EB-2012-0064

IN THE MATTER OF the *Ontario Energy Board Act 1998*, Schedule B to the *Energy Competition Act*, 1998, S.O. 1998, c.15;

AND IN THE MATTER OF an Application by Toronto Hydro-Electric System Limited for an Order or Orders approving just and reasonable rates and other service charges for the transmission of electricity, effective June 1, 2012, May 1, 2013, and May 1, 2014.

CROSS-EXAMINATION COMPENDIUM OF THE SCHOOL ENERGY COALITION (Panel 1A)

December 10, 2012

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RESPONSES TO SCHOOL ENERGY COALITION INTERROGATORIES ON ISSUE 2.1

INTERROGATORY 6:

Reference(s): none provided

Please detail the process in which the Applicant, subsequent to the release of the Board's decision in EB-2012-0144, determined which capital projects for 2012, 2013 and 2014, met the criteria for an incremental capital module.

RESPONSE:

As part of the process of constructing the present application, THESL sought to eliminate projects which, although necessary, THESL has determined do not meet the standard of urgency and priority that characterize the work included in this ICM application. THESL continues to believe that the work left out of this ICM application is nevertheless necessary and prudent and should still be undertaken by the utility over the medium to long term.

As a result, THESL has presented in this application a portfolio of projects which it believes qualify for ICM treatment under the ICM factors as discussed in the Manager's Summary at pages 14-21.

As described in the Revised Manager's Summary, the capital work included in this application was divided into ten discrete projects, some of which are divided into segments and each of which is composed of numerous jobs. THESL produced the projects and project segments by first identifying categories of necessary capital work as described above, and then populating those project segments with jobs that included such work. Necessarily, the jobs that comprise the capital projects and project segments were not carried forward wholesale from a previous application and are not grouped on the

RESPONSES TO SCHOOL ENERGY COALITION INTERROGATORIES ON ISSUE 2.1

same basis as they would have been in prior applications. As a result, the capital portfolios used in previous applications are fundamentally incomparable with the projects and segments into which work is divided in this application.

THESL's approach to PILC capital work can be used as an example to illustrate the point above. In previous applications, the PILC portfolio focused mainly on replacing major portions of PILC cable with larger 500 MCM XLPE cables. These PILC cables were either at their end-of-life and failing, or were overloaded under first contingency conditions because they were undersized. In this application, THESL re-examined its PILC cable assets and identified only jobs that were essential (with regard to the ICM eligibility factors), and with a specific focus on those jobs that are necessary to maintain safety and system reliability, and to address possible environmental concerns. Instead of replacement, these PILC-related jobs target a specific damaged portion of leaking cable or cables requiring piecing out. In these jobs, only the smallest possible section of cable is to be replaced, usually only to a neighbouring cable chamber.

Please also see THESL's response to OEB Staff interrogatory 15 (Tab 6E, Schedule 1-15).

RESPONSES TO SCHOOL ENERGY COALITION INTERROGATORIES ON ISSUE 2.1

INTERROGATORY 9:

Reference(s): Tab 2/p.16-17

Please provide a chart that indicates, for each project category (and project segment), which categories of non-discretionary (a-e) need, the Applicant is relying on.

RESPONSE:

Please see chart on following page.

RESPONSES TO SCHOOL ENERGY COALITION INTERROGATORIES ON ISSUE 2.1

		Statute, Code, or external requirement (a)	Public and Employee Safety (b)	Immenent Reliability Degradations (c)	Immenent Capacity Shortages (d)	Material Increase in Cost (e)
	Underground Infrastructure and Cable					
B1	Underground Infrastructure		x	x		
B2	Paper Insulated Lead Covered Cable - Piece Outs and Leakers		x	x		
B3	Handwell Replacement		x			
	Overhead Infrastructure and Equipment					
B4	Overhead Infrastructure		x	x		
B5	Box Construction		x	x	x	x
B6	Rear Lot Construction		x	x		x
B7	Polymer SMD-20 Switches		x	x		
B8	SCADA-Mate R1 Switches		x	x		
	Network Infrastructure and Equipment					
B9	Network Vault & Roofs		x	x		
B10	Fibertop Network Units		x	x		
B11	Automatic Transfer Switches (ATS) & Reverse Power Breakers (RPB)		x	x		
	Station Infrastructure and Equipment					
B12	Stations Power Transformers		x	x	x	
B13	Stations Switchgear - Muncipal and Transformer Stations			x		
B14	Stations Circuit Breakers		x	x		
B15	Stations Control & Communicaton Systems			x		
B16	Downtown Station Load Transfers			x		
B17	Bremner Transformer Station	x		x	x	x
B18	Hydro One Capital Contributions	x			x	
B19	Feeder Automation			x		
B20	Metering	x				
B21	Externally-Initiated Plant Relocations and Expansions	x				x

RESPONSES TO SCHOOL ENERGY COALITION INTERROGATORIES ON ISSUE 2.2

INTERROGATORY 15:

Reference(s): Tab 4/B

For each project (and project segment), please provide a chart that shows from 2008 to 2014, how much has the Applicant has spent or is seeking to spend, on like or similar projects.

RESPONSE:

The projects and project segments in THESL's present application cannot be directly compared with capital portfolios set out in previous applications. Please see THESL's response to SEC interrogatory 6 (Tab 6E, Schedule 10-6).

RESPONSES TO VULNERABLE ENERGY CONSUMERS COALITION INTERROGATORIES ON ISSUE 2.3

INTERROGATORY 112:

Reference(s): **Tab 2, page 8, lines 19-30**
Tab 4, Schedule A, Appendix 1, page 1
EB-2009-0139, Exhibit D1, Tab 8, Schedule 10, Appendix A

a) Please provide a table that breaks down THESL's actual capital spending for the years 2009-2011 using the same project/segment designations as in the Tab 4 reference.

RESPONSE:

a) It is not possible to perform the comparison requested by this interrogatory. Please see THESL's response to SEC interrogatory 6 (Tab 6E, Schedule 10-6).

b) Please restate spending projections provided for 2012-2014 in EB-2009-0139 using the same project/segment designations as in the Tab 4 reference and contrast with the current proposed spending.

RESPONSE:

b) The table below summarizes the spending projections for 2012 to 2013.

RESPONSES TO VULNERABLE ENERGY CONSUMERS COALITION INTERROGATORIES ON ISSUE 2.3

INTERROGATORY 112:

Reference(s): **Tab 2, page 8, lines 19-30**
Tab 4, Schedule A, Appendix 1, page 1
EB-2009-0139, Exhibit D1, Tab 8, Schedule 10, Appendix A

a) Please provide a table that breaks down THESL's actual capital spending for the years 2009-2011 using the same project/segment designations as in the Tab 4 reference.

RESPONSE:

a) It is not possible to perform the comparison requested by this interrogatory. Please see THESL's response to SEC interrogatory 6 (Tab 6E, Schedule 10-6).

b) Please restate spending projections provided for 2012-2014 in EB-2009-0139 using the same project/segment designations as in the Tab 4 reference and contrast with the current proposed spending.

RESPONSE:

b) The table below summarizes the spending projections for 2012 to 2013.

