

Rob Barrass

Lead Regulatory Counsel
Toronto Hydro-Electric System Limited
14 Carlton Street
Toronto, ON M5B 1K5

Telephone: 416.542.2546
Facsimile: 416.542.3024
regulatoryaffairs@torontohydro.com
www.torontohydro.com



December 2, 2013

via RESS e-filing – signed original to follow by courier

Ms. Kirsten Walli
Board Secretary
Ontario Energy Board
PO Box 2319
2300 Yonge Street, 27th floor
Toronto, ON M4P 1E4

Dear Ms. Walli:

**Re: Toronto Hydro-Electric System Limited (“THESL”)
OEB File No. EB-2012-0064 (the “Application”)
Responses to Phase 2 Technical Conference Undertakings**

THESL writes to the Ontario Energy Board in respect of the above-noted matter.

Pursuant to Procedural Order No. 8, dated November 1, 2013, THESL encloses written responses to the Technical Conference Undertakings it gave on November 27, 2013.

Please do not hesitate to contact me if you have any questions.

Yours truly,

[original signed by]

Rob Barrass

Lead Regulatory Counsel
Toronto Hydro-Electric System Limited
regulatoryaffairs@torontohydro.com

:RB/km

cc: Fred Cass of Aird & Berlis LLP, Counsel for THESL
Intervenors of Record for EB-2012-0064

TECHNICAL CONFERENCE UNDERTAKING RESPONSE INTERVENOR 7 – ENERGY PROBE RESEARCH FOUNDATION

1 **UNDERTAKING NO. JT3.1:**

2 **Reference(s): SEC # 8**

3

4 To provide evidence in the 2013 filing where the two projects, rehabilitation of feeders
5 N80M30 and 80M29, and SCNA47M17, appear, and explain why, if the cost was
6 included in that estimate for in-service additions, it is only a presentation error and does
7 not affect 2014 if it also appears in the 2014 number.

8

9 **RESPONSE:**

10 Underground Rehabilitation of Feeders NY80M30, NY80M29

11 This job appeared in the May 2012 filing and the October 2012 update on pages 59-61 of
12 Tab 4, Schedule B1, as "Underground Rehabilitation of Feeder NY80M30". In the 2014
13 evidentiary update, this job was renamed to "Underground Rehabilitation of Feeders
14 NY80M30, NY80M29" to include both feeders which this job affects.

15

16 Sub-job W12077 appeared as part of this job in the May 2012 filing with a cost estimate
17 of \$6.97M and a cost estimate number of 19522. This represented the entire scope of
18 work associated with this job. For administrative reasons, THESL then divided the scope
19 of work into five phases. The October 2012 update included only phase three, with a cost
20 of \$2.10M. The 2014 evidentiary update only includes phases four and five, with a cost
21 of \$8.84M (cost estimate numbers of 28590 and 28591). As such, the work included in
22 this job in the 2014 evidentiary update was not among the work approved by the OEB in
23 Phase 1, nor was it included in the capital expenditures used to derive in-service additions
24 for 2013 (please refer to Appendix A in THESL's response to SEC Interrogatory 5). The
25 following table is provided for further clarity:

26

**TECHNICAL CONFERENCE UNDERTAKING RESPONSE
 INTERVENOR 7 – ENERGY PROBE RESEARCH FOUNDATION**

1

	May 2012 Filing	October 2012 Update	August 2014 Update
Description	Entire scope of work	Phase three only	Phases four and five only
Cost Estimate	\$6.97M	\$2.10M	\$8.84M
Cost Estimate Number(s)	19522	19522	28590, 28591

2

3 THESL notes that the combined costs of phases three, four and five, is greater than the
 4 initial cost of the entire scope of work. The increase in cost is mainly due to
 5 complications associated with coordinating with City work in the area as well as an
 6 increase in the amount of direct buried cable being replaced in the neighbourhood.

7

8 Underground Rehabilitation of Feeder SCNA47M17

9 This job appeared in the May 2012 filing and the October 2012 update on pages 95-98 of
 10 Tab 4, Schedule B1. In the 2014 evidentiary update, two sub-jobs (E11223 and E12267)
 11 have been added. These sub-jobs did not appear in the May 2012 filing or October 2012
 12 update. As a result, they were not among the work approved by the OEB in Phase 1, nor
 13 were they included in the capital expenditures used to derive in-service additions for
 14 2013. The reason for the addition of these two sub-jobs was provided in THESL's
 15 response to SEC Interrogatory 8.

16

17 Presentation Error

18 In Table 1 in Appendix A of the response to SEC Interrogatory 8, THESL indicated that
 19 these jobs should not have been in Table 2 of T9, Schedule B1, page 4. Table 2 was
 20 intended to show only new jobs (i.e., jobs that never appeared in the May 2012 filing or

**TECHNICAL CONFERENCE UNDERTAKING RESPONSE
INTERVENOR 7 – ENERGY PROBE RESEARCH FOUNDATION**

1 the October 2012 update in respect of any year of THESL’s filed work program). Since
2 these jobs were part of the May 2012 filing and/or the October 2012 update, they should
3 not have appeared in Table 2. These jobs were not included in work approved by the
4 OEB in Phase 1, nor were they included in the capital expenditures used to derive in-
5 service additions for 2013 – this was strictly a presentation error.

TECHNICAL CONFERENCE UNDERTAKING RESPONSE INTERVENOR 7 – ENERGY PROBE RESEARCH FOUNDATION

1 **UNDERTAKING NO. JT3.2:**

2 **Reference(s): SEC No. 8**

3

4 Provide detail on types and frequencies of failures listed in response to SEC 8.

5

6 **RESPONSE:**

7 On page 1 of the response to OEB Staff Interrogatory 7, THESL provided three reasons
8 for the addition of 15 new jobs in the 2014 filing. THESL notes that the jobs in Segment
9 B1 include replacement of underground assets in addition to direct buried cable. As such,
10 THESL amends its response to SEC Interrogatory 8 as follows:

11

12 Of the 19 jobs listed in Table 2 in Tab 9, Schedule B1, p.4, 15 were added
13 to segment B1 due to one or more of the following reasons:

14 *a) To stabilize reliability on specific feeders or in specific areas*
15 *where direct buried cable or other underground asset failures*
16 *have resulted in sustained outages.*

17 *b) To replace very old direct buried cable that has passed its*
18 *useful life and is susceptible to failure.*

19 *c) Coordination of construction with third parties.*

20

21 In its response to this undertaking, THESL has expanded Tables 1 and 3 that were
22 provided in response to SEC Interrogatory 8 as follows:

- 23
- 24 • Indicating which of the above three criteria are applicable to the added job in
25 Table 1.
 - 26 • For any jobs or sub-jobs that were added due to reliability reasons, providing
specific reliability data where it had not been previously provided.

**TECHNICAL CONFERENCE UNDERTAKING RESPONSE
INTERVENOR 7 – ENERGY PROBE RESEARCH FOUNDATION**

- 1 • Indicating which of the new jobs in Table 1 were not undertaken in 2012 or 2013
2 due to operational constraints.

