ 64,975	\$ 59,777
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 64,975	\$ 59,777
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 5,198	\$ 4,782
Closing UCC	\$ 59,777	\$ 54,995



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 7

Name or General Description of Project

C16 Downtown Station Load Transfers

Asset Component

1840 Underground Conduit - Vault Roof

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 44,985
Capital Investment	\$ 44,985	\$ -
Closing Capital Investment	\$ 44,985	\$ 44,985
Opening Accumulated Amortization	\$ -	\$ 2,249
Amortization	5% \$ 2,249	\$ 2,249
Closing Accumulated Amortization	\$ 2,249	\$ 4,499
Opening Net Fixed Assets	\$ -	\$ 42,736
Closing Net Fixed Assets	\$ 42,736	\$ 40,487
Average Net Fixed Assets	\$ 21,368	\$ 41,611

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 41,386
Capital Additions	\$ 44,985	\$ -
UCC Before Half Year Rule	\$ 44,985	\$ 41,386
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 44,985	\$ 41,386
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 3,599	\$ 3,311
Closing UCC	\$ 41,386	\$ 38,075



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 8

Name or General Description of Project

C16 Downtown Station Load Transfers

Asset Component

1845 Underground Conductors and Devices

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 417,130
Capital Investment	\$ 417,130	\$ -
Closing Capital Investment	\$ 417,130	\$ 417,130
Opening Accumulated Amortization	\$ -	\$ 10,428
Amortization	3% \$ 10,428	\$ 10,428
Closing Accumulated Amortization	\$ 10,428	\$ 20,856
Opening Net Fixed Assets	\$ -	\$ 406,701
Closing Net Fixed Assets	\$ 406,701	\$ 396,273
Average Net Fixed Assets	\$ 203,351	\$ 401,487

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 383,759
Capital Additions	\$ 417,130	\$ -
UCC Before Half Year Rule	\$ 417,130	\$ 383,759
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 417,130	\$ 383,759
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 33,370	\$ 30,701
Closing UCC	\$ 383,759	\$ 353,058



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 9

Name or General Description of Project

C16 Downtown Station Load Transfers

Asset Component

1850 Line Transformers - OH

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 819
Capital Investment	\$ 819	\$ -
Closing Capital Investment	\$ 819	\$ 819
Opening Accumulated Amortization	\$ -	\$ 27
Amortization	3% \$ 27	\$ 27
Closing Accumulated Amortization	\$ 27	\$ 55
Opening Net Fixed Assets	\$ -	\$ 792
Closing Net Fixed Assets	\$ 792	\$ 765
Average Net Fixed Assets	\$ 396	\$ 778

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 754
Capital Additions	\$ 819	\$ -
UCC Before Half Year Rule	\$ 819	\$ 754
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 819	\$ 754
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 66	\$ 60
Closing UCC	\$ 754	\$ 693



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 10

Name or General Description of Project

C16 Downtown Station Load Transfers

Asset Component

1850 Line Transformers - UG

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 647
Capital Investment	\$ 647	\$ -
Closing Capital Investment	\$ 647	\$ 647
Opening Accumulated Amortization	\$ -	\$ 22
Amortization	3% \$ 22	\$ 22
Closing Accumulated Amortization	\$ 22	\$ 43
Opening Net Fixed Assets	\$ -	\$ 625
Closing Net Fixed Assets	\$ 625	\$ 604
Average Net Fixed Assets	\$ 313	\$ 615

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 595
Capital Additions	\$ 647	\$ -
UCC Before Half Year Rule	\$ 647	\$ 595
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 647	\$ 595
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 52	\$ 48
Closing UCC	\$ 595	\$ 548



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 11

Name or General Description of Project

C16 Downtown Station Load Transfers

Asset Component

1850 Line Transformers - UG Network w/protector

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 3,235
Capital Investment	\$ 3,235	\$ -
Closing Capital Investment	\$ 3,235	\$ 3,235
Opening Accumulated Amortization	\$ -	\$ 162
Amortization	5% \$ 162	\$ 162
Closing Accumulated Amortization	\$ 162	\$ 324
Opening Net Fixed Assets	\$ -	\$ 3,073
Closing Net Fixed Assets	\$ 3,073	\$ 2,912
Average Net Fixed Assets	\$ 1,537	\$ 2,992

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 2,976
Capital Additions	\$ 3,235	\$ -
UCC Before Half Year Rule	\$ 3,235	\$ 2,976
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 3,235	\$ 2,976
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 259	\$ 238
Closing UCC	\$ 2,976	\$ 2,738



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 12

Name or General Description of Project

C16 Downtown Station Load Transfers

Asset Component

1860 Meters - Smart Meters

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 2,001
Capital Investment	\$ 2,001	\$ -
Closing Capital Investment	\$ 2,001	\$ 2,001
Opening Accumulated Amortization	\$ -	\$ 133
Amortization	7% \$ 133	\$ 133
Closing Accumulated Amortization	\$ 133	\$ 267
Opening Net Fixed Assets	\$ -	\$ 1,868
Closing Net Fixed Assets	\$ 1,868	\$ 1,734
Average Net Fixed Assets	\$ 934	\$ 1,801

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 1,841
Capital Additions	\$ 2,001	\$ -
UCC Before Half Year Rule	\$ 2,001	\$ 1,841
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 2,001	\$ 1,841
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 160	\$ 147
Closing UCC	\$ 1,841	\$ 1,694



Incremental Capital Project Summary

[Return to Main Summary](#)

Fixed Asset Amortization and UCC 13

Name or General Description of Project

C16 Downtown Station Load Transfers

Asset Component

1855_Services - OH

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 7,899
Capital Investment	\$ 7,899	\$ -
Closing Capital Investment	\$ 7,899	\$ 7,899
Opening Accumulated Amortization	\$ -	\$ 158
Amortization	2% \$ 158	\$ 158
Closing Accumulated Amortization	\$ 158	\$ 316
Opening Net Fixed Assets	\$ -	\$ 7,741
Closing Net Fixed Assets	\$ 7,741	\$ 7,583
Average Net Fixed Assets	\$ 3,870	\$ 7,662

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 7,267
Capital Additions	\$ 7,899	\$ -
UCC Before Half Year Rule	\$ 7,899	\$ 7,267
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 7,899	\$ 7,267
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 632	\$ 581
Closing UCC	\$ 7,267	\$ 6,685



Incremental Capital Project Summary

Using the pull-down menu below, please identify what year of the IRM cycle you are in.

4th Year of IRM Cycle

Name or General Description of Project

C16 Downtown Station Load Transfers

Details of Project

C16 Downtown Station Load Transfers

Year

2014

Number of Asset Components

3

Asset Component (Click on the Number to View the Component Details)	Capital Cost	Capital Cost (1/2 year rule applied)	Depreciation Rate	CCA Class	CCA Rate
1 1840_Underground Conduit - Vault	1,025,727	512,864	3%	47	8%
2 1845_Underground Conductors and Devices	1,762,498	881,249	3%	47	8%
3 1845_Underground Conductors and Devices - Switch	803,716	401,858	5%	47	8%

2014

Closing Net Fixed Asset 1,741,025

Amortization Expense 54,946

CCA 143,678



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 1

Name or General Description of Project

C16 Downtown Station Load Transfers

Asset Component

1840 Underground Conduit - Vault

Average Net Fixed Assets

Net Fixed Assets

2014

Forecasted

Opening Capital Investment	\$	-
Capital Investment	\$	512,864
Closing Capital Investment	\$	512,864
Opening Accumulated Amortization	\$	-
Amortization	3%	\$ 12,822
Closing Accumulated Amortization	\$	12,822
Opening Net Fixed Assets	\$	-
Closing Net Fixed Assets	\$	500,042
Average Net Fixed Assets	\$	250,021

For PILs Calculation

UCC

2014

Forecasted

Opening UCC	\$	-
Capital Additions	\$	512,864
UCC Before Half Year Rule	\$	512,864
Half Year Rule (1/2 Additions - Disposals)	\$	-
Reduced UCC	\$	512,864
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$	41,029
Closing UCC	\$	471,835



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 2

Name or General Description of Project

C16 Downtown Station Load Transfers

Asset Component

1845 Underground Conductors and Devices

Average Net Fixed Assets

Net Fixed Assets

2014

Forecasted

Opening Capital Investment		\$ -
Capital Investment		\$ 881,249
Closing Capital Investment		\$ 881,249
Opening Accumulated Amortization		\$ -
Amortization	3%	\$ 22,031
Closing Accumulated Amortization		\$ 22,031
Opening Net Fixed Assets		\$ -
Closing Net Fixed Assets		\$ 859,218
Average Net Fixed Assets		\$ 429,609

For PILs Calculation

UCC

2014

Forecasted

Opening UCC		\$ -
Capital Additions		\$ 881,249
UCC Before Half Year Rule		\$ 881,249
Half Year Rule (1/2 Additions - Disposals)		\$ -
Reduced UCC		\$ 881,249
CCA Rate Class	47	
CCA Rate	8%	
CCA		\$ 70,500
Closing UCC		\$ 810,749



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 3

Name or General Description of Project

C16 Downtown Station Load Transfers

Asset Component

1845 Underground Conductors and Devices - Switch

Average Net Fixed Assets

Net Fixed Assets

2014
Forecasted

Opening Capital Investment	\$	-
Capital Investment	\$	401,858
Closing Capital Investment	\$	401,858
Opening Accumulated Amortization	\$	-
Amortization	5%	\$ 20,093
Closing Accumulated Amortization	\$	20,093
Opening Net Fixed Assets	\$	-
Closing Net Fixed Assets	\$	381,765
Average Net Fixed Assets	\$	190,882

For PILs Calculation

UCC

2014
Forecasted

Opening UCC	\$	-
Capital Additions	\$	401,858
UCC Before Half Year Rule	\$	401,858
Half Year Rule (1/2 Additions - Disposals)	\$	-
Reduced UCC	\$	401,858
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$	32,149
Closing UCC	\$	369,709



Incremental Capital Project Summary

Using the pull-down menu below, please identify what year of the IRM cycle you are in.

2nd Year of IRM Cycle

Name or General Description of Project

C17 Bremner Transformer Station

Year

2012

Details of Project

C17 Bremner Transformer Station

Number of Asset Components

8

Asset Component (Click on the Number to View the Component Details)	Capital Cost	Depreciation Rate	CCA Class	CCA Rate
1 1808_Buildings and Fixtures - Stn Shell Site	1,495,105	3%	01	4%
2 1808_Buildings and Fixtures - Stn Substructure	13,511,742	1%	01	4%
3 1815_TS Equip - Normally Primary above 50 kV - Disconnect Switch	4,383,810	3%	47	8%
4 1815_TS Equip - Normally Primary above 50 kV - Power Transformer	5,184,505	3%	47	8%
5 1815_TS Equip - Normally Primary above 50 kV - Station Service	1,541,339	3%	47	8%
6 1820_DS Equip - Normally Primary below 50 kV - Stn Service Batteries	228,506	10%	47	8%
7 1820_DS Equip - Normally Primary below 50 kV - Switchgear GIS	4,958,487	3%	47	8%
8 1820_DS Equip - Normally Primary below 50 kV - Station Service	429,366	3%	47	8%

	2012	2013	2014
Closing Net Fixed Asset	30,995,960	30,259,060	29,522,160
Amortization Expense	736,900	736,900	736,900
CCA	1,938,355	1,807,297	1,685,764



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 1

Name or General Description of Project

C17 Bremner Transformer Station

Asset Component

1808 Buildings and Fixtures - Stn Shell Site

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 1,495,105	\$ 1,495,105
Capital Investment	\$ 1,495,105	\$ -	\$ -
Closing Capital Investment	\$ 1,495,105	\$ 1,495,105	\$ 1,495,105
Opening Accumulated Amortization	\$ -	\$ 49,837	\$ 99,674
Amortization	3% \$ 49,837	\$ 49,837	\$ 49,837
Closing Accumulated Amortization	\$ 49,837	\$ 99,674	\$ 149,510
Opening Net Fixed Assets	\$ -	\$ 1,445,268	\$ 1,395,431
Closing Net Fixed Assets	\$ 1,445,268	\$ 1,395,431	\$ 1,345,594
Average Net Fixed Assets	\$ 722,634	\$ 1,420,349	\$ 1,370,513

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 1,435,300	\$ 1,377,888
Capital Additions	\$ 1,495,105	\$ -	\$ -
UCC Before Half Year Rule	\$ 1,495,105	\$ 1,435,300	\$ 1,377,888
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 1,495,105	\$ 1,435,300	\$ 1,377,888
CCA Rate Class	01		
CCA Rate	4%		
CCA	\$ 59,804	\$ 57,412	\$ 55,116
Closing UCC	\$ 1,435,300	\$ 1,377,888	\$ 1,322,773



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 2

Name or General Description of Project

C17 Bremner Transformer Station

Asset Component

1808 Buildings and Fixtures - Stn Substructure

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 13,511,742	\$ 13,511,742
Capital Investment	\$ 13,511,742	\$ -	\$ -
Closing Capital Investment	\$ 13,511,742	\$ 13,511,742	\$ 13,511,742
Opening Accumulated Amortization	\$ -	\$ 180,157	\$ 360,313
Amortization	1% \$ 180,157	\$ 180,157	\$ 180,157
Closing Accumulated Amortization	\$ 180,157	\$ 360,313	\$ 540,470
Opening Net Fixed Assets	\$ -	\$ 13,331,586	\$ 13,151,429
Closing Net Fixed Assets	\$ 13,331,586	\$ 13,151,429	\$ 12,971,272
Average Net Fixed Assets	\$ 6,665,793	\$ 13,241,507	\$ 13,061,351

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 12,971,272	\$ 12,452,422
Capital Additions	\$ 13,511,742	\$ -	\$ -
UCC Before Half Year Rule	\$ 13,511,742	\$ 12,971,272	\$ 12,452,422
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 13,511,742	\$ 12,971,272	\$ 12,452,422
CCA Rate Class	01		
CCA Rate	4%		
CCA	\$ 540,470	\$ 518,851	\$ 498,097
Closing UCC	\$ 12,971,272	\$ 12,452,422	\$ 11,954,325



Incremental Capital Project Summary

[Return to Main Summary](#)

Fixed Asset Amortization and UCC 3

Name or General Description of Project

C17 Bremner Transformer Station

Asset Component

1815_TS Equip - Normally Primary above 50 kV - Disconnect Switch

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 4,383,810	\$ 4,383,810
Capital Investment	\$ 4,383,810	\$ -	\$ -
Closing Capital Investment	\$ 4,383,810	\$ 4,383,810	\$ 4,383,810
Opening Accumulated Amortization	\$ -	\$ 146,127	\$ 292,254
Amortization	3% \$ 146,127	\$ 146,127	\$ 146,127
Closing Accumulated Amortization	\$ 146,127	\$ 292,254	\$ 438,381
Opening Net Fixed Assets	\$ -	\$ 4,237,683	\$ 4,091,556
Closing Net Fixed Assets	\$ 4,237,683	\$ 4,091,556	\$ 3,945,429
Average Net Fixed Assets	\$ 2,118,841	\$ 4,164,619	\$ 4,018,492

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 4,033,105	\$ 3,710,456
Capital Additions	\$ 4,383,810	\$ -	\$ -
UCC Before Half Year Rule	\$ 4,383,810	\$ 4,033,105	\$ 3,710,456
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 4,383,810	\$ 4,033,105	\$ 3,710,456
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 350,705	\$ 322,648	\$ 296,837
Closing UCC	\$ 4,033,105	\$ 3,710,456	\$ 3,413,620



Incremental Capital Project Summary

[Return to Main Summary](#)

Fixed Asset Amortization and UCC 4

Name or General Description of Project

C17 Bremner Transformer Station

Asset Component

1815_TS Equip - Normally Primary above 50 kV - Power Transformer

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 5,184,505	\$ 5,184,505
Capital Investment	\$ 5,184,505	\$ -	\$ -
Closing Capital Investment	\$ 5,184,505	\$ 5,184,505	\$ 5,184,505
Opening Accumulated Amortization	\$ -	\$ 162,016	\$ 324,032
Amortization	3% \$ 162,016	\$ 162,016	\$ 162,016
Closing Accumulated Amortization	\$ 162,016	\$ 324,032	\$ 486,047
Opening Net Fixed Assets	\$ -	\$ 5,022,490	\$ 4,860,474
Closing Net Fixed Assets	\$ 5,022,490	\$ 4,860,474	\$ 4,698,458
Average Net Fixed Assets	\$ 2,511,245	\$ 4,941,482	\$ 4,779,466

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 4,769,745	\$ 4,388,165
Capital Additions	\$ 5,184,505	\$ -	\$ -
UCC Before Half Year Rule	\$ 5,184,505	\$ 4,769,745	\$ 4,388,165
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 5,184,505	\$ 4,769,745	\$ 4,388,165
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 414,760	\$ 381,580	\$ 351,053
Closing UCC	\$ 4,769,745	\$ 4,388,165	\$ 4,037,112



Incremental Capital Project Summary

[Return to Main Summary](#)

Fixed Asset Amortization and UCC 5

Name or General Description of Project

C17 Bremner Transformer Station

Asset Component

1815_TS Equip - Normally Primary above 50 kV - Station Service

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 1,541,339	\$ 1,541,339
Capital Investment	\$ 1,541,339	\$ -	\$ -
Closing Capital Investment	\$ 1,541,339	\$ 1,541,339	\$ 1,541,339
Opening Accumulated Amortization	\$ -	\$ 38,533	\$ 77,067
Amortization	3% \$ 38,533	\$ 38,533	\$ 38,533
Closing Accumulated Amortization	\$ 38,533	\$ 77,067	\$ 115,600
Opening Net Fixed Assets	\$ -	\$ 1,502,806	\$ 1,464,272
Closing Net Fixed Assets	\$ 1,502,806	\$ 1,464,272	\$ 1,425,739
Average Net Fixed Assets	\$ 751,403	\$ 1,483,539	\$ 1,445,006

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 1,418,032	\$ 1,304,590
Capital Additions	\$ 1,541,339	\$ -	\$ -
UCC Before Half Year Rule	\$ 1,541,339	\$ 1,418,032	\$ 1,304,590
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 1,541,339	\$ 1,418,032	\$ 1,304,590
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 123,307	\$ 113,443	\$ 104,367
Closing UCC	\$ 1,418,032	\$ 1,304,590	\$ 1,200,223



Incremental Capital Project Summary

[Return to Main Summary](#)

Fixed Asset Amortization and UCC 6

Name or General Description of Project

C17 Bremner Transformer Station

Asset Component

1820_DS Equip - Normally Primary below 50 kV - Stn Service Batteries

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 228,506	\$ 228,506
Capital Investment	\$ 228,506	\$ -	\$ -
Closing Capital Investment	\$ 228,506	\$ 228,506	\$ 228,506
Opening Accumulated Amortization	\$ -	\$ 22,851	\$ 45,701
Amortization	10% \$ 22,851	\$ 22,851	\$ 22,851
Closing Accumulated Amortization	\$ 22,851	\$ 45,701	\$ 68,552
Opening Net Fixed Assets	\$ -	\$ 205,655	\$ 182,805
Closing Net Fixed Assets	\$ 205,655	\$ 182,805	\$ 159,954
Average Net Fixed Assets	\$ 102,828	\$ 194,230	\$ 171,379

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 210,225	\$ 193,407
Capital Additions	\$ 228,506	\$ -	\$ -
UCC Before Half Year Rule	\$ 228,506	\$ 210,225	\$ 193,407
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 228,506	\$ 210,225	\$ 193,407
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 18,280	\$ 16,818	\$ 15,473
Closing UCC	\$ 210,225	\$ 193,407	\$ 177,935



Incremental Capital Project Summary

[Return to Main Summary](#)

Fixed Asset Amortization and UCC 7

Name or General Description of Project

C17 Bremner Transformer Station

Asset Component

1820_DS Equip - Normally Primary below 50 kV - Switchgear GIS

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 4,958,487	\$ 4,958,487
Capital Investment	\$ 4,958,487	\$ -	\$ -
Closing Capital Investment	\$ 4,958,487	\$ 4,958,487	\$ 4,958,487
Opening Accumulated Amortization	\$ -	\$ 123,962	\$ 247,924
Amortization	3% \$ 123,962	\$ 123,962	\$ 123,962
Closing Accumulated Amortization	\$ 123,962	\$ 247,924	\$ 371,886
Opening Net Fixed Assets	\$ -	\$ 4,834,524	\$ 4,710,562
Closing Net Fixed Assets	\$ 4,834,524	\$ 4,710,562	\$ 4,586,600
Average Net Fixed Assets	\$ 2,417,262	\$ 4,772,543	\$ 4,648,581

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 4,561,808	\$ 4,196,863
Capital Additions	\$ 4,958,487	\$ -	\$ -
UCC Before Half Year Rule	\$ 4,958,487	\$ 4,561,808	\$ 4,196,863
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 4,958,487	\$ 4,561,808	\$ 4,196,863
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 396,679	\$ 364,945	\$ 335,749
Closing UCC	\$ 4,561,808	\$ 4,196,863	\$ 3,861,114



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 8

Name or General Description of Project

C17 Bremner Transformer Station

Asset Component

1820_DS Equip - Normally Primary below 50 kV - Station Service

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 429,366	\$ 429,366
Capital Investment	\$ 429,366	\$ -	\$ -
Closing Capital Investment	\$ 429,366	\$ 429,366	\$ 429,366
Opening Accumulated Amortization	\$ -	\$ 13,418	\$ 26,835
Amortization	3% \$ 13,418	\$ 13,418	\$ 13,418
Closing Accumulated Amortization	\$ 13,418	\$ 26,835	\$ 40,253
Opening Net Fixed Assets	\$ -	\$ 415,948	\$ 402,531
Closing Net Fixed Assets	\$ 415,948	\$ 402,531	\$ 389,113
Average Net Fixed Assets	\$ 207,974	\$ 409,240	\$ 395,822

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 395,017	\$ 363,416
Capital Additions	\$ 429,366	\$ -	\$ -
UCC Before Half Year Rule	\$ 429,366	\$ 395,017	\$ 363,416
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 429,366	\$ 395,017	\$ 363,416
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 34,349	\$ 31,601	\$ 29,073
Closing UCC	\$ 395,017	\$ 363,416	\$ 334,342



Incremental Capital Project Summary

Using the pull-down menu below, please identify what year of the IRM cycle you are in.

3rd Year of IRM Cycle

Name or General Description of Project

C17 Bremner Transformer Station

Year

2013

Details of Project

C17 Bremner Transformer Station

Number of Asset Components

9

Asset Component (Click on the Number to View the Component Details)	Capital Cost	Depreciation Rate	CCA Class	CCA Rate
1 1808_Buildings and Fixtures - Stn Interior	4,477,766	5%	01	4%
2 1808_Buildings and Fixtures - Stn Shell Site	5,105,064	3%	01	4%
3 1808_Buildings and Fixtures - Stn Substructure	26,386,836	1%	01	4%
4 1815_TS Equip - Normally Primary above 50 kV - Disconnect Switch	8,949,592	3%	47	8%
5 1815_TS Equip - Normally Primary above 50 kV - Power Transformer	10,394,814	3%	47	8%
6 1815_TS Equip - Normally Primary above 50 kV - Station Service	3,078,464	3%	47	8%
7 1820_DS Equip - Normally Primary below 50 kV - Stn Service Batteries	447,207	10%	47	8%
8 1820_DS Equip - Normally Primary below 50 kV - Switchgear GIS	9,703,033	3%	47	8%
9 1820_DS Equip - Normally Primary below 50 kV - Station Service	840,207	3%	47	8%

	2013	2014
Closing Net Fixed Asset	67,623,428	65,863,874
Amortization Expense	1,759,554	1,759,554
CCA	4,111,852	3,840,455



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 1

Name or General Description of Project

C17 Bremner Transformer Station

Asset Component

1808_Buildings and Fixtures - Stn Interior

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 4,477,766
Capital Investment	\$ 4,477,766	\$ -
Closing Capital Investment	\$ 4,477,766	\$ 4,477,766
Opening Accumulated Amortization	\$ -	\$ 223,888
Amortization	5% \$ 223,888	\$ 223,888
Closing Accumulated Amortization	\$ 223,888	\$ 447,777
Opening Net Fixed Assets	\$ -	\$ 4,253,878
Closing Net Fixed Assets	\$ 4,253,878	\$ 4,029,989
Average Net Fixed Assets	\$ 2,126,939	\$ 4,141,934

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 4,298,655
Capital Additions	\$ 4,477,766	\$ -
UCC Before Half Year Rule	\$ 4,477,766	\$ 4,298,655
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 4,477,766	\$ 4,298,655
CCA Rate Class	01	
CCA Rate	4%	
CCA	\$ 179,111	\$ 171,946
Closing UCC	\$ 4,298,655	\$ 4,126,709



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 2

Name or General Description of Project

C17 Bremner Transformer Station

Asset Component

1808_Buildings and Fixtures - Stn Shell Site

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 5,105,064
Capital Investment	\$ 5,105,064	\$ -
Closing Capital Investment	\$ 5,105,064	\$ 5,105,064
Opening Accumulated Amortization	\$ -	\$ 170,169
Amortization	3% \$ 170,169	\$ 170,169
Closing Accumulated Amortization	\$ 170,169	\$ 340,338
Opening Net Fixed Assets	\$ -	\$ 4,934,895
Closing Net Fixed Assets	\$ 4,934,895	\$ 4,764,726
Average Net Fixed Assets	\$ 2,467,447	\$ 4,849,811

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 4,900,861
Capital Additions	\$ 5,105,064	\$ -
UCC Before Half Year Rule	\$ 5,105,064	\$ 4,900,861
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 5,105,064	\$ 4,900,861
CCA Rate Class	01	
CCA Rate	4%	
CCA	\$ 204,203	\$ 196,034
Closing UCC	\$ 4,900,861	\$ 4,704,827



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 3

Name or General Description of Project

C17 Bremner Transformer Station

Asset Component

1808 Buildings and Fixtures - Stn Substructure

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 26,386,836
Capital Investment	\$ 26,386,836	\$ -
Closing Capital Investment	\$ 26,386,836	\$ 26,386,836
Opening Accumulated Amortization	\$ -	\$ 351,824
Amortization	1% \$ 351,824	\$ 351,824
Closing Accumulated Amortization	\$ 351,824	\$ 703,649
Opening Net Fixed Assets	\$ -	\$ 26,035,011
Closing Net Fixed Assets	\$ 26,035,011	\$ 25,683,187
Average Net Fixed Assets	\$ 13,017,506	\$ 25,859,099

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 25,331,362
Capital Additions	\$ 26,386,836	\$ -
UCC Before Half Year Rule	\$ 26,386,836	\$ 25,331,362
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 26,386,836	\$ 25,331,362
CCA Rate Class	01	
CCA Rate	4%	
CCA	\$ 1,055,473	\$ 1,013,254
Closing UCC	\$ 25,331,362	\$ 24,318,108



Incremental Capital Project Summary

[Return to Main Summary](#)

Fixed Asset Amortization and UCC 4

Name or General Description of Project

C17 Bremner Transformer Station

Asset Component

1815_TS Equip - Normally Primary above 50 kV - Disconnect Switch

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 8,949,592
Capital Investment	\$ 8,949,592	\$ -
Closing Capital Investment	\$ 8,949,592	\$ 8,949,592
Opening Accumulated Amortization	\$ -	\$ 298,320
Amortization	3% \$ 298,320	\$ 298,320
Closing Accumulated Amortization	\$ 298,320	\$ 596,639
Opening Net Fixed Assets	\$ -	\$ 8,651,272
Closing Net Fixed Assets	\$ 8,651,272	\$ 8,352,953
Average Net Fixed Assets	\$ 4,325,636	\$ 8,502,112

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 8,233,625
Capital Additions	\$ 8,949,592	\$ -
UCC Before Half Year Rule	\$ 8,949,592	\$ 8,233,625
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 8,949,592	\$ 8,233,625
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 715,967	\$ 658,690
Closing UCC	\$ 8,233,625	\$ 7,574,935



Incremental Capital Project Summary

[Return to Main Summary](#)

Fixed Asset Amortization and UCC 5

Name or General Description of Project

C17 Bremner Transformer Station

Asset Component

1815_TS Equip - Normally Primary above 50 kV - Power Transformer

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 10,394,814
Capital Investment	\$ 10,394,814	\$ -
Closing Capital Investment	\$ 10,394,814	\$ 10,394,814
Opening Accumulated Amortization	\$ -	\$ 324,838
Amortization	3% \$ 324,838	\$ 324,838
Closing Accumulated Amortization	\$ 324,838	\$ 649,676
Opening Net Fixed Assets	\$ -	\$ 10,069,976
Closing Net Fixed Assets	\$ 10,069,976	\$ 9,745,138
Average Net Fixed Assets	\$ 5,034,988	\$ 9,907,557

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 9,563,229
Capital Additions	\$ 10,394,814	\$ -
UCC Before Half Year Rule	\$ 10,394,814	\$ 9,563,229
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 10,394,814	\$ 9,563,229
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 831,585	\$ 765,058
Closing UCC	\$ 9,563,229	\$ 8,798,171



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 6

Name or General Description of Project

C17 Bremner Transformer Station

Asset Component

1815_TS Equip - Normally Primary above 50 kV - Station Service

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 3,078,464
Capital Investment	\$ 3,078,464	\$ -
Closing Capital Investment	\$ 3,078,464	\$ 3,078,464
Opening Accumulated Amortization	\$ -	\$ 76,962
Amortization	3% \$ 76,962	\$ 76,962
Closing Accumulated Amortization	\$ 76,962	\$ 153,923
Opening Net Fixed Assets	\$ -	\$ 3,001,503
Closing Net Fixed Assets	\$ 3,001,503	\$ 2,924,541
Average Net Fixed Assets	\$ 1,500,751	\$ 2,963,022

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 2,832,187
Capital Additions	\$ 3,078,464	\$ -
UCC Before Half Year Rule	\$ 3,078,464	\$ 2,832,187
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 3,078,464	\$ 2,832,187
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 246,277	\$ 226,575
Closing UCC	\$ 2,832,187	\$ 2,605,612



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 7

Name or General Description of Project

C17 Bremner Transformer Station

Asset Component

1820_DS Equip - Normally Primary below 50 kV - Stn Service Batteries

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 447,207
Capital Investment	\$ 447,207	\$ -
Closing Capital Investment	\$ 447,207	\$ 447,207
Opening Accumulated Amortization	\$ -	\$ 44,721
Amortization	10% \$ 44,721	\$ 44,721
Closing Accumulated Amortization	\$ 44,721	\$ 89,441
Opening Net Fixed Assets	\$ -	\$ 402,486
Closing Net Fixed Assets	\$ 402,486	\$ 357,765
Average Net Fixed Assets	\$ 201,243	\$ 380,126

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 411,430
Capital Additions	\$ 447,207	\$ -
UCC Before Half Year Rule	\$ 447,207	\$ 411,430
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 447,207	\$ 411,430
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 35,777	\$ 32,914
Closing UCC	\$ 411,430	\$ 378,516



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 8

Name or General Description of Project

C17 Bremner Transformer Station

Asset Component

1820_DS Equip - Normally Primary below 50 kV - Switchgear GIS

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 9,703,033
Capital Investment	\$ 9,703,033	\$ -
Closing Capital Investment	\$ 9,703,033	\$ 9,703,033
Opening Accumulated Amortization	\$ -	\$ 242,576
Amortization	3% \$ 242,576	\$ 242,576
Closing Accumulated Amortization	\$ 242,576	\$ 485,152
Opening Net Fixed Assets	\$ -	\$ 9,460,457
Closing Net Fixed Assets	\$ 9,460,457	\$ 9,217,881
Average Net Fixed Assets	\$ 4,730,228	\$ 9,339,169

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 8,926,790
Capital Additions	\$ 9,703,033	\$ -
UCC Before Half Year Rule	\$ 9,703,033	\$ 8,926,790
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 9,703,033	\$ 8,926,790
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 776,243	\$ 714,143
Closing UCC	\$ 8,926,790	\$ 8,212,647



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 9

Name or General Description of Project

C17 Bremner Transformer Station

Asset Component

1820_DS Equip - Normally Primary below 50 kV - Station Service

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 840,207
Capital Investment	\$ 840,207	\$ -
Closing Capital Investment	\$ 840,207	\$ 840,207
Opening Accumulated Amortization	\$ -	\$ 26,256
Amortization	3% \$ 26,256	\$ 26,256
Closing Accumulated Amortization	\$ 26,256	\$ 52,513
Opening Net Fixed Assets	\$ -	\$ 813,950
Closing Net Fixed Assets	\$ 813,950	\$ 787,694
Average Net Fixed Assets	\$ 406,975	\$ 800,822

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 772,990
Capital Additions	\$ 840,207	\$ -
UCC Before Half Year Rule	\$ 840,207	\$ 772,990
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 840,207	\$ 772,990
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 67,217	\$ 61,839
Closing UCC	\$ 772,990	\$ 711,151



Incremental Capital Project Summary

Using the pull-down menu below, please identify what year of the IRM cycle you are in.

4th Year of IRM Cycle

Name or General Description of Project

C17 Bremner Transformer Station

Details of Project

C17 Bremner Transformer Station

Year

2014

Number of Asset Components

9

Asset Component (Click on the Number to View the Component Details)	Capital Cost	Capital Cost (1/2 year rule applied)	Depreciation Rate	CCA Class	CCA Rate
1 1808_Buildings and Fixtures - Stn Interior	2,149,721	1,074,860	5%	01	4%
2 1808_Buildings and Fixtures - Stn Shell Site	2,006,443	1,003,222	3%	01	4%
3 1808_Buildings and Fixtures - Stn Substructure	3,379,561	1,689,781	1%	01	4%
4 1815_TS Equip - Normally Primary above 50 kV - Disconnect Switch	3,211,680	1,605,840	3%	47	8%
5 1815_TS Equip - Normally Primary above 50 kV - Power Transformer	5,179,195	2,589,598	3%	47	8%
6 1815_TS Equip - Normally Primary above 50 kV - Station Service	1,541,172	770,586	3%	47	8%
7 1820_DS Equip - Normally Primary below 50 kV - Stn Service Batteries	225,666	112,833	10%	47	8%
8 1820_DS Equip - Normally Primary below 50 kV - Switchgear GIS	4,899,138	2,449,569	3%	47	8%
9 1820_DS Equip - Normally Primary below 50 kV - Station Service	423,978	211,989	3%	47	8%
2014					
Closing Net Fixed Asset	11,165,699				
Amortization Expense	342,579				
CCA	769,948				



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 1

Name or General Description of Project

C17 Bremner Transformer Station

Asset Component

1808_Buildings and Fixtures - Stn Interior

Average Net Fixed Assets

Net Fixed Assets

	2014 Forecasted
Opening Capital Investment	\$ -
Capital Investment	\$ 1,074,860
Closing Capital Investment	\$ 1,074,860
Opening Accumulated Amortization	\$ -
Amortization	5% \$ 53,743
Closing Accumulated Amortization	\$ 53,743
Opening Net Fixed Assets	\$ -
Closing Net Fixed Assets	\$ 1,021,117
Average Net Fixed Assets	\$ 510,559

For PILs Calculation

UCC

	2014 Forecasted
Opening UCC	\$ -
Capital Additions	\$ 1,074,860
UCC Before Half Year Rule	\$ 1,074,860
Half Year Rule (1/2 Additions - Disposals)	\$ -
Reduced UCC	\$ 1,074,860
CCA Rate Class	01
CCA Rate	4%
CCA	\$ 42,994
Closing UCC	\$ 1,031,866



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 2

Name or General Description of Project

C17 Bremner Transformer Station

Asset Component

1808_Buildings and Fixtures - Stn Shell Site

Average Net Fixed Assets

Net Fixed Assets

2014
Forecasted

Opening Capital Investment	\$ -
Capital Investment	\$ 1,003,222
Closing Capital Investment	\$ 1,003,222
Opening Accumulated Amortization	\$ -
Amortization	3% \$ 33,441
Closing Accumulated Amortization	\$ 33,441
Opening Net Fixed Assets	\$ -
Closing Net Fixed Assets	\$ 969,781
Average Net Fixed Assets	\$ 484,890

For PILs Calculation

UCC

2014
Forecasted

Opening UCC	\$ -
Capital Additions	\$ 1,003,222
UCC Before Half Year Rule	\$ 1,003,222
Half Year Rule (1/2 Additions - Disposals)	\$ -
Reduced UCC	\$ 1,003,222
CCA Rate Class	01
CCA Rate	4%
CCA	\$ 40,129
Closing UCC	\$ 963,093



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 3

Name or General Description of Project

C17 Bremner Transformer Station

Asset Component

1808 Buildings and Fixtures - Stn Substructure

Average Net Fixed Assets

Net Fixed Assets

	2014 Forecasted
Opening Capital Investment	\$ -
Capital Investment	\$ 1,689,781
Closing Capital Investment	\$ 1,689,781
Opening Accumulated Amortization	\$ -
Amortization	1% \$ 22,530
Closing Accumulated Amortization	\$ 22,530
Opening Net Fixed Assets	\$ -
Closing Net Fixed Assets	\$ 1,667,250
Average Net Fixed Assets	\$ 833,625

For PILs Calculation

UCC

	2014 Forecasted
Opening UCC	\$ -
Capital Additions	\$ 1,689,781
UCC Before Half Year Rule	\$ 1,689,781
Half Year Rule (1/2 Additions - Disposals)	\$ -
Reduced UCC	\$ 1,689,781
CCA Rate Class	01
CCA Rate	4%
CCA	\$ 67,591
Closing UCC	\$ 1,622,189



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 4

Name or General Description of Project

C17 Bremner Transformer Station

Asset Component

1815_TS Equip - Normally Primary above 50 kV - Disconnect Switch

Average Net Fixed Assets

Net Fixed Assets

2014
Forecasted

Opening Capital Investment	\$ -
Capital Investment	\$ 1,605,840
Closing Capital Investment	\$ 1,605,840
Opening Accumulated Amortization	\$ -
Amortization	3% \$ 53,528
Closing Accumulated Amortization	\$ 53,528
Opening Net Fixed Assets	\$ -
Closing Net Fixed Assets	\$ 1,552,312
Average Net Fixed Assets	\$ 776,156

For PILs Calculation

UCC

2014
Forecasted

Opening UCC	\$ -
Capital Additions	\$ 1,605,840
UCC Before Half Year Rule	\$ 1,605,840
Half Year Rule (1/2 Additions - Disposals)	\$ -
Reduced UCC	\$ 1,605,840
CCA Rate Class	47
CCA Rate	8%
CCA	\$ 128,467
Closing UCC	\$ 1,477,373



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 5

Name or General Description of Project

C17 Bremner Transformer Station

Asset Component

1815_TS Equip - Normally Primary above 50 kV - Power Transformer

Average Net Fixed Assets

Net Fixed Assets

	2014 Forecasted
Opening Capital Investment	\$ -
Capital Investment	\$ 2,589,598
Closing Capital Investment	\$ 2,589,598
Opening Accumulated Amortization	\$ -
Amortization	3% \$ 80,925
Closing Accumulated Amortization	\$ 80,925
Opening Net Fixed Assets	\$ -
Closing Net Fixed Assets	\$ 2,508,673
Average Net Fixed Assets	\$ 1,254,336

For PILs Calculation

UCC

	2014 Forecasted
Opening UCC	\$ -
Capital Additions	\$ 2,589,598
UCC Before Half Year Rule	\$ 2,589,598
Half Year Rule (1/2 Additions - Disposals)	\$ -
Reduced UCC	\$ 2,589,598
CCA Rate Class	47
CCA Rate	8%
CCA	\$ 207,168
Closing UCC	\$ 2,382,430



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 6

Name or General Description of Project

C17 Bremner Transformer Station

Asset Component

1815_TS Equip - Normally Primary above 50 kV - Station Service

Average Net Fixed Assets

Net Fixed Assets

2014
 Forecasted

Opening Capital Investment	\$	-
Capital Investment	\$	770,586
Closing Capital Investment	\$	770,586
Opening Accumulated Amortization	\$	-
Amortization	3%	\$ 19,265
Closing Accumulated Amortization	\$	19,265
Opening Net Fixed Assets	\$	-
Closing Net Fixed Assets	\$	751,321
Average Net Fixed Assets	\$	375,661

For PILs Calculation

UCC

2014
 Forecasted

Opening UCC	\$	-
Capital Additions	\$	770,586
UCC Before Half Year Rule	\$	770,586
Half Year Rule (1/2 Additions - Disposals)	\$	-
Reduced UCC	\$	770,586
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$	61,647
Closing UCC	\$	708,939



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 7

Name or General Description of Project

C17 Bremner Transformer Station

Asset Component

1820_DS Equip - Normally Primary below 50 kV - Stn Service Batteries

Average Net Fixed Assets

Net Fixed Assets

2014
Forecasted

Opening Capital Investment	\$	-
Capital Investment	\$	112,833
Closing Capital Investment	\$	112,833
Opening Accumulated Amortization	\$	-
Amortization	10%	\$ 11,283
Closing Accumulated Amortization	\$	11,283
Opening Net Fixed Assets	\$	-
Closing Net Fixed Assets	\$	101,550
Average Net Fixed Assets	\$	50,775

For PILs Calculation

UCC

2014
Forecasted

Opening UCC	\$	-
Capital Additions	\$	112,833
UCC Before Half Year Rule	\$	112,833
Half Year Rule (1/2 Additions - Disposals)	\$	-
Reduced UCC	\$	112,833
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$	9,027
Closing UCC	\$	103,806



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 8

Name or General Description of Project

C17 Bremner Transformer Station

Asset Component

1820_DS Equip - Normally Primary below 50 kV - Switchgear GIS

Average Net Fixed Assets

Net Fixed Assets

2014
Forecasted

Opening Capital Investment	\$	-
Capital Investment	\$	2,449,569
Closing Capital Investment	\$	2,449,569
Opening Accumulated Amortization	\$	-
Amortization	3%	\$ 61,239
Closing Accumulated Amortization	\$	61,239
Opening Net Fixed Assets	\$	-
Closing Net Fixed Assets	\$	2,388,330
Average Net Fixed Assets	\$	1,194,165

For PILs Calculation

UCC

2014
Forecasted

Opening UCC	\$	-
Capital Additions	\$	2,449,569
UCC Before Half Year Rule	\$	2,449,569
Half Year Rule (1/2 Additions - Disposals)	\$	-
Reduced UCC	\$	2,449,569
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$	195,966
Closing UCC	\$	2,253,604



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 9

Name or General Description of Project

C17 Bremner Transformer Station

Asset Component

1820_DS Equip - Normally Primary below 50 kV - Station Service

Average Net Fixed Assets

Net Fixed Assets

	2014 Forecasted
Opening Capital Investment	\$ -
Capital Investment	\$ 211,989
Closing Capital Investment	\$ 211,989
Opening Accumulated Amortization	\$ -
Amortization	3% \$ 6,625
Closing Accumulated Amortization	\$ 6,625
Opening Net Fixed Assets	\$ -
Closing Net Fixed Assets	\$ 205,365
Average Net Fixed Assets	\$ 102,682

For PILs Calculation

UCC

	2014 Forecasted
Opening UCC	\$ -
Capital Additions	\$ 211,989
UCC Before Half Year Rule	\$ 211,989
Half Year Rule (1/2 Additions - Disposals)	\$ -
Reduced UCC	\$ 211,989
CCA Rate Class	47
CCA Rate	8%
CCA	\$ 16,959
Closing UCC	\$ 195,030



Incremental Capital Project Summary

Using the pull-down menu below, please identify what year of the IRM cycle you are in.

2nd Year of IRM Cycle

Name or General Description of Project

C18 Hydro One Capital Contributions

Year

2012

Details of Project

C18 Hydro One Capital Contributions

Number of Asset Components

1

Asset Component (Click on the Number to View the Component Details)

1 1815_TS Equip - Normally Primary above 50 kV - Contribution to HONI

Capital Cost

25,280,047

Depreciation
Rate

4%

CCA Class

CEC

CCA Rate

0%

Closing Net Fixed Asset

2012
24,268,845

2013
23,257,643

2014
22,246,441

Amortization Expense

1,011,202

1,011,202

1,011,202

CCA

-

-

-



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 1

Name or General Description of Project

C18 Hydro One Capital Contributions

Asset Component

1815_TS Equip - Normally Primary above 50 kV - Contribution to HONI

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 25,280,047	\$ 25,280,047
Capital Investment	\$ 25,280,047	\$ -	\$ -
Closing Capital Investment	\$ 25,280,047	\$ 25,280,047	\$ 25,280,047
Opening Accumulated Amortization	\$ -	\$ 1,011,202	\$ 2,022,404
Amortization	4% \$ 1,011,202	\$ 1,011,202	\$ 1,011,202
Closing Accumulated Amortization	\$ 1,011,202	\$ 2,022,404	\$ 3,033,606
Opening Net Fixed Assets	\$ -	\$ 24,268,845	\$ 23,257,643
Closing Net Fixed Assets	\$ 24,268,845	\$ 23,257,643	\$ 22,246,441
Average Net Fixed Assets	\$ 12,134,423	\$ 23,763,244	\$ 22,752,042

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 25,280,047	\$ 25,280,047
Capital Additions	\$ 25,280,047	\$ -	\$ -
UCC Before Half Year Rule	\$ 25,280,047	\$ 25,280,047	\$ 25,280,047
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 25,280,047	\$ 25,280,047	\$ 25,280,047
CCA Rate Class	CEC		
CCA Rate	0%		
CCA	\$ -	\$ -	\$ -
Closing UCC	\$ 25,280,047	\$ 25,280,047	\$ 25,280,047



Incremental Capital Project Summary

Using the pull-down menu below, please identify what year of the IRM cycle you are in.

