January 15, 2013

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

Re: Toronto-Hydro Electric System Limited (THESL)
2012, 2013, 2014 Electricity Distribution Rates - IRM Framework
Board File No. EB-2012-0064

Dear Ms. Walli:

Attached please find AMPCO's final submissions in the above proceeding.

Please do not hesitate to contact me if you have any questions or require further information.

Sincerely yours,

(ORIGINAL SIGNED)

Adam White
President
Association of Major Power Consumers in Ontario

Copies to: Toronto Hydro-Electric System Limited
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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 distribution rates and other charges effective June 1, 2012, May 1, 2013 and May 1, 2014.

APPLICATION for 2012, 2013 and 2014 IRM RATE ADJUSTMENTS and ICM RATE ADDERS

FINAL SUBMISSIONS OF AMPCO

January 15, 2013

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Final Submissions of AMPCO
January 15, 2013

I. Introduction and Background

1. Toronto Hydro-Electric System Limited ("THESL") filed an application May 10, 2012 for an Order or Orders approving just and reasonable distribution rates and other charges effective June 1, 2012, May 1, 2013 and May 1, 2014, under the Board's Incentive Regulation Mechanism (IRM) framework. THESL filed a multi-year (3 year) Incremental Capital Module (ICM) as part of its application.

2. THESL indicates to the greatest extent possible it has prepared this application in accordance with Chapter 3 of the Board's Filing Requirements for Transmission and Distribution Applications, dated June 22, 2011, as well as other guidelines and directions from the Board, including the Board's January 5, 2012 Decision with Reasons and Order on the Preliminary Issue in EB-2011-0144 together with Board Decisions on other ICM applications (collectively, the "IRM/ICM Material").[1]

3. The Board sets rates based on Incentive Regulation (IR) including formula based rate setting and cost based rate setting.

4. The Board's current IR plan (3rd Generation IR) at the timing of this application provides for a mechanistic and formulaic adjustment to distribution rates between cost of service (COS) applications using a formula with an inflation factor and productivity factors. The Board-approved formula includes expectations of efficiency and productivity gains.[2] The adjustment is based on a price cap index that is determined as the annual percentage change in the GDP-IPI (inflation) less the X-Factor. The X-Factor is 0.72% (productivity factor) plus a stretch factor. The value of the stretch factor is specific to each distributor and will be one of 0.2%, 0.4% or 0.6% representing diversity of efficiency as determined through comparative OM&A cost data analysis. 0.2% represents distributors that are statistically superior on the econometric benchmarking model and in the top quartile on the unit cost benchmarking model.

[1] Tab 2, Page 3
[2] Report of the Board Renewed Regulatory Framework for Electricity Distributors: A Performance-Based Approach, October 18, 2012, Page 7

5. THESL's stretch factor is 0.6% which means that the Board's benchmarking evaluations have determined that THESL falls into the grouping of distributors that are statistically inferior on the econometric benchmarking model and in the bottom quartile on the unit cost benchmarking model. This approach recognizes and rewards distributors for efficiency improvements during the term of the IR plan.

6. The IRM plan term is fixed at three years (i.e. rebasing year plus three years.) An ICM is included in 3rd generation IRM to address the treatment of new capital investment needs that arise during the IR plan term.[3] AMPCO notes that historical levels of CAPEX are built into the formula. THESL's last rebasing year was for 2011 distribution rates (EB-2011-0142). Thus according to the Board's policy, THESL's three year IRM term reflects the 2012 to 2014 rate years. THESL indicates its next COS application is planned for 2015.

7. In 2011, THESL filed a multi-year COS application (EB-2011-0144) for 2012, 2013 & 2014 distribution rates to address its capital requirements. At that time THESL viewed the need for its COS application and three rate years as the only approach that will accommodate THESL's extensive capital replacement and other requirements.[4]

8. In explaining its proposed COS Distribution System Modernization and Infrastructure Renewal In 2012-2014, THESL indicated it will continue its program to renew distribution infrastructure consistent with its 2012-2021 Electrical Distribution Capital Plan and that the operational work is necessary to modernize the THESL system, address ageing infrastructure, and maintain the adequacy, reliability and quality of electricity distribution service to THESL's customers.[5]

9. If a distributor applies using cost of service during the IRM period, the Board considers it to be an early rebasing application, and hence a departure from the Board's policy. In the Board's EB-2011-0144 Decision, the Board dismissed the application finding that THESL has not met the test for a departure from the 3GIRM policy for the following reasons:

> "THESL is under no current financial stress; nor do the reliability measures show evidence of system deterioration. "
>
> "The company did not provide cogent and compelling evidence showing significant prospective financial or operational distress under IRM rates. Such evidence would necessarily include a robust analysis of the planning, project prioritization and/or productivity measures undertaken in response to the incentives and parameters of 3GIRM. THESL has only put forth two scenarios which the Board has found are not credible."
>
> "The company has not attempted to use the ICM as a means of funding additional non-discretionary capital expenditures beyond the level already incorporated in rates."[6]

[3] Chapter 3, Filing requirements for Electricity Transmission and Distribution Applications, June 28, 2012, Page 6
[4] EB-2011-0144, Exhibit A1, Tab 1, Schedule 1, Page 1
[5] EB-2011-0144, Exhibit A1, Tab 1, Schedule 1, Pages 3-5
[6] EB-2011-0144 Decision January 5, 2012, Page 14

10. Specifically the Board stated that it "will not direct THESL to file a 2012 IRM application; however, the Board invites THESL to do so, and to consider whether it would be appropriate to file an ICM module as part of the application."[7] THESL indicates it formulated this IRM/ICM application to meet the Board's directions in EB-2011-0144.[8]

11. The proposed adjustments to rates and charges in this IRM/ICM application include: a 2012 price cap adjustment; adjusted Retail Transmission Service Rates, a rate rider to refund shared tax savings; a rate rider for disposition of account balances in accounts 1521 Special Purpose Charge and account 1562 PILS Deferral Account; and rate adders related to incremental capital projects.[9]

12. THESL indicates its IRM/ICM application is needed to address essential and urgent electricity infrastructure renewal which must be undertaken over the next three years to maintain current levels of system safety and reliability, and to ensure an appropriate level of safety for employees and the public. Further, THESL indicates the ICM component of the Application represents a request for resources critical for THESL to bridge the gap to its next rebasing application anticipated to occur in 2015.[10]

13. On October 31, 2012, THESL filed updated evidence that reflects a change in priorities, a shifting of jobs and cost estimates between ICM years that THESL indicates are needed due to the passage of time, the need to execute certain essential work, and THESL's operational experience. Specifically, THESL describes the update as reflecting new jobs not included in the original scope as well as data updates and corrections. THESL claims the movement of jobs from 2012 to 2013 reflects the amount of work that can be undertaken in 2012 that was limited by specialized labour and material availability, seasonal operational constraints, permitting delays and limited funds available for 2012 capital expenditures. The jobs advanced from 2013 to 2012 reflect sequencing of work and executability of certain jobs.[11]