3

4 The revised Tables 1 and 3 are provided in Appendix A of this response.

5

6 For further clarity: the cost of the added sub-jobs in Tables 1 and 3 was not included in
7 the in-service additions used to calculate 2013 ICM riders. As such, THESL did not seek
8 or receive funding for this work in Phase 1 of this Application (please refer to
9 undertaking JT3.1 as well as Appendix A in THESL's response to SEC Interrogatory 5).

Table 1: List of jobs added to the 2014 job list in segment B1

Job	Sub-job(s)	In May 2012 Filing	In Oct 2012 Update	Notes / Reasons for Addition in 2014	Criteria Met	Additional Information
Underground Rehabilitation of Feeders NY51M21, NYSS27F1, NYSS27F2, NYSS27F3	E12217, E12250, E12251, E12266, E12268	None	None	This job replaces aged direct buried cable that has failed in the last five years. Sub-jobs E12217, E12250 & E12251 replace aged direct buried cable and convert aged Winfield MS load to 27.6kV. It is an islanded 4kV MS built in the 1960's. Both the station transformer and oil breakers are old and unreliable. Sub-jobs E12266 & E12268 are needed to replace direct buried cable on Country Lane and Hyde Park Circle with cable in concrete encased duct. This area is supplied by feeder 51M21, which is a poorly performing feeder. Replacing aged and unreliable direct buried cable is expected to improve reliability to the feeder.	b	This job includes the replacement of direct buried cable that is approximately 40 years old. Feeder NY51M21 experienced five sustained outages in 2012 and has experienced seven sustained outages thus far in 2013. Sub-jobs E12266 and E12268 are expected to improve this trend of deteriorating reliability. THESL had identified these sub-jobs prior to 2012, but could not complete these sub-jobs in 2012 or 2013 due to operational constraints.
Underground Rehabilitation of Feeder NY51M29	E13194	None	None	This work is required to replace unreliable underground assets on feeder 51M29 in Don Mills / Graydon Hall and Duncan Mills area. This feeder has suffered five sustained outages in 2013 year-to-date, three of which were caused by underground assets. The area being rebuilt has experienced multiple underground asset failures, including primary cable failure. THESL has received complaints regarding reliability in this area.	a	The cable being replaced has failed twice over the past two years, once in July 2013 and once in October 2012. The cable failure in 2012 was responsible for 63% of the feeder CI in 2012. There were also three non-cable underground asset failures in the area between July 2011 and August 2012. THESL had identified this sub-job prior to 2012, but could not complete this sub-job in 2012 or 2013 due to operational constraints.
Underground Rehabilitation of Feeder NY51M30	E13093	None	None	This job rebuilds an area that has experienced eight underground asset failures and one primary cable failure in the last five years.	a	This feeder experienced one sustained outage in 2012, due to primary cable failure. This outage resulted in 2,049 CI and 2,678 CHI. This job includes the replacement of some direct buried cable that was installed on the trunk of this feeder in the 1980s.
Underground Rehabilitation of Feeder NY51M7	E13074	Same	None	This job was in the 2012-2013 application, so it should not have been in Table 2 in T9, Sch. B1, p.4. <u>This is an error in presentation only</u> and does not affect the accuracy of the in-service additions estimate for segment B1.	N/A	
Underground Rehabilitation of Feeder NY53M1	E12385, E12386	None	None	Added in 2014 so that work is completed before Metrolinx Eglinton LRT work begins in the area.	c	THESL had identified these two sub-jobs prior to 2012, but could not complete them in 2012 or 2013 due to operational constraints.

Job	Sub-job(s)	In May 2012 Filing	In Oct 2012 Update	Notes / Reasons for Addition in 2014	Criteria Met	Additional Information
Underground Rehabilitation of Feeder NY53M25	E12237	Same	None	This job was in the 2012-2013 application, so it should not have been in Table 2 in T9, SchB1, p.4. <u>This is an error in presentation only</u> and does not affect the accuracy of the in-service additions estimate for segment B1.	N/A	
Underground Rehabilitation of Feeder NY53M27	E13616	None	None	The lateral section of this feeder opposite to the job area experienced a number of direct buried cable failures. These cables were replaced with new cables in concrete encased ducts. This job replaces the remaining portion of existing direct buried cables in this loop, which are of similar age and are expected to have similar environmental and loading degradation conditions. The job also splits up loading of the loop due to additional load growth in area.	a	The lateral section of this feeder opposite to the job area experienced five direct buried cable failures between August and November of 2012. These failures caused 84% of CI and 96% of CHI on the feeder in 2012.
Underground Rehabilitation of Feeder NY53M9	E08220	None	None	This job replaces direct buried cable that feeds transformers in vaults. One of the vaults has experienced an explosive failure of equipment.	b	The cable to be replaced is more than 40 years old. The explosion happened in 2005 on a vault transformer. This sub-job was to be constructed in 2012, but was deferred due to operational constraints.
Underground Rehabilitation of Feeder NY55M21	W13162	None	None	The underground distribution on Starview Drive and Rockbanks Crescent is currently direct buried. The area has experienced four outages due to underground cable failures in the past three years.	a	The direct buried cable in this area failed once in 2010, twice in 2011, and once in 2012. This feeder experienced seven sustained outages in 2012, all due to primary cable failures. In comparison, there were two primary cable failures on this feeder in 2011.
Underground Rehabilitation of Feeders NY80M30, NY80M29	W12077	W12077, NY80M30	W12077, NY80M30	This job was in the 2012-2013 application as "Underground Rehabilitation of Feeders NY80M30", so it should not have been in Table 2 in T9, SchB1, p.4. <u>This is an error in presentation only</u> and does not affect the accuracy of the in-service additions estimate for segment B1. To better reflect the work, THESL changed the job title change to include "NY80M29" in this update. Although the sub-job W12077 was in the May 2012 filing, its cost was reduced in the October 2012 update. The remaining cost to finish this sub-job in 2014 been added in this filing.	N/A	
Underground Rehabilitation of Feeder NYSS55F1	W14667	None	None	NYSS55F1 has experienced three underground cable outages in the past five years. The underground cable supplying Jane Street and Gosford Boulevard is currently direct buried and has failed. The installation year for the cable was 1963.	a,b	The direct buried cable in this area failed twice in 2007, once in 2008, once in 2010, and once in 2012. There were four primary cable failures on this feeder in 2012, resulting in 85% of the total CI and 86% of the total CHI on this feeder in 2012.