RESPONSES TO VULNERABLE ENERGY CONSUMERS COALITION INTERROGATORIES ON ISSUE 2.3

Summary of Capital Program

Schedule Number	Projects	Segments	Cost Estimates ($M)			
			2012 Forecast *	2013 Budget	2014	Total for 2012 and 2013 **
B1	Underground Infrastructure and Cable	Underground Infrastructure	28.75	58.94	~~74.92~~	87.70
B2		Paper Insulated Lead Covered Cable - Piece Outs and Leakers	0.08	5.42	~~1.47~~	5.50
B3		Handwell Replacement	13.65	16.65	~~7.17~~	30.30
B4	Overhead Infrastructure and Equipment	Overhead Infrastructure	9.07	55.88	~~20.11~~	64.95
B5		Box Construction	0.58	23.04	~~27.76~~	23.62
B6		Rear Lot Construction	16.36	29.43	~~11.03~~	45.78
B7		Polymer SMD-20 Switches	-	1.53	~~2.94~~	1.53
B8		SCADA-Mate R1 Switches	-	1.43	~~2.69~~	1.43
B9	Network Infrastructure and Equipment	Network Vault & Roofs	2.84	18.76	~~15.57~~	21.60
B10		Fibertop Network Units	1.48	7.71	~~9.36~~	9.19
B11		Automatic Transfer Switches (ATS) & Reverse Power Breakers (RPB)	-	3.26	~~3.23~~	3.26
B12	Station Infrastructure and Equipment	Stations Power Transformers	0.38	3.48	~~0.87~~	3.86
B13.1 & 13.2		Stations Switchgear - Muncipal and Transformer Stations	1.73	21.81	~~20.31~~	23.54
B14		Stations Circuit Breakers	0.76	0.55	~~1.38~~	1.31
B15		Stations Control & Communicaton Systems	0.14	1.00	~~1.34~~	1.14
B16		Downtown Station Load Transfers	0.68	2.14	~~3.59~~	2.82
B17	Bremner TS	Bremner Transformer Station	8.50	81.00	~~23.02~~	89.50
B18	Hydro One Capital Contributions	Hydro One Capital Contributions	22.98	48.12	~~36.00~~	71.10
B19	Feeder Automation	Feeder Automation	2.30	20.66	~~7.38~~	22.97
B20	Metering	Metering	4.74	8.40	~~10.03~~	13.14
B21	Plant Relocations	Externally-Initiated Plant Relocations and Expansions	10.16	24.84	~~13.34~~	35.00
B22	Grid Solutions	Grid Solutions	-	-	~~0.96~~	-
C1	Operations Portfolio Capital		120.51	121.63	~~121.60~~	242.14
C2	Information Technology Capital		22.00	15.00	~~15.00~~	37.00
C3	Fleet Capital		0.80	2.00	~~2.00~~	2.80
C4	Buildings and Facilities Capital		5.00	5.00	~~5.00~~	10.00
	Allowance for Funds Used During Construction		1.20	1.40	~~1.40~~	2.60
Total			274.68	579.09	~~439.47~~	853.78

* The sum of actual spending to August 31, 2012 and estimated spending to year end.
** THESL has asked the OEB to consider the work programs identified for 2012 and 2013 together, and to defer consideration of the work program for 2014 to a later date.

For the reasons set out in THESL's response to SEC interrogatory 6 (Tab 6E, Schedule 10-6), it is not possible to provide THESL's spending projections in the form requested.

As described in its cover letter, dated October 31, 2012, THESL has asked the OEB to consider the work programs identified for 2012 and 2013 together, and to defer consideration of the work program for 2014 to a later date. In light of this requested bifurcation of the proceeding and THESL's obligation to update the 2014 information for any material changes prior to it being reviewed, it would not assist the OEB or

RESPONSES TO VULNERABLE ENERGY CONSUMERS COALITION INTERROGATORIES ON ISSUE 2.3

intervenors to provide information on the 2014 work program in response to this interrogatory during the first phase of this application.

c) With respect to the response to part (b), please explain any material (>10%) variances (by project/segment category) between the total projected spending over the three years per EB-2009-0139 and that projected for the three years in the current Application.

RESPONSE:

c) It is not possible to perform the comparison requested by this interrogatory. Please see THESL's response to SEC interrogatory 6 (Tab 6E, Schedule 10-6).

d) Please provide a schedule that for the two-year period 2010-2011 contrasts the actual spending by project/segment with that projected in EB-2009-0139.

RESPONSE:

d) The table below shows THESL's historical spend from 2010 to 2011. Note that THESL's actual capital work program was not tracked in the manner presented in EB-2009-0139, Exhibit D1, Tab 8, Schedule 10, Appendix A.

RESPONSES TO VULNERABLE ENERGY CONSUMERS COALITION INTERROGATORIES ON ISSUE 2.3

	2010 Actual	2011 Actual
OPERATIONAL INVESTMENTS		
Grid System Investments		
Underground System	111.6	99.0
Overhead System	31.7	39.3
Network System	7.4	4.8
Stations	17.0	18.2
Total Grid System Investments	**167.7**	**161.4**
Reactive Work	25.1	28.6
Customer Connections	42.6	58.2
Customer Capital Contribution	(26.6)	(29.8)
Externally Initiated Plant Relocations	-	7.8
Capital Contributions to HONI	1.1	27.8
Engineering Capital	34.5	23.6
AFUDC	3.5	5.2
Other	12.3	(4.2)
Total Distribution Plant Capital	**260.3**	**278.6**
CORPORATE OPERATIONAL INVESTMENTS		
Fleet &Equipment Services	10.6	11.8
Facilities	12.1	25.3
Other	-	-
Total Corporate Operational Investments	**22.7**	**37.1**
CUSTOMER SERVICES		
Wholesale Metering	1.8	-
Smart Metering	0.4	10.1
Suite Metering	6.4	10.2
Other	0.2	0.0
Total CUSTOMER SERVICES	**8.8**	**20.3**
Total INFORMATION TECHNOLOGY	**33.0**	**32.4**
Total OPERATIONAL INVESTMENTS	**324.7**	**368.4**
CRITICAL ISSUES		
Standardization	30.2	44.6
Downtown Contingency	1.1	4.7
FESI / WPF	16.7	19.3
Stations System Enhancements	5.8	4.7
Secondary Upgrade	2.6	3.9
Total CRITICAL ISSUES	**56.4**	**77.1**
TOTAL CAPITAL	**381.1**	**445.5**

RESPONSES TO VULNERABLE ENERGY CONSUMERS COALITION INTERROGATORIES ON ISSUE 2.3

e) With respect to the response to part (d), please explain any material (>10%) variances (by project/segment category) between the total projected spending over the two years per EB-2009-0139 and the actual spending.

RESPONSE:

e) As noted in response (d) above, THESL actual capital work program was not tracked in the manner presented in EB-2009-0139, Exhibit D1, Tab 8, Schedule 10, Appendix A.

RESPONSES TO VULNERABLE ENERGY CONSUMERS COALITION INTERROGATORIES ON ISSUE 2.2

INTERROGATORY 26:

Reference(s): Tab 2, page 23, Table 3

a) Were each of the 2012 projects/jobs proposed in the current Application included in THESL's EB-2011-0144 Application?

RESPONSE:

a) No. Please see THESL's response to OEB Staff interrogatory 26d (Tab 6F, Schedule 1-26, part d).

b) For any projects that were not included in the earlier Application, please explain what change in circumstances has led to their inclusion in the current Application.

RESPONSE:

b) As described in THESL's response to SEC interrogatory 6 (Tab 6E, Schedule 10-6), the capital portfolios used in previous applications are fundamentally incomparable with the projects and segments into which work is divided in this application. While the projects in this application cannot be directly compared with previous capital portfolios, THESL can confirm that the following projects are comprised of jobs that were not included in EB-2011-0144:

1) **PILC – Piece Outs and Leakers**

As described in THESL's response to SEC interrogatory 6 (Tab 6E, Schedule 10-6), this application approaches PILC cable differently than the previous application. Whereas the previous application contemplated replacement of failing or overloaded PILC cable with larger 500 MCM XLPE cables, the jobs

RESPONSES TO VULNERABLE ENERGY CONSUMERS COALITION INTERROGATORIES ON ISSUE 2.2

in this application target a specific damaged portion of leaking cable or cables requiring piecing out.

2) **SMD-20 Fuses**

SMD-20 fuses were found to have a defect within the polymer body, causing the insulator to potentially break in half during operation. This defect was only discovered in late 2011, subsequent to the filing of the filing of THESL's application in EB-2011-0144.

c) For those projects/jobs that were included in the earlier Application, please provide a schedule that indicates where in the earlier Application the description of the project/job and the (then) proposed spending can be found.

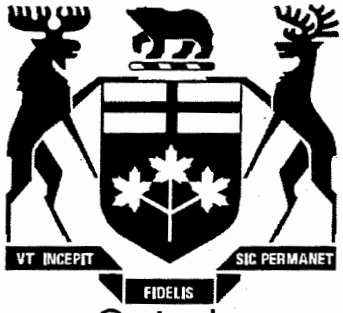
RESPONSE:

c) Please see THESL's response to SEC interrogatory 6 (Tab 6E, Schedule 10-6).

d) Please provide a schedule that lists all such projects/jobs (per part (c)) and compares the currently proposed spending for 2012 with that proposed in EB-2011-0144.

RESPONSE:

d) Please see THESL's response to SEC interrogatory 6 (Tab 6E, Schedule 10-6).