3rd Year of IRM Cycle

Name or General Description of Project

C18 Hydro One Capital Contributions

Year

2013

Details of Project

C18 Hydro One Capital Contributions

Number of Asset Components

1

Asset Component (Click on the Number to View the Component Details)

1 1815_TS Equip - Normally Primary above 50 kV - Contribution to HONI

Capital Cost

52,118,000

Depreciation
Rate

4%

CCA Class

CEC

CCA Rate

0%

Closing Net Fixed Asset

2013

50,033,280

2014

47,948,560

Amortization Expense

2,084,720

2,084,720

CCA

-

-



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 1

Name or General Description of Project

C18 Hydro One Capital Contributions

Asset Component

1815_TS Equip - Normally Primary above 50 kV - Contribution to HONI

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 52,118,000
Capital Investment	\$ 52,118,000	\$ -
Closing Capital Investment	\$ 52,118,000	\$ 52,118,000
Opening Accumulated Amortization	\$ -	\$ 2,084,720
Amortization	4% \$ 2,084,720	\$ 2,084,720
Closing Accumulated Amortization	\$ 2,084,720	\$ 4,169,440
Opening Net Fixed Assets	\$ -	\$ 50,033,280
Closing Net Fixed Assets	\$ 50,033,280	\$ 47,948,560
Average Net Fixed Assets	\$ 25,016,640	\$ 48,990,920

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 52,118,000
Capital Additions	\$ 52,118,000	\$ -
UCC Before Half Year Rule	\$ 52,118,000	\$ 52,118,000
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 52,118,000	\$ 52,118,000
CCA Rate Class	CEC	
CCA Rate	0%	
CCA	\$ -	\$ -
Closing UCC	\$ 52,118,000	\$ 52,118,000



Incremental Capital Project Summary

Using the pull-down menu below, please identify what year of the IRM cycle you are in.

4th Year of IRM Cycle

Name or General Description of Project

C18 Hydro One Capital Contributions

Year

2014

Details of Project

C18 Hydro One Capital Contributions

Number of Asset Components

1

Asset Component (Click on the Number to View the Component Details)	Capital Cost	Capital Cost (1/2 year rule applied)	Depreciation Rate	CCA Class	CCA Rate
1 1815_TS Equip - Normally Primary above 50 kV - Contribution to HONI	36,000,000	18,000,000	4%	CEC	0%
2014					
Closing Net Fixed Asset	17,280,000				
Amortization Expense	720,000				
CCA	-				



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 1

Name or General Description of Project

C18 Hydro One Capital Contributions

Asset Component

1815_TS Equip - Normally Primary above 50 kV - Contribution to HONI

Average Net Fixed Assets

Net Fixed Assets

2014
Forecasted

Opening Capital Investment	\$ -
Capital Investment	\$ 18,000,000
Closing Capital Investment	\$ 18,000,000
Opening Accumulated Amortization	\$ -
Amortization	4% \$ 720,000
Closing Accumulated Amortization	\$ 720,000
Opening Net Fixed Assets	\$ -
Closing Net Fixed Assets	\$ 17,280,000
Average Net Fixed Assets	\$ 8,640,000

For PILs Calculation

UCC

2014
Forecasted

Opening UCC	\$ -
Capital Additions	\$ 18,000,000
UCC Before Half Year Rule	\$ 18,000,000
Half Year Rule (1/2 Additions - Disposals)	\$ -
Reduced UCC	\$ 18,000,000
CCA Rate Class	CEC
CCA Rate	0%
CCA	\$ -
Closing UCC	\$ 18,000,000



Incremental Capital Project Summary

Using the pull-down menu below, please identify what year of the IRM cycle you are in.

2nd Year of IRM Cycle

Name or General Description of Project

C19 Feeder Automation

Year

2012

Details of Project

C19 Feeder Automation

Number of Asset Components

4

Asset Component (Click on the Number to View the Component Details)	Capital Cost	Depreciation Rate	CCA Class	CCA Rate
1 1830_Poles Towers and Fixtures	465,903	3%	47	8%
2 1835_Overhead Conductors and Devices	156,908	2%	47	8%
3 1835_Overhead Conductors and Devices - Switches	7,145,346	3%	47	8%
4 1855_Services - OH	52,508	2%	47	8%

	2012	2013	2014
Closing Net Fixed Asset	7,566,652	7,312,638	7,058,623
Amortization Expense	254,014	254,014	254,014
CCA	625,653	575,601	529,553



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 1

Name or General Description of Project

C19 Feeder Automation

Asset Component

1830_Poles Towers and Fixtures

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 465,903	\$ 465,903
Capital Investment	\$ 465,903	\$ -	\$ -
Closing Capital Investment	\$ 465,903	\$ 465,903	\$ 465,903
Opening Accumulated Amortization	\$ -	\$ 11,648	\$ 23,295
Amortization	3% \$ 11,648	\$ 11,648	\$ 11,648
Closing Accumulated Amortization	\$ 11,648	\$ 23,295	\$ 34,943
Opening Net Fixed Assets	\$ -	\$ 454,255	\$ 442,608
Closing Net Fixed Assets	\$ 454,255	\$ 442,608	\$ 430,960
Average Net Fixed Assets	\$ 227,128	\$ 448,431	\$ 436,784

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 428,631	\$ 394,340
Capital Additions	\$ 465,903	\$ -	\$ -
UCC Before Half Year Rule	\$ 465,903	\$ 428,631	\$ 394,340
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 465,903	\$ 428,631	\$ 394,340
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 37,272	\$ 34,290	\$ 31,547
Closing UCC	\$ 428,631	\$ 394,340	\$ 362,793



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 2

Name or General Description of Project

C19 Feeder Automation

Asset Component

1835_Overhead Conductors and Devices

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 156,908	\$ 156,908
Capital Investment	\$ 156,908	\$ -	\$ -
Closing Capital Investment	\$ 156,908	\$ 156,908	\$ 156,908
Opening Accumulated Amortization	\$ -	\$ 3,138	\$ 6,276
Amortization	2% \$ 3,138	\$ 3,138	\$ 3,138
Closing Accumulated Amortization	\$ 3,138	\$ 6,276	\$ 9,415
Opening Net Fixed Assets	\$ -	\$ 153,770	\$ 150,632
Closing Net Fixed Assets	\$ 153,770	\$ 150,632	\$ 147,494
Average Net Fixed Assets	\$ 76,885	\$ 152,201	\$ 149,063

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 144,356	\$ 132,807
Capital Additions	\$ 156,908	\$ -	\$ -
UCC Before Half Year Rule	\$ 156,908	\$ 144,356	\$ 132,807
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 156,908	\$ 144,356	\$ 132,807
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 12,553	\$ 11,548	\$ 10,625
Closing UCC	\$ 144,356	\$ 132,807	\$ 122,183



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 3

Name or General Description of Project

C19 Feeder Automation

Asset Component

1835_Overhead Conductors and Devices - Switches

Average Net Fixed Assets

Net Fixed Assets

	2012	2013	2014
	Forecasted	Forecasted	Forecasted
Opening Capital Investment	\$ -	\$ 7,145,346	\$ 7,145,346
Capital Investment	\$ 7,145,346	\$ -	\$ -
Closing Capital Investment	\$ 7,145,346	\$ 7,145,346	\$ 7,145,346
Opening Accumulated Amortization	\$ -	\$ 238,178	\$ 476,356
Amortization	3% \$ 238,178	\$ 238,178	\$ 238,178
Closing Accumulated Amortization	\$ 238,178	\$ 476,356	\$ 714,535
Opening Net Fixed Assets	\$ -	\$ 6,907,168	\$ 6,668,990
Closing Net Fixed Assets	\$ 6,907,168	\$ 6,668,990	\$ 6,430,812
Average Net Fixed Assets	\$ 3,453,584	\$ 6,788,079	\$ 6,549,901

For PILs Calculation

UCC

	2012	2013	2014
	Forecasted	Forecasted	Forecasted
Opening UCC	\$ -	\$ 6,573,719	\$ 6,047,821
Capital Additions	\$ 7,145,346	\$ -	\$ -
UCC Before Half Year Rule	\$ 7,145,346	\$ 6,573,719	\$ 6,047,821
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 7,145,346	\$ 6,573,719	\$ 6,047,821
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 571,628	\$ 525,897	\$ 483,826
Closing UCC	\$ 6,573,719	\$ 6,047,821	\$ 5,563,995



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 4

Name or General Description of Project

C19 Feeder Automation

Asset Component

1855_Services - OH

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 52,508	\$ 52,508
Capital Investment	\$ 52,508	\$ -	\$ -
Closing Capital Investment	\$ 52,508	\$ 52,508	\$ 52,508
Opening Accumulated Amortization	\$ -	\$ 1,050	\$ 2,100
Amortization	\$ 1,050	\$ 1,050	\$ 1,050
Closing Accumulated Amortization	\$ 1,050	\$ 2,100	\$ 3,150
Opening Net Fixed Assets	\$ -	\$ 51,458	\$ 50,408
Closing Net Fixed Assets	\$ 51,458	\$ 50,408	\$ 49,358
Average Net Fixed Assets	\$ 25,729	\$ 50,933	\$ 49,883

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 48,308	\$ 44,443
Capital Additions	\$ 52,508	\$ -	\$ -
UCC Before Half Year Rule	\$ 52,508	\$ 48,308	\$ 44,443
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 52,508	\$ 48,308	\$ 44,443
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 4,201	\$ 3,865	\$ 3,555
Closing UCC	\$ 48,308	\$ 44,443	\$ 40,888



Incremental Capital Project Summary

Using the pull-down menu below, please identify what year of the IRM cycle you are in.

3rd Year of IRM Cycle

Name or General Description of Project

C19 Feeder Automation

Year

2013

Details of Project

C19 Feeder Automation

Number of Asset Components

7

Asset Component (Click on the Number to View the Component Details)	Capital Cost	Depreciation Rate	CCA Class	CCA Rate
1 1830_Poles Towers and Fixtures	394,454	3%	47	8%
2 1835_Overhead Conductors and Devices	271,798	2%	47	8%
3 1835_Overhead Conductors and Devices - Switches	11,298,408	3%	47	8%
4 1845_Underground Conductors and Devices	223,776	3%	47	8%
5 1845_Underground Conductors and Devices - Switch	4,086,100	5%	47	8%
6 1855_Services - UG	16,641	3%	47	8%
7 1855_Services - OH	11,361	2%	47	8%

	2013	2014
Closing Net Fixed Asset	15,700,084	15,097,631
Amortization Expense	602,454	602,454
CCA	1,304,203	1,199,867



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 1

Name or General Description of Project

C19 Feeder Automation

Asset Component

1830_Poles Towers and Fixtures

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 394,454
Capital Investment	\$ 394,454	\$ -
Closing Capital Investment	\$ 394,454	\$ 394,454
Opening Accumulated Amortization	\$ -	\$ 9,861
Amortization	3% \$ 9,861	\$ 9,861
Closing Accumulated Amortization	\$ 9,861	\$ 19,723
Opening Net Fixed Assets	\$ -	\$ 384,593
Closing Net Fixed Assets	\$ 384,593	\$ 374,731
Average Net Fixed Assets	\$ 192,296	\$ 379,662

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 362,898
Capital Additions	\$ 394,454	\$ -
UCC Before Half Year Rule	\$ 394,454	\$ 362,898
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 394,454	\$ 362,898
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 31,556	\$ 29,032
Closing UCC	\$ 362,898	\$ 333,866



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 2

Name or General Description of Project

C19 Feeder Automation

Asset Component

1835_Overhead Conductors and Devices

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 271,798
Capital Investment	\$ 271,798	\$ -
Closing Capital Investment	\$ 271,798	\$ 271,798
Opening Accumulated Amortization	\$ -	\$ 5,436
Amortization	2% \$ 5,436	\$ 5,436
Closing Accumulated Amortization	\$ 5,436	\$ 10,872
Opening Net Fixed Assets	\$ -	\$ 266,362
Closing Net Fixed Assets	\$ 266,362	\$ 260,926
Average Net Fixed Assets	\$ 133,181	\$ 263,644

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 250,054
Capital Additions	\$ 271,798	\$ -
UCC Before Half Year Rule	\$ 271,798	\$ 250,054
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 271,798	\$ 250,054
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 21,744	\$ 20,004
Closing UCC	\$ 250,054	\$ 230,050



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 3

Name or General Description of Project

C19 Feeder Automation

Asset Component

1835_Overhead Conductors and Devices - Switches

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 11,298,408
Capital Investment	\$ 11,298,408	\$ -
Closing Capital Investment	\$ 11,298,408	\$ 11,298,408
Opening Accumulated Amortization	\$ -	\$ 376,614
Amortization	3% \$ 376,614	\$ 376,614
Closing Accumulated Amortization	\$ 376,614	\$ 753,227
Opening Net Fixed Assets	\$ -	\$ 10,921,794
Closing Net Fixed Assets	\$ 10,921,794	\$ 10,545,181
Average Net Fixed Assets	\$ 5,460,897	\$ 10,733,488

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 10,394,535
Capital Additions	\$ 11,298,408	\$ -
UCC Before Half Year Rule	\$ 11,298,408	\$ 10,394,535
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 11,298,408	\$ 10,394,535
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 903,873	\$ 831,563
Closing UCC	\$ 10,394,535	\$ 9,562,972



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 4

Name or General Description of Project

C19 Feeder Automation

Asset Component

1845_Underground Conductors and Devices

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 223,776
Capital Investment	\$ 223,776	\$ -
Closing Capital Investment	\$ 223,776	\$ 223,776
Opening Accumulated Amortization	\$ -	\$ 5,594
Amortization	3% \$ 5,594	\$ 5,594
Closing Accumulated Amortization	\$ 5,594	\$ 11,189
Opening Net Fixed Assets	\$ -	\$ 218,182
Closing Net Fixed Assets	\$ 218,182	\$ 212,587
Average Net Fixed Assets	\$ 109,091	\$ 215,384

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 205,874
Capital Additions	\$ 223,776	\$ -
UCC Before Half Year Rule	\$ 223,776	\$ 205,874
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 223,776	\$ 205,874
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 17,902	\$ 16,470
Closing UCC	\$ 205,874	\$ 189,404



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 5

Name or General Description of Project

C19 Feeder Automation

Asset Component

1845 Underground Conductors and Devices - Switch

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 4,086,100
Capital Investment	\$ 4,086,100	\$ -
Closing Capital Investment	\$ 4,086,100	\$ 4,086,100
Opening Accumulated Amortization	\$ -	\$ 204,305
Amortization	5% \$ 204,305	\$ 204,305
Closing Accumulated Amortization	\$ 204,305	\$ 408,610
Opening Net Fixed Assets	\$ -	\$ 3,881,795
Closing Net Fixed Assets	\$ 3,881,795	\$ 3,677,490
Average Net Fixed Assets	\$ 1,940,897	\$ 3,779,642

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 3,759,212
Capital Additions	\$ 4,086,100	\$ -
UCC Before Half Year Rule	\$ 4,086,100	\$ 3,759,212
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 4,086,100	\$ 3,759,212
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 326,888	\$ 300,737
Closing UCC	\$ 3,759,212	\$ 3,458,475



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 6

Name or General Description of Project

C19 Feeder Automation

Asset Component

1855_Services - UG

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 16,641
Capital Investment	\$ 16,641	\$ -
Closing Capital Investment	\$ 16,641	\$ 16,641
Opening Accumulated Amortization	\$ -	\$ 416
Amortization	3% \$ 416	\$ 416
Closing Accumulated Amortization	\$ 416	\$ 832
Opening Net Fixed Assets	\$ -	\$ 16,225
Closing Net Fixed Assets	\$ 16,225	\$ 15,809
Average Net Fixed Assets	\$ 8,113	\$ 16,017

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 15,310
Capital Additions	\$ 16,641	\$ -
UCC Before Half Year Rule	\$ 16,641	\$ 15,310
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 16,641	\$ 15,310
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 1,331	\$ 1,225
Closing UCC	\$ 15,310	\$ 14,085



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 7

Name or General Description of Project

C19 Feeder Automation

Asset Component

1855_Services - OH

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 11,361
Capital Investment	\$ 11,361	\$ -
Closing Capital Investment	\$ 11,361	\$ 11,361
Opening Accumulated Amortization	\$ -	\$ 227
Amortization	2% \$ 227	\$ 227
Closing Accumulated Amortization	\$ 227	\$ 454
Opening Net Fixed Assets	\$ -	\$ 11,134
Closing Net Fixed Assets	\$ 11,134	\$ 10,907
Average Net Fixed Assets	\$ 5,567	\$ 11,020

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 10,452
Capital Additions	\$ 11,361	\$ -
UCC Before Half Year Rule	\$ 11,361	\$ 10,452
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 11,361	\$ 10,452
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 909	\$ 836
Closing UCC	\$ 10,452	\$ 9,616



Incremental Capital Project Summary

Using the pull-down menu below, please identify what year of the IRM cycle you are in.

4th Year of IRM Cycle

Name or General Description of Project

C19 Feeder Automation

Year

2014

Details of Project

C19 Feeder Automation

Number of Asset Components

6

Asset Component (Click on the Number to View the Component Details)	Capital Cost	Capital Cost (1/2 year rule applied)	Depreciation Rate	CCA Class	CCA Rate
1 1830_Poles Towers and Fixtures	261,939	130,970	3%	47	8%
2 1835_Overhead Conductors and Devices	192,580	96,290	2%	47	8%
3 1835_Overhead Conductors and Devices - Switches	6,635,399	3,317,699	3%	47	8%
4 1845_Underground Conductors and Devices	12,479	6,240	3%	47	8%
5 1845_Underground Conductors and Devices - Switch	272,772	136,386	5%	47	8%
6 1855_Services - UG	1,079	540	3%	47	8%

2014

Closing Net Fixed Asset 3,565,345

Amortization Expense 122,779

CCA 295,050



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 1

Name or General Description of Project

C19 Feeder Automation

Asset Component

1830_Poles Towers and Fixtures

Average Net Fixed Assets

Net Fixed Assets

2014
Forecasted

Opening Capital Investment	\$	-
Capital Investment	\$	130,970
Closing Capital Investment	\$	130,970
Opening Accumulated Amortization	\$	-
Amortization	3%	\$ 3,274
Closing Accumulated Amortization	\$	3,274
Opening Net Fixed Assets	\$	-
Closing Net Fixed Assets	\$	127,695
Average Net Fixed Assets	\$	63,848

For PILs Calculation

UCC

2014
Forecasted

Opening UCC	\$	-
Capital Additions	\$	130,970
UCC Before Half Year Rule	\$	130,970
Half Year Rule (1/2 Additions - Disposals)	\$	-
Reduced UCC	\$	130,970
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$	10,478
Closing UCC	\$	120,492



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 2

Name or General Description of Project

C19 Feeder Automation

Asset Component

1835_Overhead Conductors and Devices

Average Net Fixed Assets

Net Fixed Assets

2014
Forecasted

Opening Capital Investment	\$	-
Capital Investment	\$	96,290
Closing Capital Investment	\$	96,290
Opening Accumulated Amortization	\$	-
Amortization	2%	\$ 1,926
Closing Accumulated Amortization	\$	1,926
Opening Net Fixed Assets	\$	-
Closing Net Fixed Assets	\$	94,364
Average Net Fixed Assets	\$	47,182

For PILs Calculation

UCC

2014
Forecasted

Opening UCC	\$	-
Capital Additions	\$	96,290
UCC Before Half Year Rule	\$	96,290
Half Year Rule (1/2 Additions - Disposals)	\$	-
Reduced UCC	\$	96,290
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$	7,703
Closing UCC	\$	88,587



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 3

Name or General Description of Project

C19 Feeder Automation

Asset Component

1835_Overhead Conductors and Devices - Switches

Average Net Fixed Assets

Net Fixed Assets

	2014 Forecasted
Opening Capital Investment	\$ -
Capital Investment	\$ 3,317,699
Closing Capital Investment	\$ 3,317,699
Opening Accumulated Amortization	\$ -
Amortization	3% \$ 110,590
Closing Accumulated Amortization	\$ 110,590
Opening Net Fixed Assets	\$ -
Closing Net Fixed Assets	\$ 3,207,109
Average Net Fixed Assets	\$ 1,603,555

For PILs Calculation

UCC

	2014 Forecasted
Opening UCC	\$ -
Capital Additions	\$ 3,317,699
UCC Before Half Year Rule	\$ 3,317,699
Half Year Rule (1/2 Additions - Disposals)	\$ -
Reduced UCC	\$ 3,317,699
CCA Rate Class	47
CCA Rate	8%
CCA	\$ 265,416
Closing UCC	\$ 3,052,283



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 4

Name or General Description of Project

C19 Feeder Automation

Asset Component

1845 Underground Conductors and Devices

Average Net Fixed Assets

Net Fixed Assets

	2014 Forecasted
Opening Capital Investment	\$ -
Capital Investment	\$ 6,240
Closing Capital Investment	\$ 6,240
Opening Accumulated Amortization	\$ -
Amortization	3% \$ 156
Closing Accumulated Amortization	\$ 156
Opening Net Fixed Assets	\$ -
Closing Net Fixed Assets	\$ 6,084
Average Net Fixed Assets	\$ 3,042

For PILs Calculation

UCC

	2014 Forecasted
Opening UCC	\$ -
Capital Additions	\$ 6,240
UCC Before Half Year Rule	\$ 6,240
Half Year Rule (1/2 Additions - Disposals)	\$ -
Reduced UCC	\$ 6,240
CCA Rate Class	47
CCA Rate	8%
CCA	\$ 499
Closing UCC	\$ 5,740



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 5

Name or General Description of Project

C19 Feeder Automation

Asset Component

1845 Underground Conductors and Devices - Switch

Average Net Fixed Assets

Net Fixed Assets

2014

Forecasted

Opening Capital Investment	\$	-
Capital Investment	\$	136,386
Closing Capital Investment	\$	136,386
Opening Accumulated Amortization	\$	-
Amortization	5%	\$ 6,819
Closing Accumulated Amortization	\$	6,819
Opening Net Fixed Assets	\$	-
Closing Net Fixed Assets	\$	129,567
Average Net Fixed Assets	\$	64,783

For PILs Calculation

UCC

2014

Forecasted

Opening UCC	\$	-
Capital Additions	\$	136,386
UCC Before Half Year Rule	\$	136,386
Half Year Rule (1/2 Additions - Disposals)	\$	-
Reduced UCC	\$	136,386
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$	10,911
Closing UCC	\$	125,475



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 6

Name or General Description of Project

C19 Feeder Automation

Asset Component

1855_Services - UG

Average Net Fixed Assets

Net Fixed Assets

2014
Forecasted

Opening Capital Investment	\$	-
Capital Investment	\$	540
Closing Capital Investment	\$	540
Opening Accumulated Amortization	\$	-
Amortization	3%	\$ 13
Closing Accumulated Amortization	\$	13
Opening Net Fixed Assets	\$	-
Closing Net Fixed Assets	\$	526
Average Net Fixed Assets	\$	263

For PILs Calculation

UCC

2014
Forecasted

Opening UCC	\$	-
Capital Additions	\$	540
UCC Before Half Year Rule	\$	540
Half Year Rule (1/2 Additions - Disposals)	\$	-
Reduced UCC	\$	540
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$	43
Closing UCC	\$	497



Incremental Capital Project Summary

Using the pull-down menu below, please identify what year of the IRM cycle you are in.

2nd Year of IRM Cycle

Name or General Description of Project

C20 Wholesale and Smart Metering

Year

2012

Details of Project

C20 Wholesale and Smart Metering

Number of Asset Components

2

Asset Component (Click on the Number to View the Component Details)

1	1820_DS Equip - Normally Primary below 50 kV - Grid Point Meters
2	1860_Meters - Smart Meters

Capital Cost

784,538
4,835,032

Depreciation
Rate

4%
7%

CCA Class

47
47

CCA Rate

8%
8%

Closing Net Fixed Asset

2012	2013	2014
5,265,853	4,912,136	4,558,419

Amortization Expense

353,717	353,717	353,717
---------	---------	---------

CCA

449,566	413,600	380,512
---------	---------	---------



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 1

Name or General Description of Project

C20 Wholesale and Smart Metering

Asset Component

1820_DS Equip - Normally Primary below 50 kV - Grid Point Meters

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 784,538	\$ 784,538
Capital Investment	\$ 784,538	\$ -	\$ -
Closing Capital Investment	\$ 784,538	\$ 784,538	\$ 784,538
Opening Accumulated Amortization	\$ -	\$ 31,382	\$ 62,763
Amortization	4% \$ 31,382	\$ 31,382	\$ 31,382
Closing Accumulated Amortization	\$ 31,382	\$ 62,763	\$ 94,145
Opening Net Fixed Assets	\$ -	\$ 753,157	\$ 721,775
Closing Net Fixed Assets	\$ 753,157	\$ 721,775	\$ 690,394
Average Net Fixed Assets	\$ 376,578	\$ 737,466	\$ 706,084

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 721,775	\$ 664,033
Capital Additions	\$ 784,538	\$ -	\$ -
UCC Before Half Year Rule	\$ 784,538	\$ 721,775	\$ 664,033
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 784,538	\$ 721,775	\$ 664,033
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 62,763	\$ 57,742	\$ 53,123
Closing UCC	\$ 721,775	\$ 664,033	\$ 610,910



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 2

Name or General Description of Project

C20 Wholesale and Smart Metering

Asset Component

1860 Meters - Smart Meters

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 4,835,032	\$ 4,835,032
Capital Investment	\$ 4,835,032	\$ -	\$ -
Closing Capital Investment	\$ 4,835,032	\$ 4,835,032	\$ 4,835,032
Opening Accumulated Amortization	\$ -	\$ 322,335	\$ 644,671
Amortization	7% \$ 322,335	\$ 322,335	\$ 322,335
Closing Accumulated Amortization	\$ 322,335	\$ 644,671	\$ 967,006
Opening Net Fixed Assets	\$ -	\$ 4,512,697	\$ 4,190,361
Closing Net Fixed Assets	\$ 4,512,697	\$ 4,190,361	\$ 3,868,026
Average Net Fixed Assets	\$ 2,256,348	\$ 4,351,529	\$ 4,029,194

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 4,448,230	\$ 4,092,371
Capital Additions	\$ 4,835,032	\$ -	\$ -
UCC Before Half Year Rule	\$ 4,835,032	\$ 4,448,230	\$ 4,092,371
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 4,835,032	\$ 4,448,230	\$ 4,092,371
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 386,803	\$ 355,858	\$ 327,390
Closing UCC	\$ 4,448,230	\$ 4,092,371	\$ 3,764,982



Incremental Capital Project Summary

Using the pull-down menu below, please identify what year of the IRM cycle you are in.

3rd Year of IRM Cycle

Name or General Description of Project

C20 Wholesale and Smart Metering

Year

2013

Details of Project

C20 Wholesale and Smart Metering

Number of Asset Components

2

Asset Component (Click on the Number to View the Component Details)

1	1820_DS Equip - Normally Primary below 50 kV - Grid Point Meters
2	1860_Meters - Smart Meters

Capital Cost

6,296,119
908,960

Depreciation Rate

4%
7%

CCA Class

47
47

CCA Rate

8%
8%

2013

2014

Closing Net Fixed Asset

6,892,637	6,580,195
-----------	-----------

Amortization Expense

312,442	312,442
---------	---------

CCA

576,406	530,294
---------	---------



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 1

Name or General Description of Project

C20 Wholesale and Smart Metering

Asset Component

1820_DS Equip - Normally Primary below 50 kV - Grid Point Meters

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 6,296,119
Capital Investment	\$ 6,296,119	\$ -
Closing Capital Investment	\$ 6,296,119	\$ 6,296,119
Opening Accumulated Amortization	\$ -	\$ 251,845
Amortization	4% \$ 251,845	\$ 251,845
Closing Accumulated Amortization	\$ 251,845	\$ 503,690
Opening Net Fixed Assets	\$ -	\$ 6,044,274
Closing Net Fixed Assets	\$ 6,044,274	\$ 5,792,430
Average Net Fixed Assets	\$ 3,022,137	\$ 5,918,352

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 5,792,430
Capital Additions	\$ 6,296,119	\$ -
UCC Before Half Year Rule	\$ 6,296,119	\$ 5,792,430
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 6,296,119	\$ 5,792,430
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 503,690	\$ 463,394
Closing UCC	\$ 5,792,430	\$ 5,329,035



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 2

Name or General Description of Project

C20 Wholesale and Smart Metering

Asset Component

1860 Meters - Smart Meters

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 908,960
Capital Investment	\$ 908,960	\$ -
Closing Capital Investment	\$ 908,960	\$ 908,960
Opening Accumulated Amortization	\$ -	\$ 60,597
Amortization	7% \$ 60,597	\$ 60,597
Closing Accumulated Amortization	\$ 60,597	\$ 121,195
Opening Net Fixed Assets	\$ -	\$ 848,362
Closing Net Fixed Assets	\$ 848,362	\$ 787,765
Average Net Fixed Assets	\$ 424,181	\$ 818,064

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 836,243
Capital Additions	\$ 908,960	\$ -
UCC Before Half Year Rule	\$ 908,960	\$ 836,243
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 908,960	\$ 836,243
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 72,717	\$ 66,899
Closing UCC	\$ 836,243	\$ 769,343



Incremental Capital Project Summary

Using the pull-down menu below, please identify what year of the IRM cycle you are in.

4th Year of IRM Cycle

Name or General Description of Project

C20 Wholesale and Smart Metering

Year

2014

Details of Project

C20 Wholesale and Smart Metering

Number of Asset Components

2

Asset Component (Click on the Number to View the Component Details)	Capital Cost	Capital Cost (1/2 year rule applied)	Depreciation Rate	CCA Class	CCA Rate
1 1820_DS Equip - Normally Primary below 50 kV - Grid Point Meters	9,052,450	4,526,225	4%	47	8%
2 1860_Meters - Smart Meters	973,588	486,794	7%	47	8%
Closing Net Fixed Asset	2014 4,799,517				
Amortization Expense	213,502				
CCA	401,042				



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 1

Name or General Description of Project

C20 Wholesale and Smart Metering

Asset Component

1820_DS Equip - Normally Primary below 50 kV - Grid Point Meters

Average Net Fixed Assets

Net Fixed Assets

2014
 Forecasted

Opening Capital Investment	\$	-
Capital Investment	\$	4,526,225
Closing Capital Investment	\$	4,526,225
Opening Accumulated Amortization	\$	-
Amortization	4%	\$ 181,049
Closing Accumulated Amortization	\$	181,049
Opening Net Fixed Assets	\$	-
Closing Net Fixed Assets	\$	4,345,176
Average Net Fixed Assets	\$	2,172,588

For PILs Calculation

UCC

2014
 Forecasted

Opening UCC	\$	-
Capital Additions	\$	4,526,225
UCC Before Half Year Rule	\$	4,526,225
Half Year Rule (1/2 Additions - Disposals)	\$	-
Reduced UCC	\$	4,526,225
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$	362,098
Closing UCC	\$	4,164,127



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 2

Name or General Description of Project

C20 Wholesale and Smart Metering

Asset Component

1860 Meters - Smart Meters

Average Net Fixed Assets

Net Fixed Assets

2014

Forecasted

Opening Capital Investment	\$	-
Capital Investment	\$	486,794
Closing Capital Investment	\$	486,794
Opening Accumulated Amortization	\$	-
Amortization	7%	\$ 32,453
Closing Accumulated Amortization	\$	32,453
Opening Net Fixed Assets	\$	-
Closing Net Fixed Assets	\$	454,341
Average Net Fixed Assets	\$	227,171

For PILs Calculation

UCC

2014

Forecasted

Opening UCC	\$	-
Capital Additions	\$	486,794
UCC Before Half Year Rule	\$	486,794
Half Year Rule (1/2 Additions - Disposals)	\$	-
Reduced UCC	\$	486,794
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$	38,944
Closing UCC	\$	447,850



Incremental Capital Project Summary

Using the pull-down menu below, please identify what year of the IRM cycle you are in.

2nd Year of IRM Cycle

Name or General Description of Project

C21 Externally-Initiated Plant Relocations and Expansions

Year

2012

Details of Project

C21 Externally-Initiated Plant Relocations and Expansions

Number of Asset Components

12

Asset Component (Click on the Number to View the Component Details)	Capital Cost	Depreciation Rate	CCA Class	CCA Rate
1 1830_Poles Towers and Fixtures	511,256	3%	47	8%
2 1835_Overhead Conductors and Devices	753,835	2%	47	8%
3 1835_Overhead Conductors and Devices - Switches	109,575	3%	47	8%
4 1840_Underground Conduit - Cable Chamber	999,385	2%	47	8%
5 1840_Underground Conduit - Duct Bank	14,441,418	3%	47	8%
6 1840_Underground Conduit - Vault	20,153	3%	47	8%
7 1840_Underground Conduit - Vault Roof	116,126	5%	47	8%
8 1845_Underground Conductors and Devices	6,421,776	3%	47	8%
9 1845_Underground Conductors and Devices - Switch	694,602	5%	47	8%
10 1850_Line Transformers - OH	105,062	3%	47	8%
11 1855_Services - UG	5,425	3%	47	8%
12 1855_Services - OH	89,934	2%	47	8%

	2012	2013	2014
Closing Net Fixed Asset	23,528,646	22,788,746	22,048,846
Amortization Expense	739,900	739,900	739,900
CCA	1,941,484	1,786,165	1,643,272



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 1

Name or General Description of Project

C21 Externally-Initiated Plant Relocations and Expansions

Asset Component

1830_Poles Towers and Fixtures

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 511,256	\$ 511,256
Capital Investment	\$ 511,256	\$ -	\$ -
Closing Capital Investment	\$ 511,256	\$ 511,256	\$ 511,256
Opening Accumulated Amortization	\$ -	\$ 12,781	\$ 25,563
Amortization	3% \$ 12,781	\$ 12,781	\$ 12,781
Closing Accumulated Amortization	\$ 12,781	\$ 25,563	\$ 38,344
Opening Net Fixed Assets	\$ -	\$ 498,475	\$ 485,694
Closing Net Fixed Assets	\$ 498,475	\$ 485,694	\$ 472,912
Average Net Fixed Assets	\$ 249,238	\$ 492,084	\$ 479,303

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 470,356	\$ 432,727
Capital Additions	\$ 511,256	\$ -	\$ -
UCC Before Half Year Rule	\$ 511,256	\$ 470,356	\$ 432,727
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 511,256	\$ 470,356	\$ 432,727
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 40,901	\$ 37,628	\$ 34,618
Closing UCC	\$ 470,356	\$ 432,727	\$ 398,109



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 2

Name or General Description of Project

C21 Externally-Initiated Plant Relocations and Expansions

Asset Component

1835_Overhead Conductors and Devices

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 753,835	\$ 753,835
Capital Investment	\$ 753,835	\$ -	\$ -
Closing Capital Investment	\$ 753,835	\$ 753,835	\$ 753,835
Opening Accumulated Amortization	\$ -	\$ 15,077	\$ 30,153
Amortization	2% \$ 15,077	\$ 15,077	\$ 15,077
Closing Accumulated Amortization	\$ 15,077	\$ 30,153	\$ 45,230
Opening Net Fixed Assets	\$ -	\$ 738,758	\$ 723,681
Closing Net Fixed Assets	\$ 738,758	\$ 723,681	\$ 708,604
Average Net Fixed Assets	\$ 369,379	\$ 731,220	\$ 716,143

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 693,528	\$ 638,046
Capital Additions	\$ 753,835	\$ -	\$ -
UCC Before Half Year Rule	\$ 753,835	\$ 693,528	\$ 638,046
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 753,835	\$ 693,528	\$ 638,046
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 60,307	\$ 55,482	\$ 51,044
Closing UCC	\$ 693,528	\$ 638,046	\$ 587,002



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 3

Name or General Description of Project

C21 Externally-Initiated Plant Relocations and Expansions

Asset Component

1835_Overhead Conductors and Devices - Switches

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 109,575	\$ 109,575
Capital Investment	\$ 109,575	\$ -	\$ -
Closing Capital Investment	\$ 109,575	\$ 109,575	\$ 109,575
Opening Accumulated Amortization	\$ -	\$ 3,653	\$ 7,305
Amortization	3% \$ 3,653	\$ 3,653	\$ 3,653
Closing Accumulated Amortization	\$ 3,653	\$ 7,305	\$ 10,958
Opening Net Fixed Assets	\$ -	\$ 105,923	\$ 102,270
Closing Net Fixed Assets	\$ 105,923	\$ 102,270	\$ 98,618
Average Net Fixed Assets	\$ 52,961	\$ 104,096	\$ 100,444

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 100,809	\$ 92,744
Capital Additions	\$ 109,575	\$ -	\$ -
UCC Before Half Year Rule	\$ 109,575	\$ 100,809	\$ 92,744
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 109,575	\$ 100,809	\$ 92,744
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 8,766	\$ 8,065	\$ 7,420
Closing UCC	\$ 100,809	\$ 92,744	\$ 85,325



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 4

Name or General Description of Project

C21 Externally-Initiated Plant Relocations and Expansions

Asset Component

1840 Underground Conduit - Cable Chamber

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 999,385	\$ 999,385
Capital Investment	\$ 999,385	\$ -	\$ -
Closing Capital Investment	\$ 999,385	\$ 999,385	\$ 999,385
Opening Accumulated Amortization	\$ -	\$ 19,988	\$ 39,975
Amortization	2% \$ 19,988	\$ 19,988	\$ 19,988
Closing Accumulated Amortization	\$ 19,988	\$ 39,975	\$ 59,963
Opening Net Fixed Assets	\$ -	\$ 979,397	\$ 959,409
Closing Net Fixed Assets	\$ 979,397	\$ 959,409	\$ 939,422
Average Net Fixed Assets	\$ 489,698	\$ 969,403	\$ 949,415

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 919,434	\$ 845,879
Capital Additions	\$ 999,385	\$ -	\$ -
UCC Before Half Year Rule	\$ 999,385	\$ 919,434	\$ 845,879
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 999,385	\$ 919,434	\$ 845,879
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 79,951	\$ 73,555	\$ 67,670
Closing UCC	\$ 919,434	\$ 845,879	\$ 778,209



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 5

Name or General Description of Project

C21 Externally-Initiated Plant Relocations and Expansions

Asset Component

1840 Underground Conduit - Duct Bank

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 14,441,418	\$ 14,441,418
Capital Investment	\$ 14,441,418	\$ -	\$ -
Closing Capital Investment	\$ 14,441,418	\$ 14,441,418	\$ 14,441,418
Opening Accumulated Amortization	\$ -	\$ 481,381	\$ 962,761
Amortization	3% \$ 481,381	\$ 481,381	\$ 481,381
Closing Accumulated Amortization	\$ 481,381	\$ 962,761	\$ 1,444,142
Opening Net Fixed Assets	\$ -	\$ 13,960,037	\$ 13,478,657
Closing Net Fixed Assets	\$ 13,960,037	\$ 13,478,657	\$ 12,997,276
Average Net Fixed Assets	\$ 6,980,019	\$ 13,719,347	\$ 13,237,967

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 13,286,105	\$ 12,223,216
Capital Additions	\$ 14,441,418	\$ -	\$ -
UCC Before Half Year Rule	\$ 14,441,418	\$ 13,286,105	\$ 12,223,216
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 14,441,418	\$ 13,286,105	\$ 12,223,216
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 1,155,313	\$ 1,062,888	\$ 977,857
Closing UCC	\$ 13,286,105	\$ 12,223,216	\$ 11,245,359



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 6

Name or General Description of Project

C21 Externally-Initiated Plant Relocations and Expansions

Asset Component

1840 Underground Conduit - Vault

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 20,153	\$ 20,153
Capital Investment	\$ 20,153	\$ -	\$ -
Closing Capital Investment	\$ 20,153	\$ 20,153	\$ 20,153
Opening Accumulated Amortization	\$ -	\$ 504	\$ 1,008
Amortization	3% \$ 504	\$ 504	\$ 504
Closing Accumulated Amortization	\$ 504	\$ 1,008	\$ 1,511
Opening Net Fixed Assets	\$ -	\$ 19,649	\$ 19,145
Closing Net Fixed Assets	\$ 19,649	\$ 19,145	\$ 18,641
Average Net Fixed Assets	\$ 9,824	\$ 19,397	\$ 18,893

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 18,540	\$ 17,057
Capital Additions	\$ 20,153	\$ -	\$ -
UCC Before Half Year Rule	\$ 20,153	\$ 18,540	\$ 17,057
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 20,153	\$ 18,540	\$ 17,057
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 1,612	\$ 1,483	\$ 1,365
Closing UCC	\$ 18,540	\$ 17,057	\$ 15,693



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 7

Name or General Description of Project

C21 Externally-Initiated Plant Relocations and Expansions

Asset Component

1840 Underground Conduit - Vault Roof

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 116,126	\$ 116,126
Capital Investment	\$ 116,126	\$ -	\$ -
Closing Capital Investment	\$ 116,126	\$ 116,126	\$ 116,126
Opening Accumulated Amortization	\$ -	\$ 5,806	\$ 11,613
Amortization	\$ 5,806	\$ 5,806	\$ 5,806
Closing Accumulated Amortization	\$ 5,806	\$ 11,613	\$ 17,419
Opening Net Fixed Assets	\$ -	\$ 110,319	\$ 104,513
Closing Net Fixed Assets	\$ 110,319	\$ 104,513	\$ 98,707
Average Net Fixed Assets	\$ 55,160	\$ 107,416	\$ 101,610

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 106,835	\$ 98,289
Capital Additions	\$ 116,126	\$ -	\$ -
UCC Before Half Year Rule	\$ 116,126	\$ 106,835	\$ 98,289
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 116,126	\$ 106,835	\$ 98,289
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 9,290	\$ 8,547	\$ 7,863
Closing UCC	\$ 106,835	\$ 98,289	\$ 90,426



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 8

Name or General Description of Project

C21 Externally-Initiated Plant Relocations and Expansions

Asset Component

1845 Underground Conductors and Devices

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 6,421,776	\$ 6,421,776
Capital Investment	\$ 6,421,776	\$ -	\$ -
Closing Capital Investment	\$ 6,421,776	\$ 6,421,776	\$ 6,421,776
Opening Accumulated Amortization	\$ -	\$ 160,544	\$ 321,089
Amortization	3% \$ 160,544	\$ 160,544	\$ 160,544
Closing Accumulated Amortization	\$ 160,544	\$ 321,089	\$ 481,633
Opening Net Fixed Assets	\$ -	\$ 6,261,232	\$ 6,100,687
Closing Net Fixed Assets	\$ 6,261,232	\$ 6,100,687	\$ 5,940,143
Average Net Fixed Assets	\$ 3,130,616	\$ 6,180,959	\$ 6,020,415

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 5,908,034	\$ 5,435,391
Capital Additions	\$ 6,421,776	\$ -	\$ -
UCC Before Half Year Rule	\$ 6,421,776	\$ 5,908,034	\$ 5,435,391
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 6,421,776	\$ 5,908,034	\$ 5,435,391
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 513,742	\$ 472,643	\$ 434,831
Closing UCC	\$ 5,908,034	\$ 5,435,391	\$ 5,000,560



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 9

Name or General Description of Project

C21 Externally-Initiated Plant Relocations and Expansions

Asset Component

1845 Underground Conductors and Devices - Switch

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 694,602	\$ 694,602
Capital Investment	\$ 694,602	\$ -	\$ -
Closing Capital Investment	\$ 694,602	\$ 694,602	\$ 694,602
Opening Accumulated Amortization	\$ -	\$ 34,730	\$ 69,460
Amortization	5% \$ 34,730	\$ 34,730	\$ 34,730
Closing Accumulated Amortization	\$ 34,730	\$ 69,460	\$ 104,190
Opening Net Fixed Assets	\$ -	\$ 659,872	\$ 625,142
Closing Net Fixed Assets	\$ 659,872	\$ 625,142	\$ 590,412
Average Net Fixed Assets	\$ 329,936	\$ 642,507	\$ 607,777

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 639,034	\$ 587,911
Capital Additions	\$ 694,602	\$ -	\$ -
UCC Before Half Year Rule	\$ 694,602	\$ 639,034	\$ 587,911
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 694,602	\$ 639,034	\$ 587,911
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 55,568	\$ 51,123	\$ 47,033
Closing UCC	\$ 639,034	\$ 587,911	\$ 540,878



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 10

Name or General Description of Project

C21 Externally-Initiated Plant Relocations and Expansions

Asset Component

1850 Line Transformers - OH

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 105,062	\$ 105,062
Capital Investment	\$ 105,062	\$ -	\$ -
Closing Capital Investment	\$ 105,062	\$ 105,062	\$ 105,062
Opening Accumulated Amortization	\$ -	\$ 3,502	\$ 7,004
Amortization	3% \$ 3,502	\$ 3,502	\$ 3,502
Closing Accumulated Amortization	\$ 3,502	\$ 7,004	\$ 10,506
Opening Net Fixed Assets	\$ -	\$ 101,560	\$ 98,058
Closing Net Fixed Assets	\$ 101,560	\$ 98,058	\$ 94,556
Average Net Fixed Assets	\$ 50,780	\$ 99,809	\$ 96,307

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 96,657	\$ 88,924
Capital Additions	\$ 105,062	\$ -	\$ -
UCC Before Half Year Rule	\$ 105,062	\$ 96,657	\$ 88,924
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 105,062	\$ 96,657	\$ 88,924
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 8,405	\$ 7,733	\$ 7,114
Closing UCC	\$ 96,657	\$ 88,924	\$ 81,810



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 11

Name or General Description of Project

C21 Externally-Initiated Plant Relocations and Expansions

Asset Component

1855_Services - UG

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 5,425	\$ 5,425
Capital Investment	\$ 5,425	\$ -	\$ -
Closing Capital Investment	\$ 5,425	\$ 5,425	\$ 5,425
Opening Accumulated Amortization	\$ -	\$ 136	\$ 271
Amortization	3% \$ 136	\$ 136	\$ 136
Closing Accumulated Amortization	\$ 136	\$ 271	\$ 407
Opening Net Fixed Assets	\$ -	\$ 5,289	\$ 5,154
Closing Net Fixed Assets	\$ 5,289	\$ 5,154	\$ 5,018
Average Net Fixed Assets	\$ 2,645	\$ 5,222	\$ 5,086

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 4,991	\$ 4,592
Capital Additions	\$ 5,425	\$ -	\$ -
UCC Before Half Year Rule	\$ 5,425	\$ 4,991	\$ 4,592
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 5,425	\$ 4,991	\$ 4,592
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 434	\$ 399	\$ 367
Closing UCC	\$ 4,991	\$ 4,592	\$ 4,224



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 12

Name or General Description of Project

C21 Externally-Initiated Plant Relocations and Expansions

Asset Component

1855_Services - OH

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 89,934	\$ 89,934
Capital Investment	\$ 89,934	\$ -	\$ -
Closing Capital Investment	\$ 89,934	\$ 89,934	\$ 89,934
Opening Accumulated Amortization	\$ -	\$ 1,799	\$ 3,597
Amortization	2% \$ 1,799	\$ 1,799	\$ 1,799
Closing Accumulated Amortization	\$ 1,799	\$ 3,597	\$ 5,396
Opening Net Fixed Assets	\$ -	\$ 88,135	\$ 86,337
Closing Net Fixed Assets	\$ 88,135	\$ 86,337	\$ 84,538
Average Net Fixed Assets	\$ 44,068	\$ 87,236	\$ 85,437

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 82,739	\$ 76,120
Capital Additions	\$ 89,934	\$ -	\$ -
UCC Before Half Year Rule	\$ 89,934	\$ 82,739	\$ 76,120
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 89,934	\$ 82,739	\$ 76,120
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 7,195	\$ 6,619	\$ 6,090
Closing UCC	\$ 82,739	\$ 76,120	\$ 70,030



Incremental Capital Project Summary

Using the pull-down menu below, please identify what year of the IRM cycle you are in.