Job	Sub-job(s)	In May 2012 Filing	In Oct 2012 Update	Notes / Reasons for Addition in 2014	Criteria Met	Additional Information
Underground Rehabilitation of Feeders SCFJF1	E11116	None	None	This job replaces 45 year-old direct buried cable on Cougar Court. The direct buried cable has failed. This job is expected to stabilize reliability on this feeder.	a,b	The direct buried cable in this area failed in 2008. THESL had identified this sub-job prior to 2012, but could not complete this sub-job in 2012 or 2013 due to operational constraints.
Underground Rehabilitation of Feeder SCNA47M17	E11223, E11616, E12239, E12241, E12242, E12243, E12244, E12267, E12281, E12335, E12336	All except for E11223, E12267	All except for E11223, E12267	This job was in the 2012-2013 application, so it should not have been listed in Table 2 in T9, Sch. B1, p.4. Two sub-jobs, E11223 and E12267, were added in the 2014 update, meaning that this job should have appeared in Table 4 in T9, SchB1, p.5. <u>This is an error in presentation only</u> and does not affect the accuracy of the in-service additions estimate for segment B1. This feeder has experienced 18 underground asset failures, including five direct buried cable failures, in the past five years. The two additional sub-jobs is expected to reduce outages.	a	THESL had identified on these two sub-jobs prior to 2012, but could not complete these sub-jobs in 2012 or 2013 due to operational constraints.
Underground Rehabilitation of Feeder SCNA502M23	E13605	None	None	This job replaces direct buried cable that failed in late 2012. The cable is no longer functional and has been left de-energized. The local distribution system in a contingency situation as a result.	a	
Underground Rehabilitation of Feeder SCNAE5-1M25	E13066	None	None	The direct buried cable loop being rebuilt by this job experienced three direct buried cable failures in 2012 and one in 2013. This sub-job was advanced to 2014 to address the failing infrastructure.	a	
Underground Rehabilitation of Feeder SCNAR26M22	E12277	None	None	Feeder reliability is deteriorating, with four sustained outages to-date in 2013. Outages have impacted a large customer which has complained to THESL regarding the reliability of its service. This job is expected to improve reliability.	a	Three of the four sustained outages in 2013 were due to underground asset failures, including one primary cable failure.
Underground Rehabilitation of Feeder SCNAR26M31	E11401, E11426	None	None	This job rebuilds an industrial area that has experienced four primary cable failures in the last five years.	a	The area to be rebuilt by this job experienced one primary cable failure in each of the last four years. In 2012, cable failure was responsible for 69% of the CI and 90% of the CHI on this feeder. The civil phase of this job has already been completed.

Job	Sub-job(s)	In May 2012 Filing	In Oct 2012 Update	Notes / Reasons for Addition in 2014	Criteria Met	Additional Information
Underground Rehabilitation of Feeder SCNAR26M32	E12323	None	None	This feeder has experienced four underground asset failures, including two direct buried cable failures, in the past five years. This job is expected to reduce the number of outages.	a	This feeder experienced two sustained outages in 2011, one of them due to primary cable failure. This feeder experienced one sustained outage in 2012, and it was due to a primary cable failure. THESL had identified this sub-job prior to 2012, but could not complete this sub-job in 2012 or 2013 due to operational constraints.
Underground Rehabilitation of Feeder SCXJF1	E13203, E14031	None	None	This job rebuilds a small neighbourhood fed with 45-year-old direct buried cable that is in need of immediate replacement.	b	This job will also provide load relief to a 4 kV feeder that is loaded to a level that renders its backup feeder ineffective during contingency. THESL had identified these two sub-jobs prior to 2012, but could not complete these sub-jobs in 2012 or 2013 due to operational constraints.

Table 3: Revised 2014 Job List

Original 2014 Job List		Revised 2014 Job List				
Underground Rehabilitation of Feeder	Job Cost (\$M)	Underground Rehabilitation of Feeder(s)	Job Cost (\$M)	Changes to Job	Reasons for Changes to Job	Additional Information
NY51M24	\$0.67	NY51M24, NY51M25	\$1.45	Revision to job title	Job title revised to include both feeders on which there is work.	N/A
				Added sub-job E13103	Sub-job E13103 was in the May 2012 filing, with a construction year of 2013. It was removed in the October 2012 update as it was not expected to be completed in 2013. As this sub-job is the electrical phase of sub-job E13108, which was approved by the OEB in Phase 1, THESL has added it to the 2014 program in order to complete the work as initially planned in the May 2012 filing.	

Original 2014 Job List		Revised 2014 Job List				
Underground Rehabilitation of Feeder	Job Cost (\$M)	Underground Rehabilitation of Feeder(s)	Job Cost (\$M)	Changes to Job	Reasons for Changes to Job	Additional Information
				Added sub-job E11582	Sub-job E11582 was added to the 2014 program. Feeder NY51M24 continues to experience a high number of underground asset failures. This sub-job replaces switchgear that is approximately 35 years old, and is expected to help stabilize the reliability of the feeder.	Feeder NY51M24 has experienced 30 underground asset failures in the last five years, 12 of them due to primary cable failures and the remaining due to other underground assets such transformers and switches. THESL had identified this sub-job prior to 2012, but could not complete this sub-job in 2012 or 2013 due to operational constrains.
NY51M3	\$2.56	NY51M3, NY51M27	\$4.15	Revision to job title	Job title revised to include both feeders on which there is work.	
				Added sub-jobs E12393 and E12394	Sub-jobs E12393 and E12394 were in the May 2012 filing, with a construction year of 2014. Their costs were revised in the October 2012 update to include only design costs. The design costs for these two sub-jobs were approved by the OEB in Phase 1. THESL has included the construction costs for these two sub-jobs in the 2014 program in order to complete the work as initially planned in the May 2012 filing.	
				Added sub-jobs E12418, E12419, E12425, E12426, E12429 and E12430	Sub-jobs E12418, E12419, E12425, E12426, E12429 and E12430 have been added to address reliability complaints from customers in the area by removing aged and failing direct buried cable.	From 2008 to 2011, the majority of sustained outages on feeder NY51M27 were due to underground asset failures. During this period, the feeder experienced 12 outages due to underground asset failures, including 5 outages due to primary cable failures. THESL had identified these sub-jobs prior to 2012, but could not complete these sub-jobs in 2012 or 2013 due to operational constraints.
				Removed sub-jobs E12409 and E12346	Sub-jobs E12409 and E12346 have been removed as they are electrical phases of civil phases (E12341 and E12408) that have been included for 2014, and it would not be possible to construct both phases in one year.	
NY51M8	\$0.32	NY51M8, NY51M6	\$0.34	Revision to job title	The job title was missing feeder NY51M6.	

Original 2014 Job List		Revised 2014 Job List				
Underground Rehabilitation of Feeder	Job Cost (\$M)	Underground Rehabilitation of Feeder(s)	Job Cost (\$M)	Changes to Job	Reasons for Changes to Job	Additional Information
NY55M23	\$2.24	NY55M23	\$2.38	Cost revision	Detailed design, including field visits to assess field conditions and construction factors, resulted in a job estimate increase.	
NY80M8	\$9.51	NY80M8	\$7.98	Replaced sub-job W14229 with sub-jobs W14540, W14541 and W14542	Sub-job W14229 was split into smaller sub-jobs W14540, W14541 and W14542 for administrative reasons. The overall scope of work remains unchanged.	
				Removed sub-job W14248	Sub-job W14248 is the electrical phase of sub-job W14229. It is not expected to be constructed in 2014 as it is not possible to construct both the civil and electrical phases in one year.	
NY85M24	\$2.03	NY85M4, NY85M24	\$3.01	Jobs combined	Jobs were combined to reflect work common to both feeders.	
				Added sub-job W13709	This sub-job was included in the 2014 update in error. It is a portion of sub-job W13278, which was approved by the OEB in Phase 1.	
				Added sub-job W13239	Sub-job W13239 was in the May 2012 filing, with a construction year of 2013. It was removed in the October 2012 update as it was not expected to be completed in 2013. As this sub-job is the electrical phase of sub-job W13278, which was approved by the OEB in Phase 1, THESL has added it to the 2014 program in order to complete the work as initially planned in the May 2012 filing.	
NY85M4	\$3.31			Removed sub-jobs W14268, W14269, W14270, W14153, W14154 and W14155	These sub-jobs have been removed to reflect the improved reliability on the feeder, particular with respect to underground asset failures. THESL intends to monitor the area and address its needs in future investment plans , as appropriate.	