14. Based on the update, THESL's proposed capital spending is $283 million in 2012 and $579 million in 2013.

15. In addition to the update, THESL asked the Board to hear the application in two phases: the work program for 2012 and 2013 to be considered by the Board in the current phase of the proceeding and, with the exception of the Bremner Station project and associated capital contributions, the 2014 projects to be deferred and considered in a second phase after a decision for 2012 and 2013.[12] Subject to Board approval, THESL proposes to file updated evidence to support 2014 expenditures in advance of Phase two of this proceeding.[13] The Board accepted THESL's proposal that the 2014 component of the application, with the exception of

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7THESL EB-2011-0144 Decision January 5, 2012, Page 24
8 THESL Argument-In-Chief December 21, 2012, Page 2, Paragraph 8
9 Tab 2, Page 29
[10] Tab 2, Page 2
[11] Tab 2 Addendum, Appendix A
[12] AIRD & BERLIS LLP Letter dated October 31, 2012
[13] Tab 2 Addendum, Page 3

that relating to the Bremner Station project, be incorporated into a separate phase of this proceeding. [14]

16. The relief sought by THESL includes a request that the Board consider "Special Issues" or exceptions that reflect THESL's proposed modified or new approaches to the IRM/ICM. Specifically, THESL offers new approaches as being: a multi-year ICM; alternate revenue requirement methodologies; and recognition of 2011 year-end ratebase.[15]

17. In its Argument-In-Chief, THESL focussed on the second main category of Issues on the Approved Issues List (i.e. Incremental Capital Module). Similarly, AMPCO's submissions are primarily focussed on the ICM (Issue 2). AMPCO, however, also makes submissions on Issue 1 (IRM Schedules and Models) and Issue 4 (Implementation).

18. AMPCO makes no submissions on Issue 1.1 (IRM Filings), Issue 3(Deferral and Variance Accounts) and Issue 4.2 (Suite Metering).

II. Issues to be Argued

1. Incentive Regulatory Mechanism ("IRM) Schedules and Models

1.2 Is THESL's proposal that the Board approve under the IRM framework separate and successive ICM revenue requirements and corresponding distinct electricity distribution rates and rate adders for each of the 2012, 2013 and 2014 rate years appropriate?

1.3 Is THESL's proposal that the Board recognize in rates THESL's approved 2011 year-end rate base appropriate?

1.4 What is the consequence of this application on any future application by THESL for rates for 2013 and/or 2014?

2. Incremental Capital Module ("ICM")

2.1 Is THESL's application of the ICM criteria appropriate?

2.2 Has THESL provided sufficient evidence including consultant reports, business cases and consideration of alternatives, for the proposed capital projects to adequately justify them?

2.3 Is THESL's proposal that the Board consider ICM projects for a three-year period, severable into three successive one-year rate periods, each with its own ICM rate adder appropriate?

2.4 Is THESL's proposal for an alternative to the standard treatment of the calculation of the ICM threshold together with the Board's practice of exempting certain ICM-approved capital expenditures from the application of the half year rule appropriate?

[14] EB-2012-0064 PO#3 November 8, 2012, Page 3
[15] VECC IR#1 (Exhibit 6A, 11-1)

4. Implementation

4.2 Are THESL's proposals relating to rate implementation appropriate for each of the years 2012, 2013 and 2014?

III. The Issues

1. Incentive Regulatory Mechanism ("IRM) Schedules and Models

Issue 1.2 Is THESL's proposal that the Board approve under the IRM framework separate and successive ICM revenue requirements and corresponding distinct electricity distribution rates and rate adders for each of the 2012, 2013 and 2014 rate years appropriate?

19. THESL proposed ICM projects for a three year period, severable into three successive one year rate periods, each with its own ICM rate adders. Thus, THESL sought separate and successive revenue requirements and corresponding distinct electricity distribution rates and rate adders for each of the 2012, 2013 and 2014 rate years. With the October 31, 2012 update and the approved deferral of 2014 expenditures, the proposed ICM Rate Adders have been updated to exclude the proposed 2014 capital expenditures.

20. Given the nature of THESL's IRM application which includes a multi-year capital plan, AMPCO submits THESL's approach that the Board approve separate and successive revenue requirements and corresponding distinct electricity distribution rates and rate adders for each year is appropriate, subject to AMPCO's submissions below regarding THESL's proposed ICM structure.

Issue 1.3 Is THESL's proposal that the Board recognize in rates THESL's approved 2011 year-end rate base appropriate?

<u>Recognition in 2012 rates of Board-approved actual year-end rate base of 2011</u>

21. THESL asks that the Board recognize in 2012 distribution rates, the Board-approved actual year end rate base for 2011 in the amount of $37.9 million in total revenue requirement over the period 2012 to 2014 (updated to $38 million)[16] and approve a 2011 unfunded CAPEX rate rider calculated to recover the revenue requirement related to the declining balance of these amounts for each year over the period until rebasing.

22. Under the Board's current IRM framework, in a rebasing year, rates are set on the basis of average rate base, not year-end rate base. The difference between year-end and average rate base is eligible for inclusion in rate base at the time of the next rebasing.

[16] Tab 2, Appendix 1, Page 1

23. In an IRM year, 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 until the final year of the IRM where the half-year rule would apply in the context of an ICM.[17]

24. THESL claims that the IRM/PCI adjustment does not recognize material increases in approved rate base by the end of a rebasing year (2011 in THESL's case) and as such a material deficiency stemming from unrecognized rate base is created in 2012 rates, and that THESL's approach to recover this foregone revenue is required to keep both ratepayers and THESL whole with respect to these approved and actual expenditures.[18]

25. AMPCO notes the following from the Enersource Decision:

> *"One of the central principles of incentive ratemaking frameworks is the separation of costs from prices. Multi-year incentive schemes are established without an annual re-calibration of rate base. The Board recently affirmed this long-standing approach in its Report on the Renewed Regulatory Framework for Electricity ("RRFE Report"):*
>
> *The Board's rate-setting policy in this Report represents a further development of the approach adopted by the Board when it first established Performance Based Regulation ("PBR") for electricity distributors in its January 18, 2000 Decision with Reasons:*
>
> *… PBR is not just light-handed cost of service regulation. For the electricity distribution utilities in Ontario, PBR represents a fundamental shift from the historical cost of service regulation. It provides the utilities with incentives for behaviour which more closely resembles that of competitive, cost-minimizing, profit-maximizing companies. Customers and shareholders alike can gain from efficiency enhancing and cost-minimizing strategies that will ultimately yield lower rates with appropriate safeguards for service quality. Under PBR the regulated utility will be responsible for making its investments based on business conditions and the objectives of its shareholder within the constraints of the price cap, and subject to service quality standards set by the Board.*
>
> *Going into PBR, distribution rates are set based on a cost of service review. Subsequently, rates are adjusted based on changes to the input price index and the productivity and stretch factors set by the Board. PBR decouples the price (the distribution rate) that a distributor charges for its service from its cost. This is deliberate and is designed to incent the behaviours described by the Board in*

