### AIRD & BERLIS LLP

Barristers and Solicitors

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December 6, 2012

Kirsten Walli Board Secretary Ontario Energy Board PO Box 2319 2300 Yonge Street Toronto, Ontario M4P 1E4

Dear Ms. Walli:

Re: Application by Toronto Hydro-Electric System Limited; EB-2012-

0064

The purpose of this letter is to make the Board and all parties aware of certain items that will be referred to during the examination of the witnesses at the hearing of this matter next week.

First, we have attached a copy of a document that will be introduced during the examination in chief of Toronto Hydro's rates, revenue requirement and finance witness panel (Panel 3).

Second, Toronto Hydro will be sending to the Board and all parties copies of a booklet of visual aids (comprised largely of photographs from the pre-filed evidence) that has been prepared to assist the Board in its consideration of the work proposed by Toronto Hydro in the application under the Incremental Capital Module. The version of the booklet printed on paper will be sent out so that the Board and parties will have it tomorrow and an electronic version of the booklet will be circulated to the Board and parties today. The booklet will be introduced during the examination in chief of Toronto Hydro's capital projects witness panel (Panel 2) and we anticipate that it may also be of assistance to the Board when the witnesses respond to questions from others about the capital projects.

If you have any questions about this letter, please do not hesitate to contact us in that regard.

Yours truly,

AIRD & BERLIS LLP

Fred D. Cass

FDC/

c.c. All EB-2012-0064 Intervenors

Amanda Klein, THESL

Attachment 1
Supporting Document – Rates, Revenue Requirement, Finance Panel

**THESL'S Proposed ICM Adders based on OEB ICM Framework** 

\$ millions	2012	2013	2014	Totals Notes
Capital Spending	283.0	579.0		862.0 [A]
Less: Threshold (including 20% deadband)	173.0	173.0		346.0 [B]
ICM Additions to Rate Base	110.0	406.0		<b>516.0</b> [C] = [A] - [B]
Approximate capital recovery factor	10%	10%		
ICM Adder for 2012 Spending	11.0	11.0	11.0	33.0
ICM Adder for 201	81.2			
Total Rev	114.2			

### **THESL's Unfunded Net Fixed Assets During IRM Period**

\$ Millions	2011	2012	2013	2014	Total	Notes
2011 Approved Closing NFA	2,105.1					
2011 Approved Average NFA _	2,001.5					[A]
2012 Opening Incremental NFA	103.7					
Opening Net Fixed Assets		2,105.1	2,149.1	2,476.0	-	[B] = Prior Year's Closing Net Fixed Assets
Pre-2012 CWIP		67.0	45.5	32.3	144.7	
Additions from 2012 Capital Spending		116.3	140.6	26.1	283.0	
Additions from 2013 Capital Spending		-	283.8	295.3	579.1	
Depreciation - pre-2012 Asset Base		(134.7)	(122.5)	(117.1)		
Depreciation - Pre-2012 CWIP		(1.0)	(2.7)	(3.9)		
Depreciation - 2012 and 2013 Additions		(3.6)	(17.7)	(31.7)		
		-	-	-		
Closing Net Fixed Assets		2,149.1	2,476.0	2,677.0		[C]
Average Net Fixed Assets		2,127.1	2,312.6	2,576.5		[D] = ( [B] + [C] ) / 2
Less: Net Fixed Assets funded through rates		2,015.1	2,028.8	2,042.6		[E] = [A] growing at 0.68% annually
Unfunded Net Fixed Assets		112.1	283.8	533.9		[F] = [D] - [E]
10% Proxy Revenue Attraction Factor		11.2	28.4	53.4	93.0	[G] = [F] x 10%
						_
2012 unfunded revenue requirement		11.2	11.2	11.2		
2013 unfunded revenue requirement		-	17.2	17.2		
2014 unfunded revenue requirement		-	-	25.0	93.0	

#### **Attachment 2**

ICM Visual Support Booklet



#### **Contents**

UNDERGROUND	5
Direct Buried Cables	6
Paper Insulated Lead Covered (PILC) Cable	9
Handwell Replacement	11

OVERHEAD	15
Damaged Poles	16
Box Construction	17
Conversion	21
Poor Condition	22
Rear Lot Conversion	24
SMD 20 Switches	30
SCADA-MATE R1	32

NETWORK ASSETS	33
Network Vaults and Roofs	34
Fibertop Network Units	37
Automatic Transfer Switches and Reverse Power Breakers	41

STATIONS	43
Station Power Transformers	44
Station Switchgear	54
Station Circuit Breakers	55
Downtown Station Load Transfer	56