3rd Year of IRM Cycle

Name or General Description of Project

C21 Externally-Initiated Plant Relocations and Expansions

Year

2013

Details of Project

C21 Externally-Initiated Plant Relocations and Expansions

Number of Asset Components

13

Asset Component (Click on the Number to View the Component Details)	Capital Cost	Depreciation Rate	CCA Class	CCA Rate
1 1830_Poles Towers and Fixtures	61,129	3%	47	8%
2 1835_Overhead Conductors and Devices	14,939	2%	47	8%
3 1835_Overhead Conductors and Devices - Switches	6,081	3%	47	8%
4 1840_Underground Conduit - Cable Chamber	3,792,067	2%	47	8%
5 1840_Underground Conduit - Duct Bank	10,690,950	3%	47	8%
6 1840_Underground Conduit - Vault	777,510	3%	47	8%
7 1840_Underground Conduit - Vault Roof	14,443	5%	47	8%
8 1845_Underground Conductors and Devices	1,916,900	3%	47	8%
9 1845_Underground Conductors and Devices - Switch	2,295	5%	47	8%
10 1850_Line Transformers - OH	13,513	3%	47	8%
11 1850_Line Transformers - UG	6,428	3%	47	8%
12 1850_Line Transformers - UG Network w/protector	371,964	5%	47	8%
13 1855_Services - UG	2,625	3%	47	8%

	2013	2014
Closing Net Fixed Asset	17,149,083	16,627,321
Amortization Expense	521,762	521,762
CCA	1,413,668	1,300,574



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 1

Name or General Description of Project

C21 Externally-Initiated Plant Relocations and Expansions

Asset Component

1830_Poles Towers and Fixtures

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 61,129
Capital Investment	\$ 61,129	\$ -
Closing Capital Investment	\$ 61,129	\$ 61,129
Opening Accumulated Amortization	\$ -	\$ 1,528
Amortization	3% \$ 1,528	\$ 1,528
Closing Accumulated Amortization	\$ 1,528	\$ 3,056
Opening Net Fixed Assets	\$ -	\$ 59,601
Closing Net Fixed Assets	\$ 59,601	\$ 58,072
Average Net Fixed Assets	\$ 29,800	\$ 58,836

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 56,239
Capital Additions	\$ 61,129	\$ -
UCC Before Half Year Rule	\$ 61,129	\$ 56,239
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 61,129	\$ 56,239
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 4,890	\$ 4,499
Closing UCC	\$ 56,239	\$ 51,739



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 2

Name or General Description of Project

C21 Externally-Initiated Plant Relocations and Expansions

Asset Component

1835_Overhead Conductors and Devices

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 14,939
Capital Investment	\$ 14,939	\$ -
Closing Capital Investment	\$ 14,939	\$ 14,939
Opening Accumulated Amortization	\$ -	\$ 299
Amortization	2% \$ 299	\$ 299
Closing Accumulated Amortization	\$ 299	\$ 598
Opening Net Fixed Assets	\$ -	\$ 14,641
Closing Net Fixed Assets	\$ 14,641	\$ 14,342
Average Net Fixed Assets	\$ 7,320	\$ 14,491

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 13,744
Capital Additions	\$ 14,939	\$ -
UCC Before Half Year Rule	\$ 14,939	\$ 13,744
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 14,939	\$ 13,744
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 1,195	\$ 1,100
Closing UCC	\$ 13,744	\$ 12,645



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 3

Name or General Description of Project

C21 Externally-Initiated Plant Relocations and Expansions

Asset Component

1835_Overhead Conductors and Devices - Switches

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 6,081
Capital Investment	\$ 6,081	\$ -
Closing Capital Investment	\$ 6,081	\$ 6,081
Opening Accumulated Amortization	\$ -	\$ 203
Amortization	3% \$ 203	\$ 203
Closing Accumulated Amortization	\$ 203	\$ 405
Opening Net Fixed Assets	\$ -	\$ 5,878
Closing Net Fixed Assets	\$ 5,878	\$ 5,676
Average Net Fixed Assets	\$ 2,939	\$ 5,777

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 5,594
Capital Additions	\$ 6,081	\$ -
UCC Before Half Year Rule	\$ 6,081	\$ 5,594
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 6,081	\$ 5,594
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 486	\$ 448
Closing UCC	\$ 5,594	\$ 5,147



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 4

Name or General Description of Project

C21 Externally-Initiated Plant Relocations and Expansions

Asset Component

1840 Underground Conduit - Cable Chamber

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 3,792,067
Capital Investment	\$ 3,792,067	\$ -
Closing Capital Investment	\$ 3,792,067	\$ 3,792,067
Opening Accumulated Amortization	\$ -	\$ 75,841
Amortization	2% \$ 75,841	\$ 75,841
Closing Accumulated Amortization	\$ 75,841	\$ 151,683
Opening Net Fixed Assets	\$ -	\$ 3,716,226
Closing Net Fixed Assets	\$ 3,716,226	\$ 3,640,384
Average Net Fixed Assets	\$ 1,858,113	\$ 3,678,305

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 3,488,702
Capital Additions	\$ 3,792,067	\$ -
UCC Before Half Year Rule	\$ 3,792,067	\$ 3,488,702
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 3,792,067	\$ 3,488,702
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 303,365	\$ 279,096
Closing UCC	\$ 3,488,702	\$ 3,209,605



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 5

Name or General Description of Project

C21 Externally-Initiated Plant Relocations and Expansions

Asset Component

1840 Underground Conduit - Duct Bank

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 10,690,950
Capital Investment	\$ 10,690,950	\$ -
Closing Capital Investment	\$ 10,690,950	\$ 10,690,950
Opening Accumulated Amortization	\$ -	\$ 356,365
Amortization	3% \$ 356,365	\$ 356,365
Closing Accumulated Amortization	\$ 356,365	\$ 712,730
Opening Net Fixed Assets	\$ -	\$ 10,334,585
Closing Net Fixed Assets	\$ 10,334,585	\$ 9,978,220
Average Net Fixed Assets	\$ 5,167,293	\$ 10,156,403

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 9,835,674
Capital Additions	\$ 10,690,950	\$ -
UCC Before Half Year Rule	\$ 10,690,950	\$ 9,835,674
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 10,690,950	\$ 9,835,674
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 855,276	\$ 786,854
Closing UCC	\$ 9,835,674	\$ 9,048,820



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 6

Name or General Description of Project

C21 Externally-Initiated Plant Relocations and Expansions

Asset Component

1840 Underground Conduit - Vault

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 777,510
Capital Investment	\$ 777,510	\$ -
Closing Capital Investment	\$ 777,510	\$ 777,510
Opening Accumulated Amortization	\$ -	\$ 19,438
Amortization	3% \$ 19,438	\$ 19,438
Closing Accumulated Amortization	\$ 19,438	\$ 38,876
Opening Net Fixed Assets	\$ -	\$ 758,072
Closing Net Fixed Assets	\$ 758,072	\$ 738,635
Average Net Fixed Assets	\$ 379,036	\$ 748,354

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 715,309
Capital Additions	\$ 777,510	\$ -
UCC Before Half Year Rule	\$ 777,510	\$ 715,309
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 777,510	\$ 715,309
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 62,201	\$ 57,225
Closing UCC	\$ 715,309	\$ 658,085



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 7

Name or General Description of Project

C21 Externally-Initiated Plant Relocations and Expansions

Asset Component

1840 Underground Conduit - Vault Roof

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 14,443
Capital Investment	\$ 14,443	\$ -
Closing Capital Investment	\$ 14,443	\$ 14,443
Opening Accumulated Amortization	\$ -	\$ 722
Amortization	5% \$ 722	\$ 722
Closing Accumulated Amortization	\$ 722	\$ 1,444
Opening Net Fixed Assets	\$ -	\$ 13,721
Closing Net Fixed Assets	\$ 13,721	\$ 12,999
Average Net Fixed Assets	\$ 6,860	\$ 13,360

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 13,288
Capital Additions	\$ 14,443	\$ -
UCC Before Half Year Rule	\$ 14,443	\$ 13,288
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 14,443	\$ 13,288
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 1,155	\$ 1,063
Closing UCC	\$ 13,288	\$ 12,225



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 8

Name or General Description of Project

C21 Externally-Initiated Plant Relocations and Expansions

Asset Component

1845 Underground Conductors and Devices

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 1,916,900
Capital Investment	\$ 1,916,900	\$ -
Closing Capital Investment	\$ 1,916,900	\$ 1,916,900
Opening Accumulated Amortization	\$ -	\$ 47,923
Amortization	3% \$ 47,923	\$ 47,923
Closing Accumulated Amortization	\$ 47,923	\$ 95,845
Opening Net Fixed Assets	\$ -	\$ 1,868,978
Closing Net Fixed Assets	\$ 1,868,978	\$ 1,821,055
Average Net Fixed Assets	\$ 934,489	\$ 1,845,017

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 1,763,548
Capital Additions	\$ 1,916,900	\$ -
UCC Before Half Year Rule	\$ 1,916,900	\$ 1,763,548
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 1,916,900	\$ 1,763,548
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 153,352	\$ 141,084
Closing UCC	\$ 1,763,548	\$ 1,622,464



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 9

Name or General Description of Project

C21 Externally-Initiated Plant Relocations and Expansions

Asset Component

1845 Underground Conductors and Devices - Switch

Average Net Fixed Assets

Net Fixed Assets

	2013	2014
	Forecasted	Forecasted
Opening Capital Investment	\$ -	\$ 2,295
Capital Investment	\$ 2,295	\$ -
Closing Capital Investment	\$ 2,295	\$ 2,295
Opening Accumulated Amortization	\$ -	\$ 115
Amortization	5% \$ 115	\$ 115
Closing Accumulated Amortization	\$ 115	\$ 230
Opening Net Fixed Assets	\$ -	\$ 2,180
Closing Net Fixed Assets	\$ 2,180	\$ 2,066
Average Net Fixed Assets	\$ 1,090	\$ 2,123

For PILs Calculation

UCC

	2013	2014
	Forecasted	Forecasted
Opening UCC	\$ -	\$ 2,112
Capital Additions	\$ 2,295	\$ -
UCC Before Half Year Rule	\$ 2,295	\$ 2,112
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 2,295	\$ 2,112
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 184	\$ 169
Closing UCC	\$ 2,112	\$ 1,943



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 10

Name or General Description of Project

C21 Externally-Initiated Plant Relocations and Expansions

Asset Component

1850 Line Transformers - OH

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 13,513
Capital Investment	\$ 13,513	\$ -
Closing Capital Investment	\$ 13,513	\$ 13,513
Opening Accumulated Amortization	\$ -	\$ 450
Amortization	\$ 450	\$ 450
Closing Accumulated Amortization	\$ 450	\$ 901
Opening Net Fixed Assets	\$ -	\$ 13,063
Closing Net Fixed Assets	\$ 13,063	\$ 12,612
Average Net Fixed Assets	\$ 6,531	\$ 12,838

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 12,432
Capital Additions	\$ 13,513	\$ -
UCC Before Half Year Rule	\$ 13,513	\$ 12,432
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 13,513	\$ 12,432
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 1,081	\$ 995
Closing UCC	\$ 12,432	\$ 11,438



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 11

Name or General Description of Project

C21 Externally-Initiated Plant Relocations and Expansions

Asset Component

1850 Line Transformers - UG

Average Net Fixed Assets

Net Fixed Assets

	2013	2014
	Forecasted	Forecasted
Opening Capital Investment	\$ -	\$ 6,428
Capital Investment	\$ 6,428	\$ -
Closing Capital Investment	\$ 6,428	\$ 6,428
Opening Accumulated Amortization	\$ -	\$ 214
Amortization	3% \$ 214	\$ 214
Closing Accumulated Amortization	\$ 214	\$ 429
Opening Net Fixed Assets	\$ -	\$ 6,214
Closing Net Fixed Assets	\$ 6,214	\$ 6,000
Average Net Fixed Assets	\$ 3,107	\$ 6,107

For PILs Calculation

UCC

	2013	2014
	Forecasted	Forecasted
Opening UCC	\$ -	\$ 5,914
Capital Additions	\$ 6,428	\$ -
UCC Before Half Year Rule	\$ 6,428	\$ 5,914
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 6,428	\$ 5,914
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 514	\$ 473
Closing UCC	\$ 5,914	\$ 5,441



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 12

Name or General Description of Project

C21 Externally-Initiated Plant Relocations and Expansions

Asset Component

1850 Line Transformers - UG Network w/protector

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 371,964
Capital Investment	\$ 371,964	\$ -
Closing Capital Investment	\$ 371,964	\$ 371,964
Opening Accumulated Amortization	\$ -	\$ 18,598
Amortization	5% \$ 18,598	\$ 18,598
Closing Accumulated Amortization	\$ 18,598	\$ 37,196
Opening Net Fixed Assets	\$ -	\$ 353,366
Closing Net Fixed Assets	\$ 353,366	\$ 334,767
Average Net Fixed Assets	\$ 176,683	\$ 344,067

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 342,207
Capital Additions	\$ 371,964	\$ -
UCC Before Half Year Rule	\$ 371,964	\$ 342,207
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 371,964	\$ 342,207
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 29,757	\$ 27,377
Closing UCC	\$ 342,207	\$ 314,830



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 13

Name or General Description of Project

C21 Externally-Initiated Plant Relocations and Expansions

Asset Component

1855_Services - UG

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 2,625
Capital Investment	\$ 2,625	\$ -
Closing Capital Investment	\$ 2,625	\$ 2,625
Opening Accumulated Amortization	\$ -	\$ 66
Amortization	3% \$ 66	\$ 66
Closing Accumulated Amortization	\$ 66	\$ 131
Opening Net Fixed Assets	\$ -	\$ 2,559
Closing Net Fixed Assets	\$ 2,559	\$ 2,493
Average Net Fixed Assets	\$ 1,279	\$ 2,526

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 2,415
Capital Additions	\$ 2,625	\$ -
UCC Before Half Year Rule	\$ 2,625	\$ 2,415
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 2,625	\$ 2,415
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 210	\$ 193
Closing UCC	\$ 2,415	\$ 2,221



Incremental Capital Project Summary

Using the pull-down menu below, please identify what year of the IRM cycle you are in.

4th Year of IRM Cycle

Name or General Description of Project

C21 Externally-Initiated Plant Relocations and Expansions

Year

2014

Details of Project

C21 Externally-Initiated Plant Relocations and Expansions

Number of Asset Components

12

Asset Component (Click on the Number to View the Component Details)	Capital Cost	Capital Cost (1/2 year rule applied)	Depreciation Rate	CCA Class	CCA Rate
1 1830_Poles Towers and Fixtures	36,055	18,028	3%	47	8%
2 1835_Overhead Conductors and Devices	8,003	4,002	2%	47	8%
3 1835_Overhead Conductors and Devices - Switches	2,923	1,461	3%	47	8%
4 1840_Underground Conduit - Cable Chamber	10,369	5,185	2%	47	8%
5 1840_Underground Conduit - Duct Bank	6,166,069	3,083,034	3%	47	8%
6 1840_Underground Conduit - Vault Roof	10,369	5,185	5%	47	8%
7 1845_Underground Conductors and Devices	4,806,564	2,403,282	3%	47	8%
8 1845_Underground Conductors and Devices - Switch	13,749	6,874	5%	47	8%
9 1850_Line Transformers - OH	6,494	3,247	3%	47	8%
10 1850_Line Transformers - UG	38,506	19,253	3%	47	8%
11 1850_Line Transformers - UG Network w/protector	2,228,104	1,114,052	5%	47	8%
12 1855_Services - UG	15,721	7,861	3%	47	8%

	2014
Closing Net Fixed Asset	6,450,678
Amortization Expense	220,785
CCA	533,717



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 1

Name or General Description of Project

C21 Externally-Initiated Plant Relocations and Expansions

Asset Component

1830_Poles Towers and Fixtures

Average Net Fixed Assets

Net Fixed Assets

	2014 Forecasted
Opening Capital Investment	\$ -
Capital Investment	\$ 18,028
Closing Capital Investment	\$ 18,028
Opening Accumulated Amortization	\$ -
Amortization	3% \$ 451
Closing Accumulated Amortization	\$ 451
Opening Net Fixed Assets	\$ -
Closing Net Fixed Assets	\$ 17,577
Average Net Fixed Assets	\$ 8,788

For PILs Calculation

UCC

	2014 Forecasted
Opening UCC	\$ -
Capital Additions	\$ 18,028
UCC Before Half Year Rule	\$ 18,028
Half Year Rule (1/2 Additions - Disposals)	\$ -
Reduced UCC	\$ 18,028
CCA Rate Class	47
CCA Rate	8%
CCA	\$ 1,442
Closing UCC	\$ 16,585



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 2

Name or General Description of Project

C21 Externally-Initiated Plant Relocations and Expansions

Asset Component

1835_Overhead Conductors and Devices

Average Net Fixed Assets

Net Fixed Assets

2014

Forecasted

Opening Capital Investment		\$	-
Capital Investment		\$	4,002
Closing Capital Investment		\$	4,002
Opening Accumulated Amortization		\$	-
Amortization	2%	\$	80
Closing Accumulated Amortization		\$	80
Opening Net Fixed Assets		\$	-
Closing Net Fixed Assets		\$	3,921
Average Net Fixed Assets		\$	1,961

For PILs Calculation

UCC

2014

Forecasted

Opening UCC		\$	-
Capital Additions		\$	4,002
UCC Before Half Year Rule		\$	4,002
Half Year Rule (1/2 Additions - Disposals)		\$	-
Reduced UCC		\$	4,002
CCA Rate Class	47		
CCA Rate	8%		
CCA		\$	320
Closing UCC		\$	3,681



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 3

Name or General Description of Project

C21 Externally-Initiated Plant Relocations and Expansions

Asset Component

1835_Overhead Conductors and Devices - Switches

Average Net Fixed Assets

Net Fixed Assets

	2014 Forecasted
Opening Capital Investment	\$ -
Capital Investment	\$ 1,461
Closing Capital Investment	\$ 1,461
Opening Accumulated Amortization	\$ -
Amortization	3% \$ 49
Closing Accumulated Amortization	\$ 49
Opening Net Fixed Assets	\$ -
Closing Net Fixed Assets	\$ 1,413
Average Net Fixed Assets	\$ 706

For PILs Calculation

UCC

	2014 Forecasted
Opening UCC	\$ -
Capital Additions	\$ 1,461
UCC Before Half Year Rule	\$ 1,461
Half Year Rule (1/2 Additions - Disposals)	\$ -
Reduced UCC	\$ 1,461
CCA Rate Class	47
CCA Rate	8%
CCA	\$ 117
Closing UCC	\$ 1,344



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 4

Name or General Description of Project

C21 Externally-Initiated Plant Relocations and Expansions

Asset Component

1840_Underground Conduit - Cable Chamber

Average Net Fixed Assets

Net Fixed Assets

	2014 Forecasted
Opening Capital Investment	\$ -
Capital Investment	\$ 5,185
Closing Capital Investment	\$ 5,185
Opening Accumulated Amortization	\$ -
Amortization	2% \$ 104
Closing Accumulated Amortization	\$ 104
Opening Net Fixed Assets	\$ -
Closing Net Fixed Assets	\$ 5,081
Average Net Fixed Assets	\$ 2,540

For PILs Calculation

UCC

	2014 Forecasted
Opening UCC	\$ -
Capital Additions	\$ 5,185
UCC Before Half Year Rule	\$ 5,185
Half Year Rule (1/2 Additions - Disposals)	\$ -
Reduced UCC	\$ 5,185
CCA Rate Class	47
CCA Rate	8%
CCA	\$ 415
Closing UCC	\$ 4,770



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 5

Name or General Description of Project

C21 Externally-Initiated Plant Relocations and Expansions

Asset Component

1840 Underground Conduit - Duct Bank

Average Net Fixed Assets

Net Fixed Assets

	2014 Forecasted
Opening Capital Investment	\$ -
Capital Investment	\$ 3,083,034
Closing Capital Investment	\$ 3,083,034
Opening Accumulated Amortization	\$ -
Amortization	3% \$ 102,768
Closing Accumulated Amortization	\$ 102,768
Opening Net Fixed Assets	\$ -
Closing Net Fixed Assets	\$ 2,980,267
Average Net Fixed Assets	\$ 1,490,133

For PILs Calculation

UCC

	2014 Forecasted
Opening UCC	\$ -
Capital Additions	\$ 3,083,034
UCC Before Half Year Rule	\$ 3,083,034
Half Year Rule (1/2 Additions - Disposals)	\$ -
Reduced UCC	\$ 3,083,034
CCA Rate Class	47
CCA Rate	8%
CCA	\$ 246,643
Closing UCC	\$ 2,836,392



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 6

Name or General Description of Project

C21 Externally-Initiated Plant Relocations and Expansions

Asset Component

1840_Underground Conduit - Vault Roof

Average Net Fixed Assets

Net Fixed Assets

	2014 Forecasted
Opening Capital Investment	\$ -
Capital Investment	\$ 5,185
Closing Capital Investment	\$ 5,185
Opening Accumulated Amortization	\$ -
Amortization	5% \$ 259
Closing Accumulated Amortization	\$ 259
Opening Net Fixed Assets	\$ -
Closing Net Fixed Assets	\$ 4,925
Average Net Fixed Assets	\$ 2,463

For PILs Calculation

UCC

	2014 Forecasted
Opening UCC	\$ -
Capital Additions	\$ 5,185
UCC Before Half Year Rule	\$ 5,185
Half Year Rule (1/2 Additions - Disposals)	\$ -
Reduced UCC	\$ 5,185
CCA Rate Class	47
CCA Rate	8%
CCA	\$ 415
Closing UCC	\$ 4,770



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 7

Name or General Description of Project

C21 Externally-Initiated Plant Relocations and Expansions

Asset Component

1845 Underground Conductors and Devices

Average Net Fixed Assets

Net Fixed Assets

2014
Forecasted

Opening Capital Investment	\$ -
Capital Investment	\$ 2,403,282
Closing Capital Investment	\$ 2,403,282
Opening Accumulated Amortization	\$ -
Amortization	3% \$ 60,082
Closing Accumulated Amortization	\$ 60,082
Opening Net Fixed Assets	\$ -
Closing Net Fixed Assets	\$ 2,343,200
Average Net Fixed Assets	\$ 1,171,600

For PILs Calculation

UCC

2014
Forecasted

Opening UCC	\$ -
Capital Additions	\$ 2,403,282
UCC Before Half Year Rule	\$ 2,403,282
Half Year Rule (1/2 Additions - Disposals)	\$ -
Reduced UCC	\$ 2,403,282
CCA Rate Class	47
CCA Rate	8%
CCA	\$ 192,263
Closing UCC	\$ 2,211,019



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 8

Name or General Description of Project

C21 Externally-Initiated Plant Relocations and Expansions

Asset Component

1845 Underground Conductors and Devices - Switch

Average Net Fixed Assets

Net Fixed Assets

	2014 Forecasted
Opening Capital Investment	\$ -
Capital Investment	\$ 6,874
Closing Capital Investment	\$ 6,874
Opening Accumulated Amortization	\$ -
Amortization	5% \$ 344
Closing Accumulated Amortization	\$ 344
Opening Net Fixed Assets	\$ -
Closing Net Fixed Assets	\$ 6,531
Average Net Fixed Assets	\$ 3,265

For PILs Calculation

UCC

	2014 Forecasted
Opening UCC	\$ -
Capital Additions	\$ 6,874
UCC Before Half Year Rule	\$ 6,874
Half Year Rule (1/2 Additions - Disposals)	\$ -
Reduced UCC	\$ 6,874
CCA Rate Class	47
CCA Rate	8%
CCA	\$ 550
Closing UCC	\$ 6,324



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 9

Name or General Description of Project

C21 Externally-Initiated Plant Relocations and Expansions

Asset Component

1850_Line Transformers - OH

Average Net Fixed Assets

Net Fixed Assets

	2014 Forecasted
Opening Capital Investment	\$ -
Capital Investment	\$ 3,247
Closing Capital Investment	\$ 3,247
Opening Accumulated Amortization	\$ -
Amortization	3% \$ 108
Closing Accumulated Amortization	\$ 108
Opening Net Fixed Assets	\$ -
Closing Net Fixed Assets	\$ 3,139
Average Net Fixed Assets	\$ 1,569

For PILs Calculation

UCC

	2014 Forecasted
Opening UCC	\$ -
Capital Additions	\$ 3,247
UCC Before Half Year Rule	\$ 3,247
Half Year Rule (1/2 Additions - Disposals)	\$ -
Reduced UCC	\$ 3,247
CCA Rate Class	47
CCA Rate	8%
CCA	\$ 260
Closing UCC	\$ 2,987



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 10

Name or General Description of Project

C21 Externally-Initiated Plant Relocations and Expansions

Asset Component

1850 Line Transformers - UG

Average Net Fixed Assets

Net Fixed Assets

	2014 Forecasted
Opening Capital Investment	\$ -
Capital Investment	\$ 19,253
Closing Capital Investment	\$ 19,253
Opening Accumulated Amortization	\$ -
Amortization	3% \$ 642
Closing Accumulated Amortization	\$ 642
Opening Net Fixed Assets	\$ -
Closing Net Fixed Assets	\$ 18,611
Average Net Fixed Assets	\$ 9,306

For PILs Calculation

UCC

	2014 Forecasted
Opening UCC	\$ -
Capital Additions	\$ 19,253
UCC Before Half Year Rule	\$ 19,253
Half Year Rule (1/2 Additions - Disposals)	\$ -
Reduced UCC	\$ 19,253
CCA Rate Class	47
CCA Rate	8%
CCA	\$ 1,540
Closing UCC	\$ 17,713



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 11

Name or General Description of Project

C21 Externally-Initiated Plant Relocations and Expansions

Asset Component

1850 Line Transformers - UG Network w/protector

Average Net Fixed Assets

Net Fixed Assets

	2014 Forecasted
Opening Capital Investment	\$ -
Capital Investment	\$ 1,114,052
Closing Capital Investment	\$ 1,114,052
Opening Accumulated Amortization	\$ -
Amortization	5% \$ 55,703
Closing Accumulated Amortization	\$ 55,703
Opening Net Fixed Assets	\$ -
Closing Net Fixed Assets	\$ 1,058,349
Average Net Fixed Assets	\$ 529,175

For PILs Calculation

UCC

	2014 Forecasted
Opening UCC	\$ -
Capital Additions	\$ 1,114,052
UCC Before Half Year Rule	\$ 1,114,052
Half Year Rule (1/2 Additions - Disposals)	\$ -
Reduced UCC	\$ 1,114,052
CCA Rate Class	47
CCA Rate	8%
CCA	\$ 89,124
Closing UCC	\$ 1,024,928



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 12

Name or General Description of Project

C21 Externally-Initiated Plant Relocations and Expansions

Asset Component

1855_Services - UG

Average Net Fixed Assets

Net Fixed Assets

2014
Forecasted

Opening Capital Investment	\$	-
Capital Investment	\$	7,861
Closing Capital Investment	\$	7,861
Opening Accumulated Amortization	\$	-
Amortization	3%	\$ 197
Closing Accumulated Amortization	\$	197
Opening Net Fixed Assets	\$	-
Closing Net Fixed Assets	\$	7,664
Average Net Fixed Assets	\$	3,832

For PILs Calculation

UCC

2014
Forecasted

Opening UCC	\$	-
Capital Additions	\$	7,861
UCC Before Half Year Rule	\$	7,861
Half Year Rule (1/2 Additions - Disposals)	\$	-
Reduced UCC	\$	7,861
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$	629
Closing UCC	\$	7,232



Incremental Capital Project Summary

Using the pull-down menu below, please identify what year of the IRM cycle you are in.

2nd Year of IRM Cycle

Name or General Description of Project

C22 Grid Solutions

Year

2012

Details of Project

C22 Grid Solutions

Number of Asset Components

2

Asset Component (Click on the Number to View the Component Details)	Capital Cost	Depreciation Rate			CCA Class	CCA Rate
		2012	2013	2014		
1 1925_Computer Software	1,199,000	20%	12	100%		
2 5XX1_Grid Intelligence Component	1,199,000	10%	47	8%		
Closing Net Fixed Asset	2,038,300	1,678,600	1,318,900			
Amortization Expense	359,700	359,700	359,700			
CCA	1,294,920	88,246	81,187			



Incremental Capital Project Summary

[Return to Main Summary](#)

Fixed Asset Amortization and UCC 1

Name or General Description of Project

C22 Grid Solutions

Asset Component

1925_Computer Software

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 1,199,000	\$ 1,199,000
Capital Investment	\$ 1,199,000	\$ -	\$ -
Closing Capital Investment	\$ 1,199,000	\$ 1,199,000	\$ 1,199,000
Opening Accumulated Amortization	\$ -	\$ 239,800	\$ 479,600
Amortization	20% \$ 239,800	\$ 239,800	\$ 239,800
Closing Accumulated Amortization	\$ 239,800	\$ 479,600	\$ 719,400
Opening Net Fixed Assets	\$ -	\$ 959,200	\$ 719,400
Closing Net Fixed Assets	\$ 959,200	\$ 719,400	\$ 479,600
Average Net Fixed Assets	\$ 479,600	\$ 839,300	\$ 599,500

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ -	\$ -
Capital Additions	\$ 1,199,000	\$ -	\$ -
UCC Before Half Year Rule	\$ 1,199,000	\$ -	\$ -
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 1,199,000	\$ -	\$ -
CCA Rate Class	12		
CCA Rate	####		
CCA	\$ 1,199,000	\$ -	\$ -
Closing UCC	\$ -	\$ -	\$ -



Incremental Capital Project Summary

[Return to Main Summary](#)

Fixed Asset Amortization and UCC 2

Name or General Description of Project

C22 Grid Solutions

Asset Component

5XX1_Grid Intelligence Component

Average Net Fixed Assets

Net Fixed Assets

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 1,199,000	\$ 1,199,000
Capital Investment	\$ 1,199,000	\$ -	\$ -
Closing Capital Investment	\$ 1,199,000	\$ 1,199,000	\$ 1,199,000
Opening Accumulated Amortization	\$ -	\$ 119,900	\$ 239,800
Amortization	10% \$ 119,900	\$ 119,900	\$ 119,900
Closing Accumulated Amortization	\$ 119,900	\$ 239,800	\$ 359,700
Opening Net Fixed Assets	\$ -	\$ 1,079,100	\$ 959,200
Closing Net Fixed Assets	\$ 1,079,100	\$ 959,200	\$ 839,300
Average Net Fixed Assets	\$ 539,550	\$ 1,019,150	\$ 899,250

For PILs Calculation

UCC

	2012 Forecasted	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 1,103,080	\$ 1,014,834
Capital Additions	\$ 1,199,000	\$ -	\$ -
UCC Before Half Year Rule	\$ 1,199,000	\$ 1,103,080	\$ 1,014,834
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -	\$ -
Reduced UCC	\$ 1,199,000	\$ 1,103,080	\$ 1,014,834
CCA Rate Class	47		
CCA Rate	8%		
CCA	\$ 95,920	\$ 88,246	\$ 81,187
Closing UCC	\$ 1,103,080	\$ 1,014,834	\$ 933,647



Incremental Capital Project Summary

Using the pull-down menu below, please identify what year of the IRM cycle you are in.

3rd Year of IRM Cycle

Name or General Description of Project

C22 Grid Solutions

Year

2013

Details of Project

C22 Grid Solutions

Number of Asset Components

3

Asset Component (Click on the Number to View the Component Details)	Capital Cost	Depreciation Rate	CCA Class	CCA Rate
1 1925_Computer Software	1,199,000	20%	12	100%
2 5XX1_Grid Intelligence Component	599,500	10%	47	8%
3 5XX2 Energy Storage	1,798,500	5%	47	8%

	2013	2014
Closing Net Fixed Asset	3,207,325	2,817,650
Amortization Expense	389,675	389,675
CCA	1,390,840	176,493



Incremental Capital Project Summary

[Return to Main Summary](#)

Fixed Asset Amortization and UCC 1

Name or General Description of Project

C22 Grid Solutions

Asset Component

1925_Computer Software

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 1,199,000
Capital Investment	\$ 1,199,000	\$ -
Closing Capital Investment	\$ 1,199,000	\$ 1,199,000
Opening Accumulated Amortization	\$ -	\$ 239,800
Amortization	20% \$ 239,800	\$ 239,800
Closing Accumulated Amortization	\$ 239,800	\$ 479,600
Opening Net Fixed Assets	\$ -	\$ 959,200
Closing Net Fixed Assets	\$ 959,200	\$ 719,400
Average Net Fixed Assets	\$ 479,600	\$ 839,300

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ -
Capital Additions	\$ 1,199,000	\$ -
UCC Before Half Year Rule	\$ 1,199,000	\$ -
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 1,199,000	\$ -
CCA Rate Class	12	
CCA Rate	####	
CCA	\$ 1,199,000	\$ -
Closing UCC	\$ -	\$ -



Incremental Capital Project Summary

[Return to Main Summary](#)

Fixed Asset Amortization and UCC 2

Name or General Description of Project

C22 Grid Solutions

Asset Component

5XX1_Grid Intelligence Component

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 599,500
Capital Investment	\$ 599,500	\$ -
Closing Capital Investment	\$ 599,500	\$ 599,500
Opening Accumulated Amortization	\$ -	\$ 59,950
Amortization	10% \$ 59,950	\$ 59,950
Closing Accumulated Amortization	\$ 59,950	\$ 119,900
Opening Net Fixed Assets	\$ -	\$ 539,550
Closing Net Fixed Assets	\$ 539,550	\$ 479,600
Average Net Fixed Assets	\$ 269,775	\$ 509,575

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 551,540
Capital Additions	\$ 599,500	\$ -
UCC Before Half Year Rule	\$ 599,500	\$ 551,540
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 599,500	\$ 551,540
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 47,960	\$ 44,123
Closing UCC	\$ 551,540	\$ 507,417



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 3

Name or General Description of Project

C22 Grid Solutions

Asset Component

5XX2 Energy Storage

Average Net Fixed Assets

Net Fixed Assets

	2013 Forecasted	2014 Forecasted
Opening Capital Investment	\$ -	\$ 1,798,500
Capital Investment	\$ 1,798,500	\$ -
Closing Capital Investment	\$ 1,798,500	\$ 1,798,500
Opening Accumulated Amortization	\$ -	\$ 89,925
Amortization	5% \$ 89,925	\$ 89,925
Closing Accumulated Amortization	\$ 89,925	\$ 179,850
Opening Net Fixed Assets	\$ -	\$ 1,708,575
Closing Net Fixed Assets	\$ 1,708,575	\$ 1,618,650
Average Net Fixed Assets	\$ 854,287	\$ 1,663,612

For PILs Calculation

UCC

	2013 Forecasted	2014 Forecasted
Opening UCC	\$ -	\$ 1,654,620
Capital Additions	\$ 1,798,500	\$ -
UCC Before Half Year Rule	\$ 1,798,500	\$ 1,654,620
Half Year Rule (1/2 Additions - Disposals)	\$ -	\$ -
Reduced UCC	\$ 1,798,500	\$ 1,654,620
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$ 143,880	\$ 132,370
Closing UCC	\$ 1,654,620	\$ 1,522,250



Incremental Capital Project Summary

Using the pull-down menu below, please identify what year of the IRM cycle you are in.

4th Year of IRM Cycle

Name or General Description of Project

C22 Grid Solutions

Year

2014

Details of Project

C22 Grid Solutions

Number of Asset Components

2

Asset Component (Click on the Number to View the Component Details)	Capital Cost	Capital Cost (1/2 year rule applied)	Depreciation Rate	CCA Class	CCA Rate
1 1925_Computer Software	599,500	299,750	20%	12	100%
2 5XX1_Grid Intelligence Component	359,700	179,850	10%	47	8%

	2014
Closing Net Fixed Asset	401,665
Amortization Expense	77,935
CCA	314,138



Incremental Capital Project Summary

[Return to Main Summary](#)

Fixed Asset Amortization and UCC 1

Name or General Description of Project

C22 Grid Solutions

Asset Component

1925_Computer Software

Average Net Fixed Assets

Net Fixed Assets

2014

Forecasted

Opening Capital Investment	\$	-
Capital Investment	\$	299,750
Closing Capital Investment	\$	299,750
Opening Accumulated Amortization	\$	-
Amortization	20%	\$ 59,950
Closing Accumulated Amortization	\$	59,950
Opening Net Fixed Assets	\$	-
Closing Net Fixed Assets	\$	239,800
Average Net Fixed Assets	\$	119,900

For PILs Calculation

UCC

2014

Forecasted

Opening UCC	\$	-
Capital Additions	\$	299,750
UCC Before Half Year Rule	\$	299,750
Half Year Rule (1/2 Additions - Disposals)	\$	-
Reduced UCC	\$	299,750
CCA Rate Class	12	
CCA Rate	####	
CCA	\$	299,750
Closing UCC	\$	-



Incremental Capital Project Summary

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Fixed Asset Amortization and UCC 2

Name or General Description of Project

C22 Grid Solutions

Asset Component

5XX1_Grid Intelligence Component

Average Net Fixed Assets

Net Fixed Assets

2014

Forecasted

Opening Capital Investment	\$	-
Capital Investment	\$	179,850
Closing Capital Investment	\$	179,850
Opening Accumulated Amortization	\$	-
Amortization	10%	\$ 17,985
Closing Accumulated Amortization	\$	17,985
Opening Net Fixed Assets	\$	-
Closing Net Fixed Assets	\$	161,865
Average Net Fixed Assets	\$	80,933

For PILs Calculation

UCC

2014

Forecasted

Opening UCC	\$	-
Capital Additions	\$	179,850
UCC Before Half Year Rule	\$	179,850
Half Year Rule (1/2 Additions - Disposals)	\$	-
Reduced UCC	\$	179,850
CCA Rate Class	47	
CCA Rate	8%	
CCA	\$	14,388
Closing UCC	\$	165,462

1 **FINAL DISPOSITION OF THE PILs DEFERRAL ACCOUNTS 1562 AND 1563**

2

3 In its June 24, 2011 EB-2008-0381 Decision, the Board announced its expectation that all
4 distributors will apply for final disposition of Account 1562 in their next general rates filing. The
5 Board noted that if the distributor files evidence in accordance with the various decisions made
6 in the course of the proceeding, and uses the updated SIMPIL model, the determination of the
7 account balance would be handled expeditiously and in an administrative manner.