[17] Filing Requirements For Electricity Transmission and Distribution Applications Last Revised on June 28, 2012, Page 8
[18] Tab 2 Page 4

> *2000. This approach provides the opportunity for distributors to earn, and potentially exceed, the allowed rate of return on equity. It is not necessary, nor would it be appropriate, for ratebase to be re-calibrated annually.*
>
> *The Board has been clear that rate base re-calibration is generally not part of a multi-year ratemaking framework. Distributors are expected to respond to the incentives in the framework and the result will determine the returns shareholders earn. The Board therefore concurs with Energy Probe's submission: "Enersource already has the ability to compensate its shareholders for investments that are made every year during an IRM term. This ability is called productivity and efficiency improvements."*[19]

26. In its Decision regarding Woodstock Hydro's ICM request[20] the Board stated:

> "It is important to note that the adjustment in rates will be solely linked to the costs of the incremental capital. Therefore, distributors should not perceive this activity as an opportunity to true-up rate base for any other reason."

27. In AMPCO's view, THESL is using the ICM as a means to adjust rates to accommodate increases in rate base which is contrary to the purpose of the Board's ICM.

28. AMPCO submits that the true-up in rate base requested by THESL is contrary to the Board's 3GIRM policy. This request should be denied. THESL's circumstances are no different than those of other distributors within the current IRM framework and THESL has not demonstrated that a departure from the Board's current policy is warranted.

Issue 1.4 What is the consequence of this application on any future application by THESL for rates for 2013 and/or 2014?

29. THESL asked the Board to consider the work programs identified for 2012 and 2013 together and to set rates for 2012 and 2013, and to defer consideration of the work program for 2014 to a later date.

30. The timing of the hearing of this application will affect the implementation of rates. Based on the current expected timelines, THESL requests that proposed Rate Adders and Rate Riders be implemented beginning May 1, 2013. Accordingly, the Adders and Riders have been recalculated assuming that implementation date and new proposed and updated rate adders and riders are reflected in the updated 2013 Tariff Sheets and 2013 Bill Impact Schedules. THESL expects to update both the 2013 IRM rates and 2013 ICM rate adders using the Board's updated PCI index and associated change in the ICM threshold calculation, for implementation of 2013.[21]

31. For 2014, THESL has asked the Board to defer consideration of the work program to a later date.

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[19] Enersource Hydro Mississauga Inc. EB-2012-0033 Decision, Pages 5-6
[20] Woodstock Hydro Services Inc. EB-2011-0207 Decision
[21] Tab 2, Addendum Page 16

32. AMPCO submits that given that the Board released its Renewed Regulatory Framework for Electricity (RRFE) on October 18, 2012, it may make sense for THESL to reconsider its rate making options for 2014 and beyond in the context of the Board's new framework.

33. The Board's Report outlines a Custom Incentive Rate-setting (Custom IR) approach which may be appropriate for distributors with large multi-year investment commitments.

34. On this basis AMPCO submits that THESL may wish to consider whether it is appropriate to ask the Board to approve the cancellation of Phase 2 of this proceeding.

ISSUE 2. Incremental Capital Module ("ICM")

ISSUE 2.1 Is THESL's application of the ICM criteria appropriate?

ISSUE 2.2 Has THESL provided sufficient evidence including consultant reports, business cases and consideration of alternatives, for the proposed capital projects to adequately justify them?

ISSUE 2.4 Is THESL's proposal for an alternative to the standard treatment of the calculation of the ICM threshold together with the Board's practice of exempting certain ICM-approved capital expenditures from the application of the half year rule appropriate?

35. AMPCO's submissions on the ICM respond to the Special Issues & Other Approaches put forward by THESL and include an assessment of the Board's ICM criteria as it relates to THESL's specific capital projects and THESL's proposed ICM structure.

THESL's Proposal

Evolution of THESL's Capital Plan

36. Table 1 below (prepared by AMPCO) summarizes THESL's proposed capital spend (Rebasing vs. ICM) in the IRM period 2012 to 2014, noting that 2014 spending is deferred to Phase 2 of this proceeding.

Table 1: Total Capital Requests – Rebasing vs. ICM ($ millions)

		2012	**2013**	**2012 & 2013 Total**	**2014**	**Total**	**Average Capital**	**Reference**
Rebasing Application EB-2011-0144	A	$590.0	$615.0	$1,205	$640.0	$1,845.0	$615	Tab 2, Page 23
IRM Application, May 10/12 EB-2012-0064	B	$448.7	$534.5	$982.3	$439.5	$1,422.7	$474	Tab 2, Page 23
IRM Application, Oct	**C**	**$283**	**$579.1**	**$862.1**	**Phase 2**	**$862.1**	**$431**	Undertaking J5.1

31/12 EB-2012-0064								
Difference	A-C	($307)	($35.9)					

37. AMPCO notes THESL's current IRM/ICM application proposes significant increases to the distribution portion of a typical residential customer's monthly bill in 2012 and 2013: 12.9% in 2012 and a further 12.9% in 2013. Similar increases would result for General Service customers less than 50 kW: 14.2% in 2012 and a further 13.4% in 2013.[22] For the Large User class based on 4,500,000 kWh & 8,491 kW, increases of 20.2% and 13.8% are proposed in 2012 and 2013, respectively. [23]

38. THESL's evidence states "THESL's former long-term capital plan, which was directed to stable and programmatic renewal8 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".[24]

39. Regardless of the curtailed spending, AMPCO submits that THESL's proposed capital plan in this application can be viewed as significant. THESL's proposed $448.7 million and $534.5 million of non-discretionary capital in 2012 and 2013, respectively far exceeds historical levels, and significantly exceeds recent levels which were agreed through settlements in prior proceedings: $350 million for 2010 and $378.8 million for 2011.[25] With the update, THESL currently proposes $283 million and $579 million of non-discretionary capital in 2012 and 2013, respectively. AMPCO views spending levels for 2013 as significant and notes spending in 2012 was reduced for the reasons identified in paragraph 13.

40. THESL's updated ICM portfolio consists of nine projects most of which are divided into segments composed of numerous jobs to be completed across the three year period. There are a total of 21 segments over the nine projects (B1 to B 21). The Grid Solutions project (B22) was removed in the October 31, 2012 update. THESL provided detailed descriptions of the work to be undertaken for each project.[26] THESL also retained external consultants to provide independent analysis on THESL's business cases for its proposed ICM projects and THESL's Asset Management methodologies and practices.[27]

41. In past Decisions where applications have included an ICM, the Board has at the outset assessed whether the projects applied for are consistent with the purpose of the ICM; and after assessing and accepting that they are, the Board has only then considered it appropriate to evaluate the projects using the incremental capital investment eligibility criteria.