Ontario

ONTARIO ENERGY BOARD

FILE NO.: **EB-2012-0064**

VOLUME: **Technical Conference**

DATE: **November 23, 2012**

MR. MILLAR: Mr. Harper, was there an undertaking at the end?

MR. HARPER: No, I think the answer I got for that was satisfactory. Thank you.

MR. MILLAR: I think Staff is prepared to go next. Sorry, Mark, you had your hand up? Sorry, I can't hear you.

MR. RUBENSTEIN: Can I go before you?

MR. MILLAR: Sure.

QUESTIONS BY MR. RUBINSTEIN:

MR. RUBENSTEIN: I want to follow up on some questions from Mr. Harper.

If I could take you to Schools 15, and this is at tab 6F, is schedule dual 10-15.

MR. BERDICHEVSKY: Can you please repeat? Sorry I missed it.

MR. RUBENSTEIN: Sure. It is School Energy Interrogatory No. 15. This is at 6F, schedule 10-15.

I can read it. It is not very long, if that's...

MR. BERDICHEVSKY: Sure, go ahead.

MR. RUBENSTEIN: We had asked:

> "For each project and project segment, please provide a chart that shows from 2008 to 2014 how much the applicant has spent or is seeking to spend on like or similar projects."

Your response was:

> "The projects and project segment in THESL's present application cannot be directly compared

with capital portfolios set out in the previous applications. Please see THESL's response to SEC Interrogatory 6."

Which was an interrogatory asking about how you took sort of internally from the 2011-0144 application to this ICM application.

Essentially, I want to follow up on discussions you had with Mr. Harper and on Wednesday with Ms. Grice about the comparability between this application and previous applications, at least for the Board to get the sense -- the Board and intervenors to get a sense of, on similar projects or similar project categories in past years, what the spending was and how it compares.

This morning you had a discussion with Mr. Harper and you said, Well, it's very hard. You can't do that.

And I -- hard or not, I think it is very important that the Board has that sort of information. So I am going to ask for an undertaking that you attempt as much -- to do it, and it is in your prerogative to provide qualifications to that to say why you don't think it actually does match. But I think clearly this is important information for the Board and intervenors to see.

MR. CASS: Well, Mark, you have just asked for an undertaking for the witnesses to do something that they said they can't do.

Perhaps we could just leave it -- you leave it with us. We will do the best efforts to provide something that would be useful, but I don't think an undertaking can be

given to do something that the witnesses say they can't do.

MR. RUBENSTEIN: Well, I mean, the term he used was it is very hard. So I take your point, and I will ask for an undertaking for sort of, you know, a best efforts to provide information that allows, you know, comparisons of past spending.

I understand that there are some projects which -- with your discussion earlier with Mr. Harper, that you have never done before, and I think you used the SMD 20 switches.

But clearly with respect to, say, you know, box construction projects -- I will use as an example you've done some voltage conversions before in the past, or, you know, in your overhead infrastructure category or segment, you know, you've done some feeder rebuilds in the past.

So you can compare some of these sort of things.

MR. BERDICHEVSKY: Yes, I can answer to this.

So if you're specifically targeting box construction, for example, right, so -- and you said voltage conversion, right? You have to understand, and like I said -- I answered before that we are comparing apples and oranges, and I will give you an exact -- an example for.

Box construction, that is right, we were doing before. There were a lot of criteria why we were doing this. One of them was voltage conversion.

Now we are not doing box construction as we were doing before for the voltage conversion purposes. Now we're doing just the critical portion of this box construction

that includes primarily the safety issues that we are talking about.

And so this is why I'm saying that even if I will try to attempt it and I will go really back to all our applications and go down to the detailed level of assets and everything else, and go back, I don't even think that even if the best effort -- and it's not that I am trying not to do this. I would be very happy. I want to be helpful and everything, but it will not provide a meaningful comparison, type of thing.

And any numbers I will come up with, they will not be meaningfully compared, for exactly this reason that I just said, that we are in a different regime.

So our thinking -- not only thinking -- analysis and criteria that we used for this application is really, really stringent. We were doing projects that really just must do and you provided a great example. Voltage conversion on its own would not be a driver for this type of application, and, therefore, like I said, that it will not be truly comparable. And the information that I will do my best to provide is -- I don't think it will be really meaningful for comparison.

MR. RUBENSTEIN: Well, clearly I would disagree with that. I understand that Toronto -- it would your position you can't compare them, but I think it is important on this record that we have those sort of comparisons, and there could be a discussion later if it matters or not.

But I think it is very important information. So I

will ask for that undertaking to do it, and then you can tell me why, you know, you can't match all of these sort of things and provide examples.

Like your answer you just provided me, that's fine. You have the prerogative to do that.

MR. CASS: Well, I think we have taken it as far as we can, Mark. You have asked for an undertaking. The witnesses made it clear that they can't do what you have asked for. I don't think we can take that any further today.

MR. RUBENSTEIN: Can you map it or -- so back to -- so if we can get an undertaking for the best efforts that we were just discussing before?

MR. CASS: Well, I think Arthur's response was even if he put his best efforts into it, he doesn't think he can come up with anything meaningful in response to what you are requesting.

MR. RUBENSTEIN: So that's a refusal?

MR. CASS: Yes.

MR. RUBENSTEIN: Okay.

Can you map it to -- back to your capital plan, your ten-year capital plan that you have -- that Toronto has? Can you map these projects back to the plan?

MR. BERDICHEVSKY: I believe that the interrogatory that you were just citing does that. That capital plan included the cost of service scenario in 2011, and we now are in 2012 IRM. And so the interrogatory that answers to this, exactly does that what you are asking right now.

RESPONSES TO SCHOOL ENERGY COALITION INTERROGATORIES ON ISSUE 2.2

INTERROGATORY 12:

Reference(s): none provided

Please confirm that Underground Infrastructure and Cable project category (Schedule B1-B3) are equivalent to the 'Underground Direct Buried' and 'Underground Rehabilitation' categories contained in Table 2, Ex. D1, Tab7, Schedule 1, Page 16 of pre-filled evidence in EB-2010-0142.

RESPONSE:

Not confirmed. The Underground Infrastructure and Cable project category (Schedule B1-B3) is not equivalent to the 'Underground Direct Buried' and 'Underground Rehabilitation' categories contained in Table 2, Exhibit D1, Tab7, Schedule 1, Page 16 of pre-filled evidence in EB-2010-0142. The table below compares the items included in each application.

RESPONSES TO SCHOOL ENERGY COALITION INTERROGATORIES ON ISSUE 2.2

Item	EB-2010-142 UG Direct Buried and UG Rehabilitation	EB-2012-0064 UG Infrastructure and Cable
Replacement of direct buried cable (with cable in concrete-encased ducts) and connected assets	X	X
Replacement of cable in duct and connected assets	X	
Replacement of air-insulated switchgear	X	X
Replacement of Paper Insulated Lead Covered (PILC) cable	X	X
UG load management improvement	X	
Handwell upgrades		X
URD system rebuilds	X	
Rear lot conversions	X	

revenue determination, and the utility would be faced with an untenable choice between meeting its duties as a distributor and maintaining its financial viability.

Q22. Could the structural deficit you describe be eliminated or reduced by the Incremental Capital Module?

A22. No. While a limited number of discrete projects in THESL's capital plan might qualify for ICM treatment, they would be the exceptions. The majority of THESL's capital program is composed of routine, core-business requirements of a distributor: customer connection, infrastructure renewal, and other capital for customer services and distribution support. These expenditures are clearly not extraordinary, and the Board has clearly stated that the ICM was not intended for, and does not apply in, these circumstances.

Q23. Finally Mr. McLorg, given all that you have described in this Witness Statement, the evidence that has been pre-filed, and THESL's interrogatory responses, is it THESL's view that its particular circumstances could be addressed by THESL returning to the Board each year with an 'early rebasing' application?

A23. No, it is not. Repeated, successive early rebasing applications would defeat the purpose of the Board's IRM framework, create significant regulatory burden, and put THESL in a perpetual state of uncertainty with respect to its ongoing operations.

As stated in THESL's response to VECC IR #2, "It is not possible for THESL to conduct its business responsibly while planning for dramatically different business condition scenarios that would exist as alternatives for the same period." And as explained in THESL's response to Board Staff IR # 1, the differences between the COS framework and the IRM framework are real and material in terms of THESL' operational plans.