8

9 THESL has reviewed recent OEB decisions and interrogatories in other distributors' proceedings
10 with respect to Account 1562 in order to ensure that its evidence is in accordance with
11 them. THESL has calculated the credit balance of \$6.6 million for Account 1562 which
12 THESL proposes to refund to customers. The amount is allocated to customer rate classes on the
13 basis of the most recent Board-approved distribution revenue to calculate the proposed rate
14 riders by rate class. The supporting calculations for the amount are provided in the following
15 schedules under Tab 5:

- 16 • Schedule A – Summary Continuity Schedule for Account 1562
- 17 • Schedule B – Detailed Continuity Schedules for Account 1562
- 18 • Schedule C – 2001 SIMPIL Model
- 19 • Schedule D – 2002 SIMPIL Model
- 20 • Schedule E – 2003 SIMPIL Model
- 21 • Schedule F – 2004 SIMPIL Model
- 22 • Schedule G – 2005 SIMPIL Model

23

24 The amount and the disposition rate riders for Payments in Lieu of Taxes (PILs) are shown in
25 Sheet 10 and 12 of the IRM Rate Generator model, respectively.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	
1	PILs TAXES																											
2	Analysis of Account 1562: Deferred Payments in lieu of Taxes																											
3	Utility Name: TORONTO HYDRO-ELECTRIC SYSTEM LIMITED																											
4	Reporting Period:2001-2012														Sign Convention: + for increase; - for decrease													
5																												
6																												
7																												
8	Year start:		01/10/2001		01/01/2002		01/01/2003		01/01/2004		01/01/2005		01/01/2006		01/01/2007		01/01/2008		01/01/2009		01/01/2010		01/01/2011		01/01/2012			
9	Year end:		31/12/2001		31/12/2002		31/12/2003		31/12/2004		31/12/2005		31/12/2006		31/12/2007		31/12/2008		31/12/2009		31/12/2010		31/12/2011		30/04/2012		Total	
10																												
11	Opening balance:	=	0		5,028,333		8,127,575		8,284,720		-619,716		-3,677,179		-5,763,804		-6,086,415		-6,358,015		-6,435,639		-6,490,061		-6,590,376		0	
12	Board-approved PILs tax proxy from Decisions (1)	+/-	5,000,000	A	55,000,000	A	60,000,000	B	58,571,734	D	60,109,102	E	20,204,045	F													258,884,881	
13	True-up Variance Adjustment Q4, 2001 (2)	+/-			-290,810																						-290,810	
14	True-up Variance Adjustment (3)	+/-					2,156,868		-6,024,420		-1,590,311		-1,269,640														-6,727,503	
15	Deferral Account Variance Adjustment Q4, 2001 (4)																										0	
16	Deferral Account Variance Adjustment (5)	+/-					-2,412,196	C	-3,807,479	C																	-6,219,675	
17	Adjustments to reported prior years' variances-(6)	+/-											-1,069,868	G													-1,069,868	
18	Carrying charges (7)	+/-	28,333		720,305		562,257		269,130		-223,086		-296,612		-322,611		-271,600		-77,624		-54,422		-100,315		-33,438		200,317	
19	PILs collected from customers - Proxy (8)	-	0		-52,330,253		-60,149,784		-57,913,401		-61,353,168		-19,654,550														-251,401,156	
20																												
21	Ending balance: # 1562		5,028,333		8,127,575		8,284,720		-619,716		-3,677,179		-5,763,804		-6,086,415		-6,358,015		-6,435,639		-6,490,061		-6,590,376		-6,623,814		-6,623,814	
22																												
23																												
24	NOTE: The purpose of this worksheet is to show the movement in Account 1562 which establishes the receivable from or liability to ratepayers.																											
25	For explanation of Account 1562 please refer to Accounting Procedures Handbook for Electric Distribution Utilities and FAQ April 2003.																											
26																												
27	Method 3 was used to account for the PILs proxy and recovery.																											
28	Footnotes:																											
29	A Amount agrees to Rate Decision RP-2002-0002/EB-2002-0011, which differs from RUD model																											
30	B PILs based on 2001 and 2002 approved amounts																											
31	C Deferral account variances are in respect of applicable year																											
32	D PILs for 2004 based on 2002 RUD model																											
33	E PILs based on 2002 RUD model apply for Jan 1 to Mar 31 2005 period and 2005 PILs proxy applies for balance of year.																											
34	F Prorated 2005 PILs proxy used for Jan 1 to Apr 30 2006 period																											
35	G Adjustment for elimination of LCT																											

PILs Deferral Variance Analysis
 Account 1562
 April 30, 2012

Interest Rates	
2001 to Q1 2006	6.80%
Q2 2006	4.14%
Q3 2006 to Q3 2007	4.59%
Q4 2007 to Q1 2008	5.14%
Q2 2008	4.08%
Q3 2008 to Q4 2008	3.35%
Q1 2009	2.45%
Q2 2009	1.00%
Q3 2009 to Q2 2010	0.55%
Q3 2010	0.89%
Q4 2010	1.20%
Q1 2011 to April 30 2012	1.47%

2001														Annual	Cumulative
PY CFWD	Jan-01	Feb-01	Mar-01	Apr-01	May-01	Jun-01	Jul-01	Aug-01	Sep-01	Oct-01	Nov-01	Dec-01	Subtotal	Total	
Approved PILs	-	-	-	-	-	-	-	-	-	1,666,667	1,666,666	1,666,667	5,000,000	5,000,000	
PILs Billed to Customers	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SIMPL Variance	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Subtotal	-	-	-	-	-	-	-	-	-	1,666,667	1,666,666	1,666,667	5,000,000	5,000,000	
Interest	-	-	-	-	-	-	-	-	-	-	9,444	18,889	28,333	28,333	
Total	-	-	-	-	-	-	-	-	-	1,666,667	1,676,110	1,685,556	5,028,333	5,028,333	
Cumulative Principal	-	-	-	-	-	-	-	-	-	1,666,667	3,333,333	5,000,000			
Cumulative Interest	-	-	-	-	-	-	-	-	-	-	9,444	28,333			
Cumulative Total	-	-	-	-	-	-	-	-	-	1,666,667	3,342,777	5,028,333			

2002														Annual	Cumulative
PY CFWD	Jan-02	Feb-02	Mar-02	Apr-02	May-02	Jun-02	Jul-02	Aug-02	Sep-02	Oct-02	Nov-02	Dec-02	Subtotal	Total	
Approved PILs	5,000,000	4,583,333	4,583,333	4,583,333	4,583,333	4,583,333	4,583,333	4,583,333	4,583,333	4,583,333	4,583,333	4,583,337	55,000,000	60,000,000	
PILs Billed to Customers	-	-	-	(5,128,917)	(4,844,074)	(4,963,624)	(5,167,317)	(5,881,045)	(5,666,001)	(5,259,679)	(5,034,408)	(5,063,288)	(5,321,900)	(52,330,253)	
SIMPL Variance	-	-	-	-	-	-	(290,810)	-	-	-	-	-	(290,810)	(290,810)	
Subtotal	5,000,000	4,583,333	4,583,333	(545,584)	(260,741)	(380,291)	(874,794)	(1,297,712)	(1,082,668)	(676,346)	(451,075)	(479,955)	2,378,937	7,378,937	
Interest	28,333	28,333	54,306	80,278	77,186	75,709	73,554	68,596	61,243	55,108	51,275	48,719	720,305	748,638	
Total	5,028,333	4,611,666	4,637,639	(465,306)	(183,555)	(304,582)	(801,240)	(1,229,116)	(1,021,425)	(621,238)	(399,800)	(431,236)	3,099,242	8,127,575	
Cumulative Principal	5,000,000	9,583,333	14,166,666	13,621,082	13,360,341	12,980,050	12,105,256	10,807,544	9,724,876	9,048,530	8,597,455	8,117,500	7,378,937		
Cumulative Interest	28,333	56,667	110,972	191,250	268,436	344,145	417,698	486,295	547,538	602,645	653,920	702,639	748,638		
Cumulative Total	5,028,333	9,640,000	14,277,638	13,812,332	13,628,777	13,324,195	12,522,954	11,293,839	10,272,414	9,651,175	9,251,375	8,820,139	8,127,575		

2003

	PY CFWD	Jan-03	Feb-03	Mar-03	Apr-03	May-03	Jun-03	Jul-03	Aug-03	Sep-03	Oct-03	Nov-03	Dec-03	Annual	Cumulative
														Subtotal	Total
Approved PILs	60,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	60,000,000	120,000,000
PILs Billed to Customers	(52,330,253)	(5,317,066)	(4,922,031)	(5,072,630)	(4,853,275)	(4,765,135)	(4,996,389)	(5,294,225)	(5,267,442)	(4,881,929)	(4,871,659)	(4,814,453)	(5,093,550)	(60,149,784)	(112,480,037)
SIMPL Variance	(290,810)	-	-	-	-	-	2,156,868	-	-	-	-	-	(2,412,196)	(255,328)	(546,138)
Subtotal	7,378,937	(317,066)	77,969	(72,630)	146,725	234,865	2,160,479	(294,225)	(267,442)	118,071	128,341	185,547	(2,505,746)	(405,112)	6,973,825
Interest	748,638	41,814	40,017	40,459	40,048	40,879	42,210	54,453	52,785	51,270	51,939	52,666	53,718	562,257	1,310,895
Total	8,127,575	(275,252)	117,986	(32,171)	186,773	275,744	2,202,689	(239,772)	(214,657)	169,341	180,280	238,213	(2,452,028)	157,145	8,284,720
Cumulative Principal	7,378,937	7,061,871	7,139,840	7,067,210	7,213,935	7,448,800	9,609,279	9,315,054	9,047,612	9,165,683	9,294,024	9,479,571	6,973,825		
Cumulative Interest	748,638	790,452	830,469	870,929	910,976	951,855	994,065	1,048,518	1,101,303	1,152,573	1,204,512	1,257,178	1,310,895		
Cumulative Total	8,127,575	7,852,323	7,970,309	7,938,139	8,124,911	8,400,655	10,603,344	10,363,572	10,148,915	10,318,256	10,498,536	10,736,749	8,284,720		

2004

	PY CFWD	Jan-04	Feb-04	Mar-04	Apr-04	May-04	Jun-04	Jul-04	Aug-04	Sep-04	Oct-04	Nov-04	Dec-04	Annual	Cumulative
														Subtotal	Total
Approved PILs	120,000,000	5,000,000	5,000,000	5,000,000	4,841,304	4,841,304	4,841,304	4,841,304	4,841,304	4,841,304	4,841,304	4,841,304	4,841,302	58,571,734	178,571,734
PILs Billed to Customers	(112,480,037)	(5,375,228)	(4,935,067)	(4,994,877)	(4,729,326)	(4,749,755)	(4,781,694)	(4,818,314)	(4,802,895)	(4,739,821)	(4,536,844)	(4,531,281)	(4,918,299)	(57,913,401)	(170,393,438)
SIMPL Variance	(546,138)	-	-	-	-	-	(6,024,420)	-	-	-	-	-	(3,807,479)	(9,831,899)	(10,378,037)
Subtotal	6,973,825	(375,228)	64,933	5,123	111,978	91,549	(5,964,810)	22,990	38,409	101,483	304,460	310,023	(3,884,476)	(9,173,566)	(2,199,741)
Interest	1,310,895	39,518	37,392	37,760	37,789	38,424	38,942	5,142	5,272	5,490	6,065	7,790	9,547	269,130	1,580,026
Total	8,284,720	(335,710)	102,325	42,883	149,767	129,973	(5,925,868)	28,132	43,681	106,973	310,525	317,813	(3,874,929)	(8,904,436)	(619,715)
Cumulative Principal	6,973,825	6,598,597	6,663,530	6,668,653	6,780,631	6,872,180	907,370	930,360	968,769	1,070,252	1,374,712	1,684,735	(2,199,741)		
Cumulative Interest	1,310,895	1,350,414	1,387,806	1,425,566	1,463,355	1,501,778	1,540,721	1,545,862	1,551,134	1,556,624	1,562,689	1,570,479	1,580,026		
Cumulative Total	8,284,720	7,949,011	8,051,336	8,094,219	8,243,986	8,373,958	2,448,091	2,476,222	2,519,903	2,626,876	2,937,401	3,255,214	(619,715)		

2005

PY CFWD	2005												Annual	Cumulative
	Jan-05	Feb-05	Mar-05	Apr-05	May-05	Jun-05	Jul-05	Aug-05	Sep-05	Oct-05	Nov-05	Dec-05	Subtotal	Total
Approved PILs	178,571,734	4,883,333	4,883,333	4,883,333	5,051,011	5,051,011	5,051,011	5,051,011	5,051,011	5,051,011	5,051,011	5,051,015	60,109,102	238,680,836
PILs Billed to Customers	(170,393,438)	(5,257,509)	(4,774,976)	(5,024,642)	(4,583,422)	(4,650,094)	(5,510,478)	(5,958,010)	(5,769,967)	(5,001,100)	(4,604,789)	(4,778,520)	(5,439,661)	(61,353,168)
SIMPL Variance	(10,378,037)	-	-	-	-	-	-	(1,590,311)	-	-	-	-	(1,590,311)	(11,968,348)
Subtotal	(2,199,741)	(374,176)	108,357	(141,309)	467,589	400,917	(459,467)	(906,999)	(2,309,267)	49,911	446,222	272,491	(388,646)	(2,834,377)
Interest	1,580,026	(12,465)	(14,586)	(13,972)	(14,772)	(12,123)	(9,851)	(12,454)	(17,594)	(30,680)	(30,397)	(27,868)	(26,324)	(223,086)
Total	(619,715)	(386,641)	93,771	(155,281)	452,817	388,794	(469,318)	(919,453)	(2,326,861)	19,231	415,825	244,623	(414,970)	(3,057,463)
Cumulative Principal	(2,199,741)	(2,573,917)	(2,465,560)	(2,606,869)	(2,139,280)	(1,738,363)	(2,197,830)	(3,104,829)	(5,414,096)	(5,364,185)	(4,917,963)	(4,645,472)	(5,034,118)	
Cumulative Interest	1,580,026	1,567,560	1,552,975	1,539,003	1,524,231	1,512,109	1,502,258	1,489,804	1,472,209	1,441,530	1,411,133	1,383,264	1,356,940	
Cumulative Total	(619,715)	(1,006,357)	(912,585)	(1,067,866)	(615,049)	(226,254)	(695,572)	(1,615,025)	(3,941,887)	(3,922,655)	(3,506,830)	(3,262,208)	(3,677,178)	

2006

PY CFWD	2006												Annual	Cumulative
	Jan-06	Feb-06	Mar-06	Apr-06	May-06	Jun-06	Jul-06	Aug-06	Sep-06	Oct-06	Nov-06	Dec-06	Subtotal	Total
Approved PILs	238,680,836	5,051,011	5,051,011	5,051,011	5,051,012	-	-	-	-	-	-	-	20,204,045	258,884,881
PILs Billed to Customers	(231,746,606)	(5,208,059)	(4,911,712)	(5,071,451)	(4,463,328)	-	-	-	-	-	-	-	(19,654,550)	(251,401,156)
SIMPL Variance	(11,968,348)	-	-	-	-	-	-	(1,269,640)	-	-	-	-	(1,269,640)	(13,237,988)
Removal of LCT	-	(267,467)	(267,467)	(267,467)	(267,467)	-	-	-	-	-	-	-	(1,069,868)	(1,069,868)
Subtotal	(5,034,118)	(424,515)	(128,168)	(287,907)	320,217	-	-	(1,269,640)	-	-	-	-	(1,790,013)	(6,824,131)
Interest	1,356,940	(28,527)	(30,932)	(31,659)	(20,268)	(19,163)	(19,163)	(21,246)	(21,246)	(26,102)	(26,102)	(26,102)	(26,102)	(296,612)
Total	(3,677,178)	(453,042)	(159,100)	(319,566)	299,949	(19,163)	(19,163)	(21,246)	(1,290,886)	(26,102)	(26,102)	(26,102)	(2,086,625)	(5,763,803)
Cumulative Principal	(5,034,118)	(5,458,633)	(5,586,801)	(5,874,708)	(5,554,491)	(5,554,491)	(5,554,491)	(5,554,491)	(6,824,131)	(6,824,131)	(6,824,131)	(6,824,131)	(6,824,131)	
Cumulative Interest	1,356,940	1,328,413	1,297,481	1,265,822	1,245,555	1,226,392	1,207,229	1,185,983	1,164,737	1,138,634	1,112,532	1,086,430	1,060,328	
Cumulative Total	(3,677,178)	(4,130,220)	(4,289,320)	(4,608,886)	(4,308,936)	(4,328,099)	(4,347,262)	(4,368,508)	(5,659,394)	(5,685,497)	(5,711,599)	(5,737,701)	(5,763,803)	

2007

	PY CFWD	2007												Annual	Cumulative	
		Jan-07	Feb-07	Mar-07	Apr-07	May-07	Jun-07	Jul-07	Aug-07	Sep-07	Oct-07	Nov-07	Dec-07	Subtotal	Total	
Approved PILs	258,884,881	-	-	-	-	-	-	-	-	-	-	-	-	-	-	258,884,881
PILs Billed to Customers	(251,401,156)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(251,401,156)
SIMPL Variance	(13,237,988)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(13,237,988)
Removal of LCT	(1,069,868)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(1,069,868)
Subtotal	(6,824,131)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(6,824,131)
Interest	1,060,328	(26,102)	(26,102)	(26,102)	(26,102)	(26,102)	(26,102)	(26,102)	(26,102)	(26,102)	(29,230)	(29,230)	(29,230)	(322,611)	737,717	
Total	(5,763,803)	(26,102)	(26,102)	(26,102)	(26,102)	(26,102)	(26,102)	(26,102)	(26,102)	(26,102)	(29,230)	(29,230)	(29,230)	(322,611)	(6,086,414)	
Cumulative Principal	(6,824,131)	(6,824,131)	(6,824,131)	(6,824,131)	(6,824,131)	(6,824,131)	(6,824,131)	(6,824,131)	(6,824,131)	(6,824,131)	(6,824,131)	(6,824,131)	(6,824,131)	(6,824,131)		
Cumulative Interest	1,060,328	1,034,225	1,008,123	982,021	955,918	929,816	903,714	877,611	851,509	825,407	796,177	766,947	737,717	737,717		
Cumulative Total	(5,763,803)	(5,789,906)	(5,816,008)	(5,842,110)	(5,868,213)	(5,894,315)	(5,920,417)	(5,946,520)	(5,972,622)	(5,998,724)	(6,027,954)	(6,057,184)	(6,086,414)	(6,086,414)		

2008

	PY CFWD	2008												Annual	Cumulative	
		Jan-08	Feb-08	Mar-08	Apr-08	May-08	Jun-08	Jul-08	Aug-08	Sep-08	Oct-08	Nov-08	Dec-08	Subtotal	Total	
Approved PILs	258,884,881	-	-	-	-	-	-	-	-	-	-	-	-	-	-	258,884,881
PILs Billed to Customers	(251,401,156)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(251,401,156)
SIMPL Variance	(13,237,988)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(13,237,988)
Removal of LCT	(1,069,868)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(1,069,868)
Subtotal	(6,824,131)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(6,824,131)
Interest	737,717	(29,230)	(29,230)	(29,230)	(23,202)	(23,202)	(23,202)	(19,051)	(19,051)	(19,051)	(19,051)	(19,051)	(19,051)	(19,051)	(271,600)	466,117
Total	(6,086,414)	(29,230)	(29,230)	(29,230)	(23,202)	(23,202)	(23,202)	(19,051)	(19,051)	(19,051)	(19,051)	(19,051)	(19,051)	(19,051)	(271,600)	(6,358,014)
Cumulative Principal	(6,824,131)	(6,824,131)	(6,824,131)	(6,824,131)	(6,824,131)	(6,824,131)	(6,824,131)	(6,824,131)	(6,824,131)	(6,824,131)	(6,824,131)	(6,824,131)	(6,824,131)	(6,824,131)		
Cumulative Interest	737,717	708,487	679,257	650,027	626,825	603,623	580,420	561,370	542,319	523,268	504,218	485,167	466,116	466,116		
Cumulative Total	(6,086,414)	(6,115,644)	(6,144,874)	(6,174,104)	(6,197,306)	(6,220,508)	(6,243,711)	(6,262,761)	(6,281,812)	(6,300,863)	(6,319,913)	(6,338,964)	(6,358,015)	(6,358,015)		

2009

	PY CFWD	2009												Annual	Cumulative
		Jan-09	Feb-09	Mar-09	Apr-09	May-09	Jun-09	Jul-09	Aug-09	Sep-09	Oct-09	Nov-09	Dec-09	Subtotal	Total
Approved PILs	258,884,881	-	-	-	-	-	-	-	-	-	-	-	-	-	258,884,881
PILs Billed to Customers	(251,401,156)	-	-	-	-	-	-	-	-	-	-	-	-	-	(251,401,156)
SIMPL Variance	(13,237,988)	-	-	-	-	-	-	-	-	-	-	-	-	-	(13,237,988)
Removal of LCT	(1,069,868)	-	-	-	-	-	-	-	-	-	-	-	-	-	(1,069,868)
Subtotal	(6,824,131)	-	-	-	-	-	-	-	-	-	-	-	-	-	(6,824,131)
Interest	466,117	(13,933)	(13,933)	(13,933)	(5,687)	(5,687)	(5,687)	(3,128)	(3,128)	(3,128)	(3,128)	(3,128)	(3,128)	(77,624)	388,493
Total	(6,358,014)	(13,933)	(13,933)	(13,933)	(5,687)	(5,687)	(5,687)	(3,128)	(3,128)	(3,128)	(3,128)	(3,128)	(3,128)	(77,624)	(6,435,638)
Cumulative Principal	(6,824,131)	(6,824,131)	(6,824,131)	(6,824,131)	(6,824,131)	(6,824,131)	(6,824,131)	(6,824,131)	(6,824,131)	(6,824,131)	(6,824,131)	(6,824,131)	(6,824,131)		
Cumulative Interest	466,117	452,185	438,252	424,320	418,633	412,946	407,259	404,131	401,004	397,876	394,748	391,621	388,493		
Cumulative Total	(6,358,014)	(6,371,946)	(6,385,879)	(6,399,811)	(6,405,498)	(6,411,185)	(6,416,872)	(6,420,000)	(6,423,127)	(6,426,255)	(6,429,383)	(6,432,510)	(6,435,638)		

2010

	PY CFWD	2010												Annual	Cumulative
		Jan-10	Feb-10	Mar-10	Apr-10	May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Subtotal	Total
Approved PILs	258,884,881	-	-	-	-	-	-	-	-	-	-	-	-	-	258,884,881
PILs Billed to Customers	(251,401,156)	-	-	-	-	-	-	-	-	-	-	-	-	-	(251,401,156)
SIMPL Variance	(13,237,988)	-	-	-	-	-	-	-	-	-	-	-	-	-	(13,237,988)
Removal of LCT	(1,069,868)	-	-	-	-	-	-	-	-	-	-	-	-	-	(1,069,868)
Subtotal	(6,824,131)	-	-	-	-	-	-	-	-	-	-	-	-	-	(6,824,131)
Interest	388,493	(3,128)	(3,128)	(3,128)	(3,128)	(3,128)	(3,128)	(5,061)	(5,061)	(5,061)	(6,824)	(6,824)	(6,824)	(54,422)	334,071
Total	(6,435,638)	(3,128)	(3,128)	(3,128)	(3,128)	(3,128)	(3,128)	(5,061)	(5,061)	(5,061)	(6,824)	(6,824)	(6,824)	(54,422)	(6,490,060)
Cumulative Principal	(6,824,131)	(6,824,131)	(6,824,131)	(6,824,131)	(6,824,131)	(6,824,131)	(6,824,131)	(6,824,131)	(6,824,131)	(6,824,131)	(6,824,131)	(6,824,131)	(6,824,131)		
Cumulative Interest	388,493	385,365	382,237	379,110	375,982	372,854	369,726	364,665	359,604	354,543	347,719	340,894	334,070		
Cumulative Total	(6,435,638)	(6,438,766)	(6,441,894)	(6,445,021)	(6,448,149)	(6,451,277)	(6,454,405)	(6,459,466)	(6,464,527)	(6,469,588)	(6,476,412)	(6,483,237)	(6,490,061)		

	A	B	C	D	E
1	PILs TAXES - EB-2012-0064				Version 2009.1
2	REGULATORY INFORMATION (REGINFO)				
3	Utility Name: TORONTO HYDRO-ELECTRIC SYSTEM LIMITED				Colour Code
4	Reporting period: 2001				Input Cell
5					Formula in Cell
6	Days in reporting period:	92	days		
7	Total days in the calendar year:	365	days		
8					
9	BACKGROUND				
10	Has the utility reviewed section 149(1) ITA to				
11	confirm that it is not subject to regular corporate				
12	tax (and therefore subject to PILs)?				
13			Y/N	Y	
14	Was the utility recently acquired by Hydro One				
15	and now subject to s.89 & 90 PILs?				
16			Y/N	N	
17	Is the utility a non-profit corporation?				
18	(If it is a non-profit corporation, please contact the Rates Manager at the OEB)				
19	Are the Ontario Capital Tax & Large Corporations Tax Exemptions				
20	shared among the corporate group?				
21		OCT	Y/N	Y	
22		LCT	Y/N	N	
23	Please identify the % used to allocate the OCT and LCT exemptions in				
24	Cells C65 & C74 in the TAXCALC spreadsheet.				
25		OCT		100%	
26		LCT		100%	
27	Accounting Year End				
28			Date	12-31-2001	
29	MARR NO TAX CALCULATIONS				Regulatory
30	SHEET #7 FINAL RUD MODEL DATA				Income
31	(FROM 1999 FINANCIAL STATEMENTS)				
32	USE BOARD-APPROVED AMOUNTS				
33					
34	Rate Base (wires-only)			1,810,112,688	
35	Common Equity Ratio (CER)			35.00%	
36	1-CER			65.00%	
37	Target Return On Equity			9.88%	
38	Debt rate			6.80%	
39	Market Adjusted Revenue Requirement			142,600,678	
40	1999 return from RUD Sheet #7			23,304,000	23,304,000
41	Total Incremental revenue			119,296,678	
42	Input: Board-approved dollar amounts phased-in				
43	Amount allowed in 2001			39,765,559	39,765,559
44	Amount allowed in 2002			39,765,559	39,765,559
45	Amount allowed in 2003 and 2004 (will be zero due to Bill 210				0
46	unless authorized by the Minister and the Board)				0
47	Amount allowed in 2005 - Third tranche of MARR re: CDM			39,765,559	39,765,559
48	Other Board-approved changes to MARR or incremental revenue				0
49					0
50	Total Regulatory Income				142,600,677
51	Equity			633,539,441	
52	Return at target ROE			62,593,697	
53	Debt			1,176,573,247	
54	Deemed interest amount in 100% of MARR			80,006,981	
55	Phase-in of interest - Year 1 (2001)			35,385,561	
56	((D43+D47)/D41)*D61			57,696,271	
57	Phase-in of interest - Year 2 (2002)			57,696,271	
58	((D43+D47+D48)/D41)*D61			80,006,981	
59	Phase-in of interest - Year 3 (2003) and forward				
60	((D43+D47+D48)/D41)*D61 (due to Bill 210)				
61	Phase-in of interest - 2005				
62					
63					
64					
65					
66					
67					
68					
69					
70					
71					

A	B	C	D	E	F	G
1 PILs TAXES - EB-2012-0064	ITEM	Initial Estimate		M of F Filing Variance K-C	M of F Filing Variance Explanation	Tax Returns
2 PILs DEFERRAL AND VARIANCE ACCOUNTS						Version 2009.1
3 TAX CALCULATIONS (TAXCALC)						Column Brought From TAXREC
4 ("Wires-only" business - see Tab TAXREC)						\$
5	0					
6 Utility Name: TORONTO HYDRO-ELECTRIC SYSTEM LIMITED						
7 Reporting period: 2001						
8						
9 Days in reporting period:	92	days				
10 Total days in the calendar year:	365	days				
11						
12		\$		\$		
13						
14 I) CORPORATE INCOME TAXES						
15						
16 Regulatory Net Income REGINFO E53	1	15,767,390		-24,844,390		-9,077,000
17						
18 BOOK TO TAX ADJUSTMENTS						
19 Additions:						
20 Depreciation & Amortization	2	26,557,250		4,611,750		31,169,000
21 Employee Benefit Plans - Accrued, Not Paid	3	8,282,285		-8,282,285		0
22 Tax reserves - beginning of year	4			0		0
23 Reserves from financial statements - end of year	4			114,054,159		114,054,159
24 Regulatory Adjustments - increase in income	5			0		0
25 Other Additions (See Tab entitled "TAXREC")						
26 "Material" Items from "TAXREC" worksheet	6			0		0
27 Other Additions (not "Material") "TAXREC"	6			0		0
28 "Material" Items from "TAXREC 2" worksheet	6			0		0
29 Other Additions (not "Material") "TAXREC 2"	6			1,794,266		1,794,266
30 Items on which true-up does not apply "TAXREC 3"				2,751,184		2,751,184
31						
32 Deductions: Input positive numbers						
33 Capital Cost Allowance and CEC	7	9,707,458		25,623,796		35,331,254
34 Employee Benefit Plans - Paid Amounts	8	7,502,785		-7,502,785		0
35 Items Capitalized for Regulatory Purposes	9	0		0		0
36 Regulatory Adjustments - deduction for tax purposes in Item 5	10			0		0
37 Interest Expense Deemed/ Incurred	11	8,846,390		31,940,610		40,787,000
38 Tax reserves - end of year	4			0		0
39 Reserves from financial statements - beginning of year	4			111,923,296		111,923,296
40 Contributions to deferred income plans	3			0		0
41 Contributions to pension plans	3			0		0
42 Interest capitalized for accounting but deducted for tax	11			0		0
43 Other Deductions (See Tab entitled "TAXREC")						
44 "Material" Items from "TAXREC" worksheet	12			0		0
45 Other Deductions (not "Material") "TAXREC"	12			0		0
46 Material Items from "TAXREC 2" worksheet	12			1,784,500		1,784,500
47 Other Deductions (not "Material") "TAXREC 2"	12			944,397		944,397
48 Items on which true-up does not apply "TAXREC 3"				4,084,155		4,084,155
49						
50 TAXABLE INCOME/ (LOSS)		24,550,292		-78,713,285		Before loss C/F -54,162,993
51						
52 BLENDED INCOME TAX RATE						
53 Tab Tax Rates - Regulatory from Table 1; Actual from Table 3	13	40.62%		40.62%		40.62%
54						
55 REGULATORY INCOME TAX		9,972,329		-9,972,329		Actual 0
56						
57						
58 Miscellaneous Tax Credits	14			0		Actual 0
59						
60 Total Regulatory Income Tax		9,972,329		-9,972,329		Actual 0
61						
62						
63 II) CAPITAL TAXES						
64						
65 Ontario						
66 Base	15	1,810,112,688		-99,081,803		1,711,030,885
67 Less: Exemption -Tax Rates - Regulatory, Table 1; Actual, Table 3	16	5,000,000		-212,269		4,787,731
68 Taxable Capital		1,805,112,688		-99,294,072		1,706,243,154
69						
70 Rate - Tax Rates - Regulatory, Table 1; Actual, Table 3	17	0.3000%		0.0000%		0.3000%
71						
72 Ontario Capital Tax		1,364,962		-74,762		1,290,200
73						
74 Federal Large Corporations Tax						
75 Base	18	1,810,112,688		-107,617,688		1,702,495,000
76 Less: Exemption -Tax Rates - Regulatory, Table 1; Actual, Table 3	19	10,000,000		0		10,000,000
77 Taxable Capital		1,800,112,688		-107,617,688		1,692,495,000
78						
79 Rate - Tax Rates - Regulatory, Table 1; Actual, Table 3	20	0.2250%		0.0000%		0.2250%
80						
81 Gross Amount of LCT before surtax offset (Taxable Capital x Rate)		1,020,886		-61,032		959,853
82 Less: Federal Surtax 1.12% x Taxable Income	21	274,963		-274,963		0
83						
84 Net LCT		745,923		213,931		959,853
85						

	A	B	C	D	E	F	G
1	PILs TAXES - EB-2012-0064	ITEM	Initial Estimate		M of F Filing Variance K-C	M of F Filing Variance Explanation	Tax Returns
2	PILs DEFERRAL AND VARIANCE ACCOUNTS						
3	TAX CALCULATIONS (TAXCALC)						
4	("Wires-only" business - see Tab TAXREC)						
5		0					Version 2009.1
6	Utility Name: TORONTO HYDRO-ELECTRIC SYSTEM LIMITED						
7	Reporting period: 2001						
8							
9	Days in reporting period:	92	days				Column Brought From TAXREC
10	Total days in the calendar year:	365	days				\$
11							
12					\$	\$	
13							
86	III) INCLUSION IN RATES						
87							
88	Income Tax Rate used for gross- up (exclude surtax)		39.50%				
89							
90	Income Tax (proxy tax is grossed-up)	22	16,483,188			Actual 2001	0
91	LCT (proxy tax is grossed-up)	23	1,232,930			Actual 2001	959,854
92	Ontario Capital Tax (no gross-up since it is deductible)	24	1,364,962			Actual 2001	1,290,200
93							
94							
95	Total PILs for Rate Adjustment	25	19,081,079			Actual 2001	2,250,054
96	Total PILs as per SIMPIL		19,056,196				
97	Total PILs, as approved		5,000,000				
98							
99	IV) FUTURE TRUE-UPS						
100	IV a) Calculation of the True-up Variance				DR/(CR)		
101	In Additions:						
102	Employee Benefit Plans - Accrued, Not Paid	3			(8,282,285)		
103	Tax reserves deducted in prior year	4			0		
104	Reserves from financial statements-end of year	4			114,054,159		
105	Regulatory Adjustments	5			0		
106	Other additions "Material" Items TAXREC	6			0		
107	Other additions "Material" Items TAXREC 2	6			0		
108	In Deductions - positive numbers						
109	Employee Benefit Plans - Paid Amounts	8			(7,502,785)		
110	Items Capitalized for Regulatory Purposes	9			0		
111	Regulatory Adjustments	10			0		
112	Interest Adjustment for tax purposes (See Below - cell I204)	11			0		
113	Tax reserves claimed in current year	4			0		
114	Reserves from F/S beginning of year	4			111,923,296		
115	Contributions to deferred income plans	3			0		
116	Contributions to pension plans	3			0		
117	Other deductions "Material" Items TAXREC	12			0		
118	Other deductions "Material" Item TAXREC 2	12			1,784,500		
119							
120	Total TRUE-UPS before tax effect	26			(433,137)		
121							
122	Income Tax Rate (excluding surtax) from 2001 Utility's tax return				x 40.62%		
123							
124	Income Tax Effect on True-up adjustments				= (175,940)		
125							
126	Less: Miscellaneous Tax Credits	14			0		
127							
128	Total Income Tax on True-ups				(175,940)		
129							
130	Income Tax Rate used for gross-up (exclude surtax)				39.50%		
131							
132	TRUE-UP VARIANCE ADJUSTMENT				(290,810)		
133							
134	IV b) Calculation of the Deferral Account Variance caused by changes in legislation						
135							
136	REGULATORY TAXABLE INCOME /(LOSSES) (as reported in the initial estimate column)				= 24,550,292		
137							
138	REVISED CORPORATE INCOME TAX RATE				x 40.62%		
139							
140	REVISED REGULATORY INCOME TAX				= 9,972,329		
141							
142	Less: Revised Miscellaneous Tax Credits				- 0		
143							
144	Total Revised Regulatory Income Tax				= 9,972,329		
145							
146	Less: Regulatory Income Tax reported in the Initial Estimate Column (Cell C58)				- 9,972,329		
147							
148	Regulatory Income Tax Variance				= 0		
149							

	A	B	C	D	E	F	G		
1	PILs TAXES - EB-2012-0064	ITEM	Initial Estimate		M of F Filing Variance K-C	M of F Filing Variance Explanation	Tax Returns		
2	PILs DEFERRAL AND VARIANCE ACCOUNTS								
3	TAX CALCULATIONS (TAXCALC)								
4	("Wires-only" business - see Tab TAXREC)								
5									
6	Utility Name: TORONTO HYDRO-ELECTRIC SYSTEM LIMITED								
7	Reporting period: 2001								
8									
9	Days in reporting period:							92	days
10	Total days in the calendar year:							365	days
11							Version 2009.1		
12							Column Brought From TAXREC		
13					\$	\$	\$		
150	Ontario Capital Tax								
151	Base			=	1,810,112,688				
152	Less: Exemption from tab Tax Rates, Table 2, cell C39			-	5,000,000				
153	Revised deemed taxable capital			=	1,805,112,688				
154									
155	Rate - Tab Tax Rates cell C54			x	0.3000%				
156									
157	Revised Ontario Capital Tax			=	1,364,962				
158	Less: Ontario Capital Tax reported in the initial estimate column (Cell C70)			-	1,364,962				
159	Regulatory Ontario Capital Tax Variance			=	0				
160									
161	Federal LCT								
162	Base				1,810,112,688				
163	Less: Exemption from tab Tax Rates, Table 2, cell C40			-	10,000,000				
164	Revised Federal LCT			=	1,800,112,688				
165									
166	Rate (as a result of legislative changes) tab 'Tax Rates' cell C51				0.2250%				
167									
168	Gross Amount				1,020,886				
169	Less: Federal surtax			-	274,963				
170	Revised Net LCT			=	745,923				
171									
172	Less: Federal LCT reported in the initial estimate column (Cell C82)			-	745,923				
173	Regulatory Federal LCT Variance			=	0				
174									
175	Actual Income Tax Rate used for gross-up (exclude surtax)				39.50%				
176									
177	Income Tax (grossed-up)			+	0				
178	LCT (grossed-up)			+	0				
179	Ontario Capital Tax			+	0				
180									
181	DEFERRAL ACCOUNT VARIANCE ADJUSTMENT			=	0				
182									
183	TRUE-UP VARIANCE (from cell I130)			+	(290,810)				
184									
185	Total Deferral Account Entry (Positive Entry = Debit)			=	(290,810)				
186	(Deferral Account Variance + True-up Variance)								
187									
188									
189									
190	V) INTEREST PORTION OF TRUE-UP								
191	Variance Caused By Phase-in of Deemed Debt								
192									
193	Total deemed interest (REGINFO)				80,006,981				
194	Interest phased-in (Cell C36)				8,846,390				
195									
196	Variance due to phase-in of debt component of MARR in rates according to the Board's decision				71,160,591				
197									
198									
199	Other Interest Variances (i.e. Borrowing Levels								
200	Above Deemed Debt per Rate Handbook)								
201	Interest deducted on MoF filing (Cell K36+K41)				40,787,000				
202	Total deemed interest (REGINFO CELL D61)				80,006,981				
203									
204	Variance caused by excess debt				0				
205									
206	Interest Adjustment for Tax Purposes (carry forward to Cell I110)				0				
207									
208	Total Interest Variance				71,160,591				

	A	B	C	D	E
1	PILs TAXES - EB-2012-0064	LINE	M of F	Non-wires	Wires-only
2	TAX RETURN RECONCILIATION (TAXREC)		Corporate	Eliminations	Tax
3	(for "wires-only" business - see s. 72 OEB Act)		Tax		Return
4		0	Return		
5					Version 2009.1
6	Section A: Identification:				
7	Utility Name: TORONTO HYDRO-ELECTRIC SYSTEM LIMITED				
8	Reporting period: 2001				
9	Taxation Year's start date:		01/01/2001		
10	Taxation Year's end date:		31/12/2001		
11	Number of days in taxation year:		92	days	
12					
13	Please enter the Materiality Level :		1,364,868	< - enter materiality level	
14	(0.25% x Rate Base x CER)	Y/N	N		
15	(0.25% x Net Assets)	Y/N	Y		
16	Or other measure (please provide the basis of the amount)	Y/N	N		
17	Does the utility carry on non-wires related operation?	Y/N	N		
18	(Please complete the questionnaire in the Background questionnaire worksheet.)				
19					
20	Note: Carry forward Wires-only Data to Tab "TAXCALC" Column K				
21					
22	Section B: Financial statements data:				
23	<i>Input unconsolidated financial statement data submitted with Tax returns.</i>				
24	<i>The actual categories of the income statements should be used.</i>				
25	<i>If required please change the descriptions except for amortization, interest expense and provision for income tax</i>				
26					
27	<i>Please enter the non-wire operation's amount as a positive number, the program automatically treats all amounts in the "non-wires elimination column" as negative values in TAXREC and TAXREC2.</i>				
28					
29					
30	Income:				
31	Energy Sales	+			0
32	Distribution Revenue	+	515,614,000		515,614,000
33	Other Income	+	3,920,000		3,920,000
34	Miscellaneous income	+	30,589,000		30,589,000
35		+			0
36	Revenue should be entered above this line				
37					
38	Costs and Expenses:				
39	Cost of energy purchased	-	483,598,000		483,598,000
40	Administration	-			0
41	Customer billing and collecting	-			0
42	Operations and maintenance	-	44,433,000		44,433,000
43	Amortization	-	31,169,000		31,169,000
44	Ontario Capital Tax	-			0
45	Reg Assets	-			0
46		-			0
47		-			0
48		-			0
49					
50	Net Income Before Interest & Income Taxes EBIT	=	-9,077,000	0	-9,077,000
51	Less: Interest expense for accounting purposes	-	40,787,000		40,787,000
52	Provision for payments in lieu of income taxes	-	912,000		912,000
53	Net Income (loss)	=	-50,776,000	0	-50,776,000
54	<i>(The Net Income (loss) on the MoF column should equal to the net income (loss) per financial statements on Schedule 1 of the tax return.)</i>				
55					
56	Section C: Reconciliation of accounting income to taxable income				
57	<i>From T2 Schedule 1</i>				
58	BOOK TO TAX ADDITIONS:				
59	Provision for income tax	+	912,000	0	912,000
60	Federal large corporation tax	+			0
61	Depreciation & Amortization	+	31,169,000	0	31,169,000
62	Employee benefit plans-accrued, not paid	+			0
63	Tax reserves - beginning of year	+	0	0	0
64	Reserves from financial statements- end of year	+	114,054,159	0	114,054,159
65	Regulatory adjustments on which true-up may apply (see A66)	+			0
66	Items on which true-up does not apply "TAXREC 3"	+	2,751,184	0	2,751,184
67	Material addition items from TAXREC 2	+	0	0	0
68	Other addition items (not Material) from TAXREC 2	+	1,794,266	0	1,794,266
69					
70	<i>Subtotal</i>		150,680,609	0	150,680,609
71					
72	<i>Other Additions: (Please explain the nature of the additions)</i>				
73	Recapture of CCA	+			0
74	Non-deductible meals and entertainment expense	+			0
75	Capital items expensed	+			0
76	DEPRECIATION DIFFERENCE	+			0
77		+			0
78		+			0
79		+			0
80	<i>Total Other Additions</i>	=	0	0	0
81					
82	Total Additions	=	150,680,609	0	150,680,609

	A	B	C	D	E
1	PILs TAXES - EB-2012-0064	LINE	M of F	Non-wires	Wires-only
2	TAX RETURN RECONCILIATION (TAXREC)		Corporate	Eliminations	Tax
3	(for "wires-only" business - see s. 72 OEB Act)		Tax		Return
4		0	Return		
5					Version 2009.1
83					
84	Recap Material Additions:				
85			0	0	0
86			0	0	0
87			0	0	0
88			0	0	0
89			0	0	0
90			0	0	0
91			0	0	0
92	Total Other additions >materiality level		0	0	0
93	Other additions (less than materiality level)		0	0	0
94	Total Other Additions		0	0	0
95					
96	BOOK TO TAX DEDUCTIONS:				
97	Capital cost allowance	-	34,967,350		34,967,350
98	Cumulative eligible capital deduction	-	363,904		363,904
99	Employee benefit plans-paid amounts	-			0
100	Items capitalized for regulatory purposes	-			0
101	Regulatory adjustments :	-			0
102	CCA	-			0
103	other deductions	-			0
104	Tax reserves - end of year	-	0	0	0
105	Reserves from financial statements- beginning of year	-	111,923,296	0	111,923,296
106	Contributions to deferred income plans	-			0
107	Contributions to pension plans	-			0
108	Items on which true-up does not apply "TAXREC 3"	-	4,084,155	0	4,084,155
109	Interest capitalized for accounting deducted for tax	-			0
110	Material deduction items from TAXREC 2	-	1,784,500	0	1,784,500
111	Other deduction items (not Material) from TAXREC 2	-	944,397	0	944,397
112					
113	Subtotal	=	154,067,602	0	154,067,602
114	Other deductions (Please explain the nature of the deductions)				
115	Charitable donations - tax basis	-			0
116	Gain on disposal of assets	-			0
117		-			0
118		-			0
119		-			0
120	Total Other Deductions	=	0	0	0
121					
122	Total Deductions	=	154,067,602	0	154,067,602
123					
124	Recap Material Deductions:				
125			0	0	0
126			0	0	0
127			0	0	0
128			0	0	0
129			0	0	0
130	Total Other Deductions exceed materiality level		0	0	0
131	Other Deductions less than materiality level		0	0	0
132	Total Other Deductions		0	0	0
133					
134	TAXABLE INCOME	=	-54,162,993	0	-54,162,993
135	DEDUCT:				
136	Non-capital loss applied positive number	-			0
137	Net capital loss applied positive number	-			0
138					0
139	NET TAXABLE INCOME	=	-54,162,993	0	-54,162,993
140					
141	FROM ACTUAL TAX RETURNS				
142	Net Federal Income Tax (Must agree with tax return)	+			0
143	Net Ontario Income Tax (Must agree with tax return)	+			0
144	Subtotal	=	0	0	0
145	Less: Miscellaneous tax credits (Must agree with tax returns)	-	0		0
146	Total Income Tax	=	0	0	0
147					
148	FROM ACTUAL TAX RETURNS				
149	Net Federal Income Tax Rate (Must agree with tax return)		28.12%		28.12%
150	Net Ontario Income Tax Rate (Must agree with tax return)		12.50%		12.50%
151	Blended Income Tax Rate		40.62%	*****	40.62%
152					
153	Section F: Income and Capital Taxes				
154					
155	RECAP				
156	Total Income Taxes	+	0	0	0
157	Ontario Capital Tax	+	1,290,200		1,290,200
158	Federal Large Corporations Tax	+	959,854		959,854
159					
160	Total income and capital taxes	=	2,250,054	0	2,250,054

	A	B	C	D	E
1	PILs TAXES - EB-2012-0064	LINE	M of F	Non-wires	Wires-only
2	Tax and Accounting Reserves		Corporate	Eliminations	Tax
3	For MoF Column of TAXCALC		Tax		Return
4	(for "wires-only" business - see s. 72 OEB Act)		Return		
5		0			Version 2009.1
6	Utility Name: TORONTO HYDRO-ELECTRIC SYSTEM LIMITED				
7	Reporting period: 2001				
8					
9					
10	TAX RESERVES				
11					
12	Beginning of Year:				
13					0
14	Reserve for doubtful accounts ss. 20(1)(l)				0
15	Reserve for goods & services ss.20(1)(m)				0
16	Reserve for unpaid amounts ss.20(1)(n)				0
17	Debt and share issue expenses ss.20(1)(e)				0
18	Other - Please describe				0
19	Other - Please describe				0
20					0
21					0
22	Total (carry forward to the TAXREC worksheet)		0	0	0
23					
24	End of Year:				
25					0
26	Reserve for doubtful accounts ss. 20(1)(l)				0
27	Reserve for goods & services ss.20(1)(m)				0
28	Reserve for unpaid amounts ss.20(1)(n)				0
29	Debt and share issue expenses ss.20(1)(e)				0
30	Other - Please describe				0
31	Other - Please describe				0
32					0
33					0
34	Insert line above this line				
35	Total (carry forward to the TAXREC worksheet)		0	0	0
36					
37					
38	FINANCIAL STATEMENT RESERVES				
39					
40	Beginning of Year:				
41					0
42					0
43	Environmental		1,018,172		1,018,172
44	Allowance for doubtful accounts				0
45	Inventory obsolescence		5,555,849		5,555,849
46	Property taxes				0
47	Other - Post employment benefits		103,640,750		103,640,750
48	Other - Holdback payable		1,708,525		1,708,525
49					0
50	Total (carry forward to the TAXREC worksheet)		111,923,296	0	111,923,296
51					
52	End of Year:				
53					0
54					0
55	Environmental		1,800,596		1,800,596
56	Allowance for doubtful accounts				0
57	Inventory obsolescence		7,525,248		7,525,248
58	Property taxes				0
59	Other - Post employment benefits		103,550,000		103,550,000
60	Other - Holdback payable		1,178,315		1,178,315
61					0
62	Insert line above this line				
63	Total (carry forward to the TAXREC worksheet)		114,054,159	0	114,054,159

	A	B	C	D	E	F
1						
2	PILs TAXES - EB-2012-0064	LINE	M of F	Non-wires	Wires-only	
3	TAX RETURN RECONCILIATION (TAXREC 2)		Corporate	Eliminations	Tax	
4	(for "wires-only" business - see s. 72 OEB Act)		Tax		Return	
5	RATEPAYERS ONLY		Return			
6	Shareholder-only Items should be shown on TAXREC 3					Version 2009.1
7						
8	Utility Name: TORONTO HYDRO-ELECTRIC SYSTEM LIMITED					
9	Reporting period: 2001					
10	Number of days in taxation year:			92		
11	Materiality Level:			1,364,868		
12						
13						
14						
15	Section C: Reconciliation of accounting income to taxable income					
16	Add:					
17		+				0
18	Gain on sale of eligible capital property	+				0
19	Loss on disposal of assets	+				0
20	Charitable donations (Only if it benefits ratepayers)	+	13,175			13,175
21	Taxable capital gains	+				0
22		+				0
23	Scientific research expenditures deducted	+				0
24	per financial statements	+				0
25	Capitalized interest	+				0
26	Soft costs on construction and renovation of buildings	+				0
27	Capital items expensed	+				0
28	Debt issue expense	+				0
29	Financing fees deducted in books	+				0
30	Gain on settlement of debt	+				0
31	Interest paid on income debentures	+				0
32	Recapture of SR&ED expenditures	+				0
33	Share issue expense	+				0
34	Write down of capital property	+				0
35	Amounts received in respect of qualifying environment trust	+				0
36	Provision for bad debts	+				0
37	Non-deductible bad debt expense	+	601,846			601,846
38	Non-deductible holdback payable	+	1,179,245			1,179,245
39		+				0
40	Other Additions: (please explain in detail the nature of the item)	+				0
41		+				0
42		+				0
43		+				0
44		+				0
45		+				0
46	Total Additions	=	1,794,266	0		1,794,266
47						
48	Recap of Material Additions:					
49			0	0		0
50			0	0		0
51			0	0		0
52			0	0		0
53			0	0		0
54			0	0		0
55			0	0		0
56			0	0		0
57			0	0		0
58			0	0		0
59			0	0		0
60			0	0		0
61			0	0		0
62			0	0		0
63			0	0		0