Original 2014 Job List		Revised 2014 Job List				
Underground Rehabilitation of Feeder	Job Cost (\$M)	Underground Rehabilitation of Feeder(s)	Job Cost (\$M)	Changes to Job	Reasons for Changes to Job	Additional Information
NY85M7	\$13.83	NY85M7	\$6.64	Removed sub-jobs W14129, W14130, W14131, W14132 and W14135	These five sub-jobs have been removed because they are not expected to result in an improvement in the reliability of feeder NY85M7. The poor reliability of feeder NY85M7, particularly with respect to underground asset failures, has mainly been due to assets in areas that will be rebuilt by other 2014 sub-jobs within this job, namely W14133 and W14134. THESL intends to monitor the areas to be rebuilt by these five removed sub-jobs in case reliability deteriorates in future.	
SCNA47M13	\$0.96	SCNA47M13	\$1.39	Added sub-job E12228	Sub-job E12228 was in the May 2012 filing, with a construction year of 2014. Its cost was revised in the October 2012 update to include only the design cost. The design cost for this sub-job was approved by the OEB in Phase 1. THESL has included the construction costs for this sub-job in the 2014 program in order to complete the work as initially planned in the May 2012 filing.	
SCNA502M21	\$2.56	SCNA502M21, SCNA502M22, SCNA502M28	\$2.21	Jobs combined	Jobs were combined to reflect work common to both feeders.	
				Removed sub-job E14008	Sub-job E14008 has been removed as it is the electrical phase of sub-job E13123, which has been included for 2014, and it would not be possible to construct both phases in one year.	
SCNA502M22	\$0.25			Removed sub-job E14009	Sub-job E14009 has been removed due to execution constraints at the overall segment level. This specific sub-job was deferred because there have not been cable failures in the sub-job area.	
SCNAH9M23	\$2.71	SCNAH9M23, SCNAH9M32	\$2.14	Revision to job title	Job title was revised to include feeder that is affected by sub-job E15023.	
				Added sub-job E15023	This sub-job has been added to address a segment of direct buried cable that has failed multiple times since late 2012.	The direct buried cable to be replaced failed twice in 2012.
				Removed sub-jobs E13148, E13121(21561)	Sub-jobs E13148 and E13121 (estimate 21561) have been removed as they are electrical phases of sub-jobs E13147 and E13121 (estimate 21565), which have been included for 2014, and it would not be possible to construct both phases in one year.	
SCNAH9M30	\$2.75	SCNAH9M30	\$1.92	Removed sub-job E14191	Sub-job E14191 has been removed as it is the electrical phase of sub-job E14190, which has been included for 2014, and it would not be possible to construct both phases in one year.	
SCNAR26M34	\$1.60	SCNAR26M34	\$1.06	Removed sub-job E14322	Sub-job E14322 has been removed as it is the electrical phase of sub-job E14321, which has been included for 2014, and it would not be possible to construct both phases in one year.	

Original 2014 Job List		Revised 2014 Job List				
Underground Rehabilitation of Feeder	Job Cost (\$M)	Underground Rehabilitation of Feeder(s)	Job Cost (\$M)	Changes to Job	Reasons for Changes to Job	Additional Information
SCNT47M1	\$6.58	SCNT47M1	\$7.76	Removed sub-job E12299	Sub-job E12299 was in the May 2012 filing, with a construction year of 2014. While it should have been in the Oct. 2012 filing with a construction year of 2013, it was omitted from the Oct. 2012 filing in error. THESL continued with the construction of sub-job E12299 in 2013 as other sub-jobs were dependent on its completion. Sub-job E12299 was completed earlier this year and therefore has been removed from this filing.	
				Added sub-jobs E12288 and E12300	Sub-jobs E12288 and E12300 were in the May 2012 filing, with a construction year of 2014. Their costs were revised in the October 2012 update to include only design costs. The design costs for these two sub-jobs were approved by the OEB in Phase 1. THESL has included these two sub-jobs in the 2014 program, with their construction costs, in order to complete the work as initially planned in the May 2012 filing.	
SCNT47M3	\$0.79	SCNT47M3	\$2.56	Replaced the electrical phases of E12126 and E12127 with new sub-jobs E11628 and E11629	In the May 2012 filing and the October 2012 update, sub-jobs E12126 and E12127 were each presented as two sub-jobs, one for the civil phase and one for the electrical phase. Each phase had its own estimate number. The design costs for the electrical phases were approved by the OEB in Phase 1. For administrative reasons, THESL has replaced the electrical phases with two new sub-jobs, E11628 and E11629. The scope of work remains unchanged. THESL has included these two new sub-jobs in the 2014 program, with their construction costs, in order to complete the work as initially planned in the May 2012 filing.	
				Added sub-jobs E12234 and E12235	Sub-jobs E12234 and E12235 were in the May 2012 filing with a construction year of 2014. Their costs were revised in the October 2012 update to include only design costs. The design costs for these two sub-jobs were approved by the OEB in Phase 1. THESL has included these two sub-jobs in the 2014 program, with their construction costs, in order to complete the work as initially planned in the May 2012 filing.	
				Removed sub-job E12128	Sub-job E12128 has been removed due to the complexities associated with constructing a set of sub-jobs in one area. Note that sub-jobs E11628 and E11629 are related phases to sub-job E12128 and are included in 2014.	
SCNT63M12	\$2.62	SCNT63M12	\$1.72	Removed sub-job E14011	Sub-job E14011 has been removed as it is the electrical phase of sub-job E13152, which has been included for 2014, and it would not be possible to construct both phases in one year.	
SCNT63M4	\$3.16	SCNT63M4	\$1.90	Removed sub-job E14330	Sub-job E14330 has been removed as it is the electrical phase of sub-job E14327, which has been included for 2014, and it would not be possible to construct both phases in one year.	

Original 2014 Job List		Revised 2014 Job List				
Underground Rehabilitation of Feeder	Job Cost (\$M)	Underground Rehabilitation of Feeder(s)	Job Cost (\$M)	Changes to Job	Reasons for Changes to Job	Additional Information
SCNT63M8	\$2.25	SCNT63M8	\$1.35	Removed sub-job E13044	Sub-job E13044 has been removed due to the complexities associated with constructing a set of sub-jobs in one area. Note that sub-jobs E13042 and E13043 are related phases to sub-job E13044 and are included in 2014.	
				Removed sub-job E14047	Sub-job E14047 has been removed as it is the electrical phase of sub-job E13267, which was approved by the OEB in Phase 1 but will not be completed until 2014, and it would not be possible to construct both phases in one year.	