Furthermore, the circumstances in which THESL operates are not expected to change year over year, and the logic of ratemaking is not expected to change year over year. The

THESL cannot undertake the obligation to make the corresponding capital expenditures without the opportunity to recover the associated costs through approved ICM rate adders.

Comparison Between THESL's Cost Of Service And IRM/ICM Applications

Capital Projects Not Included in This Application

THESL's former long-term capital plan, which was directed to stable and programmatic renewal of distribution and general assets, and which was substantially approved by the Board in THESL's last three rate cases over the previous four years, cannot be conducted within the IRM/ICM framework due to the restriction on capital spending that exists within that framework given the non-discretionary criterion.

The capital plan outlined in this ICM application has been significantly curtailed relative to the early rebasing application that THESL presented to the Board under file EB-2011-0144. The total capital requested by year under each application framework is shown in Table 3 below.

Table 3: Total Capital Requests – Rebasing vs ICM ($ millions) /u

	2012	2013	2014	Total
REBASING	$ 590.0	$ 615.0	~~$ 640.0~~	~~$ 1,845.0~~
ICM	$ 274.7	$ 579.1	~~$ 439.5~~	~~$ 1,422.7~~
Difference	($315.3)	($35.9)	~~($200.5)~~	~~$ (422.3)~~

THESL does not plan to execute projects such as Paper Insulated Lead Covered Cable Replacement, Asbestos Insulated Lead Covered Cable Replacement, Stations Infrastructure, Nomenclature, Grounding Compliance, Electric Vehicles and Modernization Initiatives in the next three years. In addition, for continuing project areas such as underground infrastructure, THESL now proposes further reductions in capital spending for the purposes of the submitted ICM projects relative to previous proposals.

THESL cannot undertake the obligation to make the corresponding capital expenditures without the opportunity to recover the associated costs through approved ICM rate adders.

Comparison Between THESL's Cost Of Service And IRM/ICM Applications

Capital Projects Not Included in This Application

THESL's former long-term capital plan, which was directed to stable and programmatic renewal of distribution and general assets, and which was substantially approved by the Board in THESL's last three rate cases over the previous four years, cannot be conducted within the IRM/ICM framework due to the restriction on capital spending that exists within that framework given the non-discretionary criterion.

The capital plan outlined in this ICM application has been significantly curtailed relative to the early rebasing application that THESL presented to the Board under file EB-2011-0144. The total capital requested by year under each application framework is shown in Table 3 below.

Table 3: Total Capital Requests – Rebasing vs ICM ($ millions)

	2012	2013	2014	Total
REBASING	$ 590.0	$ 615.0	$ 640.0	$ 1,845.0
ICM	$ 448.7	$ 534.5	$ 439.5	$ 1,422.7
Difference	($141.3)	($80.5)	($200.5)	$ (422.3)

THESL does not plan to execute projects such as Paper Insulated Lead Covered Cable Replacement, Asbestos Insulated Lead Covered Cable Replacement, Stations Infrastructure, Nomenclature, Grounding Compliance, Electric Vehicles and Modernization Initiatives in the next three years. In addition, for continuing project areas such as underground infrastructure, THESL now proposes further reductions in capital spending for the purposes of the submitted ICM projects relative to previous proposals.

TECHNICAL CONFERENCE UNDERTAKING RESPONSE
INTERVENOR 7 – ENERGY PROBE RESEARCH FOUNDATION

UNDERTAKING NO. JT2.9:

Reference(s): Tab 6E, Schedule 11-16

To provide calculations of forecasted capital in-service, and not in-service for 2012 and 2013 in VECC #16.

RESPONSE:

Below are the in-service and not in-service amounts for the 2012 and 2013 projects:

	2012 Cost Estimates ($M)						
	2012 Forecast	Actual Q1 2012 In-Service	Actual Q2 2012 In-Service	Forecast Q3 2012 In-Service	Forecast Q4 2012 In-Service	2012 CWIP Additions (In-Service)	2012 CWIP Additions (Not In-Service)
Total	283.00	10.01	14.81	31.24	60.25	116.31	166.69
Percentage In-Service Additions						41%	

	2013 Cost Estimates ($M)		
	2013 Budget	2013 CWIP Additions (In-Service)	2013 CWIP Additions (Not In-Service)
Total	579.09	283.76	295.33
Percentage In-Service Additions		49%	

RESPONSES TO VULNERABLE ENERGY CONSUMERS COALITION INTERROGATORIES ON ISSUE 2.1

INTERROGATORY 16:

Reference(s): Tab 2, page 16, lines 3-5 Tab 4, Schedule A, Appendix 1, page 1

a) How much of the capital spending for each year (as set out in Tab 4) is for facilities that will actually be in-service by the end of the year in which the capital is reported as being spent?

b) If all the capital spending set out in Tab 4 will not be in-service the same year in which the spend occurs, please provide a schedule that sets out for each of 2012 through 2014 year ends, the capital spending that is "in-service" versus "work-in-progress".

RESPONSE:

a) and b)

Forecasted spend in-service and not in-service for 2012 and 2013 year-ends is as follows:

Year	Forecasted Capital Spend ($M)	Forecasted Capital In-Service (%)	Forecasted Capital In-Service ($M)	Forecasted Capital Not In-Service ($M)
2012	274.68	41%	112.62	162.06
2013	579.09	49%	283.76	295.34

As described in its cover letter, dated October 31, 2012, THESL has asked the OEB to consider the work programs identified for 2012 and 2013 together, and to defer consideration of the work program for 2014 to a later date. In light of this requested bifurcation of the proceeding and THESL's obligation to update the 2014 information

/U

RESPONSES TO VULNERABLE ENERGY CONSUMERS COALITION INTERROGATORIES ON ISSUE 2.1

for any material changes prior to it being reviewed, it would not assist the OEB or intervenors to provide information on the 2014 work program in response to this interrogatory during the first phase of this application. /U

Summary of Capital Program

Schedule Number	Projects	Segments	Cost Estimates ($M) 2012 Forecast *	2013 Budget	2014	Total for 2012 and 2013 **	
B1	Underground Infrastructure and Cable	Underground Infrastructure	28.75	58.94	~~74.92~~	87.70	/UF, US
B2		Paper Insulated Lead Covered Cable - Piece Outs and Leakers	0.08	5.42	~~1.47~~	5.50	/UF, US
B3		Handwell Replacement	13.65	16.65	~~7.17~~	30.30	/UF, US
B4	Overhead Infrastructure and Equipment	Overhead Infrastructure	9.07	55.88	~~20.11~~	64.95	/UF, US
B5		Box Construction	0.58	23.04	~~27.76~~	23.62	/UF, US
B6		Rear Lot Construction	16.36	29.43	~~11.03~~	45.78	/UF, US
B7		Polymer SMD-20 Switches	-	1.53	~~2.94~~	1.53	/UF, US
B8		SCADA-Mate R1 Switches	-	1.43	~~2.69~~	1.43	/UF, US
B9	Network Infrastructure and Equipment	Network Vault & Roofs	2.84	18.76	~~15.57~~	21.60	/UF, US
B10		Fibertop Network Units	1.48	7.71	~~9.36~~	9.19	/UF, US
B11		Automatic Transfer Switches (ATS) & Reverse Power Breakers (RPB)	-	3.26	~~3.23~~	3.26	/UF, US
B12	Station Infrastructure and Equipment	Stations Power Transformers	0.38	3.48	~~0.87~~	3.86	/UF, US
B13.1 & 13.2		Stations Switchgear - Muncipal and Transformer Stations	1.73	21.81	~~20.31~~	23.54	/UF, US
B14		Stations Circuit Breakers	0.76	0.55	~~1.38~~	1.31	/UF, US
B15		Stations Control & Communicaton Systems	~~0.14~~	1.00	~~1.34~~	1.14	/UF, US
B16		Downtown Station Load Transfers	0.68	2.14	~~3.59~~	2.82	/UF, US
B17	Bremner TS	Bremner Transformer Station	8.50	81.00	~~23.02~~	89.50	/UF, US
B18	Hydro One Capital Contributions	Hydro One Capital Contributions	22.98	48.12	~~36.00~~	71.10	/UF, US
B19	Feeder Automation	Feeder Automation	2.30	20.66	~~7.38~~	22.97	/UF, US
B20	Metering	Metering	4.74	8.40	~~10.03~~	13.14	/UF, US
B21	Plant Relocations	Externally-Initiated Plant Relocations and Expansions	10.16	24.84	~~13.34~~	35.00	/UF, US
B22	Grid Solutions	Grid Solutions	-	-	~~0.96~~	-	/UF, US
C1	Operations Portfolio Capital		120.51	121.63	~~121.60~~	242.14	/UF, US
C2	Information Technology Capital		22.00	15.00	~~15.00~~	37.00	/UF, US
C3	Fleet Capital		0.80	2.00	~~2.00~~	2.80	/UF, US
C4	Buildings and Facilities Capital		5.00	5.00	~~5.00~~	10.00	/UF, US
	Allowance for Funds Used During Construction		1.20	1.40	~~1.40~~	2.60	/UF, US
Total			**274.68**	**579.09**	~~439.47~~	**853.78**	/UF, US

* The sum of actual spending to August 31, 2012 and estimated spending to year end.