[22] Tab 3, Schedule C1.2
[23] Tab 3, Schedule C2.2
[24] Tab 2, Page 23 Updated
[25] EB-2011-0144 Decision, Page 18
[26] Tab 4, Schedules B1 to B21
[27] Tab 4, Schedules D1 to D6

42. Hydro One Networks Inc. made the first application under the ICM, and in its decision the Board stated:

> *"In fact, what the Board requires in considering an application under the incremental capital module is a demonstration that the distributor is facing extraordinary and unanticipated capital spending requirements; i.e. something other than the normal course of business."*[28]
>
> *While the Board did not accept the application for relief under the ICM for Hydro One Networks Inc., it did provide substantial relief by increasing the revenue requirement by more than half of what was originally requested ($20.3 million was requested; $12.1 million was granted).*[29]

43. THESL submits that "The circumstances surrounding the scale and timing of THESL's capital program are unusual because the proportion of total assets in need of replacement is high."[30]

44. AMPCO submits that a challenge similar to the Hydro One ICM request is before the Board in this application to determine whether the capital projects put forward by THESL in 2012 and 2013 reflect "business-as-usual" projects or new, incremental, extraordinary and non-discretionary projects. Only then can the Board determine which projects are eligible for ICM treatment.

45. The Supplemental Report of the Board on 3rd Generation Incentive Regulation for Ontario's Electricity Distributors – September 17, 2008 (Pages 30 to 31) provides the rationale and Board policy with respect to determining the appropriate CAPEX to depreciation threshold:

> *"The Board notes that there are clearly differences in perception as to the purpose of the incremental capital module. Ratepayer groups perceive the capital module as a mechanism aimed solely at addressing extraordinary or special CAPEX needs by distributors. The distributors, on the other hand, perceive the module as a special feature of the 3rd Generation IR architecture which would enable them to adjust rates on an on-going, as-needed basis to accommodate increases in rate base.*
>
> *In the Board's view, the distributors' view is not aligned with the comprehensive price cap form of IR which has been espoused by the Board in its July 14, 2008 Report. The distributors' concept better fits a "targeted OM&A" or "hybrid" form of IR. This alternative IR form was discussed extensively in earlier consultations but was not adopted by the Board. The intent is not to have an IR regime under which distributors would habitually have their CAPEX reviewed to determine*

[28] Hydro One Networks Inc., EB-2008-0187 Decision, May 13, 2009, pp. 8-9
[29] EB-2011-0144 Decision
[30] Tab 2, Page 20

whether their rates are adequate to support the required funding. Rather, the capital module is intended to be reserved for unusual circumstances that are not captured as a Z-factor and where the distributor has no other options for meeting its capital requirements within the context of its financial capacities underpinned by existing rates.

A review of an application will test whether the applicant has passed the materiality threshold, and, if it does, will scrutinize the need for the requested incremental capital relief. Such scrutiny will entail reviewing the distributor's assumptions and planning and examining alternative options, and its overall CAPEX plan. If the application succeeds, in whole or in part, the Board will adjust rates to reflect a higher CAPEX as appropriate. It is important to note that the adjustment in rates will be linked solely to the costs of the incremental capital. Therefore, distributors should not perceive this activity as an opportunity to true up rate base for any other reason.

The incremental capital for which the Board may provide rate relief is the new capital sought in excess of the materiality threshold. The proceeding to consider an eligible distributor's application for rate relief would examine the reasonableness of the distributor's increased spending plan. If the application is approved, a rate rider would be established to reflect an amount sufficient to accommodate the portion of the approved incremental spending that exceeds the threshold amount. In calculating the rate relief, the Board has determined not to apply the half-year rule so as not to build in a deficiency for subsequent years in the term of the plan."

The Board has subsequently determined that the half-year rule would apply in the final year of the IRM plan.[31]

46. AMPCO submits the reasonableness of THESL's increased spending plan needs to be considered. In AMPCO's view the level of capital spending put forward by THESL as part of this ICM application is unreasonable and inconsistent with the objectives of the Board's new RRFE.

Reasonableness

47. THESL's average $615 million in planned expenditures over the period 2012-2014 (updated on October 31, 2012 to $431 for 2012-2013) is not what AMPCO considers to be a reasonable level of incremental spending and not likely what the Board envisioned when it invited THESL in its Decision in EB-2011-0144 to file a 2012 IRM application and consider whether it would be

[31] EB-2007-0673 Supplemental Report of the Board on 3rd Generation Incentive Regulation for Ontario's Electricity Distributors – September 17, 2008, Page 8

appropriate to file an ICM module as part of the application. AMPCO takes this position given that 2010 and 2011 capital expenditures average $364 million.

48. In THESL's Early Rebasing Decision (EB-2011-0144) the ICM issue was discussed. Specifically the Board made the following points:

- "While the Board cannot determine at this time the level of spending under THESL's capital plan that would be eligible for the ICM, it appears that two projects, the Bremner station and contributions to Hydro One Networks Inc. for the Leaside-Birch transmission reinforcement (which together total $86.6 million in 2012), are directly analogous to projects that the Board has previously approved under ICM for other distributors. These projects represent approximately 15% of the total proposed budget for 2012. (There is a further $49.4 million for these two projects in the 2013 budget.) Further amounts might also qualify."[32]

-" THESL's witness Mr. McLorg asserted "it's certainly our view that a case cannot be made to characterize the bulk of Toronto Hydro's spending as being in any sense extraordinary."[20]
[20] Tr. 2, p. 36.[33]

- 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.[34]

49. To further emphasize this point AMPCO notes the following from THESL's COS application EB-2011-0144:

> *"THESL has furthermore demonstrated that the scale and scope of the required infrastructure renewal is such that it cannot be considered a transient aberration. It is instead predictable, long-term, and programmatic. Although like most other utilities THESL has some need for one-time investments in major new projects such as Bremner Station, the large majority of infrastructure renewal investments are made to replace existing equipment. Replacement of existing equipment which is faulty and/or at or past end of life is not extraordinary or unusual; rather, it is basic and part of any utility's business-as-usual operations."*
>
> In addition THESL continues to have ongoing, non-discretionary, non-extraordinary capital requirements for reactive work and for customer attachment. All of these requirements for capital expenditures are documented at Exhibit D1.
>
> That evidence does not show a sudden realization that the proposed capital expenditures for the test period are now necessary. Instead, those capital expenditures

[32] EB-2011-0144 Decision January 5, 2012, Page 24
[33] THESL EB-2011-0144 Decision January 5, 2012, Page 22
[34] THESL EB-2011-0144 Decision January 5, 2012, Page 23

represent the continuation of a well established and deliberate program of investment to restore the distribution system to a sustainable condition. Over the past four years, the Board has expressly or implicitly acknowledged the need for such a program and its consequences for ratebase and revenue requirements.