	A	B	C	D	E	F
1						
2	PILs TAXES - EB-2012-0064	LINE	M of F	Non-wires	Wires-only	
3	TAX RETURN RECONCILIATION (TAXREC 2)		Corporate	Eliminations	Tax	
4	(for "wires-only" business - see s. 72 OEB Act)		Tax		Return	
5	RATEPAYERS ONLY		Return			
6	Shareholder-only Items should be shown on TAXREC 3				Version 2009.1	
7						
8	Utility Name: TORONTO HYDRO-ELECTRIC SYSTEM LIMITED					
9	Reporting period: 2001					
10	Number of days in taxation year:			92		
11	Materiality Level:			1,364,868		
12						
13						
64			0	0	0	
65			0	0	0	
66			0	0	0	
67			0	0	0	
68			0	0	0	
69			0	0	0	
70			0	0	0	
71			0	0	0	
72			0	0	0	
73			0	0	0	
74			0	0	0	
75			0	0	0	
76			0	0	0	
77	Total Material additions		0	0	0	
78	Other additions less than materiality level		1,794,266	0	1,794,266	
79	Total Additions		1,794,266	0	1,794,266	

	A	B	C	D	E	F
1						
2	PILs TAXES - EB-2012-0064	LINE	M of F	Non-wires	Wires-only	
3	TAX RETURN RECONCILIATION (TAXREC 2)		Corporate	Eliminations	Tax	
4	(for "wires-only" business - see s. 72 OEB Act)		Tax		Return	
5	RATEPAYERS ONLY		Return			
6	Shareholder-only Items should be shown on TAXREC 3				Version 2009.1	
7						
8	Utility Name: TORONTO HYDRO-ELECTRIC SYSTEM LIMITED					
9	Reporting period: 2001					
10	Number of days in taxation year:			92		
11	Materiality Level:			1,364,868		
12						
13						
80						
81	Deduct:					
82	Gain on disposal of assets per f/s	-				0
83	Dividends not taxable under section 83	-				0
84	Terminal loss from Schedule 8	-				0
85	Depreciation in inventory, end of prior year	-				0
86	Scientific research expenses claimed in year from Form T661	-				0
87	Bad debts	-				0
88	Book income of joint venture or partnership	-				0
89	Equity in income from subsidiary or affiliates	-				0
90	Contributions to a qualifying environment trust	-				0
91	Other income from financial statements	-				0
92		-				0
93	<i>Other deductions: (Please explain in detail the nature of the item)</i>	-				0
94	Net fibre rental expense Oct 1-Dec 31, 2001	-	287,931			287,931
95		-				0
96		-				0
97	Payment to WSIB	-	1,784,500			1,784,500
98	Inventory obsolescence expense	-	656,466			656,466
99	Total Deductions	=	2,728,897	0		2,728,897
100						
101	Recap of Material Deductions:					
102			0	0		0
103			0	0		0
104			0	0		0
105			0	0		0
106			0	0		0
107			0	0		0
108			0	0		0
109			0	0		0
110			0	0		0
111			0	0		0
112			0	0		0
113			0	0		0
114			0	0		0
115			0	0		0
116			0	0		0
117	Payment to WSIB		1,784,500	0		1,784,500
118			0	0		0
119	Total Deductions exceed materiality level		1,784,500	0		1,784,500
120	Other deductions less than materiality level		944,397	0		944,397
121	Total Deductions		2,728,897	0		2,728,897
122						

	A	B	C	D	E	F
1						
2	PILs TAXES - EB-2012-0064					
3	TAX RETURN RECONCILIATION (TAXREC 3)					
4	Shareholder-only Items should be shown on TAXREC 3					
5	ITEMS ON WHICH TRUE-UP DOES NOT APPLY					
6	(for "wires-only" business - see s. 72 OEB Act)					
7		0				
8	Utility Name: TORONTO HYDRO-ELECTRIC SYSTEM LIMITED					
9						
10						
11	Reporting period: 2001					
12	Number of days in taxation year:		92			
13						
14						
15						
16	Section C: Reconciliation of accounting income to taxable income					
17	Add:					
18						
19	Recapture of capital cost allowance	+				0
20	CCA adjustments	+				0
21	CEC adjustments	+				0
22	Gain on sale of non-utility eligible capital property	+				0
23	Gain on sale of utility eligible capital property	+				0
24	Loss from joint ventures or partnerships	+				0
25	Deemed dividend income	+				0
26	Loss in equity of subsidiaries and affiliates	+				0
27	Loss on disposal of utility assets	+				0
28	Loss on disposal of non-utility assets	+				0
29	Depreciation in inventory -end of year	+				0
30	Depreciation and amortization adjustments	+				0
31	Dividends credited to investment account	+				0
32	Non-deductible meals	+	60,087			60,087
33	Non-deductible club dues	+	7,151			7,151
34	Non-deductible automobile costs	+	2,287			2,287
35	Donations - amount per books					0
36	Interest and penalties on unpaid taxes					0
37	Management bonuses unpaid after 180 days of year end					0
38	Imputed interest expense on Regulatory Assets					0
39	Ontario capital tax adjustments	+				0
40	Changes in Regulatory Asset balances	+				0
41	<i>Other Additions: (please explain in detail the nature of the item)</i>	+				0
42	expenses related to pre Oct 2001	+	2,681,659			2,681,659
43		+				0
44		+				0
45		+				0
46		+				0
47	Total Additions on which true-up does not apply	=	2,751,184	0		2,751,184
48						
49	Deduct:					
50						
51	CCA adjustments	-				0
52	CEC adjustments	-				0
53	Depreciation and amortization adjustments	-				0
54	Gain on disposal of assets per financial statements	-				0
55	Financing fee amortization - considered to be interest expense for PILs	-				0
56	Imputed interest income on Regulatory Assets	-	80,152			80,152
57	Donations - amount deductible for tax purposes	-				0
58	Income from joint ventures or partnerships	-				0
59	WSIB pre Oct 2001 accounting gain	-	3,098,900			3,098,900
60		-				0
61		-				0
62		-				0
63		-				0
64	Ontario capital tax adjustments to current or prior year	-				0
65		-				0
66	Changes in Regulatory Asset balances	-	905,103			905,103
67		-				0
68	<i>Other deductions: (Please explain in detail the nature of the item)</i>	-				0
69		-				0
70		-				0
71		-				0
72		-				0
73	Total Deductions on which true-up does not apply	=	4,084,155	0		4,084,155

	A	B	C	D	E	F	G	H	I
1	PILs TAXES - EB-2012-0064								
2	Corporate Tax Rates				Version 2009.1				
3	Exemptions, Deductions, or Thresholds								
4	Utility Name: TORONTO HYDRO-ELECTRIC SYSTEM LIMITED								
5	Reporting period: 2001								
6									
7									
8	Rates Used in 2001 RAM PILs Applications for 2001					Table 1			
9	Income Range		0		200,001				
10	RAM 2002		to		to				
11		Year	200,000		700,000			>700,000	
12	Income Tax Rate								
13	Proxy Tax Year	2001							
14	Federal (Includes surtax)		13.12%		28.12%			28.12%	
15	and Ontario blended		6.00%		6.00%			12.50%	
16	Blended rate		19.12%		34.12%			40.62%	
17									
18	Capital Tax Rate		0.300%						
19	LCT rate		0.225%						
20	Surtax		1.12%						
21	Ontario Capital Tax Exemption **	MAX \$5MM	5,000,000						
22	Federal Large Corporations Tax Exemption **	MAX \$10MM	10,000,000						
23	**Exemption amounts must agree with the Board-approved 2001 RAM PILs filing								
24									
25									
26	Expected Income Tax Rates for 2001 and Capital Tax Exemptions for 2001					Table 2			
27	Income Range		0		200,001				
28	Expected Rates		to		to			>700,000	
29		Year	200,000		700,000				
30	Income Tax Rate								
31	Current year	2001							
32	Federal (Includes surtax)	2001	13.12%		28.12%			28.12%	
33	Ontario	2001	6.00%		6.00%			12.50%	
34	Blended rate	2001	19.12%		34.12%			40.62%	
35									
36	Capital Tax Rate	2001	0.300%						
37	LCT rate	2001	0.225%						
38	Surtax	2001	1.12%						
39	Ontario Capital Tax Exemption *** 2001	MAX \$5MM	5,000,000						
40	Federal Large Corporations Tax Exemption *** 2001	MAX \$10MM	10,000,000						
41	*** Allocation of exemptions must comply with the Board's instructions regarding regulated activities.								
42									

	A	B	C	D	E	F	G	H	I
43	Table 3								
44	Input Information from Utility's Actual 2001 Tax Returns								
45	Income Range		0		200,001				
46			to		to				
47		Year	200,000		700,000			>700,000	
48	Income Tax Rate								
49	Current year	2001							
50	Federal (Includes surtax)		13.12%		28.12%	28.12%		26.12%	-2.00%
51	Ontario		6.00%		6.00%	12.50%		12.50%	0.00%
52	Blended rate		19.12%		34.12%	40.62%		38.62%	-2.00%
53									
54	Capital Tax Rate		0.300%						
55	LCT rate		0.225%						
56	Surtax		1.12%						
57	Ontario Capital Tax Exemption *	MAX \$5MM	4,787,731						
58	Federal Large Corporations Tax Exemption *	MAX \$10MM	10,000,000						
59	* Include copies of the actual tax return allocation calculations in your submission: Ontario CT23 page 11; federal T2 Schedule 36								
60									

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	PILs TAXES - EB-2012-0064														
2	Analysis of PILs Tax Account 1562:														
3	Utility Name: TORONTO HYDRO-ELECTRIC SYSTEM LIMITED														
4	Reporting period: 2001														
5	Version 2009.1														
6	0														
7															
8	Year start:		01/10/2001		01/01/2002		01/01/2003		01/01/2004		01/01/2005		01/01/2006		
9	Year end:		31/12/2001		31/12/2002		31/12/2003		31/12/2004		31/12/2005		30/04/2006		Total
10															
11	Opening balance:	=	0						0		0		0		0
12	Board-approved PILs tax proxy from Decisions (1)	+/-	5,000,000										0		5,000,000
13	PILs proxy from April 1, 2005 - input 9/12 of amount														0
14	True-up Variance Adjustment Q4, 2001 (2)	+/-			-290,810										-290,810
15	True-up Variance Adjustment (3)	+/-											0		0
16	Deferral Account Variance Adjustment Q4, 2001 (4)														0
17	Deferral Account Variance Adjustment (5)	+/-											0		0
18	Adjustments to reported prior years' variances (6)	+/-													0
19	Carrying charges (7)	+/-	28,333												28,333
20	PILs billed to (collected from) customers (8)	-	0												0
21															
22	Ending balance: # 1562		<u>5,028,333</u>		<u>-290,810</u>		<u>0</u>		<u>0</u>		<u>0</u>		<u>0</u>		<u>4,737,523</u>
23															
24															
25															
26	Uncollected PILs														
27															
28	NOTE: The purpose of this worksheet is to show the movement in Account 1562 which establishes the receivable from or liability to ratepayers.														
29	For explanation of Account 1562 please refer to Accounting Procedures Handbook for Electric Distribution Utilities and FAQ April 2003.														
30															
31	Please identify if Method 1, 2 or 3 was used to account for the PILs proxy and recovery. ANSWER: METHOD 3														
32															
33	(1) (i) From the Board's Decision - see Inclusion in Rates, Part III of the TAXCALC spreadsheet for Q4 2001 and 2002.														
34	Please insert the Q4, 2001 proxy in column C even though it was approved effective March 1, 2002.														
35	If the Board gave more than one decision in the year, calculate a weighted average proxy.														
36	(ii) If the Board approved different amounts, input the Board-approved amounts in cells C13 and E13.														
37	(iii) Column G - In 2003, the initial estimate should include the Q4 2001 PILs tax proxy and the 2002 PILs tax proxy.														
38	(iv) Column I - The Q4 2001 PILs tax proxy was removed from rates on April 1, 2004 and the 2002 PILs tax proxy remained.														
39	(v) Column K - The 2002 PILs tax proxy applies to January 1 to March 31, 2005, and the new 2005 PILs tax proxy from April 1 to December 31, 2005.														
40	(vi) Column M - The 2005 PILs tax proxy will be used for the period from January 1 to April 30, 2006.														
41															
42	(2) From the Ministry of Finance Variance Column, under Future True-ups, Part IV a, cell I132, of the TAXCALC spreadsheet. The Q4, 2001 proxy has to be														
43	trueed up in 2002, 2003 and for the period January 1- March 31, 2004. Input the variance in the whole year reconciliation.														
44															
45	(3) From the Ministry of Finance Variance Column, under Future True-ups, Part IV a, cell I132, of the TAXCALC spreadsheet.														
46	The true-up will compare to the 2002 proxy for 2002, 2003, 2004 and January 1 to March 31, 2005.														
47															
48	(4) From the Ministry of Finance Variance Column, under Future True-ups, Part IV b, cell I181, of the TAXCALC spreadsheet. The Q4, 2001 proxy has to be														
49	trueed up in 2002, 2003 and for the period January 1- March 31, 2004. Input the deferral variance in the whole year reconciliation.														
50															
51	(5) From the Ministry of Finance Variance Column, under Future True-ups, Part IV a, cell I181, of the TAXCALC spreadsheet.														
52	The true-up will compare to the 2002 proxy for 2002, 2003, 2004 and January 1 to March 31, 2005.														
53															
54	(6) The correcting entry should be shown in the year the entry was made. The true-up of the carrying charges will have to be reviewed.														
55															
56	(7) Carrying charges are calculated on a simple interest basis.														
57															
58	(8) (i) PILs collected from customers from March 1, 2002 to March 31, 2004 were based on a fixed charge and a volumetric charge recovery by class. The PILs rate														
59	components for Q4, 2001 and 2002 were calculated in the 2002 approved RAM on sheet 6 and sheet 8. In April 2004, the PILs recovery was based on the														
60	2002 PILs tax proxy recovered by the volumetric rate by class as calculated on sheet 7 of the 2004 RAM.														
61	The 2005 PILs tax proxy is being recovered on a volumetric basis by class.														
62															
63	(ii) Collections should equal: (a) the actual volumes/ load (kWhs, kW, Kva) for the period (including net unbilled at period end), multiplied														
64	by the PILs volumetric proxy rates by class (from the Q4, 2001 and 2002 RAM worksheets) for 2002, 2003 and January 1 to March 31, 2004;														
65	plus, (b) customer counts by class in the same period multiplied by the PILs fixed charge rate components.														
66															
67	In 2004, use the Board-approved 2002 PILs proxy, recovered on a volumetric basis by class as calculated by the 2004 RAM, sheet 7,														
68	for the period April 1 to December 31, 2004, and add this total to the results from the sentence above for January 1 to March 31, 2004.														
69															
70	In 2005, use the Board-approved 2005 PILs proxy, recovered on a volumetric basis by class as calculated by the 2005 RAM, sheet 4,														
71	for the period April 1 to December 31, 2005. To this total, the 2004 volumetric PILs proxy rate by class should be used														
72	to calculate the recovery for the period January 1 to March 31, 2005.														
73															
74	(9) Any interim PILs recovery from Board Decisions will be recorded in APH Account # 1590. Final reconciliation of PILs proxy taxes														
75	will have to include amounts from 1562 and from 1590.														

	A	B	C	D	E
1	PILs TAXES - EB-2012-0064				Version 2009.1
2	REGULATORY INFORMATION (REGINFO)				
3	Utility Name: TORONTO HYDRO-ELECTRIC SYSTEM LIMITED			Colour Code	
4	Reporting period: 2002			Input Cell	
5				Formula in Cell	
6	Days in reporting period:	365	days		
7	Total days in the calendar year:	365	days		
8					
9	BACKGROUND				
10	Has the utility reviewed section 149(1) ITA to				
11	confirm that it is not subject to regular corporate				
12	tax (and therefore subject to PILs)?		Y/N	Y	
14	Was the utility recently acquired by Hydro One				
15	and now subject to s.89 & 90 PILs?		Y/N	N	
17	Is the utility a non-profit corporation?		Y/N	N	
18	(If it is a non-profit corporation, please contact the Rates Manager at the OEB)				
19	Are the Ontario Capital Tax & Large Corporations Tax Exemptions	OCT	Y/N	Y	
20	shared among the corporate group?	LCT	Y/N	N	
21	Please identify the % used to allocate the OCT and LCT exemptions in	OCT		100%	
22	Cells C65 & C74 in the TAXCALC spreadsheet.	LCT		100%	
24	Accounting Year End		Date	12-31-2002	
26	MARR NO TAX CALCULATIONS				Regulatory
27	SHEET #7 FINAL RUD MODEL DATA				Income
28	(FROM 1999 FINANCIAL STATEMENTS)				
29	USE BOARD-APPROVED AMOUNTS				
31	Rate Base (wires-only)			1,810,112,688	
33	Common Equity Ratio (CER)			35.00%	
35	1-CER			65.00%	
37	Target Return On Equity			9.88%	
39	Debt rate			6.80%	
41	Market Adjusted Revenue Requirement			142,600,678	
43	1999 return from RUD Sheet #7			23,304,000	23,304,000
45	Total Incremental revenue			119,296,678	
46	Input: Board-approved dollar amounts phased-in				
47	Amount allowed in 2001			39,765,559	39,765,559
48	Amount allowed in 2002			39,765,559	39,765,559
49	Amount allowed in 2003 and 2004 (will be zero due to Bill 210				0
50	unless authorized by the Minister and the Board)				0
51	Amount allowed in 2005 - Third tranche of MARR re: CDM			39,765,559	39,765,559
52	Other Board-approved changes to MARR or incremental revenue				0
53					0
54	Total Regulatory Income				142,600,677
56	Equity			633,539,441	
58	Return at target ROE			62,593,697	
60	Debt			1,176,573,247	
62	Deemed interest amount in 100% of MARR			80,006,981	
64	Phase-in of interest - Year 1 (2001)			35,385,561	
65	((D43+D47)/D41)*D61				
66	Phase-in of interest - Year 2 (2002)			57,696,271	
67	((D43+D47+D48)/D41)*D61				
68	Phase-in of interest - Year 3 (2003) and forward			57,696,271	
69	((D43+D47+D48)/D41)*D61 (due to Bill 210)				
70	Phase-in of interest - 2005			80,006,981	
71					
72					

A		B	C	D	E	F	G
		ITEM	Initial Estimate		M of F Filing Variance K-C	M of F Filing Variance Explanation	Tax Returns
							Version 2009.1
							Column Brought From TAXREC \$
1	PILs TAXES - EB-2012-0064						
2	PILs DEFERRAL AND VARIANCE ACCOUNTS						
3	TAX CALCULATIONS (TAXCALC)						
4	("Wires-only" business - see Tab TAXREC)						
5							
6	Utility Name: TORONTO HYDRO-ELECTRIC SYSTEM LIMITED						
7	Reporting period: 2002						
8							
9	Days in reporting period:	365	days				
10	Total days in the calendar year:	365	days				
11							
12			\$		\$		
13							
14	I) CORPORATE INCOME TAXES						
15							
16	Regulatory Net Income REGINFO E53	1	102,835,118		35,460,882		138,296,000
17							
18	BOOK TO TAX ADJUSTMENTS						
19	Additions:						
20	Depreciation & Amortization	2	106,229,000		15,765,000		121,994,000
21	Employee Benefit Plans - Accrued, Not Paid	3	33,129,140		-33,129,140		0
22	Tax reserves - beginning of year	4			0		0
23	Reserves from financial statements - end of year	4			119,132,936		119,132,936
24	Regulatory Adjustments - increase in income	5			0		0
25	Other Additions (See Tab entitled "TAXREC")						
26	"Material" Items from "TAXREC" worksheet	6			0		0
27	Other Additions (not "Material") "TAXREC"	6			0		0
28	"Material" Items from "TAXREC 2" worksheet	6			1,529,753		1,529,753
29	Other Additions (not "Material") "TAXREC 2"	6			3,104,309		3,104,309
30	Items on which true-up does not apply "TAXREC 3"				16,464,375		16,464,375
31							
32	Deductions: Input positive numbers						
33	Capital Cost Allowance and CEC	7	76,692,530		114,800,551		191,493,081
34	Employee Benefit Plans - Paid Amounts	8	30,011,140		-30,011,140		0
35	Items Capitalized for Regulatory Purposes	9	0		0		0
36	Regulatory Adjustments - deduction for tax purposes in Item 5	10			0		0
37	Interest Expense Deemed/ Incurred	11	57,696,271		13,479,729		71,176,000
38	Tax reserves - end of year	4			0		0
39	Reserves from financial statements - beginning of year	4			114,054,159		114,054,159
40	Contributions to deferred income plans	3			0		0
41	Contributions to pension plans	3			0		0
42	Interest capitalized for accounting but deducted for tax	11			0		0
43	Other Deductions (See Tab entitled "TAXREC")						
44	"Material" Items from "TAXREC" worksheet	12			0		0
45	Other Deductions (not "Material") "TAXREC"	12			24,769		24,769
46	Material Items from "TAXREC 2" worksheet	12			0		0
47	Other Deductions (not "Material") "TAXREC 2"	12			1,334,612		1,334,612
48	Items on which true-up does not apply "TAXREC 3"				9,954,324		9,954,324
49							
50	TAXABLE INCOME/ (LOSS)		77,793,317		-65,308,889	Before loss C/F	12,484,428
51							
52	BLENDED INCOME TAX RATE						
53	Tab Tax Rates - Regulatory from Table 1; Actual from Table 3	13	38.62%		0.0000%		38.62%
54							
55	REGULATORY INCOME TAX		30,043,779		-30,043,779	Actual	0
56							
57							
58	Miscellaneous Tax Credits	14			0	Actual	0
59							
60	Total Regulatory Income Tax		30,043,779		-30,043,779	Actual	0
61							
62							
63	II) CAPITAL TAXES						
64							
65	Ontario						
66	Base	15	1,810,112,688		125,416,854		1,935,529,542
67	Less: Exemption -Tax Rates - Regulatory, Table 1; Actual, Table 3	16	5,000,000		-413,782		4,586,218
68	Taxable Capital		1,805,112,688		125,003,072		1,930,943,324
69							
70	Rate - Tax Rates - Regulatory, Table 1; Actual, Table 3	17	0.3000%		0.0000%		0.3000%
71							
72	Ontario Capital Tax		5,415,338		377,492		5,792,830
73							
74	Federal Large Corporations Tax						
75	Base	18	1,810,112,688		135,778,341		1,945,891,029
76	Less: Exemption -Tax Rates - Regulatory, Table 1; Actual, Table 3	19	10,000,000		0		10,000,000
77	Taxable Capital		1,800,112,688		135,778,341		1,935,891,029
78							
79	Rate - Tax Rates - Regulatory, Table 1; Actual, Table 3	20	0.2250%		0.0000%		0.2250%
80							
81	Gross Amount of LCT before surtax offset (Taxable Capital x Rate)		4,050,254		305,501		4,355,755
82	Less: Federal Surtax 1.12% x Taxable Income	21	871,285		-871,285		0
83							
84	Net LCT		3,178,968		1,176,786		4,355,755
85							

	A	B	C	D	E	F	G
		ITEM	Initial Estimate		M of F Filing Variance K-C	M of F Filing Variance Explanation	Tax Returns
1	PILs TAXES - EB-2012-0064						
2	PILs DEFERRAL AND VARIANCE ACCOUNTS						
3	TAX CALCULATIONS (TAXCALC)						
4	("Wires-only" business - see Tab TAXREC)						
5							
6	Utility Name: TORONTO HYDRO-ELECTRIC SYSTEM LIMITED						Version 2009.1
7	Reporting period: 2002						
8							
9	Days in reporting period:	365	days				Column Brought From TAXREC
10	Total days in the calendar year:	365	days				\$
11							
12			\$		\$		
13							
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	A	B	C	D	E	F	G
		ITEM	Initial Estimate		M of F Filing Variance K-C	M of F Filing Variance Explanation	Tax Returns
1	PILs TAXES - EB-2012-0064						
2	PILs DEFERRAL AND VARIANCE ACCOUNTS						
3	TAX CALCULATIONS (TAXCALC)						
4	("Wires-only" business - see Tab TAXREC)						
5							
6	Utility Name: TORONTO HYDRO-ELECTRIC SYSTEM LIMITED						Version 2009.1
7	Reporting period: 2002						
8							
9	Days in reporting period:	365	days				Column Brought From TAXREC
10	Total days in the calendar year:	365	days				\$
11							
12			\$		\$		
13							
150	Ontario Capital Tax						
151	Base			=	1,810,112,688		
152	Less: Exemption from tab Tax Rates, Table 2, cell C39			-	5,000,000		
153	Revised deemed taxable capital			=	1,805,112,688		
154							
155	Rate - Tab Tax Rates cell C54			x	0.3000%		
156							
157	Revised Ontario Capital Tax			=	5,415,338		
158	Less: Ontario Capital Tax reported in the initial estimate column (Cell C70)			-	5,415,338		
159	Regulatory Ontario Capital Tax Variance			=	0		
160							
161	Federal LCT						
162	Base			=	1,810,112,688		
163	Less: Exemption from tab Tax Rates, Table 2, cell C40			-	10,000,000		
164	Revised Federal LCT			=	1,800,112,688		
165							
166	Rate (as a result of legislative changes) tab 'Tax Rates' cell C51			=	0.2250%		
167							
168	Gross Amount			=	4,050,254		
169	Less: Federal surtax			-	871,285		
170	Revised Net LCT			=	3,178,968		
171							
172	Less: Federal LCT reported in the initial estimate column (Cell C82)			-	3,178,968		
173	Regulatory Federal LCT Variance			=	0		
174							
175	Actual Income Tax Rate used for gross-up (exclude surtax)			=	37.50%		
176							
177	Income Tax (grossed-up)			+	0		
178	LCT (grossed-up)			+	0		
179	Ontario Capital Tax			+	0		
180							
181	DEFERRAL ACCOUNT VARIANCE ADJUSTMENT			=	0		
182							
183	TRUE-UP VARIANCE (from cell I130)			+	2,156,868		
184							
185	Total Deferral Account Entry (Positive Entry = Debit)			=	2,156,868		
186	(Deferral Account Variance + True-up Variance)						
187							
188							
189							
190	V) INTEREST PORTION OF TRUE-UP						
191	Variance Caused By Phase-in of Deemed Debt						
192							
193	Total deemed interest (REGINFO)			=	80,006,981		
194	Interest phased-in (Cell C36)			=	57,696,271		
195							
196	Variance due to phase-in of debt component of MARR in rates according to the Board's decision			=	22,310,710		
197							
198							
199	Other Interest Variances (i.e. Borrowing Levels Above Deemed Debt per Rate Handbook)						
200							
201	Interest deducted on MoF filing (Cell K36+K41)			=	71,176,000		
202	Total deemed interest (REGINFO CELL D61)			=	80,006,981		
203							
204	Variance caused by excess debt			=	0		
205							
206	Interest Adjustment for Tax Purposes (carry forward to Cell I110)			=	0		
207							
208	Total Interest Variance			=	22,310,710		

	A	B	C	D	E
1	PILs TAXES - EB-2012-0064	LINE	M of F	Non-wires	Wires-only
2	TAX RETURN RECONCILIATION (TAXREC)		Corporate	Eliminations	Tax
3	(for "wires-only" business - see s. 72 OEB Act)		Tax		Return
4		0	Return		
5					Version 2009.1
6	Section A: Identification:				
7	Utility Name: TORONTO HYDRO-ELECTRIC SYSTEM LIMITED				
8	Reporting period: 2002				
9	Taxation Year's start date:		01/01/2002		
10	Taxation Year's end date:		31/12/2002		
11	Number of days in taxation year:		365	days	
12					
13	Please enter the Materiality Level :		1,523,493	< - enter materiality level	
14	(0.25% x Rate Base x CER)	Y/N	N		
15	(0.25% x Net Assets)	Y/N	Y		
16	Or other measure (please provide the basis of the amount)	Y/N			
17	Does the utility carry on non-wires related operation?	Y/N	N		
18	(Please complete the questionnaire in the Background questionnaire worksheet.)				
19					
20	Note: Carry forward Wires-only Data to Tab "TAXCALC" Column K				
21					
22	Section B: Financial statements data:				
23	<i>Input unconsolidated financial statement data submitted with Tax returns.</i>				
24	<i>The actual categories of the income statements should be used.</i>				
25	<i>If required please change the descriptions except for amortization, interest expense and provision for income tax</i>				
26					
27	<i>Please enter the non-wire operation's amount as a positive number, the program automatically treats all amounts in the "non-wires elimination column" as negative values in TAXREC and TAXREC2.</i>				
28					
29					
30	Income:				
31	Energy Sales	+			0
32	Distribution Revenue	+	2,389,886,000		2,389,886,000
33	Other Income	+	10,343,000		10,343,000
34	Miscellaneous income	+	1,280,000		1,280,000
35		+			0
36	Revenue should be entered above this line				
37					
38	Costs and Expenses:				
39	Cost of energy purchased	-	1,974,923,000		1,974,923,000
40	Administration	-			0
41	Customer billing and collecting	-			0
42	Operations and maintenance	-	166,296,000		166,296,000
43	Amortization	-	121,994,000		121,994,000
44	Ontario Capital Tax	-			0
45	Reg Assets	-			0
46		-			0
47		-			0
48		-			0
49					
50	Net Income Before Interest & Income Taxes EBIT	=	138,296,000	0	138,296,000
51	Less: Interest expense for accounting purposes	-	71,176,000		71,176,000
52	Provision for payments in lieu of income taxes	-	4,270,000		4,270,000
53	Net Income (loss)	=	62,850,000	0	62,850,000
54	<i>(The Net Income (loss) on the MoF column should equal to the net income (loss) per financial statements on Schedule 1 of the tax return.)</i>				
55					
56	Section C: Reconciliation of accounting income to taxable income				
57	From T2 Schedule 1				
58	BOOK TO TAX ADDITIONS:				
59	Provision for income tax	+	4,270,000	0	4,270,000
60	Federal large corporation tax	+			0
61	Depreciation & Amortization	+	121,994,000	0	121,994,000
62	Employee benefit plans-accrued, not paid	+		0	0
63	Tax reserves - beginning of year	+	0	0	0
64	Reserves from financial statements- end of year	+	119,132,936	0	119,132,936
65	Regulatory adjustments on which true-up may apply (see A66)	+			0
66	Items on which true-up does not apply "TAXREC 3"		16,464,375	0	16,464,375
67	Material addition items from TAXREC 2	+	1,529,753	0	1,529,753
68	Other addition items (not Material) from TAXREC 2	+	3,104,309	0	3,104,309
69					
70	Subtotal		266,495,373	0	266,495,373
71					
72	Other Additions: (Please explain the nature of the additions)				
73	Recapture of CCA	+			0
74	Non-deductible meals and entertainment expense	+			0
75	Capital items expensed	+			0
76	DEPRECIATION DIFFERENCE	+			0
77		+			0
78		+			0
79		+			0
80	Total Other Additions	=	0	0	0
81					
82	Total Additions	=	266,495,373	0	266,495,373

	A	B	C	D	E
1	PILs TAXES - EB-2012-0064	LINE	M of F	Non-wires	Wires-only
2	TAX RETURN RECONCILIATION (TAXREC)		Corporate	Eliminations	Tax
3	(for "wires-only" business - see s. 72 OEB Act)		Tax		Return
4		0	Return		
5					Version 2009.1
83					
84	Recap Material Additions:				
85			0	0	0
86			0	0	0
87			0	0	0
88			0	0	0
89			0	0	0
90			0	0	0
91			0	0	0
92	Total Other additions >materiality level		0	0	0
93	Other additions (less than materiality level)		0	0	0
94	Total Other Additions		0	0	0
95					
96	BOOK TO TAX DEDUCTIONS:				
97	Capital cost allowance	-	190,104,129		190,104,129
98	Cumulative eligible capital deduction	-	1,388,952		1,388,952
99	Employee benefit plans-paid amounts	-			0
100	Items capitalized for regulatory purposes	-			0
101	Regulatory adjustments :	-			0
102	CCA	-			0
103	other deductions	-			0
104	Tax reserves - end of year	-	0	0	0
105	Reserves from financial statements- beginning of year	-	114,054,159	0	114,054,159
106	Contributions to deferred income plans	-			0
107	Contributions to pension plans	-			0
108	Items on which true-up does not apply "TAXREC 3"	-	9,954,324	0	9,954,324
109	Interest capitalized for accounting deducted for tax	-			0
110	Material deduction items from TAXREC 2	-	0	0	0
111	Other deduction items (not Material) from TAXREC 2	-	1,334,612	0	1,334,612
112					
113	Subtotal	=	316,836,176	0	316,836,176
114	Other deductions (Please explain the nature of the deductions)	-			0
115	Charitable donations - tax basis	-	24,769		24,769
116	Gain on disposal of assets	-			0
117		-			0
118		-			0
119		-			0
120	Total Other Deductions	=	24,769	0	24,769
121					
122	Total Deductions	=	316,860,945	0	316,860,945
123					
124	Recap Material Deductions:				
125			0	0	0
126			0	0	0
127			0	0	0
128			0	0	0
129			0	0	0
130	Total Other Deductions exceed materiality level		0	0	0
131	Other Deductions less than materiality level		24,769	0	24,769
132	Total Other Deductions		24,769	0	24,769
133					
134	TAXABLE INCOME	=	12,484,428	0	12,484,428
135	DEDUCT:				
136	Non-capital loss applied positive number	-	12,484,428		12,484,428
137	Net capital loss applied positive number	-			0
138					0
139	NET TAXABLE INCOME	=	0	0	0
140					
141	FROM ACTUAL TAX RETURNS				
142	Net Federal Income Tax (Must agree with tax return)	+			0
143	Net Ontario Income Tax (Must agree with tax return)	+			0
144	Subtotal	=	0	0	0
145	Less: Miscellaneous tax credits (Must agree with tax returns)	-	0		0
146	Total Income Tax	=	0	0	0
147					
148	FROM ACTUAL TAX RETURNS				
149	Net Federal Income Tax Rate (Must agree with tax return)		26.12%		26.12%
150	Net Ontario Income Tax Rate (Must agree with tax return)		12.50%		12.50%
151	Blended Income Tax Rate		38.62%	*****	38.62%
152					
153	Section F: Income and Capital Taxes				
154					
155	RECAP				
156	Total Income Taxes	+	0	0	0
157	Ontario Capital Tax	+	5,792,830		5,792,830
158	Federal Large Corporations Tax	+	4,355,755		4,355,755
159					
160	Total income and capital taxes	=	10,148,585	0	10,148,585

	A	B	C	D	E	F
1	PILs TAXES - EB-2012-0064	LINE	M of F	Non-wires	Wires-only	
2	Tax and Accounting Reserves		Corporate	Eliminations	Tax	
3	For MoF Column of TAXCALC		Tax		Return	
4	(for "wires-only" business - see s. 72 OEB Act)		Return			
5		0			Version 2009.1	
6						
7	Utility Name: TORONTO HYDRO-ELECTRIC SYSTEM LIMITED					
8	Reporting period: 2002					
9						
10	TAX RESERVES					
11						
12	Beginning of Year:					
13						0
14	Reserve for doubtful accounts ss. 20(1)(l)					0
15	Reserve for goods & services ss.20(1)(m)					0
16	Reserve for unpaid amounts ss.20(1)(n)					0
17	Debt and share issue expenses ss.20(1)(e)					0
18	Other - Please describe					0
19	Other - Please describe					0
20						0
21						0
22	Total (carry forward to the TAXREC worksheet)		0	0		0
23						
24	End of Year:					
25						0
26	Reserve for doubtful accounts ss. 20(1)(l)					0
27	Reserve for goods & services ss.20(1)(m)					0
28	Reserve for unpaid amounts ss.20(1)(n)					0
29	Debt and share issue expenses ss.20(1)(e)					0
30	Other - Please describe					0
31	Other - Please describe					0
32						0
33						0
34	Insert line above this line					
35	Total (carry forward to the TAXREC worksheet)		0	0		0
36						
37						
38	FINANCIAL STATEMENT RESERVES					
39						
40	Beginning of Year:					
41						0
42						0
43	Environmental		1,800,596			1,800,596
44	Allowance for doubtful accounts					0
45	Inventory obsolescence		7,525,248			7,525,248
46	Property taxes					0
47	Other - Post employment benefits		103,550,000			103,550,000
48	Other - Holdback payable		1,178,315			1,178,315
49						0
50	Total (carry forward to the TAXREC worksheet)		114,054,159	0		114,054,159
51						
52	End of Year:					
53						0
54						0
55	Environmental		3,333,000			3,333,000
56	Allowance for doubtful accounts		9,000,000			9,000,000
57	Inventory obsolescence		2,935,988			2,935,988
58	Property taxes					0
59	Other - Post employment benefits		103,795,000			103,795,000
60	Other - Holdback payable		68,948			68,948
61						0
62	Insert line above this line					
63	Total (carry forward to the TAXREC worksheet)		119,132,936	0		119,132,936

	A	B	C	D	E	F
1						
2	PILs TAXES - EB-2012-0064	LINE	M of F	Non-wires	Wires-only	
3	TAX RETURN RECONCILIATION (TAXREC 2)		Corporate	Eliminations	Tax	
4	(for "wires-only" business - see s. 72 OEB Act)		Tax		Return	
5	RATEPAYERS ONLY		Return			
6	Shareholder-only Items should be shown on TAXREC 3					Version 2009.1
7						
8	Utility Name: TORONTO HYDRO-ELECTRIC SYSTEM LIMITED					
9	Reporting period: 2002					
10	Number of days in taxation year:			365		
11	Materiality Level:			1,523,493		
12						
13						
14						
15	Section C: Reconciliation of accounting income to taxable income					
16	Add:					
17		+				0
18	Gain on sale of eligible capital property	+				0
19	Loss on disposal of assets	+	229,284			229,284
20	Charitable donations (Only if it benefits ratepayers)	+	11,594			11,594
21	Taxable capital gains	+				0
22		+				0
23	Scientific research expenditures deducted	+				0
24	per financial statements	+	1,200,362			1,200,362
25	Capitalized interest	+				0
26	Soft costs on construction and renovation of buildings	+				0
27	Capital items expensed	+				0
28	Debt issue expense	+				0
29	Financing fees deducted in books	+	534,688			534,688
30	Gain on settlement of debt	+				0
31	Interest paid on income debentures	+				0
32	Recapture of SR&ED expenditures	+				0
33	Share issue expense	+				0
34	Write down of capital property	+				0
35	Amounts received in respect of qualifying environment trust	+				0
36	Provision for bad debts	+	1,038,000			1,038,000
37		+				0
38	<i>Other Additions: (please explain in detail the nature of the item)</i>	+				0
39	Stationery/Advertising expense	+	90,381			90,381
40		+				0
41		+				0
42		+				0
43		+				0
44	Nondeductible inventory obsolescence	+	1,529,753			1,529,753
45		+				0
46	Total Additions	=	4,634,062	0		4,634,062
47						
48	Recap of Material Additions:					
49			0	0		0
50			0	0		0
51			0	0		0
52			0	0		0
53			0	0		0
54			0	0		0
55			0	0		0
56			0	0		0
57			0	0		0
58			0	0		0
59			0	0		0
60			0	0		0
61			0	0		0
62			0	0		0
63			0	0		0
64			0	0		0
65			0	0		0
66			0	0		0
67			0	0		0

	A	B	C	D	E
1					
2	PILs TAXES - EB-2012-0064	LINE	M of F	Non-wires	Wires-only
3	TAX RETURN RECONCILIATION (TAXREC 2)		Corporate	Eliminations	Tax
4	(for "wires-only" business - see s. 72 OEB Act)		Tax		Return
5	RATEPAYERS ONLY		Return		Version 2009.1
6	Shareholder-only Items should be shown on TAXREC 3				
7					
8	Utility Name: TORONTO HYDRO-ELECTRIC SYSTEM LIMITED				
9	Reporting period: 2002				
10	Number of days in taxation year:		365		
11	Materiality Level:		1,523,493		
12					
13					
68			0	0	0
69			0	0	0
70			0	0	0
71			0	0	0
72			0	0	0
73			0	0	0
74			0	0	0
75	Nondeductible inventory obsolescence		1,529,753	0	1,529,753
76			0	0	0
77	Total Material additions		1,529,753	0	1,529,753
78	Other additions less than materiality level		3,104,309	0	3,104,309
79	Total Additions		4,634,062	0	4,634,062

	A	B	C	D	E
1					
2	PILs TAXES - EB-2012-0064	LINE	M of F	Non-wires	Wires-only
3	TAX RETURN RECONCILIATION (TAXREC 2)		Corporate	Eliminations	Tax
4	(for "wires-only" business - see s. 72 OEB Act)		Tax		Return
5	RATEPAYERS ONLY		Return		Version 2009.1
6	Shareholder-only Items should be shown on TAXREC 3				
7					
8	Utility Name: TORONTO HYDRO-ELECTRIC SYSTEM LIMITED				
9	Reporting period: 2002				
10	Number of days in taxation year:		365		
11	Materiality Level:		1,523,493		
12					
13	Deduct:				
80					
81	Deduct:				
82	Gain on disposal of assets per f/s	-			0
83	Dividends not taxable under section 83	-			0
84	Terminal loss from Schedule 8	-			0
85	Depreciation in inventory, end of prior year	-			0
86	Scientific research expenses claimed in year from Form T661	-	1,200,362		1,200,362
87	Bad debts	-			0
88	Book income of joint venture or partnership	-			0
89	Equity in income from subsidiary or affiliates	-			0
90	Contributions to a qualifying environment trust	-			0
91	Other income from financial statements	-			0
92	Financing fees deducted for tax	-	134,250		134,250
93		-			0
94		-			0
95	<i>Other deductions: (Please explain in detail the nature of the item)</i>	-			0
96		-			0
97		-			0
98		-			0
99	Total Deductions	=	1,334,612	0	1,334,612
100					
101	Recap of Material Deductions:				
102			0	0	0
103			0	0	0
104			0	0	0
105			0	0	0
106			0	0	0
107			0	0	0
108			0	0	0
109			0	0	0
110			0	0	0
111			0	0	0
112			0	0	0
113			0	0	0
114			0	0	0
115			0	0	0
116			0	0	0
117			0	0	0
118			0	0	0
119	Total Deductions exceed materiality level		0	0	0
120	Other deductions less than materiality level		1,334,612	0	1,334,612
121	Total Deductions		1,334,612	0	1,334,612

	A	B	C	D	E	F
1						
2	PILs TAXES - EB-2012-0064					
3	TAX RETURN RECONCILIATION (TAXREC 3)					
4	Shareholder-only Items should be shown on TAXREC 3					
5	ITEMS ON WHICH TRUE-UP DOES NOT APPLY					
6	(for "wires-only" business - see s. 72 OEB Act)					
7		0				
8	Utility Name: TORONTO HYDRO-ELECTRIC SYSTEM LIMITED				Version 2009.1	
9						
10						
11	Reporting period: 2002					
12	Number of days in taxation year:		365			
13						
14						
15						
16	Section C: Reconciliation of accounting income to taxable income					
17	Add:					
18						
19	Recapture of capital cost allowance	+				0
20	CCA adjustments	+				0
21	CEC adjustments	+				0
22	Gain on sale of non-utility eligible capital property	+				0
23	Gain on sale of utility eligible capital property	+				0
24	Loss from joint ventures or partnerships	+				0
25	Deemed dividend income	+				0
26	Loss in equity of subsidiaries and affiliates	+				0
27	Loss on disposal of utility assets	+				0
28	Loss on disposal of non-utility assets	+				0
29	Depreciation in inventory -end of year	+				0
30	Depreciation and amortization adjustments	+				0
31	Dividends credited to investment account	+				0
32	Non-deductible meals	+	52,480			52,480
33	Non-deductible club dues	+	24,847			24,847
34	Non-deductible automobile costs	+	371			371
35	Donations - amount per books					0
36	Interest and penalties on unpaid taxes					0
37	Management bonuses unpaid after 180 days of year end					0
38	Imputed interest expense on Regulatory Assets					0
39	Ontario capital tax adjustments	+				0
40	Changes in Regulatory Asset balances	+				0
41	<i>Other Additions: (please explain in detail the nature of the item)</i>	+				0
42	pre October 2001 bad debt expense	+	1,842,375			1,842,375
43	net fibre rental expense for prior year	+	1,527,898			1,527,898
44		+				0
45		+				0
46	Meter error re Ellesmere-net income adjustment	+	13,016,404			13,016,404
47	Total Additions on which true-up does not apply	=	16,464,375	0		16,464,375
48						
49	Deduct:					
50						
51	CCA adjustments	-				0
52	CEC adjustments	-				0
53	Depreciation and amortization adjustments	-				0
54	Gain on disposal of assets per financial statements	-				0
55	Financing fee amortization - considered to be interest expense for PILs	-				0
56	Imputed interest income on Regulatory Assets	-	2,511,963			2,511,963
57	Donations - amount deductible for tax purposes	-				0
58	Income from joint ventures or partnerships	-				0
59		-				0
60		-				0
61		-				0
62		-				0
63		-				0
64	Ontario capital tax adjustments to current or prior year	-				0
65		-				0
66	Changes in Regulatory Asset balances	-	5,015,433			5,015,433
67		-				0
68	<i>Other deductions: (Please explain in detail the nature of the item)</i>	-				0
69		-				0
70		-				0
71	Decrease in income due to meter error	-	2,426,928			2,426,928
72		-				0
73	Total Deductions on which true-up does not apply	=	9,954,324	0		9,954,324