** THESL has asked the OEB to consider the work programs identified for 2012 and 2013 together, and to defer consideration of the work program for 2014 to a later date.

RESPONSES TO ONTARIO ENERGY BOARD STAFF INTERROGATORIES ON ISSUE 2.1

INTERROGATORY 21:

Reference(s): T2/pp. 19-20

On these pages, prudence is defined as follows:

> "…the achievement of or approach to the lowest reasonable life cycle cost consistent with all other constraints, including for example safety of equipment, compliance with standards including accepted standards of good utility practice, public acceptability and the reliability and adequacy of the distribution system."

Please state how this definition was determined.

RESPONSE:

THESL's definition is THESL's understanding of the definition of prudence as contained in the OEB's filing guidelines, expanded to explain how THESL has sought to apply that definition. In THESL's view prudence requires wise decisions, not merely expedient decisions.

Ontario Energy Board

Commission de l'énergie de l'Ontario

Ontario

EB-2011-0144

IN THE MATTER OF the *Ontario Energy Board Act, 1998,* S.O. 1998, c. 15, (Schedule B);

AND IN THE MATTER OF an application by Toronto Hydro-Electric System Limited for an order approving just and reasonable rates and other charges for electricity distribution to be effective May 1, 2012, May 1, 2013 and May 1, 2014.

BEFORE: Cynthia Chaplin
Vice-Chair and Presiding Member

Paula Conboy
Member

Marika Hare
Member

DECISION WITH REASONS AND ORDER ON THE PRELIMINARY ISSUE

January 5, 2012

Background

Toronto Hydro-Electric System Limited ("THESL") filed an application with the Ontario Energy Board (the "Board") on August 26, 2011 under section 78 of the *Ontario Energy Board Act*, *1998*, (the "Act") seeking approval for changes to the rates that THESL charges for electricity distribution, to be effective May 1, 2012, May 1, 2013 and May 1, 2014. The Board assigned the application file number EB-2011-0144.

planned level of expenditures over the period 2012-2014 is $615 million, which VECC characterized as a "remarkably large capital plan."[21]

It may also be that the full planned spending is not imperative to ensure appropriate system reliability. Although THESL asserted that the high level of expenditures are driven by pressing system needs, the Board notes that on the existing capital spending level the company's reliability statistics show no marked deterioration, and the number of "worst performing feeders"[22] (a more important criteria than the reliability statistics, according to Mr. Haines) has been reduced by half – from 80 to 40.
If there really is nothing unusual about THESL's capital expenditures in terms of the nature of the activities, then the spending should be managed within the parameters of the 3GIRM framework, just as spending is managed by almost every other distributor. If the company is facing unusual non-discretionary requirements, then the appropriate course is an ICM application.

THESL has explained that it did not conduct its planning in contemplation of a year or years with rates set using IRM. It may be that a re-analysis of its capital plan will result in other expenditures which are potentially eligible for ICM treatment. The Board notes that were THESL to apply for an ICM adjustment for 2012, the half-year rule would likely not apply as the expectation would be that 2013 rates would also be set using IRM. This adjustment would have the effect of including the expenditures in rate base from the beginning of the year.

Next Steps

Some intervenors would have the Board set rates for 2012 using IRM in the expectation that the company would return with an ICM application, or that the Board would conduct a capital program review of some sort in the same timeframe. The objectives of these approaches are to instil greater cost discipline on THESL, reinforce the integrity of the policy, and still provide the opportunity for a review of the capital spending. On the other hand, CCC argued against a "hybridized" approach of combining IRM for a year and some sort of capital expenditure review.

CCC summarized the benefits of the IRM framework for ratepayers and highlighted that the Board needs to consider the interests of ratepayers and the impact of its decision on

[21] Tr. 4, p. 102.
[22] Mr. Haines described "worst performing feeders" as those feeders that have more than 7 outages per year.

RESPONSES TO ONTARIO ENERGY BOARD STAFF INTERROGATORIES ON ISSUE 2.2

INTERROGATORY 23:

Reference(s): T2/p. 2

It is stated that:

> "The specific projects THESL includes within the ICM reflect the minimum amount of infrastructure renewal THESL must undertake over the next three years to maintain current overall levels of system safety and reliability."

Please comment on whether or not there have been any significant changes in THESL's service quality and reliability statistics in the time since the filing of the EB-2011-0144 application.

RESPONSE:

THESL has been able to maintain relatively stable reliability over the referenced period. 2011 year-end reliability was on par with what was expected, and the 2012 year to date (August-end) reliability indicators have been lower (i.e., better) than expectations. This can be attributed in part to reduced weather-related outages resulting from a mild winter and summer.

THESL does not consider its current reliability results to be "good". Average reliability statistics mask reliability degradations in specific locations that are essential to address. In addition, THESL notes that over short intervals, reliability statistics can fluctuate according to short-term influences such as the severity of weather and changes in the amount of work being done on the system.

RESPONSES TO ONTARIO ENERGY BOARD STAFF INTERROGATORIES ON ISSUE 2.2

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Please comment on whether or not there have been any significant changes in THESL's service quality and reliability statistics in the time since the filing of the EB-2011-0144 application.

RESPONSE:

THESL has been able to maintain relatively stable reliability over the referenced period. 2011 year-end reliability was on par with what was expected, and the 2012 year to date (August-end) reliability indicators have been lower (i.e., better) than expectations. This can be attributed in part to reduced weather-related outages resulting from a mild winter and summer.

THESL does not consider its current reliability results to be "good". Average reliability statistics mask reliability degradations in specific locations that are essential to address. In addition, THESL notes that over short intervals, reliability statistics can fluctuate according to short-term influences such as the severity of weather and changes in the amount of work being done on the system.

RESPONSES TO ASSOCIATION OF MAJOR POWER CONSUMERS IN ONTARIO INTERROGATORIES ON ISSUE 2.2

INTERROGATORY 5:

Reference(s): Tab 2

a) Please complete the following table to provide THESL's recent Reliability Statistics:

	2008	2009	2010	2011
Interruptions				
Customers Interrupted				
Customer Hours Interrupted				
SAIDI				
SAIFI				
CAIDI				

RESPONSES TO ASSOCIATION OF MAJOR POWER CONSUMERS IN ONTARIO INTERROGATORIES ON ISSUE 2.2

RESPONSE:

a)

	2008	2009	2010	2011
Interruptions	1,836	1,901	2,164	1,938
Customers Interrupted	1,203,272	1,125,153	1,229,183	1,143,395
Customer Hours Interrupted	847,885	946,736	898,587	1,006,809
SAIFI	1.76	1.64	1.77	1.62
SAIDI	1.24	1.38	1.29	1.43
CAIDI	0.70	0.84	0.73	0.88

(MEDs[1] not included)

b) Please provide the data and percentage breakdown of customer hours interrupted by cause for the years 2008 to 2011.

RESPONSE:

b)

	2008	2009	2010	2011
Adverse Environment	4.6%	0.7%	4.6%	0.4%
Adverse Weather	8.8%	6.9%	9.8%	9.7%
Defective Equipment	51.9%	49.9%	37.9%	41.2%
Foreign Interference	8.9%	12.2%	6.1%	7.7%
Human Element	0.6%	0.6%	1.3%	0.9%

[1] "Major Event Days" as defined by the IEEE 1366.