**TECHNICAL CONFERENCE UNDERTAKING RESPONSE
 INTERVENOR 10 – SCHOOL ENERGY COALITION**

1 **UNDERTAKING NO. JT3.3:**

2 **Reference(s):** **Technical Completion v. Financial Completion**
 3

4 To provide chart comparing jobs for B1 segment originally in the application with jobs
 5 technically completed in 2012.
 6

7 **RESPONSE:**

8 The table below indicates which sub-jobs in segment B1 approved by the OEB in Phase 1
 9 were “technically complete” in 2012. THESL considers a sub-job “technically complete”
 10 when the assets associated with the sub-job are installed and ready for use.
 11

Sub-job Number	2012/2013 Approved B1 Sub-job	“Technically Complete” in 2012
E10112	Purple Sageway 51M3 UG replacement (Civil)	
E11072	Bridletowne NA502M22 UG Replacement SCNA502M22 (Elec)	X
E11087	E11087 Grand Marshall Cable Repl SCNT47M1 – Civil and Electrical	
E11139	E11139 Cassandra UG Rebuild - Civil	
E11191	E11191 FESI-12 McLevin/Alford UG rebuild NT4747M3	
E11301	E11301 FESI-12 Hupfield UG rebuild Phase 1 NT47M3	
E11356	E11356 FESI-12 Pennyhill UG rebuild NT47M3	
E11372	E11372 FESI-12 Hupfield UG rebuild Phase 2 NT47M3	
E11380	E11380 FESI-12 Empringham/McLevin UG rebuild NT47M3	
E11421	Antrim Glamorgan Dundalk UG Rebuild SCNAE5-1M29 (Civil)	
E11421	Antrim Glamorgan Dundalk UG Rebuild SCNAE5-1M29 (Elec)	
E11438	E11438 Old Finch UG Rebuild Phase 1 - Civil (47M3)	
E11439	E11439 Old Finch UG Rebuild Phase 1 - Electrical (47M3)	
E11472	E11472 Rebuild Ingleton UG SCNT63M12 Main (Civil) - Ph A	X
E11483	E11483 Rebuild Ingleton 63M12 - Ph 1 - Civil	X
E11544	E11544 Rebuild Blackwell Coxworth UG (Civil)	
E11592	E11592 FESI-12 NY51M6 Leslie/Nymark UG Cable Rehab Prt2	
E11593	E11593 FESI-12 NY51M6 Leslie/Nymark UG Cable Rehab Ph1	

TECHNICAL CONFERENCE UNDERTAKING RESPONSE INTERVENOR 10 – SCHOOL ENERGY COALITION

Sub-job Number	2012/2013 Approved B1 Sub-job	“Technically Complete” in 2012
E11616	E11616 Meadowvale/Heatherbank 47M17 Cabling Civil (DESIGN ONLY)	
E11618	E11618 Rebuild Ingleton UG SCNT63M12 Main (Civil) - Ph B	
E12081	E12081 Rebuild Ingleton Main Ph A - Elect	
E12094	E12094 Rebuild Ingleton Ph 1 Elect	
E12095	E12095 Rebuild Ingleton Ph 2 Elect	
E12096	E12096 Rebuild Ingleton Ph 3 Elect	
E12121	E12121 Rebuild Blackwell Coxworth UG (Electrical)	
E12126	E12126 Morningview SCNT47M3 UG Rebuild Phase 1 (Civil)	
E12126	E12126 Morningview SCNT47M3 UG Rebuild Phase 1 (Electrical) (DESIGN ONLY)	
E12127	E12127 Morningview SCNT47M3 UG Rebuild Phase 2 (Civil)	
E12127	E12127 Morningview SCNT47M3 UG Rebuild Phase 2 (Electrical) (DESIGN ONLY)	
E12128	E12128 Morningview SCNT47M3 UG Rebuild Phase 3 (Civil)	
E12153	E12153 Melford Distribution Feeder Transfer from R26M34	
E12157	E12157 26M23 New Feeder to Morningside- Old Finch –Civil	
E12188	E12188 H9M30 435 Markam Rd TH UG Rehab	
E12195	E12195 Mammoth Hall UG Rebuild Civil NT47M1	
E12202	E12202 Rehab of Feeder NAE5-2M3 in McCowan and Kingston area (Electrical)	
E12206	E12206 NY80M29 Fenn/Foursome UG DB Rebuild Civil	
E12209	E12209 Dalmatian/Choiceland 47M13 UG Rebuild-Civil	
E12212	E12212 Venture Drive UG Rebuild Civil SCNT47M1	X
E12226	E12226 NY80M27/29 Yorkminster UG Tie Elec	
E12227	E12227 NY80M29 Fenn/Foursome UG DB Rebuild Elect	
E12228	E12228 Dalmatian/Choiceland 47M13 Rebuild – Electrical (DESIGN ONLY)	
E12230	E12230 Rehab of Feeder NAE5-2M3 in McCowan and Kingston area (Civil)	
E12234	E12234 Rebuild 3-Phase Neilson Industrial NT47M3 – Civil (DESIGN ONLY)	
E12235	E12235 Rebuild 3-Ph Neilson Industrial NT47M3- Electrical (DESIGN ONLY)	
E12239	E12239 Royal Rouge Trail UG Rebuild 47M17-Civil (DESIGN ONLY)	
E12240	E12240 Durnford/Rylander/Tideswell 47M17 3-Ph Loop-Civil	
E12241	E12241 Rebuild Tallpine Subd and Durnford TH 47M17- Civil (DESIGN ONLY)	
E12242	E12242 Royal Rouge Trail UG Rebuild 47M17-Electrical (DESIGN ONLY)	
E12243	E12243 Durnford/Rylander/Tideswell 47M17 3-Ph Loop-Electric (DESIGN ONLY)	