	A	B	C	D	E	F
1	PILs TAXES - EB-2012-0064					
2	Corporate Tax Rates					Version 2009.
3	Exemptions, Deductions, or Thresholds					
4	Utility Name: TORONTO HYDRO-ELECTRIC SYSTEM LIMITED					
5	Reporting period: 2002					
6						
7						Table 1
8	Rates Used in 2002 RAM PILs Applications for 2002					
9	Income Range		0		200,001	
10	RAM 2002		to		to	>700,000
11		Year	200,000		700,000	
12	Income Tax Rate					
13	Proxy Tax Year	2002				
14	Federal (Includes surtax)					26.12%
15	and Ontario blended					12.50%
16	Blended rate					38.62%
17						
18	Capital Tax Rate		0.300%			
19	LCT rate		0.225%			
20	Surtax		1.12%			
21	Ontario Capital Tax Exemption **	MAX \$5MM	5,000,000			
22	Federal Large Corporations Tax Exemption **	MAX \$10MM	10,000,000			
23	**Exemption amounts must agree with the Board-approved 2002 RAM PILs filing					
24						
25						Table 2
26	Expected Income Tax Rates for 2002 and Capital Tax Exemptions for 2002					
27	Income Range		0		200,001	
28	Expected Rates		to		to	>700,000
29		Year	200,000		700,000	
30	Income Tax Rate					
31	Current year	2002				
32	Federal (Includes surtax)					26.12%
33	Ontario					12.50%
34	Blended rate					38.62%
35						
36	Capital Tax Rate		0.300%			
37	LCT rate		0.225%			
38	Surtax		1.12%			
39	Ontario Capital Tax Exemption *** 2002	MAX \$5MM	5,000,000			
40	Federal Large Corporations Tax Exemption *** 2002	MAX \$10MM	10,000,000			
41	*** Allocation of exemptions must comply with the Board's instructions regarding regulated activities.					
42						

	A	B	C	D	E	F
43						Table 3
44	Input Information from Utility's Actual 2002 Tax Returns					
45	Income Range		0		200,001	
46			to		to	
47		Year	200,000		700,000	>700,000
48	Income Tax Rate					
49	Current year	2002				
50	Federal (Includes surtax)					26.12%
51	Ontario					12.50%
52	Blended rate					38.62%
53						
54	Capital Tax Rate		0.300%			
55	LCT rate		0.225%			
56	Surtax		1.12%			
57	Ontario Capital Tax Exemption *	MAX \$5MM	4,586,218			
58	Federal Large Corporations Tax Exemption *	MAX \$10MM	10,000,000			
59	* Include copies of the actual tax return allocation calculations in your submission: Ontario CT23 page 11; federal T2 Schedule 36					
60						

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	PILs TAXES - EB-2012-0064														
2	Analysis of PILs Tax Account 1562:														
3	Utility Name: TORONTO HYDRO-ELECTRIC SYSTEM LIMITED														
4	Reporting period: 2002 Version 2009.1														
5	Sign Convention: + for increase; - for decrease														
6															
7															
8	Year start:		01/10/2001		01/01/2002		01/01/2003		01/01/2004		01/01/2005		01/01/2006		
9	Year end:		31/12/2001		31/12/2002		31/12/2003		31/12/2004		31/12/2005		30/04/2006		Total
10															
11	Opening balance:	=	0		5,028,333				0		0		0		0
12	Board-approved PILs tax proxy from Decisions (1)	+/-	5,000,000		55,000,000								0		60,000,000
13	PILs proxy from April 1, 2005 - input 9/12 of amount														0
14	True-up Variance Adjustment Q4, 2001 (2)	+/-			-290,810										-290,810
15	True-up Variance Adjustment (3)	+/-					2,156,868						0		2,156,868
16	Deferral Account Variance Adjustment Q4, 2001 (4)														0
17	Deferral Account Variance Adjustment (5)	+/-											0		0
18	Adjustments to reported prior years' variances (6)	+/-													0
19	Carrying charges (7)	+/-	28,333		720,305										748,638
20	PILs billed to (collected from) customers (8)	-	0		-52,330,253										-52,330,253
21															
22	Ending balance: # 1562		5,028,333		8,127,575				0		0		0		10,284,443
23															
24															
25															
26	Uncollected PILs														
27															
28	NOTE: The purpose of this worksheet is to show the movement in Account 1562 which establishes the receivable from or liability to ratepayers.														
29	For explanation of Account 1562 please refer to Accounting Procedures Handbook for Electric Distribution Utilities and FAQ April 2003.														
30															
31	Please identify if Method 1, 2 or 3 was used to account for the PILs proxy and recovery. ANSWER: METHOD 3														
32															
33	(1) (i) From the Board's Decision - see Inclusion in Rates, Part III of the TAXCALC spreadsheet for Q4 2001 and 2002.														
34	Please insert the Q4, 2001 proxy in column C even though it was approved effective March 1, 2002.														
35	If the Board gave more than one decision in the year, calculate a weighted average proxy.														
36	(ii) If the Board approved different amounts, input the Board-approved amounts in cells C13 and E13.														
37	(iii) Column G - In 2003, the initial estimate should include the Q4 2001 PILs tax proxy and the 2002 PILs tax proxy.														
38	(iv) Column I - The Q4 2001 PILs tax proxy was removed from rates on April 1, 2004 and the 2002 PILs tax proxy remained.														
39	(v) Column K - The 2002 PILs tax proxy applies to January 1 to March 31, 2005, and the new 2005 PILs tax proxy from April 1 to December 31, 2005.														
40	(vi) Column M - The 2005 PILs tax proxy will be used for the period from January 1 to April 30, 2006.														
41															
42	(2) From the Ministry of Finance Variance Column, under Future True-ups, Part IV a, cell I132, of the TAXCALC spreadsheet. The Q4, 2001 proxy has to be														
43	true up in 2002, 2003 and for the period January 1- March 31, 2004. Input the variance in the whole year reconciliation.														
44															
45	(3) From the Ministry of Finance Variance Column, under Future True-ups, Part IV a, cell I132, of the TAXCALC spreadsheet.														
46	The true-up will compare to the 2002 proxy for 2002, 2003, 2004 and January 1 to March 31, 2005.														
47															
48	(4) From the Ministry of Finance Variance Column, under Future True-ups, Part IV b, cell I181, of the TAXCALC spreadsheet. The Q4, 2001 proxy has to be														
49	true up in 2002, 2003 and for the period January 1- March 31, 2004. Input the deferral variance in the whole year reconciliation.														
50															
51	(5) From the Ministry of Finance Variance Column, under Future True-ups, Part IV a, cell I181, of the TAXCALC spreadsheet.														
52	The true-up will compare to the 2002 proxy for 2002, 2003, 2004 and January 1 to March 31, 2005.														
53															
54	(6) The correcting entry should be shown in the year the entry was made. The true-up of the carrying charges will have to be reviewed.														
55															
56	(7) Carrying charges are calculated on a simple interest basis.														
57															
58	(8) (i) PILs collected from customers from March 1, 2002 to March 31, 2004 were based on a fixed charge and a volumetric charge recovery by class. The PILs rate														
59	components for Q4, 2001 and 2002 were calculated in the 2002 approved RAM on sheet 6 and sheet 8. In April 2004, the PILs recovery was based on the														
60	2002 PILs tax proxy recovered by the volumetric rate by class as calculated on sheet 7 of the 2004 RAM.														
61	The 2005 PILs tax proxy is being recovered on a volumetric basis by class.														
62															
63	(ii) Collections should equal: (a) the actual volumes/ load (kWhs, kW, Kva) for the period (including net unbilled at period end), multiplied														
64	by the PILs volumetric proxy rates by class (from the Q4, 2001 and 2002 RAM worksheets) for 2002, 2003 and January 1 to March 31, 2004;														
65	plus, (b) customer counts by class in the same period multiplied by the PILs fixed charge rate components.														
66															
67	In 2004, use the Board-approved 2002 PILs proxy, recovered on a volumetric basis by class as calculated by the 2004 RAM, sheet 7,														
68	for the period April 1 to December 31, 2004, and add this total to the results from the sentence above for January 1 to March 31, 2004.														
69															
70	In 2005, use the Board-approved 2005 PILs proxy, recovered on a volumetric basis by class as calculated by the 2005 RAM, sheet 4,														
71	for the period April 1 to December 31, 2005. To this total, the 2004 volumetric PILs proxy rate by class should be used														
72	to calculate the recovery for the period January 1 to March 31, 2005.														
73															
74	(9) Any interim PILs recovery from Board Decisions will be recorded in APH Account # 1590. Final reconciliation of PILs proxy taxes														
75	will have to include amounts from 1562 and from 1590.														

	A	B	C	D	E
1	PILs TAXES - EB-2012-0064				Version 2009.1
2	REGULATORY INFORMATION (REGINFO)				
3	Utility Name: TORONTO HYDRO-ELECTRIC SYSTEM LIMITED				Colour Code
4	Reporting period: 2003				Input Cell
5					Formula in Cell
6	Days in reporting period:	365	days		
7	Total days in the calendar year:	365	days		
8					
9	BACKGROUND				
10	Has the utility reviewed section 149(1) ITA to				
11	confirm that it is not subject to regular corporate				
12	tax (and therefore subject to PILs)?				
13			Y/N	Y	
14	Was the utility recently acquired by Hydro One				
15	and now subject to s.89 & 90 PILs?				
16			Y/N	N	
17	Is the utility a non-profit corporation?				
18	(If it is a non-profit corporation, please contact the Rates Manager at the OEB)				
19	Are the Ontario Capital Tax & Large Corporations Tax Exemptions				
20	shared among the corporate group?				
21		OCT	Y/N	Y	
22	Please identify the % used to allocate the OCT and LCT exemptions in				
23	Cells C65 & C74 in the TAXCALC spreadsheet.				
24		LCT	Y/N	N	
25		OCT		100%	
26		LCT		100%	
27	Accounting Year End				
28			Date	12-31-2003	
29	MARR NO TAX CALCULATIONS				Regulatory
30	SHEET #7 FINAL RUD MODEL DATA				Income
31	(FROM 1999 FINANCIAL STATEMENTS)				
32	USE BOARD-APPROVED AMOUNTS				
33					
34	Rate Base (wires-only)			1,810,112,688	
35	Common Equity Ratio (CER)			35.00%	
36	1-CER			65.00%	
37	Target Return On Equity			9.88%	
38	Debt rate			6.80%	
39	Market Adjusted Revenue Requirement			142,600,678	
40	1999 return from RUD Sheet #7			23,304,000	23,304,000
41	Total Incremental revenue			119,296,678	
42	Input: Board-approved dollar amounts phased-in				
43	Amount allowed in 2001			39,765,559	39,765,559
44	Amount allowed in 2002			39,765,559	39,765,559
45	Amount allowed in 2003 and 2004 (will be zero due to Bill 210				0
46	unless authorized by the Minister and the Board)				0
47	Amount allowed in 2005 - Third tranche of MARR re: CDM			39,765,559	39,765,559
48	Other Board-approved changes to MARR or incremental revenue				0
49					0
50	Total Regulatory Income				142,600,677
51	Equity			633,539,441	
52	Return at target ROE			62,593,697	
53	Debt			1,176,573,247	
54	Deemed interest amount in 100% of MARR			80,006,981	
55	Phase-in of interest - Year 1 (2001)			35,385,561	
56	((D43+D47)/D41)*D61			57,696,271	
57	Phase-in of interest - Year 2 (2002)			57,696,271	
58	((D43+D47+D48)/D41)*D61			57,696,271	
59	Phase-in of interest - Year 3 (2003) and forward			80,006,981	
60	((D43+D47+D48)/D41)*D61 (due to Bill 210)				
61	Phase-in of interest - 2005			80,006,981	

A	B	C	D	E	F	G	
	ITEM	Initial Estimate		M of F Filing Variance K-C	M of F Filing Variance Explanation	Tax Returns	
						Version 2009.1	
						Column Brought From TAXREC	
						\$	
1	PILs TAXES - EB-2012-0064						
2	PILs DEFERRAL AND VARIANCE ACCOUNTS						
3	TAX CALCULATIONS (TAXCALC)						
4	("Wires-only" business - see Tab TAXREC)						
5	0						
6	Utility Name: TORONTO HYDRO-ELECTRIC SYSTEM LIMITED						
7	Reporting period: 2003						
8							
9	Days in reporting period:	365	days				
10	Total days in the calendar year:	365	days				
11							
12		\$		\$			
13							
14	I) CORPORATE INCOME TAXES						
15							
16	Regulatory Net Income REGINFO E53	1	102,835,118	81,232,387		184,067,505	
17							
18	BOOK TO TAX ADJUSTMENTS						
19	Additions:						
20	Depreciation & Amortization	2	106,229,000	11,453,140		117,682,140	
21	Employee Benefit Plans - Accrued, Not Paid	3	33,129,140	-33,129,140		0	
22	Tax reserves - beginning of year	4		0		0	
23	Reserves from financial statements - end of year	4		108,977,216		108,977,216	
24	Regulatory Adjustments - increase in income	5		0		0	
25	Other Additions (See Tab entitled "TAXREC")						
26	"Material" Items from "TAXREC" worksheet	6		0		0	
27	Other Additions (not "Material") "TAXREC"	6		0		0	
28	"Material" Items from "TAXREC 2" worksheet	6		4,132,505		4,132,505	
29	Other Additions (not "Material") "TAXREC 2"	6		2,385,415		2,385,415	
30	Items on which true-up does not apply "TAXREC 3"			12,122,319		12,122,319	
31							
32	Deductions: Input positive numbers						
33	Capital Cost Allowance and CEC	7	76,692,530	80,170,009		156,862,539	
34	Employee Benefit Plans - Paid Amounts	8	30,011,140	-30,011,140		0	
35	Items Capitalized for Regulatory Purposes	9	0	0		0	
36	Regulatory Adjustments - deduction for tax purposes in Item 5	10		0		0	
37	Interest Expense Deemed/ Incurred	11	57,696,271	18,922,234		76,618,505	
38	Tax reserves - end of year	4		0		0	
39	Reserves from financial statements - beginning of year	4		119,132,936		119,132,936	
40	Contributions to deferred income plans	3		0		0	
41	Contributions to pension plans	3		0		0	
42	Interest capitalized for accounting but deducted for tax	11		0		0	
43	Other Deductions (See Tab entitled "TAXREC")						
44	"Material" Items from "TAXREC" worksheet	12		0		0	
45	Other Deductions (not "Material") "TAXREC"	12		0		0	
46	Material Items from "TAXREC 2" worksheet	12		0		0	
47	Other Deductions (not "Material") "TAXREC 2"	12		3,628,453		3,628,453	
48	Items on which true-up does not apply "TAXREC 3"			2,233,343		2,233,343	
49							
50	TAXABLE INCOME/ (LOSS)		77,793,317	-6,901,993	Before loss C/F	70,891,324	
51							
52	BLENDED INCOME TAX RATE						
53	Tab Tax Rates - Regulatory from Table 1; Actual from Table 3	13	38.62%	-2.0000%		36.62%	
54							
55	REGULATORY INCOME TAX		30,043,779	-19,346,149	Actual	10,697,630	
56							
57							
58	Miscellaneous Tax Credits	14		538,238	Actual	538,238	
59							
60	Total Regulatory Income Tax		30,043,779	-19,884,387	Actual	10,159,392	
61							
62							
63	II) CAPITAL TAXES						
64							
65	Ontario						
66	Base	15	1,810,112,688	258,496,941		2,068,609,629	
67	Less: Exemption -Tax Rates - Regulatory, Table 1; Actual, Table 3	16	5,000,000	-271,438		4,728,562	
68	Taxable Capital		1,805,112,688	258,225,503		2,063,881,067	
69							
70	Rate - Tax Rates - Regulatory, Table 1; Actual, Table 3	17	0.3000%	0.0000%		0.3000%	
71							
72	Ontario Capital Tax		5,415,338	776,305		6,191,643	
73							
74	Federal Large Corporations Tax						
75	Base	18	1,810,112,688	272,448,650		2,082,561,338	
76	Less: Exemption -Tax Rates - Regulatory, Table 1; Actual, Table 3	19	10,000,000	0		10,000,000	
77	Taxable Capital		1,800,112,688	272,448,650		2,072,561,338	
78							
79	Rate - Tax Rates - Regulatory, Table 1; Actual, Table 3	20	0.2250%	0.0000%		0.2250%	
80							
81	Gross Amount of LCT before surtax offset (Taxable Capital x Rate)		4,050,254	613,009		4,663,263	
82	Less: Federal Surtax 1.12% x Taxable Income	21	871,285	-544,105		327,180	
83							
84	Net LCT		3,178,968	1,157,115		4,336,083	
85							

	A	B	C	D	E	F	G
		ITEM	Initial Estimate		M of F Filing Variance K-C	M of F Filing Variance Explanation	Tax Returns
							Version 2009.1
1	PILs TAXES - EB-2012-0064						
2	PILs DEFERRAL AND VARIANCE ACCOUNTS						
3	TAX CALCULATIONS (TAXCALC)						
4	("Wires-only" business - see Tab TAXREC)						
5		0					
6	Utility Name: TORONTO HYDRO-ELECTRIC SYSTEM LIMITED						
7	Reporting period: 2003						
8							
9	Days in reporting period:	365	days				
10	Total days in the calendar year:	365	days				
11							
12			\$		\$		
13							
13							Column Brought From TAXREC
13							\$
86	III) INCLUSION IN RATES						
87							
88	Income Tax Rate used for gross- up (exclude surtax)		37.50%				
89							
90	Income Tax (proxy tax is grossed-up)	22	48,070,047			Actual 2003	10,159,392
91	LCT (proxy tax is grossed-up)	23	5,086,349			Actual 2003	4,336,083
92	Ontario Capital Tax (no gross-up since it is deductible)	24	5,415,338			Actual 2003	6,191,643
93							
94							
95	Total PILs for Rate Adjustment -- MUST AGREE WITH 2002 RAM DECISION	25	58,571,734			Actual 2003	20,687,118
96							
97							
98							
99	IV) FUTURE TRUE-UPS						
100	IV a) Calculation of the True-up Variance				DR/(CR)		
101	In Additions:						
102	Employee Benefit Plans - Accrued, Not Paid	3			-33,129,140		
103	Tax reserves deducted in prior year	4			0		
104	Reserves from financial statements-end of year	4			108,977,216		
105	Regulatory Adjustments	5			0		
106	Other additions "Material" Items TAXREC	6			0		
107	Other additions "Material" Items TAXREC 2	6			4,132,505		
108	In Deductions - positive numbers						
109	Employee Benefit Plans - Paid Amounts	8			-30,011,140		
110	Items Capitalized for Regulatory Purposes	9			0		
111	Regulatory Adjustments	10			0		
112	Interest Adjustment for tax purposes (See Below - cell I204)	11			0		
113	Tax reserves claimed in current year	4			0		
114	Reserves from F/S beginning of year	4			119,132,936		
115	Contributions to deferred income plans	3			0		
116	Contributions to pension plans	3			0		
117	Other deductions "Material" Items TAXREC	12			0		
118	Other deductions "Material" Item TAXREC 2	12			0		
119							
120	Total TRUE-UPS before tax effect	26			= -9,141,215		
121							
122	Income Tax Rate (excluding surtax) from 2003 Utility's tax return				x 36.62%		
123							
124	Income Tax Effect on True-up adjustments				= -3,347,513		
125							
126	Less: Miscellaneous Tax Credits	14			538,238		
127							
128	Total Income Tax on True-ups				-3,885,751		
129							
130	Income Tax Rate used for gross-up (exclude surtax)				35.50%		
131							
132	TRUE-UP VARIANCE ADJUSTMENT				-6,024,420		
133							
134	IV b) Calculation of the Deferral Account Variance caused by changes in legislation						
135							
136	REGULATORY TAXABLE INCOME /(LOSSES) (as reported in the initial estimate column)				= 77,793,317		
137							
138	REVISED CORPORATE INCOME TAX RATE				x 36.62%		
139							
140	REVISED REGULATORY INCOME TAX				= 28,487,913		
141							
142	Less: Revised Miscellaneous Tax Credits				-		
143							
144	Total Revised Regulatory Income Tax				= 28,487,913		
145							
146	Less: Regulatory Income Tax reported in the Initial Estimate Column (Cell C58)				- 30,043,779		
147							
148	Regulatory Income Tax Variance				= -1,555,866		
149							

	A	B	C	D	E	F	G
		ITEM	Initial Estimate		M of F Filing Variance K-C	M of F Filing Variance Explanation	Tax Returns
							Version 2009.1
							Column Brought From TAXREC
							\$
1	PILs TAXES - EB-2012-0064						
2	PILs DEFERRAL AND VARIANCE ACCOUNTS						
3	TAX CALCULATIONS (TAXCALC)						
4	("Wires-only" business - see Tab TAXREC)						
5		0					
6	Utility Name: TORONTO HYDRO-ELECTRIC SYSTEM LIMITED						
7	Reporting period: 2003						
8							
9	Days in reporting period:	365	days				
10	Total days in the calendar year:	365	days				
11							
12			\$		\$		
13							
150	Ontario Capital Tax						
151	Base			=	1,810,112,688		
152	Less: Exemption from tab Tax Rates, Table 2, cell C39			-	5,000,000		
153	Revised deemed taxable capital			=	1,805,112,688		
154							
155	Rate - Tab Tax Rates cell C54			x	0.3000%		
156							
157	Revised Ontario Capital Tax			=	5,415,338		
	Less: Ontario Capital Tax reported in the initial estimate column (Cell C70)			-	5,415,338		
158							
159	Regulatory Ontario Capital Tax Variance			=	0		
160							
161	Federal LCT						
162	Base				1,810,112,688		
163	Less: Exemption from tab Tax Rates, Table 2, cell C40			-	10,000,000		
164	Revised Federal LCT			=	1,800,112,688		
165							
166	Rate (as a result of legislative changes) tab 'Tax Rates' cell C51				0.2250%		
167							
168	Gross Amount				4,050,254		
169	Less: Federal surtax			-	871,285		
170	Revised Net LCT			=	3,178,968		
171							
172	Less: Federal LCT reported in the initial estimate column (Cell C82)			-	3,178,968		
173	Regulatory Federal LCT Variance			=	0		
174							
175	Actual Income Tax Rate used for gross-up (exclude surtax)				35.50%		
176							
177	Income Tax (grossed-up)			+	(2,412,196)		
178	LCT (grossed-up)			+	0		
179	Ontario Capital Tax			+	0		
180							
181	DEFERRAL ACCOUNT VARIANCE ADJUSTMENT			=	(2,412,196)		
182							
183	TRUE-UP VARIANCE (from cell I130)			+	(6,024,420)		
184							
185	Total Deferral Account Entry (Positive Entry = Debit)			=	(8,436,616)		
186	(Deferral Account Variance + True-up Variance)						
187							
188							
189							
190	V) INTEREST PORTION OF TRUE-UP						
191	Variance Caused By Phase-in of Deemed Debt						
192							
193	Total deemed interest (REGINFO)				80,006,981		
194	Interest phased-in (Cell C36)				57,696,271		
195							
196	Variance due to phase-in of debt component of MARR in rates according to the Board's decision				22,310,710		
197							
198							
199	Other Interest Variances (i.e. Borrowing Levels						
200	Above Deemed Debt per Rate Handbook)						
201	Interest deducted on MoF filing (Cell K36+K41)				76,618,505		
202	Total deemed interest (REGINFO CELL D61)				80,006,981		
203							
204	Variance caused by excess debt				0		
205							
206	Interest Adjustment for Tax Purposes (carry forward to Cell I110)				0		
207							
208	Total Interest Variance				22,310,710		

	A	B	C	D	E	F	G
1	PILs TAXES - EB-2012-0064	LINE	M of F	Non-wires	Wires-only		
2	TAX RETURN RECONCILIATION (TAXREC)		Corporate	Eliminations	Tax		
3	(for "wires-only" business - see s. 72 OEB Act)		Tax		Return		
4		0	Return				
5					Version 2009.1		
6	Section A: Identification:						
7	Utility Name: TORONTO HYDRO-ELECTRIC SYSTEM LIMITED						
8	Reporting period: 2003						
9	Taxation Year's start date:		01/01/2003				
10	Taxation Year's end date:		31/12/2003				
11	Number of days in taxation year:		365	days			
12							
13	Please enter the Materiality Level :		1,736,868	< - enter materiality level			
14	(0.25% x Rate Base x CER)	Y/N	N				
15	(0.25% x Net Assets)	Y/N	Y				
16	Or other measure (please provide the basis of the amount)	Y/N	N				
17	Does the utility carry on non-wires related operation?	Y/N	N				
18	(Please complete the questionnaire in the Background questionnaire worksheet.)						
19							
20	Note: Carry forward Wires-only Data to Tab "TAXCALC" Column K						
21							
22	Section B: Financial statements data:						
23	<i>Input unconsolidated financial statement data submitted with Tax returns.</i>						
24	<i>The actual categories of the income statements should be used.</i>						
25	<i>If required please change the descriptions except for amortization, interest expense and provision for income tax</i>						
26							
27	<i>Please enter the non-wire operation's amount as a positive number, the program automatically treats all amounts</i>						
28	<i>in the "non-wires elimination column" as negative values in TAXREC and TAXREC2.</i>						
29							
30	Income:						
31	Energy Sales	+				0	
32	Distribution Revenue	+	2,389,949,000			2,389,949,000	
33	Other Income	+	22,034,000			22,034,000	
34	Miscellaneous income	+	11,364,000			11,364,000	
35		+				0	
36	Revenue should be entered above this line						
37							
38	Costs and Expenses:						
39	Cost of energy purchased	-	1,957,184,000			1,957,184,000	
40	Administration	-				0	
41	Customer billing and collecting	-				0	
42	Operations and maintenance	-	160,995,000			160,995,000	
43	Amortization	-	117,579,000			117,579,000	
44	Ontario Capital Tax	-				0	
45	Reg Assets	-				0	
46	Financing expenses	-	3,521,495			3,521,495	
47		-				0	
48		-				0	
49							
50	Net Income Before Interest & Income Taxes EBIT	=	184,067,505	0		184,067,505	
51	Less: Interest expense for accounting purposes	-	76,618,505			76,618,505	
52	Provision for payments in lieu of income taxes	-	34,490,000			34,490,000	
53	Net Income (loss)	=	72,959,000	0		72,959,000	
54	<i>(The Net Income (loss) on the MoF column should equal to the net income (loss) per financial statements on Schedule 1 of the tax return.)</i>						
55							

	A	B	C	D	E	F	G
1	PILs TAXES - EB-2012-0064						
2	TAX RETURN RECONCILIATION (TAXREC)	LINE	M of F	Non-wires	Wires-only		
3	(for "wires-only" business - see s. 72 OEB Act)		Corporate	Eliminations	Tax		
4			Tax		Return		
5		0	Return				
							Version 2009.1
56	Section C: Reconciliation of accounting income to taxable income						
57	From T2 Schedule 1						
58	BOOK TO TAX ADDITIONS:						
59	Provision for income tax	+	34,490,000	0	34,490,000		
60	Federal large corporation tax	+			0		
61	Depreciation & Amortization	+	117,682,140	0	117,682,140		
62	Employee benefit plans-accrued, not paid	+		0	0		
63	Tax reserves - beginning of year	+	0	0	0		
64	Reserves from financial statements- end of year	+	108,977,216	0	108,977,216		
65	Regulatory adjustments on which true-up may apply (see A66)	+			0		
66	Items on which true-up does not apply "TAXREC 3"	+	12,122,319	0	12,122,319		
67	Material addition items from TAXREC 2	+	4,132,505	0	4,132,505		
68	Other addition items (not Material) from TAXREC 2	+	2,385,415	0	2,385,415		
69							
70	Subtotal		279,789,595	0	279,789,595		
71							
72	<i>Other Additions: (Please explain the nature of the additions)</i>						
73	Recapture of CCA	+			0		
74	Non-deductible meals and entertainment expense	+			0		
75	Capital items expensed	+			0		
76	DEPRECIATION DIFFERENCE	+			0		
77		+			0		
78		+			0		
79		+			0		
80	Total Other Additions	=	0	0	0		
81							
82	Total Additions	=	279,789,595	0	279,789,595		
83							
84	Recap Material Additions:						
85			0	0	0		
86			0	0	0		
87			0	0	0		
88			0	0	0		
89			0	0	0		
90			0	0	0		
91			0	0	0		
92	Total Other additions >materiality level		0	0	0		
93	Other additions (less than materiality level)		0	0	0		
94	Total Other Additions		0	0	0		
95							
96	BOOK TO TAX DEDUCTIONS:						
97	Capital cost allowance	-	155,566,254		155,566,254		
98	Cumulative eligible capital deduction	-	1,296,285		1,296,285		
99	Employee benefit plans-paid amounts	-			0		
100	Items capitalized for regulatory purposes	-			0		
101	Regulatory adjustments :	-			0		
102	CCA	-			0		
103	other deductions	-			0		
104	Tax reserves - end of year	-	0	0	0		
105	Reserves from financial statements- beginning of year	-	119,132,936	0	119,132,936		
106	Contributions to deferred income plans	-			0		
107	Contributions to pension plans	-			0		
108	Items on which true-up does not apply "TAXREC 3"	-	2,233,343	0	2,233,343		
109	Interest capitalized for accounting deducted for tax	-			0		
110	Material deduction items from TAXREC 2	-	0	0	0		
111	Other deduction items (not Material) from TAXREC 2	-	3,628,453	0	3,628,453		
112							
113	Subtotal	=	281,857,271	0	281,857,271		
114	<i>Other deductions (Please explain the nature of the deductions)</i>						
115	Charitable donations - tax basis	-			0		
116	Gain on disposal of assets	-			0		
117		-			0		
118		-			0		
119		-			0		
120	Total Other Deductions	=	0	0	0		
121							
122	Total Deductions	=	281,857,271	0	281,857,271		

	A	B	C	D	E	F	G
1	PILs TAXES - EB-2012-0064						
2	TAX RETURN RECONCILIATION (TAXREC)	LINE	M of F	Non-wires	Wires-only		
3	(for "wires-only" business - see s. 72 OEB Act)		Corporate	Eliminations	Tax		
4			Tax		Return		
5		0	Return				
							Version 2009.1
123	Recap Material Deductions:						
124			0	0	0		
125			0	0	0		
126			0	0	0		
127			0	0	0		
128			0	0	0		
129			0	0	0		
130	<i>Total Other Deductions exceed materiality level</i>		0	0	0		
131	<i>Other Deductions less than materiality level</i>		0	0	0		
132	Total Other Deductions		0	0	0		
133							
134	TAXABLE INCOME	=	70,891,324	0	70,891,324		
135	DEDUCT:						
136	Non-capital loss applied positive number	-	41,678,475		41,678,475		
137	Net capital loss applied positive number	-			0		
138					0		
139	NET TAXABLE INCOME	=	29,212,849	0	29,212,849		
140							
141	FROM ACTUAL TAX RETURNS						
142	Net Federal Income Tax (Must agree with tax return)	+	7,046,063		7,046,063		From Statement of Adjustments
143	Net Ontario Income Tax (Must agree with tax return)	+	3,651,567		3,651,567		From Statement of Adjustments
144	Subtotal	=	10,697,630	0	10,697,630		
145	Less: Miscellaneous tax credits (Must agree with tax returns)	-	538,238		538,238		
146	Total Income Tax	=	10,159,392	0	10,159,392		
147							
148	FROM ACTUAL TAX RETURNS						
149	Net Federal Income Tax Rate (Must agree with tax return)		24.12%		24.12%		
150	Net Ontario Income Tax Rate (Must agree with tax return)		12.50%		12.50%		
151	Blended Income Tax Rate		36.62%	*****	36.62%		
152							
153	Section F: Income and Capital Taxes						
154							
155	RECAP						
156	Total Income Taxes	+	10,159,392	0	10,159,392		
157	Ontario Capital Tax	+	6,191,643		6,191,643		
158	Federal Large Corporations Tax	+	4,336,083		4,336,083		
159							
160	Total income and capital taxes	=	20,687,118	0	20,687,118		

	A	B	C	D	E	F
1	PILs TAXES - EB-2012-0064	LINE	M of F	Non-wires	Wires-only	
2	Tax and Accounting Reserves		Corporate	Eliminations	Tax	
3	For MoF Column of TAXCALC		Tax		Return	
4	(for "wires-only" business - see s. 72 OEB Act)		Return			
5		0			Version 2009.1	
6						
7	Utility Name: TORONTO HYDRO-ELECTRIC SYSTEM LIMITED					
8	Reporting period: 2003					
9						
10	TAX RESERVES					
11						
12	Beginning of Year:					
13						0
14	Reserve for doubtful accounts ss. 20(1)(l)					0
15	Reserve for goods & services ss.20(1)(m)					0
16	Reserve for unpaid amounts ss.20(1)(n)					0
17	Debt and share issue expenses ss.20(1)(e)					0
18	Other - Please describe					0
19	Other - Please describe					0
20						0
21						0
22	Total (carry forward to the TAXREC worksheet)		0	0		0
23						
24	End of Year:					
25						0
26	Reserve for doubtful accounts ss. 20(1)(l)					0
27	Reserve for goods & services ss.20(1)(m)					0
28	Reserve for unpaid amounts ss.20(1)(n)					0
29	Debt and share issue expenses ss.20(1)(e)					0
30	Other - Please describe					0
31	Other - Please describe					0
32						0
33						0
34	Insert line above this line					
35	Total (carry forward to the TAXREC worksheet)		0	0		0
36						
37						
38	FINANCIAL STATEMENT RESERVES					
39						
40	Beginning of Year:					
41						0
42						0
43	Environmental		3,333,000			3,333,000
44	Allowance for doubtful accounts		9,000,000			9,000,000
45	Inventory obsolescence		2,935,988			2,935,988
46	Property taxes					0
47	Other - Post employment benefits		103,795,000			103,795,000
48	Other - Holdback payable		68,948			68,948
49						0
50	Total (carry forward to the TAXREC worksheet)		119,132,936	0		119,132,936
51						
52	End of Year:					
53						0
54						0
55	Environmental					0
56	Allowance for doubtful accounts		585,360			585,360
57	Inventory obsolescence		2,668,190			2,668,190
58	Property taxes		2,000,000			2,000,000
59	Other - Post employment benefits		103,677,000			103,677,000
60	Other - Holdback payable		0			0
61	Other		46,666			46,666
62	Insert line above this line					
63	Total (carry forward to the TAXREC worksheet)		108,977,216	0		108,977,216

Tax Reserves

	A	B	C	D	E	F
1						
2	PILs TAXES - EB-2012-0064	LINE	M of F	Non-wires	Wires-only	
3	TAX RETURN RECONCILIATION (TAXREC 2)		Corporate	Eliminations	Tax	
4	(for "wires-only" business - see s. 72 OEB Act)		Tax		Return	
5	RATEPAYERS ONLY		Return			
6	Shareholder-only Items should be shown on TAXREC 3					Version 2009.1
7						
8	Utility Name: TORONTO HYDRO-ELECTRIC SYSTEM LIMITED					
9	Reporting period: 2003					
10	Number of days in taxation year:			365		
11	Materiality Level:			1,736,868		
12						
13						
14						
15	Section C: Reconciliation of accounting income to taxable income					
16	Add:					
17		+				0
18	Gain on sale of eligible capital property	+				0
19	Loss on disposal of assets	+				0
20	Charitable donations (Only if it benefits ratepayers)	+	316			316
21	Taxable capital gains	+				0
22		+				0
23	Scientific research expenditures deducted	+				0
24	per financial statements	+	655,621			655,621
25	Capitalized interest	+				0
26	Soft costs on construction and renovation of buildings	+				0
27	Capital items expensed	+				0
28	Debt issue expense	+				0
29	Financing fees deducted in books	+	1,536,876			1,536,876
30	Gain on settlement of debt	+				0
31	Interest paid on income debentures	+				0
32	Recapture of SR&ED expenditures	+				0
33	Share issue expense	+				0
34	Write down of capital property	+				0
35	Amounts received in respect of qualifying environment trust	+				0
36	Provision for bad debts	+				0
37		+				0
38		+				0
39		+				0
40	Other Additions: (please explain in detail the nature of the item)	+				0
41		+				0
42	Asset retirement obligation- accretion expense	+	192,602			192,602
43	Reversal of environmental provision- reserve adjustment	+	4,132,505			4,132,505
44		+				0
45		+				0
46	Total Additions	=	6,517,920	0		6,517,920
47						

	A	B	C	D	E	F
1						
2	PILs TAXES - EB-2012-0064	LINE	M of F	Non-wires	Wires-only	
3	TAX RETURN RECONCILIATION (TAXREC 2)		Corporate	Eliminations	Tax	
4	(for "wires-only" business - see s. 72 OEB Act)		Tax		Return	
5	RATEPAYERS ONLY		Return			
6	Shareholder-only Items should be shown on TAXREC 3					Version 2009.1
7						
8	Utility Name: TORONTO HYDRO-ELECTRIC SYSTEM LIMITED					
9	Reporting period: 2003					
10	Number of days in taxation year:			365		
11	Materiality Level:			1,736,868		
12						
13						
48	Recap of Material Additions:					
49			0	0	0	
50			0	0	0	
51			0	0	0	
52			0	0	0	
53			0	0	0	
54			0	0	0	
55			0	0	0	
56			0	0	0	
57			0	0	0	
58			0	0	0	
59			0	0	0	
60			0	0	0	
61			0	0	0	
62			0	0	0	
63			0	0	0	
64			0	0	0	
65			0	0	0	
66			0	0	0	
67			0	0	0	
68			0	0	0	
69			0	0	0	
70			0	0	0	
71			0	0	0	
72			0	0	0	
73			0	0	0	
74	Reversal of environmental provision- reserve adjustment		4,132,505	0	4,132,505	
75			0	0	0	
76			0	0	0	
77	Total Material additions		4,132,505	0	4,132,505	
78	Other additions less than materiality level		2,385,415	0	2,385,415	
79	Total Additions		6,517,920	0	6,517,920	
80						

	A	B	C	D	E	F
1						
2	PILs TAXES - EB-2012-0064	LINE	M of F	Non-wires	Wires-only	
3	TAX RETURN RECONCILIATION (TAXREC 2)		Corporate	Eliminations	Tax	
4	(for "wires-only" business - see s. 72 OEB Act)		Tax		Return	
5	RATEPAYERS ONLY		Return			
6	Shareholder-only Items should be shown on TAXREC 3				Version 2009.1	
7						
8	Utility Name: TORONTO HYDRO-ELECTRIC SYSTEM LIMITED					
9	Reporting period: 2003					
10	Number of days in taxation year:		365			
11	Materiality Level:		1,736,868			
12						
13						
81	Deduct:					
82	Gain on disposal of assets per f/s	-	396,506		396,506	
83	Dividends not taxable under section 83	-			0	
84	Terminal loss from Schedule 8	-			0	
85	Depreciation in inventory, end of prior year	-			0	
86	Scientific research expenses claimed in year from Form T661	-	655,621		655,621	
87	Bad debts	-	1,038,000		1,038,000	
88	Book income of joint venture or partnership	-			0	
89	Equity in income from subsidiary or affiliates	-			0	
90	Contributions to a qualifying environment trust	-			0	
91	Other income from financial statements	-			0	
92		-			0	
93		-			0	
94		-			0	
95	<i>Other deductions: (Please explain in detail the nature of the item)</i>	-			0	
96	Asset retirement obligation- cash payment deducted for tax	-	511,000		511,000	
97	Debt financing fees- deducted for tax	-	1,027,326		1,027,326	
98		-			0	
99	Total Deductions	=	3,628,453	0	3,628,453	
100						
101	Recap of Material Deductions:					
102			0	0	0	
103			0	0	0	
104			0	0	0	
105			0	0	0	
106			0	0	0	
107			0	0	0	
108			0	0	0	
109			0	0	0	
110			0	0	0	
111			0	0	0	
112			0	0	0	
113			0	0	0	
114			0	0	0	
115			0	0	0	
116			0	0	0	
117			0	0	0	
118			0	0	0	
119	Total Deductions exceed materiality level		0	0	0	
120	Other deductions less than materiality level		3,628,453	0	3,628,453	
121	Total Deductions		3,628,453	0	3,628,453	

	A	B	C	D	E	F
1						
2	PILs TAXES - EB-2012-0064					
3	TAX RETURN RECONCILIATION (TAXREC 3)					
4	Shareholder-only Items should be shown on TAXREC 3					
5	ITEMS ON WHICH TRUE-UP DOES NOT APPLY					
6	(for "wires-only" business - see s. 72 OEB Act)					
7		0				
8	Utility Name: TORONTO HYDRO-ELECTRIC SYSTEM LIMITED				Version 2009.1	
9						
10						
11	Reporting period: 2003					
12	Number of days in taxation year: 365					
13						
14						
15						
16	Section C: Reconciliation of accounting income to taxable income					
17	Add:					
18						
19	Recapture of capital cost allowance	+				0
20	CCA adjustments	+				0
21	CEC adjustments	+				0
22	Gain on sale of non-utility eligible capital property	+				0
23	Gain on sale of utility eligible capital property	+				0
24	Loss from joint ventures or partnerships	+				0
25	Deemed dividend income	+				0
26	Loss in equity of subsidiaries and affiliates	+				0
27	Loss on disposal of utility assets	+				0
28	Loss on disposal of non-utility assets	+				0
29	Depreciation in inventory -end of year	+				0
30	Depreciation and amortization adjustments	+				0
31	Dividends credited to investment account	+				0
32	Non-deductible meals	+	58,651			58,651
33	Non-deductible club dues	+	49,334			49,334
34	Non-deductible automobile costs	+				0
35	Donations - amount per books					316
36	Interest and penalties on unpaid taxes					0
37	Management bonuses unpaid after 180 days of year end					0
38	Imputed interest expense on Regulatory Assets					0
39	Ontario capital tax adjustments	+				0
40	Changes in Regulatory Asset balances	+				0
41	<i>Other Additions: (please explain in detail the nature of the item)</i>	+				0
42	Increase in net income due to restatement	+	10,061,000			10,061,000
43	Non-deductible penalties	+	1,953,334			1,953,334
44		+				0
45		+				0
46		+				0
47	Total Additions on which true-up does not apply	=	12,122,319	0		12,122,635
48						
49	Deduct:					
50						
51	CCA adjustments	-				0
52	CEC adjustments	-				0
53	Depreciation and amortization adjustments	-				0
54	Gain on disposal of assets per financial statements	-				0
55	Financing fee amortization - considered to be interest expense for PILs	-				0
56	Imputed interest income on Regulatory Assets	-	2,233,343			2,233,343
57	Donations - amount deductible for tax purposes	-				0
58	Income from joint ventures or partnerships	-				0
59		-				0
60		-				0
61		-				0
62		-				0
63		-				0
64	Ontario capital tax adjustments to current or prior year	-				0
65		-				0
66	Changes in Regulatory Asset balances	-				0
67		-				0
68	<i>Other deductions: (Please explain in detail the nature of the item)</i>	-				0
69		-				0
70		-				0
71		-				0
72		-				0
73	Total Deductions on which true-up does not apply	=	2,233,343	0		2,233,343
74						

	A	B	C	D	E	F	G
1	PILs TAXES - EB-2012-0064						
2	Corporate Tax Rates						Version 2009.1
3	Exemptions, Deductions, or Thresholds						
4	Utility Name: TORONTO HYDRO-ELECTRIC SYSTEM LIMITED						
5	Reporting period: 2003						
6							
7							Table 1
8	Rates Used in 2002 RAM PILs Applications for 2002						
9	Income Range		0		200,001		
10	RAM 2002		to		to		>700,000
11		Year	200,000		700,000		
12	Income Tax Rate						
13	Proxy Tax Year	2002					
14	Federal (Includes surtax)						26.12%
15	and Ontario blended						12.50%
16	Blended rate						38.62%
17							
18	Capital Tax Rate		0.300%				
19	LCT rate		0.225%				
20	Surtax		1.12%				
21	Ontario Capital Tax Exemption **	MAX \$5MM	5,000,000				
22	Federal Large Corporations Tax Exemption **	MAX \$10MM	10,000,000				
23	**Exemption amounts must agree with the Board-approved 2002 RAM PILs filing						
24							
25							Table 2
26	Expected Income Tax Rates for 2003 and Capital Tax Exemptions for 2003						
27	Income Range		0		200,001		
28	Expected Rates		to		to		>700,000
29		Year	200,000		700,000		
30	Income Tax Rate						
31	Current year	2003					
32	Federal (Includes surtax)						24.12%
33	Ontario						12.50%
34	Blended rate						36.62%
35							
36	Capital Tax Rate		0.300%				
37	LCT rate		0.225%				
38	Surtax		1.12%				
39	Ontario Capital Tax Exemption *** 2002	MAX \$5MM	5,000,000				
40	Federal Large Corporations Tax Exemption *** 2002	MAX \$10MM	10,000,000				
41	*** Allocation of exemptions must comply with the Board's instructions regarding regulated activities.						
42							

	A	B	C	D	E	F	G
43							Table 3
44	Input Information from Utility's Actual 2003 Tax Returns						
45	Income Range		0		200,001		
46			to		to	>700,000	
47		Year	200,000		700,000		
48	Income Tax Rate						
49	Current year	2003					
50	Federal (Includes surtax)						24.12%
51	Ontario						12.50%
52	Blended rate						36.62%
53							
54	Capital Tax Rate		0.300%				
55	LCT rate		0.225%				
56	Surtax		1.12%				
57	Ontario Capital Tax Exemption *	MAX \$5MM	4,728,562				
58	Federal Large Corporations Tax Exemption *	MAX \$10MM	10,000,000				
59	* Include copies of the actual tax return allocation calculations in your submission: Ontario CT23 page 11; federal T2 Schedule 36						
60							