RESPONSES TO ASSOCIATION OF MAJOR POWER CONSUMERS IN ONTARIO INTERROGATORIES ON ISSUE 2.2

	2008	2009	2010	2011
Lightning	7.5%	7.1%	1.9%	8.8%
Loss of Supply	2.2%	10.0%	8.5%	3.8%
Scheduled Outage	3.0%	2.3%	12.4%	5.7%
Tree Contacts	10.1%	8.4%	14.9%	18.5%
Unknown	2.4%	1.9%	2.6%	3.4%

(MEDs not included)

c) Please provide the data and percentage breakdown of types of equipment failures based on customer hours interrupted for 2010 and 2011.

c)

	2010	2011
Overhead Equipment	44.2%	34.2%
Station Equipment	1.7%	7.3%
Underground Equipment	53.5%	58.5%
Various	0.6%	0.0%

(MEDs not included)

d) Please comment on reliability trends based on 2012 year to date.

d) Please see THESL's response to OEB Staff interrogatory 23 (Tab 6F, Schedule 1-23).

ONTARIO ENERGY BOARD

FILE NO.: **EB-2012-0064**

VOLUME: **Technical Conference**

DATE: **November 21, 2012**

assumed load of that asset, as part of that study. We're not saying that that load is going to change in that analysis.

What is changing is the probability of failure of that existing asset, and then also the probability of failure of the new asset. And you also have that annualized capital cost component.

MR. BRETT: All right. Thank you.

MR. DAVIES: Is there any other intervenor who would like to ask questions? Or should Staff ask --

MS. GRICE: I can start. I am not sure if my questions are of this panel or panel 4.

MR. DAVIES: Okay.

MS. GRICE: Should I give it a shot?

MR. DAVIES: Sure, yes.

QUESTIONS BY MS. GRICE:

MS. GRICE: Hi. My name is Shelley Grice and I am representing AMPCO.

The first question I have has to do with the Board's regulatory framework. So would that be panel 1 or panel 4?

MR. WALKER: I think that would be panel 4.

MS. GRICE: Okay. I also have some questions on reliability. Would that be panel 1 or panel 4?

MR. WALKER: That would be us.

MS. GRICE: That would be you? Okay. I have just a couple of questions on reliability. The reference I have is tab 6F, schedule 2-5, and it is an AMPCO interrogatory and it's AMPCO No. 5.

Okay. What we asked there was for Toronto Hydro's recent reliability statistics, and, based on the results, it appears that the reliability statistics are better in 2011.

And I just -- we just had a follow-up question, if you could just provide a bit of an explanation why that would be, and then how those results were taken into consideration in the prioritization of the projects for 2012-2013.

MR. OTAL: So in terms of the reliability -- and I'm assuming we're looking at the table from 2008 to 2011; is that correct?

MS. GRICE: That is correct.

MR. OTAL: So the one thing that's remained consistent within this time frame is that of all of our cause code contributors, defective equipment still accounts for roughly 50 percent of all of our outages within our system year after year. And so that still demonstrates the need of doing this work and doing this work now.

In general, if we look at our reliability, from 2003 till 2011 reliability, you know, hasn't changed significantly within that period in time, and what we're really looking for in terms of reliability is to be more closely aligned with the reliability of world class cities. And we've still got a long way to go before we reach the reliability levels of those world class cities.

MS. GRICE: Okay. But just based on the trending in 2011 -- and I believe there was another interrogatory

TECHNICAL CONFERENCE UNDERTAKING RESPONSE INTERVENOR 11 – VULNERABLE ENERGY CONSUMERS COALITION

UNDERTAKING NO. JT2.2:

Reference(s):

Provide studies comparing THESL against other cities that THESL considers itself to be reasonably benchmarked against in respect of reliability.

RESPONSE:

Please see attached the Reliability Eligibility Peer Group Cities Comparison by Capgemini (Appendix A). This study had previously been submitted as part of the EB-2010-0142 proceeding.

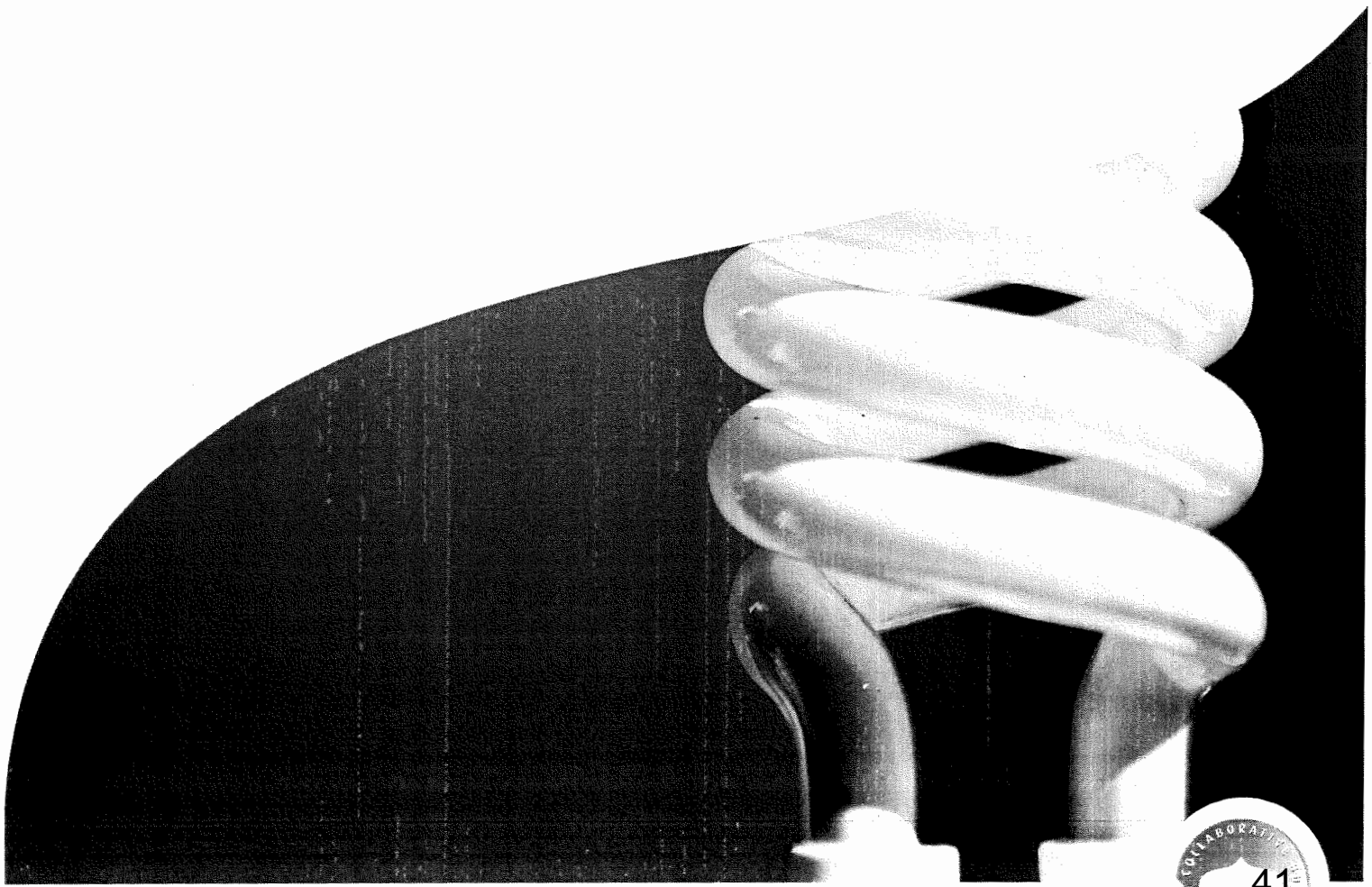
This undertaking was provided in the context of a line of questioning regarding reliability indicators such as SAIDI, SAIFI and CAIDI, as well as other bases for THESL's assessment of its own reliability. In that context, THESL notes that system average numbers such as these indicators mask area-specific and customer-specific problems. For example, THESL provides as Appendix B to this undertaking response letters received from certain key customer accounts which detail, among other things, these customers' experiences and concerns in respect of reliability.