These regular requirements for capital expenditures contrast strongly with those intended by the Board to be accommodated by the ICM….

The Board reiterated and expanded on its views in the EB-2008-0187 Decision on an application by Hydro One Distribution. In that Decision at pages 7-8, immediately after quoting the above passage, the Board stated that:

"The Board's objective in establishing the incremental capital module was to enhance the regulatory efficiency of the incentive rate mechanism, which is intended to be formulaic and simplistic in its application, by adding a method to accommodate extraordinary capital spending requirements should they arise during the term of the incentive rate mechanism. The ability to address extraordinary capital spending requirements within the IRM framework increases the efficiency opportunities without requiring a full cost of service rebasing review."

Subsequently at pages 8-9 of that Decision, the Board stated that:

"In considering Hydro One's application in this case it is apparent that Hydro One has conflated the calculation of the threshold and the eligibility criteria. While the relationship between depreciation expense and capital spending establishes the base materiality threshold, the relationship itself is not the determinative factor in assessing the appropriateness of the use of the incremental capital module. Hydro One has substantially predicated its application on the gap between its depreciation expense and its capital spending plan. In fact what the Board requires in considering an application under the incremental capital module is a demonstration that the distributor is facing extraordinary and unanticipated capital spending requirements; i.e. something other than the normal course of business."

In two other cases (for Guelph Hydro, EB-2010-0130, and for Oakville Hydro, EB-2010-0104) the Board granted applications for ICM relief for extraordinary capital expenditures on new transformer stations. In those cases the Board held that the applications met the eligibility criteria of materiality, need, and prudence. These projects are distinguishable from THESL's infrastructure renewal needs since they did not replace existing equipment and were urgently required to meet new load. They were also non recurring on a year over year basis; while load growth in certain areas outside of Toronto may remain vigorous and require further expansion in the future, the

> needs to be served by those stations are now met. Further major investments in new transformer stations may not be necessary for several years.
>
> On the basis of the Board's statements in the Supplementary Report and the EB-2008-0187 Decision, together with the character of the ICM expenditures in the applications where use of the ICM was permitted, THESL understands it to be the Board's position that the ICM is not intended for, and would not be approved for, the type of capital program that THESL has conducted for several years and proposes to continue." [35]

50. AMPCO submits that THESL has not provided sufficient evidence in this application that events have taken place since 2011 to alter THESL's business objectives in a way that the company is now facing new, unusual and extraordinary non-discretionary spending requirements that are substantially different than history and at the level THESL is proposing.

51. On this basis, AMPCO submits that THESL's application is inconsistent with the purpose of an ICM.

52. However, if the Board disagrees, AMPCO makes the following submissions on THESL's ICM for the Board's consideration.

Consistency with the Board's RRFE

53. The Board's recent report on the RRFE speaks to the pace of the work and the need for distributors to control costs.

54. In the Report, the Board has determined that the term for 4th Generation IR will be five years (rebasing plus 4 years) and this longer term will better align rate-setting and distributor planning, strengthen efficiency incentives, support innovation and help manage the pace of rate increases for customers.[36] Specifically, an objective for the development of a renewed regulatory framework is to ensure that distributors are encouraged to manage the prioritization and pace of network investments having regard to the total bill impact on customers.[37]

55. As part of the RRFE, the Board determined distributors will be required to file 5-year capital plans to support their rate applications. The Board states "Pacing and prioritization of capital investments to promote predictability in rates and affordability for customers must be a primary goal in a distributor's capital plan. The Board recognizes that factors beyond a distributor's control may add complexity and uncertainty to any effort to estimate bill impacts on customers.

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[35] EB-2011-0144, Exhibit A1, Tab 1, Schedule 2, Pages 30-33

[36] Report of the Board Renewed Regulatory Framework for Electricity Distributors: A Performance-Based Approach, October 18, 2012, Page 15

[37] Report of the Board Renewed Regulatory Framework for Electricity Distributors: A Performance-Based Approach, October 18, 2012, Page 24

However, a distributor must exercise control over the pace of its own capital spending, as this factor can be an important element in the total cost of electricity to customers.[38]

56. AMPCO submits that THESL's proposed IRM/ICM in this application is not aligned nor consistent with the Board's new RRFE. AMPCO submits that THESL has not demonstrated in its evidence how it has optimized, prioritized and paced investments to take into consideration the total bill impact on customers. THESL has indicated in its evidence, during the interrogatory process and at the hearing that it is unable to prioritize its capital plan as all of the work is essential.

57. Parties made several requests for THESL to rank each of the segments (B1 to B21) in terms of priority to which THESL replied that "THESL does not believe that the projects can be ranked in terms of priority. The projects in THESL's application have been identified and included because they meet the ICM eligibility factors, are essential to maintain the safety and reliability of the distribution system and THESL has no other options to fund them at this time. While THESL can only implement a limited number of jobs in a given year for a variety of reasons (including resource availability, project planning constraints, external factors such as availability and timing of permits, etc.), each aggregate project contains jobs that require more or less equally essential work.[39]

58. AMPCO submits that THESL's determination to execute these projects without prioritization and financial constraint demonstrates a lack of cost discipline and regard for the rate impact on customers.

Application of the Board's Guidelines

Review of Eligibility Criteria

59. The Board's Guideline states "The incremental capital module ("ICM") is intended to address the treatment of new (emphasis added) capital investment needs that arise during the IRM plan term which are incremental to the materiality threshold defined below."[40]

60. For incremental capital expenditures to be considered for recovery prior to rebasing, the Board's Guidelines indicate the amounts must satisfy the following eligibility criteria: materiality, need and prudence.[41]

[38] Report of the Board Renewed Regulatory Framework for Electricity Distributors: A Performance-Based Approach, October 18, 2012, Page 37
[39] Exhibit 6-F, Tab 6-F, Schedule 1-26
[40] Chapter 3, Filing requirements for Electricity Transmission and Distribution Applications, June 28, 2012, Page 6
[41] Report of the Board on 3rd Generation Incentive Regulation for Ontario's Electricity Distributors – July 14, 2008, Section 2.5, Page 24

61. The Board's eligibility criteria are reproduced below:

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.

62. Based on previous ICM applications, AMPCO observes that the Board has based its decisions to approve an ICM on whether the Applicant has: demonstrated that the projects are consistent with the purpose of the ICM; provided sufficient evidence; adequately demonstrated that its capital budget for the rate year (2012 & 2013 in THESL's case) is non-discretionary; appropriately applied-for incremental capital that is outside of the base upon which rates were derived; and established the need, prudence and materiality for the applied-for projects.

63. For example, In the Board's 2011 IRM decisions for Guelph Hydro[42] and Oakville Hydro[43] the Board allowed for municipal transformer stations to be funded through the ICM. In the Board's 2012 IRM decision for Centre Wellington[44] the Board did not approve the SCADA project, as it found that it was not clear that the project is non-discretionary.