TECHNICAL CONFERENCE UNDERTAKING RESPONSE INTERVENOR 10 – SCHOOL ENERGY COALITION

Sub-job Number	2012/2013 Approved B1 Sub-job	“Technically Complete” in 2012
E12244	E12244 Rebuild Talpine Sub and Durnford TH 47M17- Electrical (DESIGN ONLY)	
E12256	E12256 Bridletowne Cable Replacement SCNA502M22 - Electrical	
E12259	E12259 Bridletowne Cable Replacement SCNA502M22 – Civil	
E12275	E12275 Muirbank 47M13 UG Rebuild - Civil	X
E12281	E12281 Meadowvale/Heatherbank 47M17 Cabling Elec (DESIGN ONLY)	
E12288	E12288 NT47M1 - UG Rebuild in the Hutcherson Sq area Electrical (DESIGN ONLY)	
E12300	E12300 NT47M1 - UG Rebuild in the Hutcherson Sq area Civil (DESIGN ONLY)	
E12317	E12317 Rebuild Ingleton Main Ph B - Elect	
E12319	E12319 26M23 New Feeder to Morningside- Old Finch –Electric	
E12335	E12335 47M17 Blue Anchor UG Rebuild Electrical (DESIGN ONLY)	
E12336	E12336 47M17 Blue Anchor UG Rebuild Civil (DESIGN ONLY)	
E12348	E12348 H9M30 UG Rebuild Muir Dr - Golf Club - Civil SCNAH9M30	
E12357	E12357 Extend UG R26M23 to Morningview 47M3 (DESIGN ONLY)	
E12393	E12393 James Gray Drive UG Rebuild Elec NY51M3 (DESIGN ONLY)	
E12394	E12394 James Gray Drive UG Rebuild Civil NY51M3 (DESIGN ONLY)	
E12493	E12493 FESI UG Rebuild NT63M8 Revlis Sub Part 1- Civil SCNT63M8	
E12494	E12494 FESI UG Rebuild NT63M8 Revlis Sub Part 2-Civil SCNT63M8	X
E12495	E12495 FESI UG Rebuild NT63M8 Revlis Sub Part 3-Civil SCNT63M8	
E12520	E12520 UG Rebuild NT47M1 Conlins Milner- Civil	X
E12529	E12529 Braymore W 47M14 UG Rebuild Ph 2 - Civil	X
E12530	E12530 Braymore W 47M14 UG Rebuild Ph 2 – Electrical	
E12656	UG Cable Replacement NY80M29 Harrison Garden West	X
E12666	E12666 Phase 1 Reconfigure FESI 80M29 -Harrison Garden	
E13014	E13014 Holmcrest 47M13 UG Rebuild - Civil	
E13037	E13037 2501-61 Bridletowne UG 502M22 Rebuild Electrical SCNA502M22	
E13060	E13060 141 Galloway UG Rebuild Civil	
E13061	E13061 141 Galloway UG Rebuild Electrical	
E13063	E13063 Rodda UG Rebuild Civil	
E13064	E13064 Rodda UG Rebuild Electrical	
E13075	NY51M7 Replacement of DB Cables btn Leslie & Bayview - Civil	
E13078	E13078 UG DB cable replacement between Leslie and Bayview - Civil NY51M8,	

**TECHNICAL CONFERENCE UNDERTAKING RESPONSE
INTERVENOR 10 – SCHOOL ENERGY COALITION**

Sub-job Number	2012/2013 Approved B1 Sub-job	“Technically Complete” in 2012
	NY51M6	
E13099	E13099 UG Rebuild on Don Mills between Sheppard and Graydon - Electrical NY51M24	
E13102	E13102 UG rebuild of NY51M24 Forest Manor Rd East of Don Mills - Electrical NY51M24	
E13104	E13104 NY51M24 UG Rebuild in Subdivision by Don Mills & Sheppard Part 1 - Civill NY51M24	
E13106	E13106 NY51M24 UG Rebuild in Subdivision by Don Mills & Sheppard Part 2 - Civill NY51M24	
E13108	E13108 UG rebuild of NY51M24 Buchan Crt by Sheppard Ave E. - Civil NY51M24	
E13108	E13102 UG rebuild of NY51M24 Forest Manor Rd East of Don Mills - Civil NY51M24	
E13124	E13124 Rebuild Orange File SD 502M22 UG-Civil	
E13129	E13129 Rebuild UG Trunk NT63M8 M11 McCowan-Civil	
E13267	E13267 UG Rebuild 63M8 Silver star Midland- Civil	
W11385	W11385 FESI 55M8 Northwoods Sub UG Cable and Rebuild	
W11455	W11455 FESI-12 Yonge St UG Fdr Cable rehab (NY80M30/M27)	X
W11456	W11385 FESI 55M8 Northwoods Sub UG Cable and Rebuild	
W11460	W11460 FESI-12 NY80M30 Johnston/Yonge UG Fdr Cable rehab	X
W11614	W11614 FESI LadyShot-Eldorado DB Cable Replace	
W11615	W11615 FESI Keegen Cr. DB Cable Replace	
W12077	W12077 Hoggs Hollow UG Rebuild (NY80M30) – estimate 19522	X
W12435	W12435 Faul David and Astral UG DB Res'l Rebuild	X
W12449	W12449 FESI - Lateral Cable and Tx Rehab Bathurst and Rockford	
W12490	W12490 FESI-UG DB Cable Rehab Bombardier Supply	
W13193	W13193 Arrow Rd - Lateral UG Loop Replacement	
W13278	W13278 Northview Heights Civil Rebuild	
W13474	W13474 UG Cable Replacement on 85M31 at Lodestar Road, Toronto (Electrical)	
W13475	W13475 UG Cable Replacement on 85M31 at Lodestar Road, Toronto (Civil)	
X11444	Tichester and surrounding civil electrical enhancement 35M10/35M9	

TECHNICAL CONFERENCE UNDERTAKING RESPONSE INTERVENOR 10 – SCHOOL ENERGY COALITION

1 **UNDERTAKING NO. JT3.4:**

2 **Reference(s):**

3

4 For 2012 and 2013, to provide how many units had originally been budgeted or planned
5 for by the time of the Phase 1 decision, and also how many have been forecasted to be
6 replaced for the end of 2013.

7

8 **RESPONSE:**

	Planned	Actual / Forecast
2012	1686	2446
2013	2078	2018

10 Note: values above include both unit replacements and unit removals

**TECHNICAL CONFERENCE UNDERTAKING RESPONSE
INTERVENOR 2 – ASSOCIATION OF MAJOR POWER
CONSUMERS OF ONTARIO**

1 **UNDERTAKING NO. JT3.5:**

2 **Reference(s):**

3

4 Provide increase in replacement costs for Handwells from 2012 to 2013.

5

6 **RESPONSE:**

7 The unit costs of handwell jobs in 2012 averaged around \$6,150, based on a sample list
8 of completed projects. The projects include both replacement and removal of units, for
9 which the costs cannot be separately identified. The costs typically range between \$5000
10 to \$7000 per unit based on site-specific conditions. Replacement costs are higher than
11 removal costs.

12

13 The unit costs of handwell jobs in 2013 (also based on a sample list of completed projects
14 including both replacement and removal units) increased around \$550 compared to 2012.

15 The factors affecting the increase are:

- 16
- 17 • Updated cost rates (e.g. standard labour rates, contractor rates, and engineering capitalization).
 - 18 • Updated permanent restoration costs for sidewalks, which vary based on site-specific conditions.
- 19

**TECHNICAL CONFERENCE UNDERTAKING RESPONSE
 INTERVENOR 7 – ENERGY PROBE RESEARCH FOUNDATION**

1 **UNDERTAKING NO. JT3.6:**

2 **Reference(s):**

3

4 To provide information on whether the 2014 application includes reconstruction of
 5 Sunnybrook service, as well as the costs related to the project and the potential in-service
 6 time, as well as the number of outages, the length of outages, in each one of the years for
 7 the Sunnybrook complex, from 2010 through 2013.

8

9 **RESPONSE:**

10 There are four jobs in the 2012-2014 ICM application that THESL expects will address
 11 reliability and service quality issues affecting Sunnybrook. These are detailed in the
 12 summary charts below. Three jobs were approved by the OEB in Phase 1, and one job is
 13 currently before the OEB in Phase 2.