Capgemini
CONSULTING. TECHNOLOGY. OUTSOURCING

toronto hydro corporation

RELIABILITY PEER GROUP CITIES COMPARISON

FINAL REPORT



9. APPENDIX

Appendix 1: Peer Group Cities Criteria

Appendix 2: Potential Peer Group Cities

Appendix 3: Toronto Hydro Reliability Data

Appendix 4: Toronto Hydro Reliability Data Analysis

Appendix 5: Other Cities Reliability Data

Appendix 6: Data Analysis

Appendix 7: Toronto Reliability Plan

Appendix 8: Circuits Schematics

Appendix 9: Transformation Map

RESPONSES TO ONTARIO ENERGY BOARD STAFF INTERROGATORIES ON ISSUE 1.1

INTERROGATORY 10:

Reference(s): **T2/p. 14 and *Chapter 3 of the Filing Requirements For Electricity Transmission and Distribution Applications,* p 10**

In the first reference, THESL begins its discussion as to how its application meets the criteria established by the Board in the Filing Requirements.

One of the requirements outlined in the second reference is "A description of the actions the distributor will take in the event the Board does not approve the application." in reference to ICM requests.

Please provide this information.

RESPONSE:

Should the Board reject this application, THESL would likely be required to channel all its available resources to address defective equipment on a strictly emergency reactive basis. Of course, THESL will always do its best to ensure that its customers, from residential customers to the largest commercial and manufacturing entities depending on our system, will receive electricity according to their reasonable expectations. However it is the considered view of THESL Asset Management and Operations Staff respectively that where THESL is unable to replace end-of-life (or past end-of-life) or defective equipment as a result of the absence of funding service disruptions will likely increase (both in frequency and duration), as will the likely costs of emergency repairs to failing equipment, and necessary projects would be delayed. Further, THESL is concerned that while the service levels to customers will likely be lower overall in this circumstance, the costs to ratepayers would likely be higher overall. This is so because responding to

RESPONSES TO ONTARIO ENERGY BOARD STAFF INTERROGATORIES ON ISSUE 1.1

defective and obsolete equipment on an emergency, reactive basis is generally more expensive than the orderly replacement contemplated in this application. The particular consequences of inaction as they relate to each specific project, as well as the sub-optimal approach of addressing these problems strictly on a reactive basis, are outlined in the non-discretionary justification within each subsection in Tab 4.

Ontario Energy Board

Commission de l'énergie de l'Ontario

EB-2006-0170

Ontario Energy Board

Filing Requirements For Electricity Transmission and Distribution Applications

Last Revised on June 28, 2012
(Originally issued on November 14, 2006)

The price cap index adjustment is determined as the annual percentage change in the GDP-IPI less the X-Factor. The X-factor is 0.72% plus a stretch factor. The value of the stretch factor is specific to each distributor for each rate year, and will be one of the following values: 0.2%; 0.4%; or 0.6%. The Board will determine each distributor's stretch factor. The distributor specific stretch factors will not be available before the application is filed. Therefore, the Rate Generator will include a proxy stretch factor of 0.4%. Once the distributor specific stretch factors become available, Board staff will adjust the stretch factor in each distributor's individual Rate Generator. Distributors will have an opportunity to comment on the accuracy of Board staff's update as part of the draft Rate Order process.

The price cap index adjustment will not be applied to the following components of delivery rates:

- Rate Adders;
- Rate Riders;
- Low Voltage Service Charges;
- Retail Transmission Service Rates;
- Wholesale Market Service Rate;
- Rural Rate Protection Charge;
- Standard Supply Service – Administrative Charge;
- MicroFIT Service Charge;
- Specific Service Charges; and
- Transformation and Primary Metering Allowances.[4]

2.2 Incremental Capital Module

The incremental capital module ("ICM") is intended to address the treatment of new capital investment needs that arise during the IRM plan term which are incremental to the materiality threshold defined below.

The eligibility criteria to recover amounts that are incremental to capital investment needs are included in section 2.5 of the *Report of the Board on 3rd Generation Incentive Regulation for Ontario's Electricity Distributors, dated* July 14, 2008 and are reproduced below.

4 and any other allowances the Board may determine.

Criteria	Description
Materiality	The amounts must exceed the Board-defined materiality threshold and clearly have a significant influence on the operation of the distributor; otherwise they should be dealt with at rebasing.
Need	Amounts should be directly related to the claimed driver, which must be clearly non-discretionary. The amounts must be clearly outside of the base upon which rates were derived.
Prudence	The amounts to be incurred must be prudent. This means that the distributor's decision to incur the amounts must represent the most cost-effective option (not necessarily least initial cost) for ratepayers.

2.2.1 ICM Materiality Threshold

The ICM materiality threshold is discussed in section 2.3 of the *Supplemental Report of the Board on 3rd Generation Incentive Regulation for Ontario's Electricity Distributors* (the "Supplemental Report") EB-2007-0673.

The Board has determined that the following formula is to be used by a distributor to calculate the materiality threshold that will apply to it:

$$\textit{Threshold Value} = 1 + \left(\frac{RB}{d}\right) * (g + PCI * (1 + g)) + 20\%$$

Where:

RB = rate base included in base rates ($);
d = depreciation expense included in base rates ($);
g = distribution revenue change from load growth (%); and
PCI = price cap index (% inflation less productivity factor less stretch factor).

The values for "RB" and "d" are the Board-approved amounts in the distributor's base year rate decision.

The value for "g" is the % difference in distribution revenues between the most current complete year and the base year.

The following table provides an example of the calculation of the materiality threshold values.

An Illustration:

Assumptions:	RB	=	$100 million;
	d	=	$5 million;
	g	=	1.5% (0.015); and
	PCI	=	0.75% (0.0075).
Calculation:	$1+(\frac{100,000,000}{5,000,000})*(0.015+.0075*(1+0.015))+0.20=1.65$		
Result:	The materiality threshold (CAPEX/Depreciation) is 1.65 or 165%. That is, given the assumptions in this example, the Board expects the distributor to manage a CAPEX level of up to $8.26 million ($5 million * 1.65) before being eligible to apply to recover incremental amounts.		

2.2.2 Eligible Incremental Capital Amount

In the Supplemental Report, the Board determined that eligible incremental capital amount sought for recovery should be new capital in excess of the materiality threshold. The materiality threshold value, as calculated using the formula discussed in Section 2.2.1, establishes eligibility for incremental capital spending and also marks the base from which to calculate the maximum amount eligible for recovery. A distributor applying for recovery of incremental capital should calculate the maximum allowable capital amount by taking the difference between the 2013 total non-discretionary capital expenditure and the materiality threshold.

2.2.3 Application of the Half-Year Rule

The Board's general guidance on the application of the half-year rule is provided in the Supplemental Report. In this report the Board determined that the half-year rule should not apply so as not build a deficiency for the subsequent years of the IRM plan term. In a subsequent decision with respect to the application of the half-year rule in the context of an ICM, the Board decided that the half-year rule would apply in the final year of the IRM plan term[5]. The Board has adopted this as a clarification to the policy on ICM.

2.2.4 Revenue Requirement Calculation

When calculating the revenue requirement associated with the ICM, a distributor should use the following parameters:

- Cost of Capital
  - In the *Report of the Board on Cost of Capital and 2nd Generation Incentive Regulation for Ontario's Electricity Distributors*, issued

[5] EB-2010-0130, Guelph Hydro Electric Systems Inc., *Decision and Order*, p. 15

December 20, 2006 ("2006 Report") the Board outlined the transition to a single deemed capital structure of 60% debt and 40% equity. Since all distributors have completed the transition to a 60/40 debt-equity ratio, a distributor filing for an ICM adjustment shall use this deemed capital structure.

- On December 11, 2009 the Board issued the *Report of the Board on the Cost of Capital for Ontario's Regulated Utilities* (the "2009 Report"). The 2009 Report sets out revised cost of capital parameters to be effected in cost of service applications. A distributor filing an ICM adjustment, shall use the last Board-approved cost of capital parameters determined during the distributor's last rebasing application when calculating the revenue requirement associated with the ICM.

- PILS
  - Since currently known legislated tax changes from the level reflected in the Board-approved base rates for a distributor will be reflected in the IRM adjustments, a distributor filing for an ICM adjustment should apply the current tax rates when calculating the revenue requirement associated with the ICM.