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	PILs TAXES - EB-2012-0064														
2	Analysis of PILs Tax Account 1562:														
3	Utility Name: TORONTO HYDRO-ELECTRIC SYSTEM LIMITED														
4	Reporting period: 2003														
5	Sign Convention: + for increase; - for decrease														
6															
7															
8	Year start:		01/10/2001		01/01/2002		01/01/2003		01/01/2004		01/01/2005		01/01/2006		
9	Year end:		31/12/2001		31/12/2002		31/12/2003		31/12/2004		31/12/2005		30/04/2006		Total
10															
11	Opening balance:	=	0		5,028,333		8,127,575		8,284,720		2,260,300		2,260,300		0
12	Board-approved PILs tax proxy from Decisions (1)	+/-	5,000,000		55,000,000		60,000,000						0		120,000,000
13	PILs proxy from April 1, 2005 - input 9/12 of amount														0
14	True-up Variance Adjustment Q4, 2001 (2)	+/-			-290,810										-290,810
15	True-up Variance Adjustment (3)	+/-					2,156,868		-6,024,420						-3,867,552
16	Deferral Account Variance Adjustment Q4, 2001 (4)														0
17	Deferral Account Variance Adjustment (5)	+/-					-2,412,196								-2,412,196
18	Adjustments to reported prior years' variances (6)	+/-													0
19	Carrying charges (7)	+/-	28,333		720,305		562,257								1,310,895
20	PILs billed to (collected from) customers (8)	-	0		-52,330,253		-60,149,784								-112,480,037
21															
22	Ending balance: # 1562		5,028,333		8,127,575		8,284,720		2,260,300		2,260,300		2,260,300		2,260,300
23															
24															
25															
26	Uncollected PILs														
27															
28	NOTE: The purpose of this worksheet is to show the movement in Account 1562 which establishes the receivable from or liability to ratepayers.														
29	For explanation of Account 1562 please refer to Accounting Procedures Handbook for Electric Distribution Utilities and FAQ April 2003.														
30															
31	Please identify if Method 1, 2 or 3 was used to account for the PILs proxy and recovery. ANSWER: METHOD 3														
32															
33	(1) (i) From the Board's Decision - see Inclusion in Rates, Part III of the TAXCALC spreadsheet for Q4 2001 and 2002.														
34	Please insert the Q4, 2001 proxy in column C even though it was approved effective March 1, 2002.														
35	If the Board gave more than one decision in the year, calculate a weighted average proxy.														
36	(ii) If the Board approved different amounts, input the Board-approved amounts in cells C13 and E13.														
37	(iii) Column G - In 2003, the initial estimate should include the Q4 2001 PILs tax proxy and the 2002 PILs tax proxy.														
38	(iv) Column I - The Q4 2001 PILs tax proxy was removed from rates on April 1, 2004 and the 2002 PILs tax proxy remained.														
39	(v) Column K - The 2002 PILs tax proxy applies to January 1 to March 31, 2005, and the new 2005 PILs tax proxy from April 1 to December 31, 2005.														
40	(vi) Column M - The 2005 PILs tax proxy will be used for the period from January 1 to April 30, 2006.														
41															
42	(2) From the Ministry of Finance Variance Column, under Future True-ups, Part IV a, cell I132, of the TAXCALC spreadsheet. The Q4, 2001 proxy has to be trueed up in 2002, 2003 and for the period January 1- March 31, 2004. Input the variance in the whole year reconciliation.														
43															
44															
45	(3) From the Ministry of Finance Variance Column, under Future True-ups, Part IV a, cell I132, of the TAXCALC spreadsheet.														
46	The true-up will compare to the 2002 proxy for 2002, 2003, 2004 and January 1 to March 31, 2005.														
47															
48	(4) From the Ministry of Finance Variance Column, under Future True-ups, Part IV b, cell I181, of the TAXCALC spreadsheet. The Q4, 2001 proxy has to be trueed up in 2002, 2003 and for the period January 1- March 31, 2004. Input the deferral variance in the whole year reconciliation.														
49															
50															
51	(5) From the Ministry of Finance Variance Column, under Future True-ups, Part IV a, cell I181, of the TAXCALC spreadsheet.														
52	The true-up will compare to the 2002 proxy for 2002, 2003, 2004 and January 1 to March 31, 2005.														
53															
54	(6) The correcting entry should be shown in the year the entry was made. The true-up of the carrying charges will have to be reviewed.														
55															
56	(7) Carrying charges are calculated on a simple interest basis.														
57															
58	(8) (i) PILs collected from customers from March 1, 2002 to March 31, 2004 were based on a fixed charge and a volumetric charge recovery by class. The PILs rate components for Q4, 2001 and 2002 were calculated in the 2002 approved RAM on sheet 6 and sheet 8. In April 2004, the PILs recovery was based on the 2002 PILs tax proxy recovered by the volumetric rate by class as calculated on sheet 7 of the 2004 RAM.														
59	The 2005 PILs tax proxy is being recovered on a volumetric basis by class.														
60															
61															
62															
63	(ii) Collections should equal: (a) the actual volumes/ load (kWhs, kW, Kva) for the period (including net unbilled at period end), multiplied by the PILs volumetric proxy rates by class (from the Q4, 2001 and 2002 RAM worksheets) for 2002, 2003 and January 1 to March 31, 2004;														
64	plus, (b) customer counts by class in the same period multiplied by the PILs fixed charge rate components.														
65															
66															
67	In 2004, use the Board-approved 2002 PILs proxy, recovered on a volumetric basis by class as calculated by the 2004 RAM, sheet 7, for the period April 1 to December 31, 2004, and add this total to the results from the sentence above for January 1 to March 31, 2004.														
68															
69															
70	In 2005, use the Board-approved 2005 PILs proxy, recovered on a volumetric basis by class as calculated by the 2005 RAM, sheet 4, for the period April 1 to December 31, 2005. To this total, the 2004 volumetric PILs proxy rate by class should be used to calculate the recovery for the period January 1 to March 31, 2005.														
71															
72															
73															
74	(9) Any interim PILs recovery from Board Decisions will be recorded in APH Account # 1590. Final reconciliation of PILs proxy taxes will have to include amounts from 1562 and from 1590.														
75															

	A	B	C	D	E
1	PILs TAXES - EB-2012-0064				Version 2009.1
2	REGULATORY INFORMATION (REGINFO)				
3	Utility Name: TORONTO HYDRO-ELECTRIC SYSTEM LIMITED			Colour Code	
4	Reporting period: 2004			Input Cell	
5				Formula in Cell	
6	Days in reporting period:	365	days		
7	Total days in the calendar year:	365	days		
8					
9	BACKGROUND				
10	Has the utility reviewed section 149(1) ITA to				
11	confirm that it is not subject to regular corporate				
12	tax (and therefore subject to PILs)?				
13			Y/N	Y	
14	Was the utility recently acquired by Hydro One				
15	and now subject to s.89 & 90 PILs?				
16			Y/N	N	
17	Is the utility a non-profit corporation?				
18	(If it is a non-profit corporation, please contact the Rates Manager at the OEB)				
19	Are the Ontario Capital Tax & Large Corporations Tax Exemptions				
20	shared among the corporate group?				
21	Please identify the % used to allocate the OCT and LCT exemptions in				
22	Cells C65 & C74 in the TAXCALC spreadsheet.				
23		OCT	Y/N	N	
24		LCT	Y/N	N	
25		OCT		100%	
26		LCT		100%	
27	Accounting Year End		Date	12-31-2004	
28	MARR NO TAX CALCULATIONS				Regulatory
29	SHEET #7 FINAL RUD MODEL DATA				Income
30	(FROM 1999 FINANCIAL STATEMENTS)				
31	USE BOARD-APPROVED AMOUNTS				
32					
33	Rate Base (wires-only)			1,810,112,688	
34	Common Equity Ratio (CER)			35.00%	
35	1-CER			65.00%	
36	Target Return On Equity			9.88%	
37	Debt rate			6.80%	
38	Market Adjusted Revenue Requirement			142,600,678	
39	1999 return from RUD Sheet #7			23,304,000	23,304,000
40	Total Incremental revenue			119,296,678	
41	Input: Board-approved dollar amounts phased-in				
42	Amount allowed in 2001			39,765,559	39,765,559
43	Amount allowed in 2002			39,765,559	39,765,559
44	Amount allowed in 2003 and 2004 (will be zero due to Bill 210 unless authorized by the Minister and the Board)			0	0
45	Amount allowed in 2005 - Third tranche of MARR re: CDM			39,765,559	39,765,559
46	Other Board-approved changes to MARR or incremental revenue			0	0
47				0	0
48	Total Regulatory Income				142,600,677
49	Equity			633,539,441	
50	Return at target ROE			62,593,697	
51	Debt			1,176,573,247	
52	Deemed interest amount in 100% of MARR			80,006,981	
53	Phase-in of interest - Year 1 (2001)			35,385,561	
54	((D43+D47)/D41)*D61			57,696,271	
55	Phase-in of interest - Year 2 (2002)			57,696,271	
56	((D43+D47+D48)/D41)*D61			80,006,981	
57	Phase-in of interest - Year 3 (2003) and forward			80,006,981	
58	((D43+D47+D48)/D41)*D61 (due to Bill 210)				
59	Phase-in of interest - 2005				
60					
61					
62					
63					
64					
65					
66					
67					
68					
69					
70					
71					

	A	B	C	D	E	F	G	H
1	PILs TAXES - EB-2012-0064	ITEM	Initial Estimate		M of F Filing Variance K-C	M of F Filing Variance Explanation	Tax Returns	
2	PILs DEFERRAL AND VARIANCE ACCOUNTS						Version 2009.1	
3	TAX CALCULATIONS (TAXCALC)						Column Brought From TAXREC	
4	("Wires-only" business - see Tab TAXREC)						\$	
5								
6	Utility Name: TORONTO HYDRO-ELECTRIC SYSTEM LIMITED							
7	Reporting period: 2004							
8								
9	Days in reporting period:	365	days					
10	Total days in the calendar year:	365	days					
11								
12			\$		\$			
13								
14	I) CORPORATE INCOME TAXES							
15								
16	Regulatory Net Income REGINFO E53	1	102,835,118		79,797,882		182,633,000	
17								
18	BOOK TO TAX ADJUSTMENTS							
19	Additions:							
20	Depreciation & Amortization	2	106,229,000		16,297,000		122,526,000	
21	Employee Benefit Plans - Accrued, Not Paid	3	33,129,140		-33,129,140		0	
22	Tax reserves - beginning of year	4			0		0	
23	Reserves from financial statements - end of year	4			109,978,621		109,978,621	
24	Regulatory Adjustments - increase in income	5			0		0	
25	Other Additions (See Tab entitled "TAXREC")							
26	"Material" Items from "TAXREC" worksheet	6			0		0	
27	Other Additions (not "Material") "TAXREC"	6			0		0	
28	"Material" Items from "TAXREC 2" worksheet	6			0		0	
29	Other Additions (not "Material") "TAXREC 2"	6			1,993,341		1,993,341	
30	Items on which true-up does not apply "TAXREC 3"				161,244		161,244	
31								
32	Deductions: Input positive numbers							
33	Capital Cost Allowance and CEC	7	76,692,530		42,485,312		119,177,842	
34	Employee Benefit Plans - Paid Amounts	8	30,011,140		-30,011,140		0	
35	Items Capitalized for Regulatory Purposes	9	0		0		0	
36	Regulatory Adjustments - deduction for tax purposes in Item 5	10			0		0	
37	Interest Expense Deemed/ Incurred	11	57,696,271		20,976,729		78,673,000	
38	Tax reserves - end of year	4			0		0	
39	Reserves from financial statements - beginning of year	4			108,977,216		108,977,216	
40	Contributions to deferred income plans	3			0		0	
41	Contributions to pension plans	3			0		0	
42	Interest capitalized for accounting but deducted for tax	11			0		0	
43	Other Deductions (See Tab entitled "TAXREC")							
44	"Material" Items from "TAXREC" worksheet	12			0		0	
45	Other Deductions (not "Material") "TAXREC"	12			0		0	
46	Material Items from "TAXREC 2" worksheet	12			0		0	
47	Other Deductions (not "Material") "TAXREC 2"	12			3,298,862		3,298,862	
48	Items on which true-up does not apply "TAXREC 3"				2,233,343		2,233,343	
49								
50	TAXABLE INCOME/ (LOSS)		77,793,317		27,138,626		Before loss C/F 104,931,943	
51								
52	BLENDED INCOME TAX RATE							
53	Tab Tax Rates - Regulatory from Table 1; Actual from Table 3	13	38.62%		-2.5000%		36.12%	
54								
55	REGULATORY INCOME TAX		30,043,779		6,564,681		Actual 36,608,460	
56								
57								
58	Miscellaneous Tax Credits	14			269,188		Actual 269,188	
59								
60	Total Regulatory Income Tax		30,043,779		6,295,493		Actual 36,339,272	
61								
62								
63	II) CAPITAL TAXES							
64								
65	Ontario							
66	Base	15	1,810,112,688		259,954,523		2,070,067,211	
67	Less: Exemption -Tax Rates - Regulatory, Table 1; Actual, Table 3	16	5,000,000		0		5,000,000	
68	Taxable Capital		1,805,112,688		259,954,523		2,065,067,211	
69								
70	Rate - Tax Rates - Regulatory, Table 1; Actual, Table 3	17	0.3000%		0.0000%		0.3000%	
71								
72	Ontario Capital Tax		5,415,338		779,864		6,195,202	
73								
74	Federal Large Corporations Tax							
75	Base	18	1,810,112,688		228,148,967		2,038,261,655	
76	Less: Exemption -Tax Rates - Regulatory, Table 1; Actual, Table 3	19	10,000,000		40,000,000		50,000,000	
77	Taxable Capital		1,800,112,688		268,148,967		1,988,261,655	
78								
79	Rate - Tax Rates - Regulatory, Table 1; Actual, Table 3	20	0.2250%		-0.0250%		0.2000%	
80								
81	Gross Amount of LCT before surtax offset (Taxable Capital x Rate)	21	4,050,254		-73,730		3,976,523	
82	Less: Federal Surtax 1.12% x Taxable Income		871,285		302,312		1,173,597	
83								
84	Net LCT		3,178,968		-376,042		2,802,926	
85								

	A	B	C	D	E	F	G	H
1	PILs TAXES - EB-2012-0064	ITEM	Initial Estimate		M of F Filing Variance K-C	M of F Filing Variance Explanation	Tax Returns	
2	PILs DEFERRAL AND VARIANCE ACCOUNTS							
3	TAX CALCULATIONS (TAXCALC)							
4	("Wires-only" business - see Tab TAXREC)							
5		0						Version 2009.1
6	Utility Name: TORONTO HYDRO-ELECTRIC SYSTEM LIMITED							
7	Reporting period: 2004							
8								
9	Days in reporting period:	365	days					Column Brought From TAXREC
10	Total days in the calendar year:	365	days					\$
11								
12								
13								
86	III) INCLUSION IN RATES							
87								
88	Income Tax Rate used for gross-up (exclude surtax)		37.50%					
89								
90	Income Tax (proxy tax is grossed-up)	22	48,070,047			Actual 2004	36,339,272	
91	LCT (proxy tax is grossed-up)	23	5,086,349			Actual 2004	2,802,927	
92	Ontario Capital Tax (no gross-up since it is deductible)	24	5,415,338			Actual 2004	6,195,202	
93								
94								
95	Total PILs for Rate Adjustment -- MUST AGREE WITH 2002 RAM DECISION	25	58,571,734			Actual 2004	45,337,401	
96								
97								
98								
99	IV) FUTURE TRUE-UPS							
100	IV a) Calculation of the True-up Variance				DR/(CR)			
101	In Additions:							
102	Employee Benefit Plans - Accrued, Not Paid	3			-33,129,140			
103	Tax reserves deducted in prior year	4			0			
104	Reserves from financial statements-end of year	4			109,978,621			
105	Regulatory Adjustments	5			0			
106	Other additions "Material" Items TAXREC	6			0			
107	Other additions "Material" Items TAXREC 2	6			0			
108	In Deductions - positive numbers							
109	Employee Benefit Plans - Paid Amounts	8			-30,011,140			
110	Items Capitalized for Regulatory Purposes	9			0			
111	Regulatory Adjustments	10			0			
112	Interest Adjustment for tax purposes (See Below - cell I204)	11			0			
113	Tax reserves claimed in current year	4			0			
114	Reserves from F/S beginning of year	4			108,977,216			
115	Contributions to deferred income plans	3			0			
116	Contributions to pension plans	3			0			
117	Other deductions "Material" Items TAXREC	12			0			
118	Other deductions "Material" Item TAXREC 2	12			0			
119								
120	Total TRUE-UPS before tax effect	26			= -2,116,595			
121								
122	Income Tax Rate (excluding surtax) from 2004 Utility's tax return				x 36.12%			
123								
124	Income Tax Effect on True-up adjustments				= -764,514			
125								
126	Less: Miscellaneous Tax Credits	14			269,188			
127								
128	Total Income Tax on True-ups				-1,033,702			
129								
130	Income Tax Rate used for gross-up (exclude surtax)				35.00%			
131								
132	TRUE-UP VARIANCE ADJUSTMENT							
133								
134	IV b) Calculation of the Deferral Account Variance caused by changes in legislation							
135								
136	REGULATORY TAXABLE INCOME /(LOSSES) (as reported in the initial estimate column)				= 77,793,317			
137								
138	REVISED CORPORATE INCOME TAX RATE				x 36.12%			
139								
140	REVISED REGULATORY INCOME TAX				= 28,098,946			
141								
142	Less: Revised Miscellaneous Tax Credits				-			
143								
144	Total Revised Regulatory Income Tax				= 28,098,946			
145								
146	Less: Regulatory Income Tax reported in the Initial Estimate Column (Cell C58)				- 30,043,779			
147								
148	Regulatory Income Tax Variance				= -1,944,833			
149								

	A	B	C	D	E	F	G	H		
1	PILs TAXES - EB-2012-0064	ITEM	Initial Estimate		M of F Filing Variance K-C	M of F Filing Variance Explanation	Tax Returns			
2	PILs DEFERRAL AND VARIANCE ACCOUNTS									
3	TAX CALCULATIONS (TAXCALC)									
4	("Wires-only" business - see Tab TAXREC)									
5										
6	Utility Name: TORONTO HYDRO-ELECTRIC SYSTEM LIMITED									
7	Reporting period: 2004									
8										
9	Days in reporting period:								365	days
10	Total days in the calendar year:								365	days
11							Version 2009.1			
12			\$		\$		Column Brought From TAXREC			
13							\$			
150	Ontario Capital Tax									
151	Base			=	1,810,112,688					
152	Less: Exemption from tab Tax Rates, Table 2, cell C39			-	5,000,000					
153	Revised deemed taxable capital			=	1,805,112,688					
154										
155	Rate - Tab Tax Rates cell C54			x	0.3000%					
156										
157	Revised Ontario Capital Tax			=	5,415,338					
158	Less: Ontario Capital Tax reported in the initial estimate column (Cell C70)			-	5,415,338					
159	Regulatory Ontario Capital Tax Variance			=	0					
160										
161	Federal LCT									
162	Base				1,810,112,688					
163	Less: Exemption from tab Tax Rates, Table 2, cell C40			-	50,000,000					
164	Revised Federal LCT			=	1,760,112,688					
165										
166	Rate (as a result of legislative changes) tab 'Tax Rates' cell C51				0.2000%					
167										
168	Gross Amount				3,520,225					
169	Less: Federal surtax			-	871,285					
170	Revised Net LCT			=	2,648,940					
171										
172	Less: Federal LCT reported in the initial estimate column (Cell C82)			-	3,178,968					
173	Regulatory Federal LCT Variance			=	-530,028					
174										
175	Actual Income Tax Rate used for gross-up (exclude surtax)				35.00%					
176										
177	Income Tax (grossed-up)			+	(2,992,051)					
178	LCT (grossed-up)			+	(815,428)					
179	Ontario Capital Tax			+	0					
180										
181	DEFERRAL ACCOUNT VARIANCE ADJUSTMENT			=	(3,807,479)					
182										
183	TRUE-UP VARIANCE (from cell I130)			+	(1,590,311)					
184										
185	Total Deferral Account Entry (Positive Entry = Debit)			=	(5,397,790)					
186	<i>(Deferral Account Variance + True-up Variance)</i>									
187										
188										
189										
190	V) INTEREST PORTION OF TRUE-UP									
191	Variance Caused By Phase-in of Deemed Debt									
192										
193	Total deemed interest (REGINFO)				80,006,981					
194	Interest phased-in (Cell C36)				57,696,271					
195										
196	Variance due to phase-in of debt component of MARR in rates according to the Board's decision				22,310,710					
197										
198										
199	Other Interest Variances (i.e. Borrowing Levels Above Deemed Debt per Rate Handbook)									
200										
201	Interest deducted on MoF filing (Cell K36+K41)				78,673,000					
202	Total deemed interest (REGINFO CELL D61)				80,006,981					
203										
204	Variance caused by excess debt				0					
205										
206	Interest Adjustment for Tax Purposes (carry forward to Cell I110)				0					
207										
208	Total Interest Variance				22,310,710					

	A	B	C	D	E
1	PILs TAXES - EB-2012-0064	LINE	M of F	Non-wires	Wires-only
2	TAX RETURN RECONCILIATION (TAXREC)		Corporate	Eliminations	Tax
3	(for "wires-only" business - see s. 72 OEB Act)		Tax		Return
4		0	Return		
5					Version 2009.1
6	Section A: Identification:				
7	Utility Name: TORONTO HYDRO-ELECTRIC SYSTEM LIMITED				
8	Reporting period: 2004				
9	Taxation Year's start date:		01/01/2004		
10	Taxation Year's end date:		31/12/2004		
11	Number of days in taxation year:		365	days	
12					
13	Please enter the Materiality Level :		1,764,205	< - enter materiality level	
14	(0.25% x Rate Base x CER)	Y/N	N		
15	(0.25% x Net Assets)	Y/N	Y		
16	Or other measure (please provide the basis of the amount)	Y/N	N		
17	Does the utility carry on non-wires related operation?	Y/N	N		
18	(Please complete the questionnaire in the Background questionnaire worksheet.)				
19					
20	Note: Carry forward Wires-only Data to Tab "TAXCALC" Column K				
21					
22	Section B: Financial statements data:				
23	<i>Input unconsolidated financial statement data submitted with Tax returns.</i>				
24	<i>The actual categories of the income statements should be used.</i>				
25	<i>If required please change the descriptions except for amortization, interest expense and provision for income tax</i>				
26					
27	<i>Please enter the non-wire operation's amount as a positive number, the program automatically treats all amounts</i>				
28	<i>in the "non-wires elimination column" as negative values in TAXREC and TAXREC2.</i>				
29					
30	Income:				
31	Energy Sales	+			0
32	Distribution Revenue	+	2,235,154,000		2,235,154,000
33	Other Income	+	27,240,000		27,240,000
34	Miscellaneous income	+	10,325,000		10,325,000
35		+			0
36	Revenue should be entered above this line				
37					
38	Costs and Expenses:				
39	Cost of energy purchased	-	1,798,008,000		1,798,008,000
40	Administration	-			0
41	Customer billing and collecting	-			0
42	Operations and maintenance	-	166,617,000		166,617,000
43	Amortization	-	122,526,000		122,526,000
44	Ontario Capital Tax	-			0
45	Reg Assets	-			0
46	Financing expenses	-	2,935,000		2,935,000
47		-			0
48		-			0
49					
50	Net Income Before Interest & Income Taxes EBIT	=	182,633,000	0	182,633,000
51	Less: Interest expense for accounting purposes	-	78,673,000		78,673,000
52	Provision for payments in lieu of income taxes	-	43,825,000		43,825,000
53	Net Income (loss)	=	60,135,000	0	60,135,000
54	<i>(The Net Income (loss) on the MoF column should equal to the net income (loss) per financial statements on Schedule 1 of the tax return.)</i>				
55					
56	Section C: Reconciliation of accounting income to taxable income				
57	From T2 Schedule 1				
58	BOOK TO TAX ADDITIONS:				
59	Provision for income tax	+	43,825,000	0	43,825,000
60	Federal large corporation tax	+			0
61	Depreciation & Amortization	+	122,526,000	0	122,526,000
62	Employee benefit plans-accrued, not paid	+		0	0
63	Tax reserves - beginning of year	+	0	0	0
64	Reserves from financial statements- end of year	+	109,978,621	0	109,978,621
65	Regulatory adjustments on which true-up may apply (see A66)	+			0
66	Items on which true-up does not apply "TAXREC 3"		161,244	0	161,244
67	Material addition items from TAXREC 2	+	0	0	0
68	Other addition items (not Material) from TAXREC 2	+	1,993,341	0	1,993,341
69					

	A	B	C	D	E
1	PILs TAXES - EB-2012-0064	LINE	M of F	Non-wires	Wires-only
2	TAX RETURN RECONCILIATION (TAXREC)		Corporate	Eliminations	Tax
3	(for "wires-only" business - see s. 72 OEB Act)		Tax		Return
4		0	Return		
5					Version 2009.1
70	<i>Subtotal</i>		278,484,206	0	278,484,206
71					
72	<i>Other Additions: (Please explain the nature of the additions)</i>				
73	Recapture of CCA	+			0
74	Non-deductible meals and entertainment expense	+			0
75	Capital items expensed	+			0
76	DEPRECIATION DIFFERENCE	+			0
77		+			0
78		+			0
79		+			0
80	<i>Total Other Additions</i>	=	0	0	0
81					
82	Total Additions	=	278,484,206	0	278,484,206
83					
84	Recap Material Additions:				
85			0	0	0
86			0	0	0
87			0	0	0
88			0	0	0
89			0	0	0
90			0	0	0
91			0	0	0
92	<i>Total Other additions >materiality level</i>		0	0	0
93	<i>Other additions (less than materiality level)</i>		0	0	0
94	Total Other Additions		0	0	0
95					

	A	B	C	D	E
1	PILs TAXES - EB-2012-0064	LINE	M of F	Non-wires	Wires-only
2	TAX RETURN RECONCILIATION (TAXREC)		Corporate	Eliminations	Tax
3	(for "wires-only" business - see s. 72 OEB Act)		Tax		Return
4		0	Return		
5					Version 2009.1
96	BOOK TO TAX DEDUCTIONS:				
97	Capital cost allowance	-	117,861,765		117,861,765
98	Cumulative eligible capital deduction	-	1,316,077		1,316,077
99	Employee benefit plans-paid amounts	-			0
100	Items capitalized for regulatory purposes	-			0
101	Regulatory adjustments :	-			0
102	CCA	-			0
103	other deductions	-			0
104	Tax reserves - end of year	-	0	0	0
105	Reserves from financial statements- beginning of year	-	108,977,216	0	108,977,216
106	Contributions to deferred income plans	-			0
107	Contributions to pension plans	-			0
108	Items on which true-up does not apply "TAXREC 3"		2,233,343	0	2,233,343
109	Interest capitalized for accounting deducted for tax	-			0
110	Material deduction items from TAXREC 2	-	0	0	0
111	Other deduction items (not Material) from TAXREC 2	-	3,298,862	0	3,298,862
112					
113	Subtotal	=	233,687,263	0	233,687,263
114	Other deductions (Please explain the nature of the deductions)				
115	Charitable donations - tax basis	-			0
116	Gain on disposal of assets	-			0
117		-			0
118		-			0
119		-			0
120	Total Other Deductions	=	0	0	0
121					
122	Total Deductions	=	233,687,263	0	233,687,263
123					
124	Recap Material Deductions:				
125			0	0	0
126			0	0	0
127			0	0	0
128			0	0	0
129			0	0	0
130	Total Other Deductions exceed materiality level		0	0	0
131	Other Deductions less than materiality level		0	0	0
132	Total Other Deductions		0	0	0
133					
134	TAXABLE INCOME	=	104,931,943	0	104,931,943
135	DEDUCT:				
136	Non-capital loss applied positive number	-			0
137	Net capital loss applied positive number	-			0
138					0
139	NET TAXABLE INCOME	=	104,931,943	0	104,931,943
140					
141	FROM ACTUAL TAX RETURNS				
142	Net Federal Income Tax (Must agree with tax return)	+	23,178,535		23,178,535
143	Net Ontario Income Tax (Must agree with tax return)	+	13,429,925		13,429,925
144	Subtotal	=	36,608,460	0	36,608,460
145	Less: Miscellaneous tax credits (Must agree with tax returns)	-	269,188		269,188
146	Total Income Tax	=	36,339,272	0	36,339,272
147					
148	FROM ACTUAL TAX RETURNS				
149	Net Federal Income Tax Rate (Must agree with tax return)		22.12%		22.12%
150	Net Ontario Income Tax Rate (Must agree with tax return)		14.00%		14.00%
151	Blended Income Tax Rate		36.12%	*****	36.12%
152					
153	Section F: Income and Capital Taxes				
154					
155	RECAP				
156	Total Income Taxes	+	36,339,272	0	36,339,272
157	Ontario Capital Tax	+	6,195,202		6,195,202
158	Federal Large Corporations Tax	+	2,802,926		2,802,926
159					
160	Total income and capital taxes	=	45,337,400	0	45,337,400

	A	B	C	D	E	F
1	PILs TAXES - EB-2012-0064	LINE	M of F	Non-wires	Wires-only	
2	Tax and Accounting Reserves		Corporate	Eliminations	Tax	
3	For MoF Column of TAXCALC		Tax		Return	
4	(for "wires-only" business - see s. 72 OEB Act)		Return			
5		0			Version 2009.1	
6						
7	Utility Name: TORONTO HYDRO-ELECTRIC SYSTEM LIMITED					
8	Reporting period: 2004					
9						
10	TAX RESERVES					
11						
12	Beginning of Year:					
13						0
14	Reserve for doubtful accounts ss. 20(1)(l)					0
15	Reserve for goods & services ss.20(1)(m)					0
16	Reserve for unpaid amounts ss.20(1)(n)					0
17	Debt and share issue expenses ss.20(1)(e)					0
18	Other - Please describe					0
19	Other - Please describe					0
20						0
21						0
22	Total (carry forward to the TAXREC worksheet)		0	0		0
23						
24	End of Year:					
25						0
26	Reserve for doubtful accounts ss. 20(1)(l)					0
27	Reserve for goods & services ss.20(1)(m)					0
28	Reserve for unpaid amounts ss.20(1)(n)					0
29	Debt and share issue expenses ss.20(1)(e)					0
30	Other - Please describe					0
31	Other - Please describe					0
32						0
33						0
34	Insert line above this line					
35	Total (carry forward to the TAXREC worksheet)		0	0		0
36						
37						
38	FINANCIAL STATEMENT RESERVES					
39						
40	Beginning of Year:					
41						0
42						0
43	Environmental					0
44	Allowance for doubtful accounts		585,360			585,360
45	Inventory obsolescence		2,668,190			2,668,190
46	Property taxes		2,000,000			2,000,000
47	Other - Post employment benefits		103,677,000			103,677,000
48	Other		46,666			46,666
49						0
50	Total (carry forward to the TAXREC worksheet)		108,977,216	0		108,977,216
51						
52	End of Year:					
53						0
54						0
55	Environmental					0
56	Allowance for doubtful accounts		6,570			6,570
57	Inventory obsolescence		1,575,051			1,575,051
58	Property taxes					0
59	Other - Post employment benefits		108,397,000			108,397,000
60	Other - Holdback payable		0			0
61	Other					0
62	Insert line above this line					
63	Total (carry forward to the TAXREC worksheet)		109,978,621	0		109,978,621

	A	B	C	D	E	F
1						
2	PILs TAXES - EB-2012-0064					
3	TAX RETURN RECONCILIATION (TAXREC 2)	LINE	M of F	Non-wires	Wires-only	
4	(for "wires-only" business - see s. 72 OEB Act)		Corporate	Eliminations	Tax	
5	RATEPAYERS ONLY		Tax		Return	
6	Shareholder-only Items should be shown on TAXREC 3		Return			Version 2009.1
7						
8	Utility Name: TORONTO HYDRO-ELECTRIC SYSTEM LIMITED					
9	Reporting period: 2004					
10	Number of days in taxation year:			365		
11	Materiality Level:			1,764,205		
12						
13						
14						
15	Section C: Reconciliation of accounting income to taxable income					
16	Add:					
17		+				0
18	Gain on sale of eligible capital property	+				0
19	Loss on disposal of assets	+				0
20	Charitable donations (Only if it benefits ratepayers)	+				0
21	Taxable capital gains	+	146,332			146,332
22		+				0
23	Scientific research expenditures deducted	+				0
24	per financial statements	+	844,629			844,629
25	Capitalized interest	+				0
26	Soft costs on construction and renovation of buildings	+				0
27	Capital items expensed	+				0
28	Debt issue expense	+				0
29	Financing fees deducted in books	+	731,936			731,936
30	Gain on settlement of debt	+				0
31	Interest paid on income debentures	+				0
32	Recapture of SR&ED expenditures	+				0
33	Share issue expense	+				0
34	Write down of capital property	+				0
35	Amounts received in respect of qualifying environment trust	+				0
36	Provision for bad debts	+				0
37		+				0
38		+				0
39		+				0
40	<i>Other Additions: (please explain in detail the nature of the item)</i>	+				0
41	Asset retirement obligation- accretion expense	+	235,261			235,261
42		+				0
43	Interest and penalties on unpaid taxes	+	35,183			35,183
44		+				0
45		+				0
46	Total Additions	=	1,993,341	0		1,993,341
47						
48	Recap of Material Additions:					
49			0	0		0
50			0	0		0
51			0	0		0
52			0	0		0
53			0	0		0
54			0	0		0
55			0	0		0
56			0	0		0
57			0	0		0
58			0	0		0
59			0	0		0
60			0	0		0
61			0	0		0
62			0	0		0
63			0	0		0
64			0	0		0
65			0	0		0
66			0	0		0
67			0	0		0
68			0	0		0
69			0	0		0
70			0	0		0

	A	B	C	D	E	F
1						
2	PILs TAXES - EB-2012-0064					
3	TAX RETURN RECONCILIATION (TAXREC 2)	LINE	M of F	Non-wires	Wires-only	
4	(for "wires-only" business - see s. 72 OEB Act)		Corporate	Eliminations	Tax	
5	RATEPAYERS ONLY		Tax		Return	
6	Shareholder-only Items should be shown on TAXREC 3		Return			Version 2009.1
7						
8	Utility Name: TORONTO HYDRO-ELECTRIC SYSTEM LIMITED					
9	Reporting period: 2004					
10	Number of days in taxation year:		365			
11	Materiality Level:		1,764,205			
12						
13						
71			0	0	0	
72			0	0	0	
73			0	0	0	
74			0	0	0	
75			0	0	0	
76			0	0	0	
77	Total Material additions		0	0	0	
78	Other additions less than materiality level		1,993,341	0	1,993,341	
79	Total Additions		1,993,341	0	1,993,341	
80						
81	Deduct:					
82	Gain on disposal of assets per f/s	-	1,043,000		1,043,000	
83	Dividends not taxable under section 83	-			0	
84	Terminal loss from Schedule 8	-			0	
85	Depreciation in inventory, end of prior year	-			0	
86	Scientific research expenses claimed in year from Form T661	-	306,391		306,391	
87	Bad debts	-			0	
88	Book income of joint venture or partnership	-			0	
89	Equity in income from subsidiary or affiliates	-			0	
90	Contributions to a qualifying environment trust	-			0	
91	Other income from financial statements	-			0	
92		-			0	
93		-			0	
94	Other deductions: (Please explain in detail the nature of the item)	-			0	
95		-			0	
96	Asset retirement obligation- cash payment deducted for tax	-	140,308		140,308	
97	Debt financing fees- deducted for tax S 20(1)(e)	-	1,270,925		1,270,925	
98	ITC booked to accounting income	-	538,238		538,238	
99	Total Deductions	=	3,298,862	0	3,298,862	
100						
101	Recap of Material Deductions:					
102			0	0	0	
103			0	0	0	
104			0	0	0	
105			0	0	0	
106			0	0	0	
107			0	0	0	
108			0	0	0	
109			0	0	0	
110			0	0	0	
111			0	0	0	
112			0	0	0	
113			0	0	0	
114			0	0	0	
115			0	0	0	
116			0	0	0	
117			0	0	0	
118			0	0	0	
119	Total Deductions exceed materiality level		0	0	0	
120	Other deductions less than materiality level		3,298,862	0	3,298,862	
121	Total Deductions		3,298,862	0	3,298,862	

	A	B	C	D	E	F
1						
2	PILs TAXES - EB-2012-0064					
3	TAX RETURN RECONCILIATION (TAXREC 3)					
4	Shareholder-only Items should be shown on TAXREC 3					
5	<u>ITEMS ON WHICH TRUE-UP DOES NOT APPLY</u>					
6	(for "wires-only" business - see s. 72 OEB Act)					
7		0				
8	Utility Name: TORONTO HYDRO-ELECTRIC SYSTEM LIMITED					Version 2009.1
9						
10						
11	Reporting period: 2004					
12	Number of days in taxation year:		365			
13	<hr/>					
14						
15						
16	Section C: Reconciliation of accounting income to taxable income					
17	Add:					
18						
19	Recapture of capital cost allowance	+				0
20	CCA adjustments	+				0
21	CEC adjustments	+				0
22	Gain on sale of non-utility eligible capital property	+				0
23	Gain on sale of utility eligible capital property	+				0
24	Loss from joint ventures or partnerships	+				0
25	Deemed dividend income	+				0
26	Loss in equity of subsidiaries and affiliates	+				0
27	Loss on disposal of utility assets	+				0
28	Loss on disposal of non-utility assets	+				0
29	Depreciation in inventory -end of year	+				0
30	Depreciation and amortization adjustments	+				0
31	Dividends credited to investment account	+				0
32	Non-deductible meals	+	101,426			101,426
33	Non-deductible club dues	+	59,818			59,818
34	Non-deductible automobile costs	+				0
35	Donations - amount per books					0
36	Interest and penalties on unpaid taxes					0
37	Management bonuses unpaid after 180 days of year end					0
38	Imputed interest expense on Regulatory Assets					0
39	Ontario capital tax adjustments	+				0
40	Changes in Regulatory Asset balances	+				0
41	<i>Other Additions: (please explain in detail the nature of the item)</i>	+				0
42		+				0
43		+				0
44		+				0
45		+				0
46		+				0
47	Total Additions on which true-up does not apply	=	161,244	0		161,244
48						
49	Deduct:					
50						
51	CCA adjustments	-				0
52	CEC adjustments	-				0
53	Depreciation and amortization adjustments	-				0
54	Gain on disposal of assets per financial statements	-				0
55	Financing fee amortization - considered to be interest expense for PILs	-				0
56	Imputed interest income on Regulatory Assets	-	2,233,343			2,233,343
57	Donations - amount deductible for tax purposes	-				0
58	Income from joint ventures or partnerships	-				0
59		-				0
60		-				0
61		-				0
62		-				0
63		-				0
64	Ontario capital tax adjustments to current or prior year	-				0
65		-				0
66	Changes in Regulatory Asset balances	-				0
67		-				0
68	<i>Other deductions: (Please explain in detail the nature of the item)</i>	-				0
69		-				0
70		-				0
71		-				0
72		-				0
73	Total Deductions on which true-up does not apply	=	2,233,343	0		2,233,343

	A	B	C	D	E	F
1	PILs TAXES - EB-2012-0064					
2	Corporate Tax Rates					
3	Version 2009					
4	Exemptions, Deductions, or Thresholds					
5	Utility Name: TORONTO HYDRO-ELECTRIC SYSTEM LIMITED					
6	Reporting period: 2004					
7	Table 1					
8	Rates Used in 2002 RAM PILs Applications for 2002					
9	Income Range		0		200,001	
10	RAM 2002		to		to	>700,000
11		Year	200,000		700,000	
12	Income Tax Rate					
13	Proxy Tax Year	2002				
14	Federal (Includes surtax)					26.12%
15	and Ontario blended					12.50%
16	Blended rate					38.62%
17						
18	Capital Tax Rate		0.300%			
19	LCT rate		0.225%			
20	Surtax		1.12%			
21	Ontario Capital Tax Exemption **	MAX \$5MM	5,000,000			
22	Federal Large Corporations Tax Exemption **	MAX \$10MM	10,000,000			
23	**Exemption amounts must agree with the Board-approved 2002 RAM PILs filing					
24						
25	Table 2					
26	Expected Income Tax Rates for 2004 and Capital Tax Exemptions for 2004					
27	Income Range		0		200,001	
28	Expected Rates		to		to	>700,000
29		Year	200,000		700,000	
30	Income Tax Rate					
31	Current year	2004				
32	Federal (Includes surtax)					22.12%
33	Ontario					14.00%
34	Blended rate					36.12%
35						
36	Capital Tax Rate		0.300%			
37	LCT rate		0.200%			
38	Surtax		1.12%			
39	Ontario Capital Tax Exemption *** 2004	MAX \$5MM	5,000,000			
40	Federal Large Corporations Tax Exemption *** 2004	MAX \$50MM	50,000,000			
41	***Allocation of exemptions must comply with the Board's instructions regarding regulated activities.					
42						
43	Table 3					
44	Input Information from Utility's Actual 2004 Tax Returns					
45	Income Range		0		200,001	
46	Expected Rates		to		to	>700,000
47		Year	200,000		700,000	
48	Income Tax Rate					
49	Current year	2004				
50	Federal (Includes surtax)		0.00%		0.00%	22.12%
51	Ontario		0.00%		0.00%	14.00%
52	Blended rate		0.00%		0.00%	36.12%
53						
54	Capital Tax Rate		0.300%			
55	LCT rate		0.200%			
56	Surtax		1.12%			
57	Ontario Capital Tax Exemption *	MAX \$5MM	5,000,000			
58	Federal Large Corporations Tax Exemption *	MAX \$50MM	50,000,000			
59	* Include copies of the actual tax return allocation calculations in your submission: Ontario CT23 page 11; federal T2 Schedule 36					
60						

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	PILs TAXES - EB-2012-0064														
2	Analysis of PILs Tax Account 1562:														
3	Utility Name: TORONTO HYDRO-ELECTRIC SYSTEM LIMITED														
4	Reporting period: 2004														
5	Sign Convention: + for increase; - for decrease														
6															
7															
8	Year start:		01/10/2001		01/01/2002		01/01/2003		01/01/2004		01/01/2005		01/01/2006		
9	Year end:		31/12/2001		31/12/2002		31/12/2003		31/12/2004		31/12/2005		30/04/2006		Total
10															
11	Opening balance:	=	0		5,028,333		8,127,575		8,284,720		-619,716		-2,210,027		0
12	Board-approved PILs tax proxy from Decisions (1)	+/-	5,000,000		55,000,000		60,000,000		58,571,734				0		178,571,734
13	PILs proxy from April 1, 2005 - input 9/12 of amount														0
14	True-up Variance Adjustment Q4, 2001 (2)	+/-			-290,810										-290,810
15	True-up Variance Adjustment (3)	+/-					2,156,868		-6,024,420		-1,590,311				-5,457,863
16	Deferral Account Variance Adjustment Q4, 2001 (4)	+/-													0
17	Deferral Account Variance Adjustment (5)	+/-					-2,412,196		-3,807,479						-6,219,675
18	Adjustments to reported prior years' variances (6)	+/-													0
19	Carrying charges (7)	+/-	28,333		720,305		562,257		269,130						1,580,025
20	PILs billed to (collected from) customers (8)	-	0		-52,330,253		-60,149,784		-57,913,401						-170,393,438
21															
22	Ending balance: # 1562		<u>5,028,333</u>		<u>8,127,575</u>		<u>8,284,720</u>		<u>-619,716</u>		<u>-2,210,027</u>		<u>-2,210,027</u>		<u>-2,210,027</u>
23															
24															
25															
26	Uncollected PILs														
27															
28	NOTE: The purpose of this worksheet is to show the movement in Account 1562 which establishes the receivable from or liability to ratepayers.														
29	For explanation of Account 1562 please refer to Accounting Procedures Handbook for Electric Distribution Utilities and FAQ April 2003.														
30															
31	Please identify if Method 1, 2 or 3 was used to account for the PILs proxy and recovery. ANSWER: METHOD 3														
32															
33	(1) (i) From the Board's Decision - see Inclusion in Rates, Part III of the TAXCALC spreadsheet for Q4 2001 and 2002.														
34	Please insert the Q4, 2001 proxy in column C even though it was approved effective March 1, 2002.														
35	If the Board gave more than one decision in the year, calculate a weighted average proxy.														
36	(ii) If the Board approved different amounts, input the Board-approved amounts in cells C13 and E13.														
37	(iii) Column G - In 2003, the initial estimate should include the Q4 2001 PILs tax proxy and the 2002 PILs tax proxy.														
38	(iv) Column I - The Q4 2001 PILs tax proxy was removed from rates on April 1, 2004 and the 2002 PILs tax proxy remained.														
39	(v) Column K - The 2002 PILs tax proxy applies to January 1 to March 31, 2005, and the new 2005 PILs tax proxy from April 1 to December 31, 2005.														
40	(vi) Column M - The 2005 PILs tax proxy will be used for the period from January 1 to April 30, 2006.														
41															
42	(2) From the Ministry of Finance Variance Column, under Future True-ups, Part IV a, cell I132, of the TAXCALC spreadsheet. The Q4, 2001 proxy has to be trueed up in 2002, 2003 and for the period January 1- March 31, 2004. Input the variance in the whole year reconciliation.														
43															
44															
45	(3) From the Ministry of Finance Variance Column, under Future True-ups, Part IV a, cell I132, of the TAXCALC spreadsheet.														
46	The true-up will compare to the 2002 proxy for 2002, 2003, 2004 and January 1 to March 31, 2005.														
47															
48	(4) From the Ministry of Finance Variance Column, under Future True-ups, Part IV b, cell I181, of the TAXCALC spreadsheet. The Q4, 2001 proxy has to be trueed up in 2002, 2003 and for the period January 1- March 31, 2004. Input the deferral variance in the whole year reconciliation.														
49															
50															
51	(5) From the Ministry of Finance Variance Column, under Future True-ups, Part IV a, cell I181, of the TAXCALC spreadsheet.														
52	The true-up will compare to the 2002 proxy for 2002, 2003, 2004 and January 1 to March 31, 2005.														
53															
54	(6) The correcting entry should be shown in the year the entry was made. The true-up of the carrying charges will have to be reviewed.														
55															
56	(7) Carrying charges are calculated on a simple interest basis.														
57															
58	(8) (i) PILs collected from customers from March 1, 2002 to March 31, 2004 were based on a fixed charge and a volumetric charge recovery by class. The PILs rate components for Q4, 2001 and 2002 were calculated in the 2002 approved RAM on sheet 6 and sheet 8. In April 2004, the PILs recovery was based on the 2002 PILs tax proxy recovered by the volumetric rate by class as calculated on sheet 7 of the 2004 RAM.														
59	The 2005 PILs tax proxy is being recovered on a volumetric basis by class.														
60															
61															
62															
63	(ii) Collections should equal: (a) the actual volumes/ load (kWhs, kW, Kva) for the period (including net unbilled at period end), multiplied by the PILs volumetric proxy rates by class (from the Q4, 2001 and 2002 RAM worksheets) for 2002, 2003 and January 1 to March 31, 2004;														
64	plus, (b) customer counts by class in the same period multiplied by the PILs fixed charge rate components.														
65															
66															
67	In 2004, use the Board-approved 2002 PILs proxy, recovered on a volumetric basis by class as calculated by the 2004 RAM, sheet 7, for the period April 1 to December 31, 2004, and add this total to the results from the sentence above for January 1 to March 31, 2004.														
68															
69															
70	In 2005, use the Board-approved 2005 PILs proxy, recovered on a volumetric basis by class as calculated by the 2005 RAM, sheet 4, for the period April 1 to December 31, 2005. To this total, the 2004 volumetric PILs proxy rate by class should be used to calculate the recovery for the period January 1 to March 31, 2005.														
71															
72															
73															
74	(9) Any interim PILs recovery from Board Decisions will be recorded in APH Account # 1590. Final reconciliation of PILs proxy taxes will have to include amounts from 1562 and from 1590.														
75															