# UNDERGROUND



### **DIRECT BURIED CABLES** - Failed cables

Schedule B1



B1 - Fig 40

Fault due to insulation failure

## **DIRECT BURIED CABLES** - REBUILD project midway





# **DIRECT BURIED CABLES** - Project post completion



### **PILC CABLES** - Before and after piece out

Schedule B2





Not Pieced Out (Before)

Pieced Out (After)

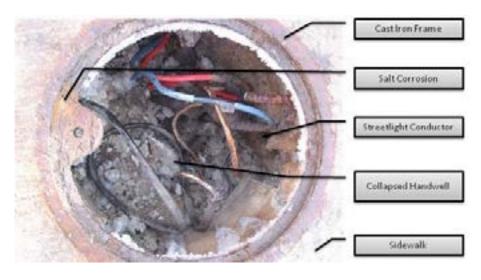
# **PILC CABLES** – Leaking oil from PILC cables Schedule B2





B2 - Fig 3

### **HANDWELL REPLACEMENT** – Existing state



B3 - Fig 1 Open handwell photographed during inspections



B3 - Fig 3
Degraded conditions of split bolt connectors in handwells

### **HANDWELL REPLACEMENT** - New installations

Schedule B3





New non-conductive lids

### **HANDWELL REPLACEMENT** - New connections

Schedule B3





Crew working on installations

New connection



# OVERHEAD



### **DAMAGED POLES**





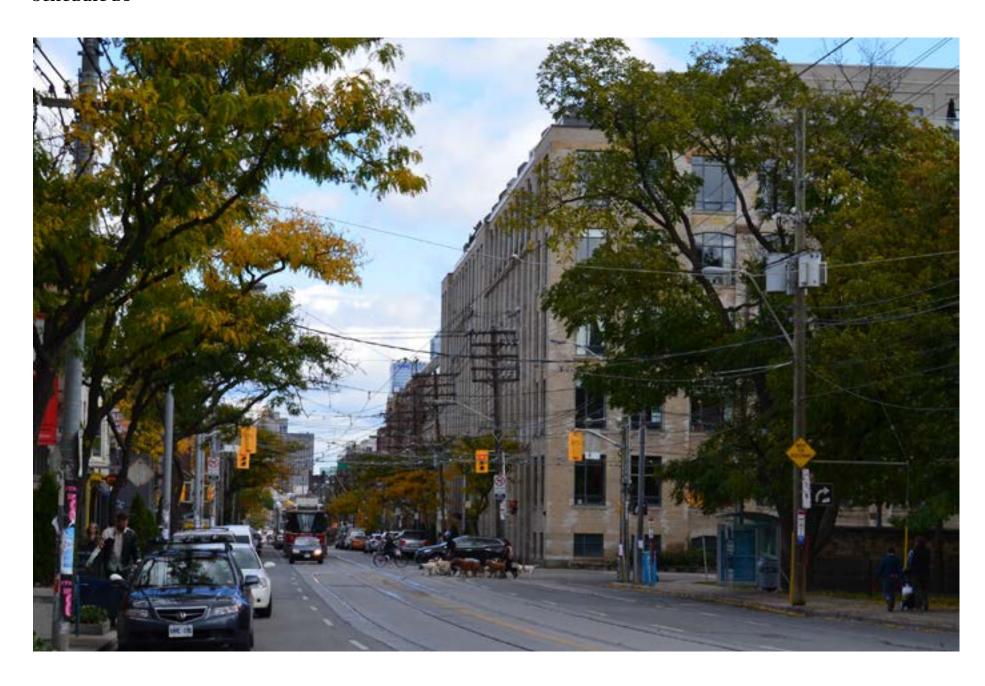
**B4 - Fig 8** Multiple pole failure

**B4 - Fig 13** Broken pole on home - Acacia Rd.

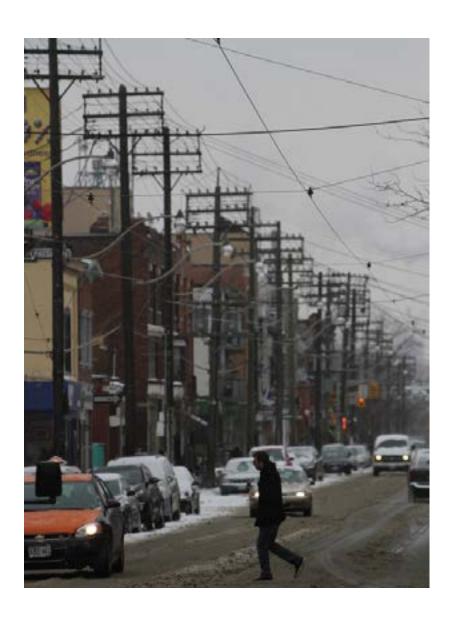
# **BOX CONSTRUCTION** - Crews working on box construction Schedule B5