64. In an earlier decision regarding an Oshawa PUC Networks Inc. ICM request, the Board determined that some of the projects were discretionary (including a feeder replacement project) and therefore not eligible for relief, but that the concrete pole replacement project was non-discretionary and therefore eligible for relief. [45]

65. The Board has noted that in the recent ICM decisions it has granted rate relief for discrete, material and non-discretionary projects which cannot be funded through the normal operation of the 3GIRM mechanism.[46]

66. In its Argument-In-Chief, THESL's position is "its evidence has more than adequately demonstrated that the proposed capital spending is material, non-discretionary, essential and prudent.[47] THESL further states that it "must invest in essential capital work in order to maintain the safety and reliability of its system and to meet the expectations of its customers with respect to safety and reliability. If Toronto Hydro does not receive funding for these critical

[42] Guelph Hydro Electric Systems Inc., EB-2010-0130 Decision, March 17, 2011 (corrected)
[43] Oakville Hydro Electricity Distribution Inc., EB-2010-0104 Decision, June 10, 200 9
[44] Centre Wellington EB-2011-0169 Decision
[45] Oshawa PUC Networks Inc., Decision – Part II, EB-2008-0205, June 10, 2009
[46] THESL EB-2011-0144 Decision, Page 22
[47] THESL Argument, December 21, 2012, Page 11, Paragraph 46

capital expenditures in a timely manner, issues arise with respect to Toronto Hydro's cash flow, financial leverage and avoidable financing costs."

67. AMPCO makes the following submissions regarding the Board's ICM criteria as it applies to THESL's ICM application. Submissions on materiality are set out immediately below. AMPCO's submissions on the need and prudence criteria are discussed in the context of THESL's specific projects and segments beginning at paragraph 94 hereof.

Materiality

68. As noted at paragraph 61 above, materiality is described as: 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.

69. In the Supplemental Report, the Board determined that eligible incremental capital sought for recovery should be new capital in excess of a materiality threshold. Distributors are to use a Board-approved formula to calculate the materiality threshold that will apply to it.[48] The Board found merit in adding a dead band and approved a 20% adder or deadband in the formula.[49] The amount recovered through rates to fund incremental investment needs to be in excess of this calculated threshold value.

70. Using the Board-approved formula THESL calculated its ICM Threshold Amount as $172,989,464 (which includes a 20% deadband in the amount of $27,763,156.)[50]

71. AMPCO has reviewed recent 2011 and 2012 Decisions by the Board in applications that included an ICM and notes that in all cases the rate relief approved by the Board exceeded a threshold amount specific to each utility that included a 20% deadband amount.

72. The materiality threshold calculates the amount of ongoing capital expenditures that can be supported by rates during IRM.[51] In THESL's case, this amount is $173 million.

73. AMPCO submits that THESL has appropriately calculated the ICM threshold amount ($173 million) with the deadband in accordance with the Board's Filing Requirements. AMPCO takes issue, however, with THESL's proposed ICM structure and approach to determining and calculating the amount of incremental capital eligible for recovery.

<u>Determination of Revenue Requirements and Rate Mitigation</u>

74. In its application, THESL put forward a calculation of ICM rate adders based on the Board's Standard Approach as well as a modification to the Standard Approach.

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[48] Chapter 3, Filing Requirements for Transmission and Distribution Applications, June 28, 2012, Page 7
[49] EB-2007-0673 Supplemental Report of the Board on 3rd Generation Incentive Regulation for Ontario's Electricity Distributors – September 17, 2008, Page 33
[50] Tab 2, Appendix 2, Page 1
[51] Hydro Hawkesbury Inc. EB-2011-0173 Decision, Page 20

75. THESL's modification to the standard ICM treatment includes an alternate calculation of the ICM threshold and an alternative approach to the practice of exempting ICM-approved capital expenditures of the half-year rule (except in the year immediately preceding rebasing). Specifically, THESL proposed to modify the standard treatment so that the ICM threshold is calculated in accordance with the existing formula without the 20% deadband factor and the ICM rate adders would be calculated for each year based on the average incremental ICM investment for that year (half-year rule).[52] THESL observed that this alternative approach provides for rate mitigation as it could result in lower cumulative revenue requirements[53], if the approved ICM amounts for 2012 and 2013 exceed a certain level.

76. At the hearing, THESL put forward other approaches that might be considered by the Board. Specifically during the hearing, THESL's witnesses discussed an illustrative scenario that used changes in net fixed assets as the methodology for approximation of revenue requirement impacts.[54] THESL indicates this is a useful point of comparison opposite the results that flow from the application of the spending model.[55]

77. As noted in the Board's Decision regarding Enersource's 2013 and 2014 rate application, "The Board is guided by its policies in its decision making and conforms to those policies unless there are compelling reasons to do otherwise."[56]

78. AMPCO submits that THESL's circumstances do not constitute compelling reasons to warrant a departure from the Board's Standard ICM approach and as such, its modified approach and the other approaches it proposed should not be accepted by the Board. AMPCO submits the Standard Method should be used to determine the ICM.

Standard Approach

79. In applying the Board's Standard, ICM Approach, THESL uses a "capital spending" ("CAPEX") model. Under this scenario, CAPEX that exceeds the materiality threshold is eligible for recovery under the ICM regardless of when the asset is put in service. AMPCO's understanding of the ICM differs from THESL's. AMPCO believes, based on historical ICM applications, the Board's ICM framework is and should be based on the timing of in-service capital additions in a given rate year.

80. Based on annual capital spend requirements for the entire phase 1 work program (2012/2013) and including the application of the threshold with the deadband ($173 M), THESL calculates the total revenue required from the ICM adders over the IRM period as approximately $114.2 million, as shown below.[57] This calculation results in ICM additions to rate base in 2012 and 2013 and calculates the ICM adder revenue based on a 10% proxy of the additions to rate base.

[52] Tab 2, Page
[53] Tab 2, Page 11
[54] Exhibit K4.3, Page 2, T4, Pages 67-75
[55] THESL Argument-In-Chief, December 21, 2012, Page 11, Paragraph 47
[56] Enersource Hydro Mississauga Inc. EB-2012-0033 Decision, Page 3
[57] Exhibit K4.3, Page 1

THESL'S Proposed ICM Adders based on OEB ICM Framework

$ millions	2012	2013	2014	Totals	Notes
Capital Spending	283.0	579.0		862.0	[A] Tab7 Sch2-10 pg 2of4
Less: Threshold (including 20% deadband)	173.0	173.0		346.0	[B] Tab2 App2 pg 1of1
ICM Additions to Rate Base	**110.0**	**406.0**		**516.0**	[C] = [A] - [B]
Approximate capital recovery factor	10%	10%			
ICM Adder for 2012 Spending	**11.0**	**11.0**	**11.0**	33.0	
ICM Adder for 2013 Spending		**40.6**	**40.6**	81.2	
Total Revenue from ICM Adders over IRM Period				**114.2**	

81. AMPCO submits that in addition to the Board's June 28, 2012 Filing Requirements, the Board's Decisions in past ICM applications provide guidance on this issue.