Job Estimate Number	Job Title	Brief Job Description	Actual/ Planned Completion Date	Costs	Status
20848	E12459 Banbury/Post Rd OH Rehab: NY34M6, NY53M24, NY51M21	Replace trunk 336 kcmil conductors, install tree proof conductors in heavily treed areas, replace deteriorated poles, porcelain equipment, and CSP transformers	2014	\$0.26M	Approved in Phase 1
18456	E11374 SCADA Installation 34M6	Installation of SCADAMATE switches	June 2013	\$0.79M	Approved in Phase 1
19775	X13109- 34M6 -Replacement of non – standard CSP transformers and conductor	Replace poles, overhead conductors, CSP transformers, switches, porcelain insulators and arresters	2014	\$0.97M	Approved in Phase 1

TECHNICAL CONFERENCE UNDERTAKING RESPONSE INTERVENOR 7 – ENERGY PROBE RESEARCH FOUNDATION

Job Estimate Number	Job Title	Brief Job Description	Actual/ Planned Completion Date	Costs	Status
19735	X12148 ParkLane Repl nonStd Txf/CSP (34M7)	Replace all CSP and undersized transformers, replace all glass fuse cut-outs and switches, install animal guards and tree proof conductors in treed areas	2014	\$0.65M	Filed in Phase 2 (Tab 9, Schedule B4, pages 39-40)

1

2 The Sunnybrook complex experienced 10 sustained¹ and 41 momentary² outages from
3 2010 to 2013.

¹ Sustained outage is defined as an outage lasting one minute or more.

² Momentary outage is defined as an outage lasting less than one minute.

**TECHNICAL CONFERENCE UNDERTAKING RESPONSE
INTERVENOR 2 – ASSOCIATION OF MAJOR POWER
CONSUMERS OF ONTARIO**

1 **UNDERTAKING NO. JT3.7:**

2 **Reference(s): Spending/Investment Beyond 2015**

3

4 To provide a projection of the number of years of future spending that will be needed
5 beyond 2015.

6

7 **RESPONSE:**

8 THESL typically undertakes its long-term capital planning over a ten-year horizon. Over
9 this period, THESL expects that Toronto's distribution grid will require significant and
10 sustained investment to renew and modernize its distribution assets and related general
11 plant assets. The investments over this period will reflect the same needs and, in many
12 cases, the same types of assets that are addressed in the capital program set out in this
13 Application.

14

15 As a general matter, replacing old assets with new tends to decrease the number of
16 THESL's assets at or beyond end of life. However, assets will continue to age and there
17 will be additional assets that will reach or exceed their useful lives, requiring
18 replacement. Given stability of capital funding, THESL expects that certain critical assets
19 identified as part of the 2014 IRM filing, such as Fibertop Network Units, Secondary
20 Handwells, SCADAMATE R1 and Polymer SMD-20 switches, will be completely
21 removed from the system over a five-to-ten year horizon. Given the heterogeneous
22 nature, age, and condition of THESL's asset base, however, THESL anticipates that new
23 asset-related issues will arise during and beyond the current planning horizon. THESL
24 will endeavour to address any such challenges in a manner that best serves its customers,
25 while remaining conscious of potential rate pressures.

TECHNICAL CONFERENCE UNDERTAKING RESPONSE INTERVENOR 3 – BUILDING OWNERS AND MANAGERS ASSOCIATION

1 **UNDERTAKING NO. JT3.8:**

2 **Reference(s):** **Actual ISAs for 2013**

3

4 To provide the most recent actual number for spending to date.

5

6 **RESPONSE:**

7 THESL's September 30, 2013 financial statements were issued in mid-November 2013.

8 As a result, September actuals were not available at the time when THESL prepared its

9 response to OEB Staff Interrogatory 3. The updated table is provided below:

10

Schedule Number	Segments	Phase 1: Approved			Phase 1: Actuals/Forecast				
		In-Service			In-Service				
		Total 2012 In-Service Additions	Total 2013 In-Service Additions	Total 2014 In-Service Additions	2012 In-Service Additions Actuals	2013 In-Service Additions Actual (YTD Jun)	2013 In-Service Additions Actual (YTD Jun)	2013 In-Service Additions Forecast as at Jul 2013 (Annual)	2014 In-Service Additions Forecast as at Jul 2013 (Annual)
B1	Underground Infrastructure	12.74	51.88	23.07	9.29	8.96	17.68	33.71	47.36
B2	Paper Insulated Lead Covered Cable - Piece Outs and Leakers	0.04	3.34	2.12	0.11	0.02	0.02	0.64	4.76
B3	Handwell Replacement	6.05	17.73	6.52	5.41	6.00	7.96	11.33	14.82
B4	Overhead Infrastructure	4.02	39.06	21.87	0.48	2.26	8.38	17.62	47.69
B5	Box Construction	0.26	14.35	9.02	-	-	-	1.18	22.50
B6	Rear Lot Construction	7.25	27.02	11.52	3.49	6.70	12.09	18.52	25.29
B9	Network Vault & Roofs	1.26	13.00	7.34	-	0.85	4.66	7.21	14.65
B10	Fibertop Network Units	0.65	5.52	3.02	0.96	1.89	3.50	5.66	2.70
B11	Automatic Transfer Switches (ATS) & Reverse Power Breakers (RPB)	-	1.99	1.28	-	-	0.48	1.48	1.79
B12	Stations Power Transformers	0.17	2.33	1.36	-	-	-	0.23	3.67
B13.1 & 13.2	Stations Switchgear - Municipal and Transformer Stations	0.77	9.16	5.37	-	-	-	1.31	14.14
B17	Copeland Transformer Station	-	-	124.10	-	2.08	2.08	2.08	110.11
B18.2	Hydro One Capital Contributions	-	-	60.00	-	-	-	-	60.23
B20	Metering	2.10	7.75	3.29	4.24	6.60	6.96	9.16	0.18
B21	Externally-Initiated Plant Relocations and Expansions	4.50	20.78	9.72	1.84	4.16	4.70	5.70	28.41
BXX	ICM Understatement of Capitalized Labour	3.69	4.63	-	-	-	-	-	-
Total ICM Projects		43.49	218.53	289.59	25.82	39.51	68.50	115.83	398.29
B7	Polymer SMD-20 Switches	-	0.93	0.60	-	-	-	1.22	0.31
B8	SCADA-Mate R1 Switches	-	0.87	0.56	-	-	-	-	1.43
B14	Stations Circuit Breakers	0.34	0.76	0.22	0.22	0.02	0.21	1.03	0.06
B16	Downtown Station Load Transfers	0.30	1.68	0.84	-	0.03	0.03	0.03	2.78
B18.1	Hydro One Capital Contributions	-	1.48	-	5.48	2.59	2.59	2.59	4.22
C1	Operations Portfolio Capital	29.00	87.75	29.66	39.83	25.23	36.76	62.93	43.66
C2	Information Technology Capital	9.25	21.47	6.28	7.56	8.31	9.49	19.46	9.99
C3	Fleet Capital	0.29	0.76	1.75	0.80	0.16	0.16	2.25	-
C4	Buildings and Facilities Capital	3.76	2.90	3.35	1.40	3.58	4.60	5.08	3.52
Normal Capital Expenditures		42.94	118.60	43.25	55.28	39.92	53.83	94.60	65.96
Grand Total		86.43	337.12	332.84	81.09	79.43	122.34	210.43	464.25

11

**TECHNICAL CONFERENCE UNDERTAKING RESPONSE
INTERVENOR 11 –VULNERABLE ENERGY CONSUMERS'
COALITION**

1 **UNDERTAKING NO. JT3.9:**

2 **Reference(s): USGAAP De-Recognition**

3

4 Confirm and explain THESL's understanding of de-recognition of assets under us
5 GAAP, and confirm whether THESL will be unable to account for assets taken out of
6 service as part of the ICM program.