### **BOX VS. CONVERSION**

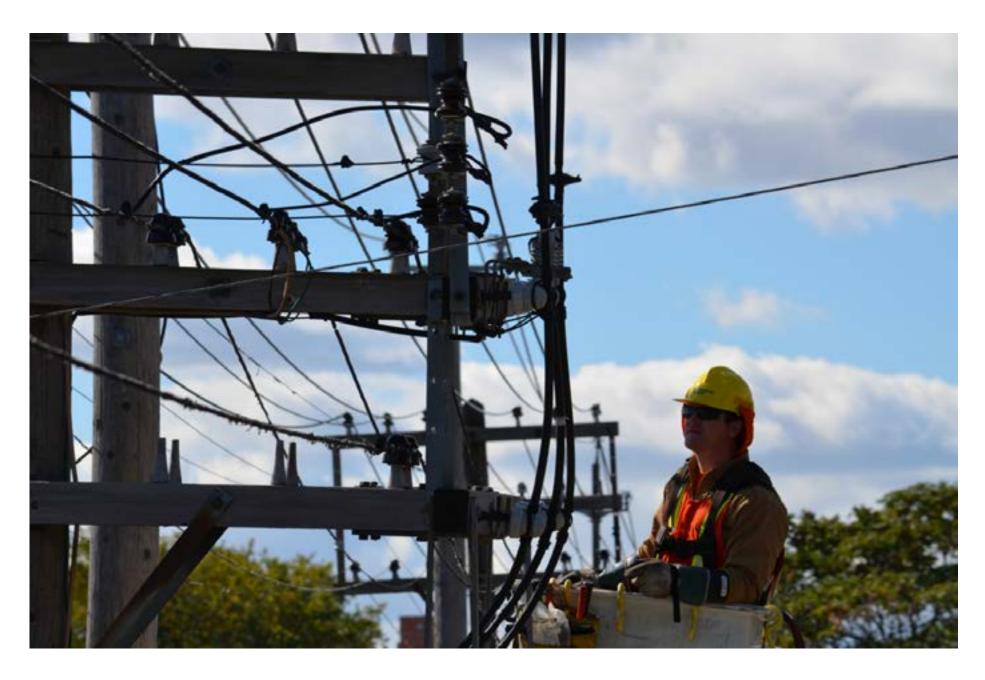


### **BOX CONSTRUCTION**





### **BOX CONSTRUCTION**



### **CONVERSION**







# **POOR CONDITION** – Wooden poles



**POOR CONDITION** – New development/load on existing infrastructure and in close proximity to homes Schedule B5





B5 - Fig 6

### **REAR LOT CONVERSION** - Before





### **REAR LOT CONVERSION** - Before

Schedule B6





Difficult to access and make repairs (need to climb poles as trucks can't access backyards)