82. In recent ICM decisions, the total capital budget compared to the materiality threshold consisted of the utilities non-discretionary base budget for the rate year plus the incremental capital that is the subject of the ICM and which reflects only capital expenditures spent on assets that were going into service in the rate year (i.e. in-year in-service capital). The amount approved for recovery in each application was for new capital in excess of the materiality threshold related to work that went in service in the rate year.

83. AMPCO also notes the settlement agreement that was reached regarding the structure of the CM in the recent Hydro One 2013 IRM Distribution Rates Case (EB-2012-0136) was based on In-Service Additions forecasted for 2013 not capital spending as described below. [58]

84. Hydro One filed a 2013 IRM application resulting in a 2.9% distribution bill increase for a typical residential customer consuming 800 kWh per month. The settlement agreement reflects the parties' efforts to determine an appropriate ICM balanced with Hydro One's need to continue to safely and reliably operate its distribution system and to continue with its expanding work program and necessary capital investments. The financial impact of the settlement reached reduced the distribution rate increase for the same residential customer to 1.3% for 2013.[59]

85. Specifically, the parties settled the issue of what projects should be approved for ICM treatment as follows:

> "For the purposes of reaching a settlement, the parties agree that only projects that are incremental to depreciation plus the 20% deadband, as calculated in accordance with the Board's formula, qualify for ICM treatment. The parties agree that Hydro One will

[58] Hydro One Networks Inc. EB-2012-0136 Decision and PO#4, December 10, 2012, Settlement Agreement, Exhibit M, Tab 1, Schedule 1, Pages 5-11
[59] Hydro One Networks Inc. EB-2012-0136 Decision and PO#4, December 10, 2012, Settlement Agreement, Exhibit M, Tab 1, Schedule 1, Page 3

update the threshold calculation for the Board's revised inflation factor. The revised calculation raised the threshold from $332.5M to $342.4M. For the purposes of reaching a settlement, the parties agree that the phrase "Typical Capital" implies that it represents projects that are "business as usual", which is inappropriate for ICM treatment. The parties agree that the in-service additions of the following projects should be approved for ICM treatment. In so doing, the agreed projects that were in the category described as "Typical Capital" in the pre-filed evidence have been reviewed and placed in a new category, "Special Capital" in this Settlement Agreement. The projects listed under that category are those that, in the particular circumstances of the Applicant in the Test Year, the parties agree are sufficiently out of the normal course of business that the special rate treatment afforded by the ICM is appropriate."[60] Hydro One provided a specific list of 2013 ICM projects totalling $275.9 million that will be in service in 2013.

86. In addition the Settlement Agreement stated:

> *"For the purpose of settlement, the parties agree that the need for the requested incremental capital projects has been demonstrated. Appendix A provides the total forecast revenue and the agreed upon ICM amounts. Further, it is agreed that when Hydro One returns to the Board for approval of its distribution rates in a cost of service proceeding, the guidance provided by EB-2007-0673 Supplemental Report of the Board will be followed:*
>
> *"At the time of rebasing, the Board will carry out a prudence review to determine the amounts to be incorporated in rate base. The Board will also make a determination at the time regarding the treatment of differences between forecast and actual capital spending during the IRM plan term. Overspending or underspending will be reviewed at the time of rebasing".*
>
> *This review will relate to the projects identified above."*[61]

87. In considering the Board's decisions in past ICM applications as noted above and the recent settlement in the Hydro One application also noted above, AMPCO submits that the ICM additions to rate base in THESL's application that are eligible for recovery should be based on in-service capital additions in 2012 and 2013 in excess of THESL's $173 million materiality threshold, not the capital spending amount in the relevant years.

[60] Hydro One Networks Inc. EB-2012-0136 Decision and PO#4, December 10, 2012, Settlement Agreement, Exhibit M, Tab 1, Schedule 1, Pages 5-6
[61] Hydro One Networks Inc. EB-2012-0136 Decision and PO#4, December 10, 2012, Settlement Agreement, Exhibit M, Tab 1, Schedule 1, Page7

88. AMPCO agrees with Energy Probe in its submissions that if the Board agrees that the ICM additions should be determined based on in-service additions, the Board workforms should be modified to reflect in-service additions rather than CAPEX.

89. Table 2 below shows THESL's in-service additions and CWIP determinations for the period 2012 to 2013.[62]

Table 2: Proposed In-Service Additions for 2012 & 2013 ($ millions)

		2012	2013	Total
Forecasted In-service Additions from 2012 capital Spending	A	$116.31	$140.59	$256.9
Forecasted In-service Additions from 2013 capital Spending	B		$283.76	$283.76
Sub-Total		**$116.31**	**$424.35**	**$540.66**
Pre-2012 CWIP	D	$67.01	$45.46	$144.7
Total	A+B	$183.32	$469.82	

90. With respect to pre-2012 CWIP, AMPCO submits that THESL has not demonstrated that the 2011 projects qualify for ICM treatment in the 2012-2013 rate years. Thus, AMPCO submits the materiality threshold test should be based on in-year in-service additions excluding pre-2012 CWIP.

91. Based on this approach, AMPCO submits as shown in Table 3 below that for 2012 THESL has not met the Threshold Test and thus the in-service additions in 2012 are not eligible for recovery in 2012.

Table 3: Calculation of Proposed ICM Additions

Proposed ICM Additions	**2012**	**2013**	**Total**
In-Service Additions from capital spending	$116.31	$424.35	**$540.66**
Less: Threshold (with 20% deadband)	$173	$173	
ICM Additions to Rate Base	**-$56.7**	**$251.35**	**$251.35**

92. Based on this approach AMPCO submits THESL's request for an ICM and associated Rate Adders for 2012 does not qualify and should be rejected.

[62] Tab 8, Schedule 5-1, Appendix A

93. For 2013, AMPCO submits that $251.35 million in incremental capital is eligible for recovery under an ICM subject to meeting the Board's eligibility criteria of need and prudence discussed below. As discussed, AMPCO submits the issue of reasonableness with respect to spending levels, pace and prioritization of investments and regard for the impact on customers are also considerations.

Need & Prudence

94. As noted at paragraph 61 above, need and prudence are described as follows:

> **Need:** Amounts should be directly related to the claimed driver, which must be clearly non-discretional. 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.

95. In its Argument-In-Chief, THESL's position is "its evidence has more than adequately demonstrated that the proposed capital spending is material, non-discretionary, essential and prudent.[63] THESL further states that it "must invest in essential capital work in order to maintain the safety and reliability of its system and to meet the expectations of its customers with respect to safety and reliability. If Toronto Hydro does not receive funding for these critical capital expenditures in a timely manner, issues arise with respect to Toronto Hydro's cash flow, financial leverage and avoidable financing costs.