	A	B	C	D	E
1	PILs TAXES - EB-2012-0064				Version 2009.1
2	REGULATORY INFORMATION (REGINFO)				
3	Utility Name: TORONTO HYDRO-ELECTRIC SYSTEM LIMITED				Colour Code
4	Reporting period: 2005				Input Cell
5				Formula in Cell	
6	Days in reporting period:	365	days		
7	Total days in the calendar year:	365	days		
8	BACKGROUND				
10	Has the utility reviewed section 149(1) ITA to				
11	confirm that it is not subject to regular corporate				
12	tax (and therefore subject to PILs)?				
13			Y/N	Y	
14	Was the utility recently acquired by Hydro One				
15	and now subject to s.89 & 90 PILs?				
16			Y/N	N	
17	Is the utility a non-profit corporation?				
18	(If it is a non-profit corporation, please contact the Rates Manager at the OEB)				
19	Are the Ontario Capital Tax & Large Corporations Tax Exemptions				
20	shared among the corporate group?				
19		OCT	Y/N	N	
20		LCT	Y/N	N	
21	Please identify the % used to allocate the OCT and LCT exemptions in				
22	Cells C65 & C74 in the TAXCALC spreadsheet.				
21		OCT		100%	
22		LCT		100%	
23					
24	Accounting Year End				
24			Date	12-31-2005	
25					
26	MARR NO TAX CALCULATIONS				Regulatory
27	SHEET #7 FINAL RUD MODEL DATA				Income
28	(FROM 1999 FINANCIAL STATEMENTS)				
29	USE BOARD-APPROVED AMOUNTS				
30					
31	Rate Base (wires-only)			1,810,112,688	
32					
33	Common Equity Ratio (CER)			35.00%	
34					
35	1-CER			65.00%	
36					
37	Target Return On Equity			9.88%	
38					
39	Debt rate			6.80%	
40					
41	Market Adjusted Revenue Requirement			142,600,678	
42					
43	1999 return from RUD Sheet #7			23,304,000	23,304,000
44					
45	Total Incremental revenue			119,296,678	
46	Input: Board-approved dollar amounts phased-in				
47	Amount allowed in 2001			39,765,559	39,765,559
48	Amount allowed in 2002			39,765,559	39,765,559
49	Amount allowed in 2003 and 2004 (will be zero due to Bill 210				0
50	unless authorized by the Minister and the Board)				0
51	Amount allowed in 2005 - Third tranche of MARR re: CDM			39,765,559	39,765,559
52	Other Board-approved changes to MARR or incremental revenue				0
53					0
54	Total Regulatory Income				142,600,677
55					
56	Equity			633,539,441	
57					
58	Return at target ROE			62,593,697	
59					
60	Debt			1,176,573,247	
61					
62	Deemed interest amount in 100% of MARR			80,006,981	
63					
64	Phase-in of interest - Year 1 (2001)			35,385,561	
65	((D43+D47)/D41)*D61				
66	Phase-in of interest - Year 2 (2002)			57,696,271	
67	((D43+D47+D48)/D41)*D61				
68	Phase-in of interest - Year 3 (2003) and forward			57,696,271	
69	((D43+D47+D48)/D41)*D61 (due to Bill 210)				
70	Phase-in of interest - 2005			80,006,981	

	A	B	C	D	E	F	G
1	PILs TAXES - EB-2012-0064	ITEM	Initial Estimate		M of F Filing Variance K-C	M of F Filing Variance Explanation	Tax Returns
2	PILs DEFERRAL AND VARIANCE ACCOUNTS						
3	TAX CALCULATIONS (TAXCALC)						
4	("Wires-only" business - see Tab TAXREC)						
5		0					Version 2009.1
6	Utility Name: TORONTO HYDRO-ELECTRIC SYSTEM LIMITED						
7	Reporting period: 2005						
8							
9	Days in reporting period:	365	days				Column Brought From TAXREC
10	Total days in the calendar year:	365	days				
11							
12			\$		\$		\$
13							
14	I) CORPORATE INCOME TAXES						
15							
16	Regulatory Net Income REGINFO E53	1	142,600,677		62,416,243		205,016,920
17	BOOK TO TAX ADJUSTMENTS						
18	Additions:						
19	Depreciation & Amortization	2	106,229,000		18,758,458		124,987,458
20	Employee Benefit Plans - Accrued, Not Paid	3	9,886,000		-9,886,000		0
21	Tax reserves - beginning of year	4			0		0
22	Reserves from financial statements - end of year	4			116,997,819		116,997,819
23	Regulatory Adjustments - increase in income	5			0		0
24	Other Additions (See Tab entitled "TAXREC")						
25	"Material" Items from "TAXREC" worksheet	6			0		0
26	Other Additions (not "Material") "TAXREC"	6			0		0
27	"Material" Items from "TAXREC 2" worksheet	6			26,043,856		26,043,856
28	Other Additions (not "Material") "TAXREC 2"	6			840,871		840,871
29	Items on which true-up does not apply "TAXREC 3"				9,678,426		9,678,426
30	Deductions: Input positive numbers						
31	Capital Cost Allowance and CEC	7	76,692,530		36,663,215		113,355,745
32	Employee Benefit Plans - Paid Amounts	8	5,166,000		-5,166,000		0
33	Items Capitalized for Regulatory Purposes	9	0		0		0
34	Regulatory Adjustments - deduction for tax purposes in Item 5	10			0		0
35	Interest Expense Deemed/ Incurred	11	80,006,981		-1,477,429		78,529,552
36	Tax reserves - end of year	4			0		0
37	Reserves from financial statements - beginning of year	4			109,978,620		109,978,620
38	Contributions to deferred income plans	3			0		0
39	Contributions to pension plans	3			0		0
40	Interest capitalized for accounting but deducted for tax	11			0		0
41	Other Deductions (See Tab entitled "TAXREC")						
42	"Material" Items from "TAXREC" worksheet	12			0		0
43	Other Deductions (not "Material") "TAXREC"	12			0		0
44	Material Items from "TAXREC 2" worksheet	12			29,298,263		29,298,263
45	Other Deductions (not "Material") "TAXREC 2"	12			1,481,431		1,481,431
46	Items on which true-up does not apply "TAXREC 3"				558,336		558,336
47	CDM 2005 incremental OM&A expenses per 2005 PILs model		4,895,000		-4,895,000		
48	TAXABLE INCOME/ (LOSS)		91,955,166		58,408,237		150,363,403
49						Before loss C/F	
50	BLENDED INCOME TAX RATE						
51	Tab Tax Rates - Regulatory from Table 1; Actual from Table 3	13	36.12%		0.0000%		36.12%
52	REGULATORY INCOME TAX						
53			33,214,206		20,686,831		Actual 53,901,037
54	Miscellaneous Tax Credits						
55		14			480,248		Actual 480,248
56	Total Regulatory Income Tax						
57			33,214,206		20,206,583		Actual 53,420,789
58	III) CAPITAL TAXES						
59	Ontario						
60	Base	15	1,810,112,688		309,209,207		2,119,321,895
61	Less: Exemption -Tax Rates - Regulatory, Table 1; Actual, Table 3	16	7,500,000		0		7,500,000
62	Taxable Capital		1,802,612,688		309,209,207		2,111,821,895
63	Rate - Tax Rates - Regulatory, Table 1; Actual, Table 3						
64		17	0.3000%		0.0000%		0.3000%
65	Ontario Capital Tax						
66			5,407,838		927,628		6,335,466
67	Federal Large Corporations Tax						
68	Base	18	1,810,112,688		218,649,135		2,028,761,823
69	Less: Exemption -Tax Rates - Regulatory, Table 1; Actual, Table 3	19	50,000,000		0		50,000,000
70	Taxable Capital		1,760,112,688		218,649,135		1,978,761,823
71	Rate - Tax Rates - Regulatory, Table 1; Actual, Table 3						
72		20	0.1750%		0.0000%		0.1750%
73	Gross Amount of LCT before surtax offset (Taxable Capital x Rate)						
74			3,080,197		382,636		3,462,833
75	Less: Federal Surtax 1.12% x Taxable Income	21	1,029,898		649,696		1,679,594
76	Net LCT						
77			2,050,299		-267,060		1,783,239

	A	B	C	D	E	F	G
		ITEM	Initial Estimate		M of F Filing Variance K-C	M of F Filing Variance Explanation	Tax Returns
							Version 2009.1
							Column Brought From TAXREC
					\$	\$	\$
1	PILs TAXES - EB-2012-0064						
2	PILs DEFERRAL AND VARIANCE ACCOUNTS						
3	TAX CALCULATIONS (TAXCALC)						
4	("Wires-only" business - see Tab TAXREC)						
5		0					
6	Utility Name: TORONTO HYDRO-ELECTRIC SYSTEM LIMITED						
7	Reporting period: 2005						
8							
9	Days in reporting period:	365	days				
10	Total days in the calendar year:	365	days				
11							
12							
13							
86	III) INCLUSION IN RATES						
87							
88	Income Tax Rate used for gross- up		36.12%				
89							
90	Income Tax (proxy tax is grossed-up)	22	51,994,687			Actual 2005	53,420,789
91	LCT (proxy tax is grossed-up)	23	3,209,611			Actual 2005	1,783,239
92	Ontario Capital Tax (no gross-up since it is deductible)	24	5,407,838			Actual 2005	6,335,466
93							
94							
95	Total PILs for Rate Adjustment -- AGREES WITH 2005 RAM DECISION	25	60,612,136			Actual 2005	61,539,494
96							
97							
98							
99	IV) FUTURE TRUE-UPS						
100	IV a) Calculation of the True-up Variance				DR/(CR)		
101	In Additions:						
102	Employee Benefit Plans - Accrued, Not Paid	3			-9,886,000		
103	Tax reserves deducted in prior year	4			0		
104	Reserves from financial statements-end of year	4			116,997,819		
105	Regulatory Adjustments	5			0		
106	Other additions "Material" Items TAXREC	6			0		
107	Other additions "Material" Items TAXREC 2	6			26,043,856		
108	In Deductions - positive numbers						
109	Employee Benefit Plans - Paid Amounts	8			-5,166,000		
110	Items Capitalized for Regulatory Purposes	9			0		
111	Regulatory Adjustments	10			0		
112	Interest Adjustment for tax purposes (See Below - cell I204)	11			0		
113	Tax reserves claimed in current year	4			0		
114	Reserves from F/S beginning of year	4			109,978,620		
115	Contributions to deferred income plans	3			0		
116	Contributions to pension plans	3			0		
117	Other deductions "Material" Items TAXREC	12			0		
118	Other deductions "Material" Item TAXREC 2	12			29,298,263		
119							
120	Total TRUE-UPS before tax effect	26			= -955,208		
121							
122	Income Tax Rate from 2005 Utility's tax return				x 36.12%		
123							
124	Income Tax Effect on True-up adjustments				= (345,021)		
125							
126	Less: Miscellaneous Tax Credits	14			480,248		
127							
128	Total Income Tax on True-ups				(825,269)		
129							
130	Income Tax Rate used for gross-up (exclude surtax)				35.00%		
131							
132	TRUE-UP VARIANCE ADJUSTMENT						
133							
134	IV b) Calculation of the Deferral Account Variance caused by changes in legislation						
135							
136	REGULATORY TAXABLE INCOME /(LOSSES) (as reported in the initial estimate column)				= 91,955,166		
137							
138	REVISED CORPORATE INCOME TAX RATE				x 36.12%		
139							
140	REVISED REGULATORY INCOME TAX				= 33,214,206		
141							
142	Less: Revised Miscellaneous Tax Credits				-		
143							
144	Total Revised Regulatory Income Tax				= 33,214,206		
145							
146	Less: Regulatory Income Tax reported in the Initial Estimate Column (Cell C58)				- 33,214,206		
147							
148	Regulatory Income Tax Variance				= 0		
149							

	A	B	C	D	E	F	G
1	PILs TAXES - EB-2012-0064	ITEM	Initial		M of F	M of F	Tax
2	PILs DEFERRAL AND VARIANCE ACCOUNTS		Estimate		Filing	Filing	Returns
3	TAX CALCULATIONS (TAXCALC)				Variance	Variance	
4	("Wires-only" business - see Tab TAXREC)				K-C	Explanation	
5		0					Version 2009.1
6	Utility Name: TORONTO HYDRO-ELECTRIC SYSTEM LIMITED						
7	Reporting period: 2005						
8							
9	Days in reporting period:	365	days				Column
10	Total days in the calendar year:	365	days				Brought
11							From
12					\$		TAXREC
13							\$
150	Ontario Capital Tax						
151	Base			=	1,810,112,688		
152	Less: Exemption from tab Tax Rates, Table 2, cell C39			-	7,500,000		
153	Revised deemed taxable capital			=	1,802,612,688		
154							
155	Rate - Tab Tax Rates cell C54			x	0.3000%		
156							
157	Revised Ontario Capital Tax			=	5,407,838		
158	Less: Ontario Capital Tax reported in the initial estimate column (Cell C70)			-	5,407,838		
159	Regulatory Ontario Capital Tax Variance			=	0		
160							
161	Federal LCT						
162	Base			=	1,810,112,688		
163	Less: Exemption from tab Tax Rates, Table 2, cell C40			-	50,000,000		
164	Revised Federal LCT			=	1,760,112,688		
165							
166	Rate (as a result of legislative changes) tab 'Tax Rates' cell C51				0.1750%		
167							
168	Gross Amount				3,080,197		
169	Less: Federal surtax			-	1,029,898		
170	Revised Net LCT			=	2,050,299		
171							
172	Less: Federal LCT reported in the initial estimate column (Cell C82)			-	2,050,299		
173	Regulatory Federal LCT Variance			=	0		
174							
175	Actual Income Tax Rate used for gross-up (exclude surtax)				35.00%		
176							
177	Income Tax (grossed-up)			+	0		
178	LCT (grossed-up)			+	0		
179	Ontario Capital Tax			+	0		
180							
181	DEFERRAL ACCOUNT VARIANCE ADJUSTMENT			=	0		
182							
183	TRUE-UP VARIANCE (from cell I130)			+	(1,269,645)		
184							
185	Total Deferral Account Entry (Positive Entry = Debit)			=	(1,269,645)		
186	<i>(Deferral Account Variance + True-up Variance)</i>						
187							
188							
189							
190	V) INTEREST PORTION OF TRUE-UP						
191	Variance Caused By Phase-in of Deemed Debt						
192							
193	Total deemed interest (REGINFO)				80,006,981		
194	Interest phased-in (Cell C36)				80,006,981		
195							
196	Variance due to phase-in of debt component of MARR in rates				0		
197	according to the Board's decision						
198							
199	Other Interest Variances (i.e. Borrowing Levels						
200	Above Deemed Debt per Rate Handbook)						
201	Interest deducted on MoF filing (Cell K36+K41)				78,529,552		
202	Total deemed interest (REGINFO CELL D61)				80,006,981		
203							
204	Variance caused by excess debt				0		
205							
206	Interest Adjustment for Tax Purposes (carry forward to Cell I110)				0		
207							
208	Total Interest Variance				0		

	A	B	C	D	E
1	PILs TAXES - EB-2012-0064	LINE	M of F	Non-wires	Wires-only
2	TAX RETURN RECONCILIATION (TAXREC)		Corporate	Eliminations	Tax
3	(for "wires-only" business - see s. 72 OEB Act)		Tax		Return
4		0	Return		
5					Version 2009.1
6	Section A: Identification:				
7	Utility Name: TORONTO HYDRO-ELECTRIC SYSTEM LIMITED				
8	Reporting period: 2005				
9	Taxation Year's start date:		01/01/2005		
10	Taxation Year's end date:		31/12/2005		
11	Number of days in taxation year:		365	days	
12					
13	Please enter the Materiality Level :		1,641,325	< - enter materiality level	
14	(0.25% x Rate Base x CER)	Y/N	N		
15	(0.25% x Net Assets)	Y/N	Y		
16	Or other measure (please provide the basis of the amount)	Y/N	N		
17	Does the utility carry on non-wires related operation?	Y/N	N		
18	(Please complete the questionnaire in the Background questionnaire worksheet.)				
19					
20	Note: Carry forward Wires-only Data to Tab "TAXCALC" Column K				
21					
22	Section B: Financial statements data:				
23	<i>Input unconsolidated financial statement data submitted with Tax returns.</i>				
24	<i>The actual categories of the income statements should be used.</i>				
25	<i>If required please change the descriptions except for amortization, interest expense and provision for income tax</i>				
26					
27	<i>Please enter the non-wire operation's amount as a positive number, the program automatically treats all amounts</i>				
28	<i>in the "non-wires elimination column" as negative values in TAXREC and TAXREC2.</i>				
29					
30	Income:				
31	Energy Sales	+			0
32	Distribution Revenue	+	2,686,750,529		2,686,750,529
33	Other Income	+	26,031,955		26,031,955
34	Miscellaneous income	+	10,485,354		10,485,354
35		+			0
36	Revenue should be entered above this line				
37					
38	Costs and Expenses:				
39	Cost of energy purchased	-	2,224,034,095		2,224,034,095
40	Administration	-			0
41	Customer billing and collecting	-			0
42	Operations and maintenance	-	161,413,363		161,413,363
43	Amortization	-	124,987,458		124,987,458
44	Ontario Capital Tax	-	5,725,556		5,725,556
45	Reg Assets	-			0
46	Financing expenses	-	2,090,446		2,090,446
47		-			0
48		-			0
49					
50	Net Income Before Interest & Income Taxes EBIT	=	205,016,920	0	205,016,920
51	Less: Interest expense for accounting purposes	-	78,529,552		78,529,552
52	Provision for payments in lieu of income taxes	-	61,113,786		61,113,786
53	Net Income (loss)	=	65,373,582	0	65,373,582
54	<i>(The Net Income (loss) on the MoF column should equal to the net income (loss) per financial statements on Schedule 1 of the tax return.)</i>				
55					

	A	B	C	D	E
1	PILs TAXES - EB-2012-0064	LINE	M of F	Non-wires	Wires-only
2	TAX RETURN RECONCILIATION (TAXREC)		Corporate	Eliminations	Tax
3	(for "wires-only" business - see s. 72 OEB Act)		Tax		Return
4		0	Return		
5					Version 2009.1
56	Section C: Reconciliation of accounting income to taxable income				
57	<i>From T2 Schedule 1</i>				
58	BOOK TO TAX ADDITIONS:				
59	Provision for income tax	+	61,113,786	0	61,113,786
60	Federal large corporation tax	+			0
61	Depreciation & Amortization	+	124,987,458	0	124,987,458
62	Employee benefit plans-accrued, not paid	+		0	0
63	Tax reserves - beginning of year	+	0	0	0
64	Reserves from financial statements- end of year	+	116,997,819	0	116,997,819
65	Regulatory adjustments on which true-up may apply (see A66)	+			0
66	Items on which true-up does not apply "TAXREC 3"		9,678,426	0	9,678,426
67	Material addition items from TAXREC 2	+	26,043,856	0	26,043,856
68	Other addition items (not Material) from TAXREC 2	+	840,871	0	840,871
69					
70	<i>Subtotal</i>		339,662,216	0	339,662,216
71					
72	<i>Other Additions: (Please explain the nature of the additions)</i>				
73	Recapture of CCA	+			0
74	Non-deductible meals and entertainment expense	+			0
75	Capital items expensed	+			0
76	DEPRECIATION DIFFERENCE	+			0
77		+			0
78		+			0
79		+			0
80	<i>Total Other Additions</i>	=	0	0	0
81					
82	Total Additions	=	339,662,216	0	339,662,216
83					
84	Recap Material Additions:				
85			0	0	0
86			0	0	0
87			0	0	0
88			0	0	0
89			0	0	0
90			0	0	0
91			0	0	0
92	<i>Total Other additions >materiality level</i>		0	0	0
93	<i>Other additions (less than materiality level)</i>		0	0	0
94	Total Other Additions		0	0	0
95					

	A	B	C	D	E
1	PILs TAXES - EB-2012-0064	LINE	M of F	Non-wires	Wires-only
2	TAX RETURN RECONCILIATION (TAXREC)		Corporate	Eliminations	Tax
3	(for "wires-only" business - see s. 72 OEB Act)		Tax		Return
4		0	Return		
5					Version 2009.1
96	BOOK TO TAX DEDUCTIONS:				
97	Capital cost allowance	-	112,131,793		112,131,793
98	Cumulative eligible capital deduction	-	1,223,952		1,223,952
99	Employee benefit plans-paid amounts	-			0
100	Items capitalized for regulatory purposes	-			0
101	Regulatory adjustments :	-			0
102	CCA	-			0
103	other deductions	-			0
104	Tax reserves - end of year	-	0	0	0
105	Reserves from financial statements- beginning of year	-	109,978,620	0	109,978,620
106	Contributions to deferred income plans	-			0
107	Contributions to pension plans	-			0
108	Items on which true-up does not apply "TAXREC 3"		558,336	0	558,336
109	Interest capitalized for accounting deducted for tax	-			0
110	Material deduction items from TAXREC 2	-	29,298,263	0	29,298,263
111	Other deduction items (not Material) from TAXREC 2	-	1,481,431	0	1,481,431
112					
113	Subtotal	=	254,672,395	0	254,672,395
114	Other deductions (Please explain the nature of the deductions)				
115	Charitable donations - tax basis	-			0
116	Gain on disposal of assets	-			0
117		-			0
118		-			0
119		-			0
120	Total Other Deductions	=	0	0	0
121					
122	Total Deductions	=	254,672,395	0	254,672,395
123					
124	Recap Material Deductions:				
125			0	0	0
126			0	0	0
127			0	0	0
128			0	0	0
129			0	0	0
130	Total Other Deductions exceed materiality level		0	0	0
131	Other Deductions less than materiality level		0	0	0
132	Total Other Deductions		0	0	0
133					
134	TAXABLE INCOME	=	150,363,403	0	150,363,403

	A	B	C	D	E
1	PILs TAXES - EB-2012-0064	LINE	M of F	Non-wires	Wires-only
2	TAX RETURN RECONCILIATION (TAXREC)		Corporate	Eliminations	Tax
3	(for "wires-only" business - see s. 72 OEB Act)		Tax		Return
4		0	Return		
5					Version 2009.1
135	DEDUCT:				
136	Non-capital loss applied positive number	-			0
137	Net capital loss applied positive number	-	399,695		399,695
138					0
139	NET TAXABLE INCOME	=	149,963,708	0	149,963,708
140					
141	FROM ACTUAL TAX RETURNS				
142	Net Federal Income Tax (Must agree with tax return)	+	33,053,639		33,053,639
143	Net Ontario Income Tax (Must agree with tax return)	+	20,847,398		20,847,398
144	Subtotal	=	53,901,037	0	53,901,037
145	Less: Miscellaneous tax credits (Must agree with tax returns)	-	480,248		480,248
146	Total Income Tax	=	53,420,789	0	53,420,789
147					
148	FROM ACTUAL TAX RETURNS				
149	Net Federal Income Tax Rate (Must agree with tax return)		22.12%		22.12%
150	Net Ontario Income Tax Rate (Must agree with tax return)		14.00%		14.00%
151	Blended Income Tax Rate		36.12%	*****	36.12%
152					
153	Section F: Income and Capital Taxes				
154					
155	RECAP				
156	Total Income Taxes	+	53,420,789	0	53,420,789
157	Ontario Capital Tax	+	6,335,466		6,335,466
158	Federal Large Corporations Tax	+	1,783,239		1,783,239
159					
160	Total income and capital taxes	=	61,539,494	0	61,539,494

	A	B	C	D	E
1	PILs TAXES - EB-2012-0064	LINE	M of F	Non-wires	Wires-only
2	Tax and Accounting Reserves		Corporate	Eliminations	Tax
3	For MoF Column of TAXCALC		Tax		Return
4	(for "wires-only" business - see s. 72 OEB Act)		Return		
5		0			Version 2009.1
6					
7	Utility Name: TORONTO HYDRO-ELECTRIC SYSTEM LIMITED				
8	Reporting period: 2005				
9					
10	TAX RESERVES				
11					
12	Beginning of Year:				
13					0
14	Reserve for doubtful accounts ss. 20(1)(l)				0
15	Reserve for goods & services ss.20(1)(m)				0
16	Reserve for unpaid amounts ss.20(1)(n)				0
17	Debt and share issue expenses ss.20(1)(e)				0
18	Other - Please describe				0
19	Other - Please describe				0
20					0
21					0
22	Total (carry forward to the TAXREC worksheet)		0	0	0
23					
24	End of Year:				
25					0
26	Reserve for doubtful accounts ss. 20(1)(l)				0
27	Reserve for goods & services ss.20(1)(m)				0
28	Reserve for unpaid amounts ss.20(1)(n)				0
29	Debt and share issue expenses ss.20(1)(e)				0
30	Other - Please describe				0
31	Other - Please describe				0
32					0
33					0
34	Insert line above this line				
35	Total (carry forward to the TAXREC worksheet)		0	0	0
36					
37					
38	FINANCIAL STATEMENT RESERVES				
39					
40	Beginning of Year:				
41					0
42					0
43	Environmental				0
44	Allowance for doubtful accounts		6,570		6,570
45	Inventory obsolescence		1,575,050		1,575,050
46	Property taxes				0
47	Other - Post employment benefits		108,397,000		108,397,000
48	Other-Holdback payable				0
49					0
50	Total (carry forward to the TAXREC worksheet)		109,978,620	0	109,978,620
51					
52	End of Year:				
53					0
54					0
55	Environmental				0
56	Allowance for doubtful accounts		255,159		255,159
57	Inventory obsolescence		2,064,675		2,064,675
58	Property taxes				0
59	Other - Post employment benefits		114,575,985		114,575,985
60	Other - Holdback payable				0
61	Other-termination accrual		102,000		102,000
62	Insert line above this line				
63	Total (carry forward to the TAXREC worksheet)		116,997,819	0	116,997,819

Tax Reserves

	A	B	C	D	E	F
1						
2	PILs TAXES - EB-2012-0064					
3	TAX RETURN RECONCILIATION (TAXREC 2)	LINE	M of F	Non-wires	Wires-only	
4	(for "wires-only" business - see s. 72 OEB Act)		Corporate	Eliminations	Tax	
5	RATEPAYERS ONLY		Tax		Return	
6	Shareholder-only Items should be shown on TAXREC 3		Return			Version 2009.1
7						
8	Utility Name: TORONTO HYDRO-ELECTRIC SYSTEM LIMITED					
9	Reporting period: 2005					
10	Number of days in taxation year:		365			
11	Materiality Level:		1,641,325			
12						
13						
14						
15	Section C: Reconciliation of accounting income to taxable income					
16	Add:					
17		+				0
18	Gain on sale of eligible capital property	+				0
19	Loss on disposal of assets	+				0
20	Charitable donations (Only if it benefits ratepayers)	+				0
21	Taxable capital gains	+	1,309,959			1,309,959
22		+				0
23	Scientific research expenditures deducted	+				0
24	per financial statements	+	1,714,361			1,714,361
25	Capitalized interest	+				0
26	Soft costs on construction and renovation of buildings	+				0
27	Capital items expensed	+				0
28	Debt issue expense	+				0
29	Financing fees deducted in books	+	484,528			484,528
30	Gain on settlement of debt	+				0
31	Interest paid on income debentures	+				0
32	Recapture of SR&ED expenditures	+				0
33	Share issue expense	+				0
34	Write down of capital property	+				0
35	Amounts received in respect of qualifying environment trust	+				0
36	Provision for bad debts	+				0
37		+				0
38	<i>Other Additions: (please explain in detail the nature of the item)</i>	+				0
39	Ontario specified tax credit subject to tax	+	109,836			109,836
40	Interest expense re capital lease obligations	+	2,830			2,830
41	Asset retirement obligation- accretion expense	+	243,677			243,677
42		+				0
43		+				0
44	Reversal of bad debt deduction for tax purposes on GST recovered	+	1,802,791			1,802,791
45	Deferred revenue- 12(1)(a) inclusion	+	21,216,745			21,216,745
46	Total Additions	=	26,884,727	0		26,884,727
47						

	A	B	C	D	E	F
1						
2	PILs TAXES - EB-2012-0064					
3	TAX RETURN RECONCILIATION (TAXREC 2)	LINE	M of F	Non-wires	Wires-only	
4	(for "wires-only" business - see s. 72 OEB Act)		Corporate	Eliminations	Tax	
5	RATEPAYERS ONLY		Tax		Return	
6	Shareholder-only Items should be shown on TAXREC 3		Return			Version 2009.1
7						
8	Utility Name: TORONTO HYDRO-ELECTRIC SYSTEM LIMITED					
9	Reporting period: 2005					
10	Number of days in taxation year:			365		
11	Materiality Level:			1,641,325		
12						
13						
48	Recap of Material Additions:					
49				0	0	0
50				0	0	0
51				0	0	0
52				0	0	0
53	Taxable capital gain-net against accounting gain		1,309,959	0	0	0
54				0	0	0
55				0	0	0
56	Scientific research expenditures deducted		1,714,361	0	1,714,361	
57				0	0	0
58				0	0	0
59				0	0	0
60				0	0	0
61				0	0	0
62				0	0	0
63				0	0	0
64				0	0	0
65				0	0	0
66				0	0	0
67				0	0	0
68				0	0	0
69				0	0	0
70				0	0	0
71				0	0	0
72				0	0	0
73				0	0	0
74				0	0	0
75	Reversal of bad debt deduction for tax purposes on GST recovered		1,802,791	0	1,802,791	
76	Deferred revenue- 12(1)(a) inclusion		21,216,745	0	21,216,745	
77	Total Material additions		26,043,856	0	24,733,897	
78	Other additions less than materiality level		840,871	0	2,150,830	
79	Total Additions		26,884,727	0	26,884,727	

	A	B	C	D	E	F
1						
2	PILs TAXES - EB-2012-0064					
3	TAX RETURN RECONCILIATION (TAXREC 2)	LINE	M of F	Non-wires	Wires-only	
4	(for "wires-only" business - see s. 72 OEB Act)		Corporate	Eliminations	Tax	
5	RATEPAYERS ONLY		Tax		Return	
6	Shareholder-only Items should be shown on TAXREC 3		Return			Version 2009.1
7						
8	Utility Name: TORONTO HYDRO-ELECTRIC SYSTEM LIMITED					
9	Reporting period: 2005					
10	Number of days in taxation year:		365			
11	Materiality Level:		1,641,325			
12						
13						
80						
81	Deduct:					
82	Gain on disposal of assets per f/s, net of taxable capital gain	-	2,964,336		2,964,336	
83	Dividends not taxable under section 83	-			0	
84	Terminal loss from Schedule 8	-			0	
85	Depreciation in inventory, end of prior year	-			0	
86	Scientific research expenses claimed in year from Form T661	-	1,445,173		1,445,173	
87	Bad debts	-			0	
88	Book income of joint venture or partnership	-			0	
89	Equity in income from subsidiary or affiliates	-			0	
90	Contributions to a qualifying environment trust	-			0	
91	Other income from financial statements	-			0	
92	Post employment benefits capitalized to fixed assets for acc'ing purposes	-	3,672,000		3,672,000	
93	Deferred revenue -20(1)(m) deduction	-	21,216,754		21,216,754	
94	<i>Other deductions: (Please explain in detail the nature of the item)</i>	-			0	
95		-			0	
96	Asset retirement obligation- cash payment deducted for tax	-	351,057		351,057	
97	Debt financing fees- deducted for tax S 20(1)(e)	-	1,121,325		1,121,325	
98	Lease payments	-	9,049		9,049	
99	Total Deductions	=	30,779,694	0	30,779,694	
100						
101	Recap of Material Deductions:					
102	Gain on disposal of assets per f/s, net of taxable capital gain		2,964,336	0	2,964,336	
103			0	0	0	
104			0	0	0	
105			0	0	0	
106	Scientific research expenses claimed for tax -net against add back		1,445,173	0	1,445,173	
107			0	0	0	
108			0	0	0	
109			0	0	0	
110			0	0	0	
111			0	0	0	
112	Post employment benefits capitalized to fixed assets for acc'ing purposes		3,672,000	0	3,672,000	
113	Deferred revenue -20(1)(m) deduction		21,216,754	0	21,216,754	
114			0	0	0	
115			0	0	0	
116			0	0	0	
117			0	0	0	
118			0	0	0	
119	Total Deductions exceed materiality level		29,298,263	0	29,298,263	
120	Other deductions less than materiality level		1,481,431	0	1,481,431	
121	Total Deductions		30,779,694	0	30,779,694	
122						

	A	B	C	D	E
1					
2	PILs TAXES - EB-2012-0064				
3	TAX RETURN RECONCILIATION (TAXREC 3)				
4	Shareholder-only Items should be shown on TAXREC 3				
5	<u>ITEMS ON WHICH TRUE-UP DOES NOT APPLY</u>				
6	(for "wires-only" business - see s. 72 OEB Act)				
7		0			
8	Utility Name: TORONTO HYDRO-ELECTRIC SYSTEM LIMITED				Version 2009.1
9					
10					
11	Reporting period: 2005				
12	Number of days in taxation year:		365		
13					
14	Section C: Reconciliation of accounting income to taxable income				
15					
16	Section C: Reconciliation of accounting income to taxable income				
17	Add:				
18					
19	Recapture of capital cost allowance	+			0
20	CCA adjustments	+			0
21	CEC adjustments	+			0
22	Gain on sale of non-utility eligible capital property	+			0
23	Gain on sale of utility eligible capital property	+			0
24	Loss from joint ventures or partnerships	+			0
25	Deemed dividend income	+			0
26	Loss in equity of subsidiaries and affiliates	+			0
27	Loss on disposal of utility assets	+			0
28	Loss on disposal of non-utility assets	+			0
29	Depreciation in inventory -end of year	+			0
30	Depreciation and amortization adjustments	+			0
31	Dividends credited to investment account	+			0
32	Non-deductible meals	+	144,667		144,667
33	Non-deductible club dues	+	65,882		65,882
34	Non-deductible automobile costs	+			0
35	Donations - amount per books				0
36	Interest and penalties on unpaid taxes		800		800
37	Management bonuses unpaid after 180 days of year end				0
38	Imputed interest expense on Regulatory Assets				0
39	Ontario capital tax adjustments	+			0
40	Changes in Regulatory Asset balances	+	9,467,077		9,467,077
41	<i>Other Additions: (please explain in detail the nature of the item)</i>	+			0
42		+			0
43		+			0
44		+			0
45		+			0
46		+			0
47	Total Additions on which true-up does not apply	=	9,678,426	0	9,678,426
48					
49	Deduct:				
50					
51	CCA adjustments	-			0
52	CEC adjustments	-			0
53	Depreciation and amortization adjustments	-			0
54	Gain on disposal of assets per financial statements	-			0
55	Financing fee amortization - considered to be interest expense for PILs	-			0
56	Imputed interest income on Regulatory Assets	-	558,336		558,336
57	Donations - amount deductible for tax purposes	-			0
58	Income from joint ventures or partnerships	-			0
59		-			0
60		-			0
61		-			0
62		-			0
63		-			0
64	Ontario capital tax adjustments to current or prior year	-			0
65		-			0
66	Changes in Regulatory Asset balances	-			0
67		-			0
68	<i>Other deductions: (Please explain in detail the nature of the item)</i>	-			0
69		-			0
70		-			0
71		-			0
72		-			0
73	Total Deductions on which true-up does not apply	=	558,336	0	558,336

	A	B	C	D	E	F	G
1	PILs TAXES - EB-2012-0064						
2	Corporate Tax Rates						Version 2009.1
3	Exemptions, Deductions, or Thresholds						
4	Utility Name: TORONTO HYDRO-ELECTRIC SYSTEM LIMITED						
5	Reporting period: 2005						
6							
7	Table 1						
8	Rates Used in 2005 RAM PILs Applications for 2005						
9	Income Range		0		200,001		
10	RAM 2002		to		to		>700,000
11		Year	200,000		700,000		
12	Income Tax Rate						
13	Proxy Tax Year	2005					
14	Federal (Includes surtax)						22.12%
15	and Ontario blended						14.00%
16	Blended rate						36.12%
17							
18	Capital Tax Rate		0.300%				
19	LCT rate		0.175%				
20	Surtax		1.12%				
21	Ontario Capital Tax Exemption **	MAX \$7.5MM	7,500,000				
22	Federal Large Corporations Tax Exemption **	MAX \$50MM	50,000,000				
23	**Exemption amounts must agree with the Board-approved 2005 RAM PILs filing						
24							
25	Table 2						
26	Expected Income Tax Rates for 2005 and Capital Tax Exemptions for 2005						
27	Income Range		0		200,001		
28	Expected Rates		to		to		>700,000
29		Year	200,000		700,000		
30	Income Tax Rate						
31	Current year	2005					
32	Federal (Includes surtax)						22.12%
33	Ontario						14.00%
34	Blended rate						36.12%
35							
36	Capital Tax Rate		0.300%				
37	LCT rate		0.175%				
38	Surtax		1.12%				
39	Ontario Capital Tax Exemption ***	MAX \$7.5MM	7,500,000				
40	Federal Large Corporations Tax Exemption ***	MAX \$50MM	50,000,000				
41	*** Allocation of exemptions must comply with the Board's instructions regarding regulated activities.						
42							
43	Table 3						
44	Input Information from Utility's Actual 2005 Tax Returns						
45	Income Range		0		200,001		
46			to		to		>700,000
47		Year	200,000		700,000		
48	Income Tax Rate						
49	Current year	2005					
50	Federal (Includes surtax)						22.12%
51	Ontario						14.00%
52	Blended rate						36.12%
53							
54	Capital Tax Rate		0.300%				
55	LCT rate		0.175%				
56	Surtax		1.12%				
57	Ontario Capital Tax Exemption *	MAX \$7.5MM	7,500,000				
58	Federal Large Corporations Tax Exemption *	MAX \$50MM	50,000,000				
59	* Include copies of the actual tax return allocation calculations in your submission: Ontario CT23 page 11; federal T2 Schedule 36						
60							

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	PILs TAXES - EB-2012-0064														
2	Analysis of PILs Tax Account 1562:														
3	Utility Name: TORONTO HYDRO-ELECTRIC SYSTEM LIMITED														
4	Reporting period: 2005														
5	Sign Convention: + for increase; - for decrease														
6															
7															
8	Year start:		01/10/2001	01/01/2002	01/01/2003	01/01/2004	01/01/2005	01/01/2006							
9	Year end:		31/12/2001	31/12/2002	31/12/2003	31/12/2004	31/12/2005	30/04/2006	Total						
10															
11	Opening balance:	=	0	5,028,333	8,127,575	8,284,720	-619,716	-3,677,179	0						
12	Board-approved PILs tax proxy from Decisions (1)	+/-	5,000,000	55,000,000	60,000,000	58,571,734	60,109,102	0	238,680,836						
13	PILs proxy from April 1, 2005 - input 9/12 of amount								0						
14	True-up Variance Adjustment Q4, 2001 (2)	+/-		-290,810					-290,810						
15	True-up Variance Adjustment (3)	+/-			2,156,868	-6,024,420	-1,590,311	-1,269,645	-6,727,508						
16	Deferral Account Variance Adjustment Q4, 2001 (4)								0						
17	Deferral Account Variance Adjustment (5)	+/-			-2,412,196	-3,807,479	0		-6,219,675						
18	Adjustments to reported prior years' variances (6)	+/-							0						
19	Carrying charges (7)	+/-	28,333	720,305	562,257	269,130	-223,086		1,356,939						
20	PILs billed to (collected from) customers (8)	-	0	-52,330,253	-60,149,784	-57,913,401	-61,353,168		-231,746,606						
21															
22	Ending balance: # 1562		5,028,333	8,127,575	8,284,720	-619,716	-3,677,179	-4,946,824	-4,946,824						
23															
24															
25															
26	Uncollected PILs														
27															
28	NOTE: The purpose of this worksheet is to show the movement in Account 1562 which establishes the receivable from or liability to ratepayers.														
29	For explanation of Account 1562 please refer to Accounting Procedures Handbook for Electric Distribution Utilities and FAQ April 2003.														
30															
31	Please identify if Method 1, 2 or 3 was used to account for the PILs proxy and recovery. ANSWER: METHOD 3														
32															
33	(1) (i) From the Board's Decision - see Inclusion in Rates, Part III of the TAXCALC spreadsheet for Q4 2001 and 2002.														
34	Please insert the Q4, 2001 proxy in column C even though it was approved effective March 1, 2002.														
35	If the Board gave more than one decision in the year, calculate a weighted average proxy.														
36	(ii) If the Board approved different amounts, input the Board-approved amounts in cells C13 and E13.														
37	(iii) Column G - In 2003, the initial estimate should include the Q4 2001 PILs tax proxy and the 2002 PILs tax proxy.														
38	(iv) Column I - The Q4 2001 PILs tax proxy was removed from rates on April 1, 2004 and the 2002 PILs tax proxy remained.														
39	(v) Column K - The 2002 PILs tax proxy applies to January 1 to March 31, 2005, and the new 2005 PILs tax proxy from April 1 to December 31, 2005.														
40	(vi) Column M - The 2005 PILs tax proxy will used for the period from January 1 to April 30, 2006.														
41															
42	(2) From the Ministry of Finance Variance Column, under Future True-ups, Part IV a, cell I132, of the TAXCALC spreadsheet. The Q4, 2001 proxy has to be														
43	true'd up in 2002, 2003 and for the period January 1- March 31, 2004. Input the variance in the whole year reconciliation.														
44															
45	(3) From the Ministry of Finance Variance Column, under Future True-ups, Part IV a, cell I132, of the TAXCALC spreadsheet.														
46	The true-up will compare to the 2002 proxy for 2002, 2003, 2004 and January 1 to March 31, 2005.														
47															
48	(4) From the Ministry of Finance Variance Column, under Future True-ups, Part IV b, cell I181, of the TAXCALC spreadsheet. The Q4, 2001 proxy has to be														
49	true'd up in 2002, 2003 and for the period January 1- March 31, 2004. Input the deferral variance in the whole year reconciliation.														
50															
51	(5) From the Ministry of Finance Variance Column, under Future True-ups, Part IV a, cell I181, of the TAXCALC spreadsheet.														
52	The true-up will compare to the 2002 proxy for 2002, 2003, 2004 and January 1 to March 31, 2005.														
53															
54	(6) The correcting entry should be shown in the year the entry was made. The true-up of the carrying charges will have to be reviewed.														
55															
56	(7) Carrying charges are calculated on a simple interest basis.														
57															
58	(8) (i) PILs collected from customers from March 1, 2002 to March 31, 2004 were based on a fixed charge and a volumetric charge recovery by class. The PILs rate														
59	components for Q4, 2001 and 2002 were calculated in the 2002 approved RAM on sheet 6 and sheet 8. In April 2004, the PILs recovery was based on the														
60	2002 PILs tax proxy recovered by the volumetric rate by class as calculated on sheet 7 of the 2004 RAM.														
61	The 2005 PILs tax proxy is being recovered on a volumetric basis by class.														
62															
63	(ii) Collections should equal: (a) the actual volumes/ load (kWhs, kW, Kva) for the period (including net unbilled at period end), multiplied														
64	by the PILs volumetric proxy rates by class (from the Q4, 2001 and 2002 RAM worksheets) for 2002, 2003 and January 1 to March 31, 2004;														
65	plus, (b) customer counts by class in the same period multiplied by the PILs fixed charge rate components.														
66															
67	In 2004, use the Board-approved 2002 PILs proxy, recovered on a volumetric basis by class as calculated by the 2004 RAM, sheet 7,														
68	for the period April 1 to December 31, 2004, and add this total to the results from the sentence above for January 1 to March 31, 2004.														
69															
70	In 2005, use the Board-approved 2005 PILs proxy, recovered on a volumetric basis by class as calculated by the 2005 RAM, sheet 4,														
71	for the period April 1 to December 31, 2005. To this total, the 2004 volumetric PILs proxy rate by class should be used														
72	to calculate the recovery for the period January 1 to March 31, 2005.														
73															
74	(9) Any interim PILs recovery from Board Decisions will be recorded in APH Account # 1590. Final reconciliation of PILs proxy taxes														
75	will have to include amounts from 1562 and from 1590.														