7

8 **RESPONSE:**

9 THESL's understanding of de-recognition of assets under US GAAP is formed by
10 accounting and reporting standards published by FASB and the OEB.

11

12 US GAAP ASC980 "980 Regulated Operations" provides guidance on the accounting
13 and reporting of entities with regulated operations. This guidance illustrates that a rate-
14 regulated entity can deviate from US GAAP when the US GAAP accounting
15 requirements are not directly related to the economic effects of rate actions imposed on
16 the rate-regulated entity by orders of regulatory authorities.

17

18 The OEB Accounting Procedures Handbook ("APH") allows entities to use the concept
19 of pooled assets. Article 410 page 14 of the APH defines "Grouped assets" as

20 "...those assets that by their nature make identification of individual components
21 impractical. The group basis of amortization refers to a system of grouping assets
22 for amortization purposes using an amortization method that will allocate the
23 combined cost of the assets over their estimated useful life in a rational and
24 systematic manner. This accounting treatment recognizes that individual units are
25 not readily identifiable."

26

**TECHNICAL CONFERENCE UNDERTAKING RESPONSE
INTERVENOR 11 –VULNERABLE ENERGY CONSUMERS'
COALITION**

1 A consequence of employing group asset accounting is that THESL cannot track the de-
2 recognition of individual assets for financial reporting purposes. Where practical,
3 however, THESL does remove the book value of assets from Rate Base. This includes
4 instances where specific identification allows removal at retirement or disposition (e.g.
5 rolling stock, properties, etc).

**TECHNICAL CONFERENCE UNDERTAKING RESPONSE
INTERVENOR 1 – ONTARIO ENERGY BOARD STAFF**

1 **UNDERTAKING NO. JT3.10:**

2 **Reference(s): Account 1588**

3

4 To determine feasibility of using billed revenue in the variance in account 1588, and
5 explain why board direction was not followed.

6

7 **RESPONSE:**

8 THESL's monthly financial accounting process matches monthly power purchases with
9 estimates of monthly power revenues to customers. Monthly estimates of power
10 revenues (THESL's term is Earned Revenues) are derived based on the monthly power
11 purchases (which are accurately known for the calendar month) and assumes that all
12 power purchased is sold.

13

14 THESL bills the largest proportion of its 700,000-plus customers on a bi-monthly basis
15 on 21 different billing cycles and, prior to the introduction of Smart Meters, based on bi-
16 monthly meter reads or estimates. Because amounts billed in a particular calendar month
17 include power consumed in previous month(s), and because for some customers no bills
18 are issued during a month, THESL is unable to match actual billed data with the power
19 purchases for the same calendar month. Additionally, billing errors and corrections,
20 cancel/rebills, and other billing adjustments would impact the amounts billed in a month.
21 As a result, THESL estimates revenue based on power purchases and approved loss
22 factors and does not book amounts to the RSVA Power account.

23

24 Similarly, due to bi-monthly billing, THESL's unbilled amounts at the end of a particular
25 month will reflect consumption that has occurred in previous months. For these reasons,
26 THESL is unable to calculate an amount to book into the RSVA 1588 account.

27

TECHNICAL CONFERENCE UNDERTAKING RESPONSE INTERVENOR 1 – ONTARIO ENERGY BOARD STAFF

1 Although THESL does not record any amounts to RSVA Power, THESL does monitor its
2 unbilled balances monthly, which is where any variances would show. THESL's
3 Unbilled account, which is a life-to-date balance, is determined by crediting the billed
4 amount (reversing the billed amount against the Unbilled account) and debiting the
5 earned amount (recording the earned revenue against the Unbilled account) for that
6 month. If a persistent difference existed between actual losses and approved losses, this
7 would be reflected in a permanent growth or reduction in the values in this account over
8 time. THESL has not noted any such trend.

9
10 Additionally, as part of THESL's cost of service filings, THESL has filed annual
11 estimates of its actual loss factors, based on high level estimates of power consumed
12 within the calendar year using proration of billed data. These estimates, provided in the
13 attached Appendix A for the years 2009-2012, show that on average over that period,
14 THESL's approved losses are not significantly different than an average of the estimated
15 actual losses over the 4 years. THESL further notes that among LDC's in the province,
16 THESL's approved loss factors are among the lowest in the province (based on
17 information contained in the OEB's 2011 Rates Database).

18
19 With respect to the EB-2008-0680 and EB-2010-0142 hearings, THESL was opposed to
20 Pollution Probe's proposals that approved losses should be reduced and that THESL
21 should be held fully accountable for losses in order to incent it to reduce loss factors
22 further. The OEB's decision in both cases was a denial of Pollution Probe's proposals,
23 and in the EB-2010-0142 decision acknowledged management of line losses as a generic
24 issue to be dealt with in the future.

Loss Factors 2009-2012						
		2009	2010	2011	2012	Average 2009-2012
A1	"Wholesale" kWh delivered to distributor (higher value)	25,223,333,205	25,634,505,857	25,592,078,938	25,443,999,940	
A2	"Wholesale" kWh delivered to distributor (lower value)	25,110,336,690	25,519,667,354	25,477,430,501	25,330,014,873	
B	"Wholesale" kWh for Large Use customers	2,529,414,445	2,320,331,188	2,478,710,585	2,434,785,385	
C	Net "Wholesale" kWh delivered to distributor (A2)-(B)	22,580,922,244	23,199,336,166	22,998,719,916	22,895,229,489	
D	"Retail" kWh delivered by distributor	24,358,524,840	24,406,431,049	25,112,262,208	24,336,019,863	
E	"Retail" kWh for Large Use Customers	2,494,245,583	2,288,069,409	2,444,246,706	2,400,932,240	
F	Net "Retail" kWh delivered by distributor (D)-(E)	21,864,279,258	22,118,361,640	22,668,015,502	21,935,087,623	
G	Loss Factor in distributors system [(C)/(F)] non-Large Use Customers	1.0328	1.0489	1.0146	1.0438	
	Losses Upstream of Distributors System					
H	Supply Facility Loss Factor	1.0045	1.0045	1.0045	1.0045	
I	Total Loss Factor [(G)x(H)] non-Large Use Customers	1.0374	1.0536	1.0192	1.0485	1.0397
	THESL's Approved TLF non-Large Use Customers	1.0376	1.0376	1.0376	1.0376	1.0376