- Working Capital Allowance ("WCA")
  - A distributor filing an ICM adjustment shall use the last Board-approved WCA determined during the distributor's last rebasing application when calculating the revenue requirement associated with the ICM.

2.2.5 ICM Filing Guidelines

The Board requires that a distributor requesting relief for incremental capital during the IRM3 plan term must include comprehensive evidence to support the claimed need, which should include the following:

- An analysis demonstrating that the materiality threshold test has been met and that the amounts will have a significant influence on the operation of the distributor;
- Justification that the amounts to be incurred will be prudent. This means that the distributor's decision to incur the amounts represents the most cost-effective option (not necessarily least initial cost) for ratepayers;
- Justification that amounts being sought are directly related to the claimed cause, which must be clearly non-discretionary and clearly outside of the base upon which current rates were derived.

- Evidence that the incremental revenue requested will not be recovered through other means (e.g., it is not, in full or in part, included in base rates or being funded by the expansion of service to include new customers and other load growth);
- Details by project for the proposed capital spending plan for the test year segregated between discretionary and non-discretionary;
- A description of the proposed non-discretionary capital projects and expected in-service dates;
- Calculation of the revenue requirement associated with each proposed incremental non-discretionary capital project (i.e. the cost of capital, depreciation, and PILs);
- Calculation of revenue requirement offsets associated with each incremental non-discretionary projects due to revenue to be generated through other means (e.g. customer contributions in aid of construction);
- A description of the actions the distributor will take in the event that the Board does not approve the application.
- Calculation of a rate rider to recover the incremental revenue from each class and the rationale for the proposed approach.

2.2.6 ICM Reporting Requirements

A distributor that receives rate relief through this module will be required to report to the Board annually on the actual amounts spent. At the time of the next rebasing, the distributor will file a calculation of the amounts to be incorporated in rate base. At that time the Board will make a determination on the treatment of any difference between forecast and actual capital spending during the IRM plan term. Any overspending or underspending will be reviewed at the time of rebasing.

2.2.7 ICM Accounting Treatment

The distributor will record eligible ICM amounts in Account 1508, Other Regulatory Asset, sub-account Incremental Capital Expenditures, subject to the assets being used and useful. For incremental capital assets under construction, the normal accounting treatment will continue in the construction work in progress ("CWIP") prior to these assets going into service and hence eligible for recording in the 1508 sub-account. The amortization of capital assets for the relevant accounting period will be recorded in a separate amortization account of the sub-account, Incremental Capital Expenditures. In addition, the revenues collected from the rate rider will be recorded in Account 1508, Other Regulatory Asset, sub-account, Incremental Capital Expenditures rate rider.

The distributor shall also record monthly carrying charges in sub-accounts Incremental Capital Expenditures and Incremental Capital Expenditures rate rider. Carrying charges

amounts are calculated using simple interest applied to the monthly opening balances in the account and recorded in a separate sub-account of account 1508. The rate of interest shall be the rate prescribed by the Board for deferral and variance accounts for the respective quarterly period published in the Board's web site.

2.2.8 Rate Generator and Supplemental Filing Module for ICM

The supplemental filing module supporting the Rate Generator will assist the distributor in calculating the distributor's threshold. The distributor will then tabulate the value of its eligible non-discretionary investments and compare this to the threshold. Other calculation work forms will be provided to calculate the revenue requirement for each project proposed for inclusion in the ICM request in the supplemental filing module. Once all work forms are completed and listed in the supplemental module, the tabulated revenue requirement will be converted into a rate rider.

2.3 Z-factor Claims

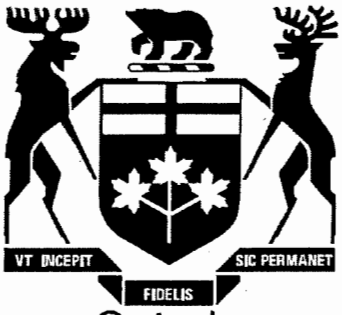
Z-factors are intended to provide for unforeseen events outside of a distributor's management control. The cost to a distributor must be material and its causation clear. A distributor must follow the guidelines listed below when applying to the Board to recover the amounts that the distributor has recorded in a Board-approved deferral account related to a Z-factor claim.

2.3.1 Eligibility Criteria for Z-factor Amounts

The eligibility criteria for a request to recover amounts by way of a Z-factor are discussed in section 2.6 of the *Board's Report on 3rd Generation Incentive Regulation for Ontario's Electricity Distributors* – July 14, 2008, and are summarized in Table 1 below. In order for amounts to be considered for recovery by way of a Z-factor, the amounts must satisfy all three eligibility criteria set out in Table 1 below.

Table 1: Z-factor Amount Eligibility Criteria

Criteria	Description
Causation	Amounts should be directly related to the Z-factor event. The amount must be clearly outside of the base upon which rates were derived.
Materiality	The amounts must exceed the Board-defined materiality threshold and have a significant influence on the operation of the distributor; otherwise they should be expensed in the normal course and addressed through organizational productivity improvements.
Prudence	The amount must have been prudently incurred. This means that the distributor's decision to incur the amount must represent the most cost-effective option (not necessarily least initial cost) for ratepayers.



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me. I'm here to discuss technical issues that -- you know, like, what we have to do. And so we put forward what we really have to do, must do in order to keep the lights on type of thing, right? To keep the same reliability, keep the system going, to have the safety of our employees and public.

I cannot -- it would be pure speculation on my part right now to say what Toronto Hydro would do if they're not granted the ICM. I am here to -- to defend the plan.

MR. RUBENSTEIN: No, I understand. But if you are not granted the ICM, all those considerations you're still going to think about, right? Got to keep the lights on, all those sorts of things that you believe will happen if you are not granted this ICM.

So in 2013, if you're not granted that funding, you're still going to do projects. I mean, it talks about -- in this interrogatory response, you talk about, you know, your -- about sort of in a broad sense of sort of the considerations that Toronto Hydro is still going to undertake.

But I assume at least some of these projects will be undertaken?

MR. BERDICHEVSKY: I believe that -- I truly believe and stand by it that each and every project that is in this application is absolutely a must-do project, and therefore these are all -- must be done.

Really, like there is no -- going even lower than that and, you know, it will be -- I cannot speculate on behalf

of Board whether the Board will approve or disapprove this application.

So I am telling you that it will be very hard for me to tell that box construction that is a safety-related issue is a more safety-related issue than rear lot, which is also a safety-related issue.

So these are all equally, I would say, very -- these are safety issues. We have to -- we have to do this type of work, and I will not be able to speculate on a what-if scenario type of thing.

MR. WALKER: Can I ask a clarifying question?

MR. RUBENSTEIN: Sure.

MR. WALKER: When you're saying this, are you asking if we didn't get the entire ICM, or some portion of it?

MR. RUBENSTEIN: Let's say -- no, let's say the entire ICM.

MR. WALKER: So if we were put back to depreciation as our funding level?

MR. RUBENSTEIN: Well, we can have a debate about that, but I...

[Witness panel confers]

MR. WALKER: I don't think we can say at this point which particular jobs we were going to do. That's going to be an execution decision we're going to have to make at the time, based on the circumstances that we have at that time.

We will -- at a low level of funding, we'll be doing the most critical work that we need to do to keep, you know, our reliability as best as it can be, and it will be

a different situation than we're in currently.

MR. RUBENSTEIN: And you don't know at this time which one of those critical projects that will be? I understand your position is all projects are necessary, they're all -- you have to do them all.

But, you know, there are different levels of sort of non-discretionary projects that Toronto Hydro would have to make that decision at that time for the same -- for the reasons that you just talked about, the most critical projects.

So I am trying to understand, well, two things.

One, I would like to know what those projects are that you think -- you think -- I understand we're not -- it's not 2013 yet. You're not in that situation. You think that they will be -- and exactly what the process will be, sort of what your process will be in sort of making that determination, or have made that determination.

MR. CASS: Mark, the first part of your question, I think, has been answered at least a couple of times, that they don't know at this time what those projects will be. And it will have to be addressed at the time of the Board decision.

The second part of your question, I don't know if there is an answer to that, about a process.

MR. WALKER: I am not clear on what you mean by "process," to be honest.

MR. RUBENSTEIN: I mean, if you can sort of elaborate on -- at that point, if we're -- if you're in that