### **REAR LOT CONVERSION** - After (conversion)





### **REAR LOT CONVERSION**



## **REAR LOT CONVERSION** - Access and safety issues



B6 - Fig 10



B6 - Fig 7

### **REAR LOT CONVERSION** - Poor condition



### **SMD 20 SWITCHES** - Broken switch

Schedule B7

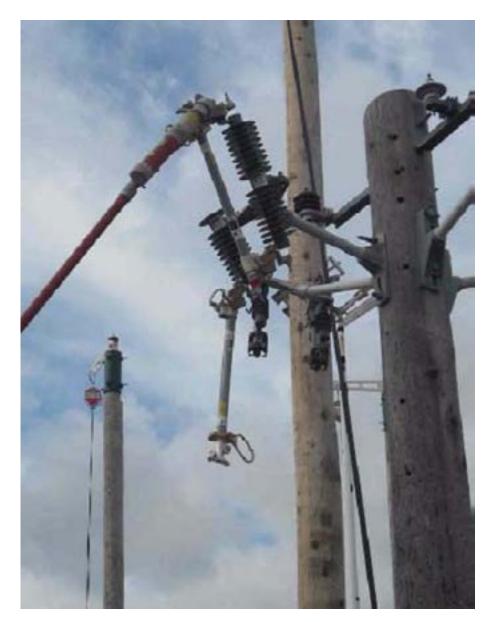




B7 - Fig 3

B7 - Fig 2

**SMD 20 SWITCHES** – Demonstration of how switch breaks Schedule B7





# **SCADA-MATE R1** – Typical switch Schedule B8



B8 - Fig 1

# NETWORK ASSETS



### **NETWORK VAULTS AND ROOFS** - Poor condition





B9 - Fig 7

B9 - Fig 8

### **NETWORK VAULTS AND ROOFS** - Poor condition





### **NETWORK VAULTS AND ROOFS** - Before and after





### FIBERTOP NETWORK UNITS - What can happen...







### **FIBERTOP NETWORK UNITS**

Schedule B10



B10 - Fig 2

### FIBERTOP NETWORK UNITS - Before and after the fire



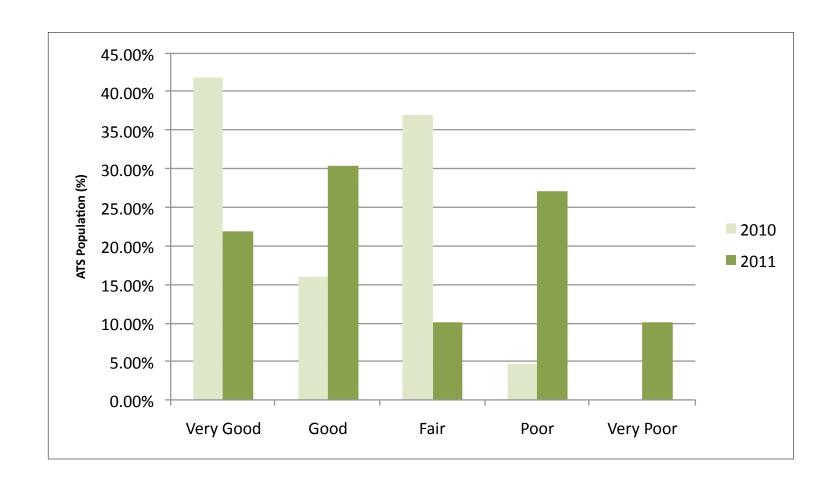


# **FIBERTOP NETWORK UNITS** – New submersible network protectors Schedule B10





## **AUTOMATIC TRANSFER SWITCHES AND REVERSE POWER BREAKERS** – Poor condition Schedule B11



B11 - Fig 2

### **AUTOMATIC TRANSFER SWITCHES AND REVERSE POWER BREAKERS** – Failures

Schedule B11







B11 - Fig 3

B11 - Fig 4

# STATIONS TORONTO

### **STATION POWER TRANSFORMERS** - Oil leaks

Schedule B12





B12 - Fig 1 B12 - Fig 2

### **STATION POWER TRANSFORMERS** - Oil leaks



# **STATION POWER TRANSFORMERS** – Albion MS – station transformer TR2 Schedule B12





# **STATION POWER TRANSFORMERS** – Albion MS – station transformer TR2 Schedule B12





# **STATION POWER TRANSFORMERS** – Thistletown MS – station transformer TR2 Schedule B12





**STATION POWER TRANSFORMERS** – Thistletown MS – station transformer TR2 Schedule B12





# **STATION POWER TRANSFORMERS** – Edenbridge MS – station transformer TR1 Schedule B12





# **STATION POWER TRANSFORMERS** – Edenbridge MS – station transformer TR1 Schedule B12





# **STATION POWER TRANSFORMERS** – Blaketon MS – station transformer Schedule B12





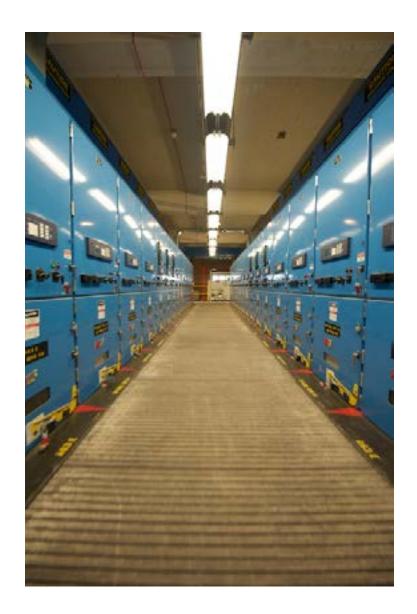
# **STATION POWER TRANSFORMERS** – New station transformer Schedule B12



### **STATION SWITCHGEAR** - Old vs. new

Schedule B13 / B13.1 / B13.2





### **STATION CIRCUIT BREAKERS** - Old vs. new





# **DOWNTOWN STATION LOAD TRANSFER** – Dufferin station flooding Schedule B19