96. With respect to prudence, THESL provided some evidence of the prudence of the chosen approach relative to the alternatives (to the extent they are available). THESL defines prudence as 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.[64]

97. THESL has a Feeder Investment Model that it uses to develop ICM projects. THESL used it in evaluating the proposed ICM projects presented in this application. THESL describes it's FIM as a risk based model designed to identify the economically optimal replacement time for aging assets. At the highest level, the model works by balancing the cost associated with the increasing risk of failure as assets age and their condition degrades ("risk cost") against the benefit of delaying the capital spending required for replacement by extending service life as long as possible.[65]

[63] THESL Argument, December 21, 2012, Page 11, Paragraph 46
[64] Tab 2, Page 19
[65] Tab 2, Appendix 4, Page 1

Feeder Investment Model

98. For the reasons set out below, AMPCO submits that the Feeder Investment Model ("FIM") is not a good predictive tool. Its use by THESL has not resulted in the identification of programs/projects which meet the Board's test for Need and Prudence in the context of an ICM application and, in hindsight, probably led THESL astray in its development of an ICM application.

99. THESL's proposed capital investment program has been constructed based on evaluations using its Feeder Investment Model (FIM).[66] Essentially, all of the programs proposed for inclusion in the ICM derive from calculations made in the FIM. It is therefore critical to this application that the FIM should only identify projects that meet the Board's criteria for an ICM as it appears that a cornerstone of THESL's claim is that a large number of projects are needed and are non-discretionary is based on the business case evaluations using the FIM.

100. By its nature, the FIM does not focus on identifying projects that are "out of the ordinary course of business". Rather, THESL is using it as a non-prioritizing screen for all potential feeder-related projects it might consider, including "business as usual" programs (not discrete projects) such as asset replacement.

101. As constructed, the FIM attempts to evaluate projects using a risk based approach. This is a logical approach to prioritizing projects. Any asset manager must use this or a similar approach to ensure that available capital and maintenance dollars are spent prudently.

102. Where the FIM model departs from previously accepted practice is in its insertion of estimated external customer incurred outage costs captured as risk and ownership costs and treated as internal costs in THESL's project business cases.

103. Use of this model for capital projects is of concern to AMPCO due to the nature of the methodology resulting from the possible introduction of overstated avoided risk and ownership costs for specific project options. In AMPCO's opinion, use of the FIM by THESL has distorted certain aspects of the business case as set out below.

The selection of THESL's proxy customer outage costs lacks evidence.

104. In an interrogatory response[67], THESL presented a brief table of values developed in selected academic studies on the possible customer cost of outages. THESL did not provide evidence of values derived by other utilities for project evaluation purposes, as its evidence suggests this is not done in other utilities.

[66] EB-2012-0064 Application, Tab 2, Appendix 4, page 2 of 7, lines 1-2.
[67] Tab 6F, Schedule I-27

Table 1 – Customer Interruption Cost Breakdown

	Study Name	Duration Cost ($/kVA)	Event Cost ($/kVA)	Reference	Page Number on PDF
A	Interruption Costs Netherlands	8.721	6.579	N/A	4
B	THESL	15	30	N/A	N/A
C	The Use of Customer Outage Cost Surveys in Policy Decision-Making	14.436	35.982	N/A	5
D	Consumer Expectations of DNOs and WTP for Improvements in Service	22.539	8.769	Table 29	35
E	Economic Valuation of Electrical Service Reliability	17.631	86.652	N/A	9
F	How to Estimate the Value of Service Reliability Improvements	50.94	42.93	Table 1	3

105. In its interrogatories, neither AMPCO nor other intervenors took issue with the studies quoted in the response to this interrogatory. AMPCO, however, requested during cross-examination that THESL provide the referenced reports. THESL objected and the Board did not order THESL to provide them. AMPCO has, however been able to find Reference F (How to Estimate the Value of Service Reliability Improvements) as a result of an internet search. Table 1 below is contained in this study.

TABLE I
ESTIMATED AVERAGE ELECTRIC CUSTOMER INTERRUPTION COSTS
US 2008$ BY CUSTOMER TYPE AND DURATION

Interruption Cost	Interruption Duration				
	Momentary	30 minutes	1 hour	4 hours	8 hours
Medium and Large C&I					
Cost Per Event	$6,558	$9,217	$12,487	$42,506	$69,284
Cost Per Average kW	$8.0	$11.3	$15.3	$52.1	$85.0
Cost Per Un-served kWh	$96.5	$22.6	$15.3	$13.0	$10.6
Cost Per Annual kWh	9.18E-04	1.29E-03	1.75E-03	5.95E-03	9.70E-03
Small C&I					
Cost Per Event	$293	$435	$619	$2,623	$5,195
Cost Per Average kW	$133.7	$198.1	$282.0	$1,195.8	$2,368.6
Cost Per Un-served kWh	$1,604.1	$396.3	$282.0	$298.9	$296.1
Cost Per Annual kWh	1.53E-02	2.26E-02	3.22E-02	$0.137	$0.270
Residential					
Cost Per Event	$2.1	$2.7	$3.3	$7.4	$10.6
Cost Per Average kW	$1.4	$1.8	$2.2	$4.9	$6.9
Cost Per Un-served kWh	$16.8	$3.5	$2.2	$1.2	$0.9
Cost Per Annual kWh	1.60E-04	2.01E-04	2.46E-04	5.58E-04	7.92E-04

106. AMPCO has been unable to equate the numbers contained in this Table 1 above, with the values quoted by THESL in its own Table 1. This may be due to THESL having normalized the values in these reports to provide a practical comparison to its own numbers, but this is not known because no examination of information took place at the hearing.

107. Nonetheless, AMPCO believes the use of these reports as supportive evidence is problematic for several reasons.

108. First, since the number of quoted reports is small at only five and the spread of data from high to low is more than a factor of five, the results present considerable uncertainty.

109. Second, all of these are academic studies and none are based on actual utility use to justify projects.

110. Also, the one study AMPCO was readily able to find clearly distinguishes between different classes of customers, which THESL's coarse approximation does not.

111. More fundamentally, the use of customer outage cost in the manner done by THESL has yet to be accepted in any jurisdiction known to THESL's own consultants. Since this area of study has been under development for at least three decades, the Board should be reluctant to accept such an approach without first undertaking a rigorous examination of its proper methodological parameters and potential illogical consequences.

Impact of Customer Cost Selection on the Business Case Analysis

112. As just indicated, the cost to a customer of an outage has been the subject of much study for decades, as it can be of value to support decisions for selecting among projects or for determining the fairest way to conduct work that may require a forced outage. For example, some regulatory jurisdictions have directed utilities to incorporate proxy customer outage costs into job planning decisions where the utility might otherwise choose a job plan that inadequately considered customer impacts.

113. To the best of our knowledge no jurisdiction has sanctioned the use of proxy customer outage costs to justify a program or project in a regulatory process.

114. The specific values assumed by THESL, moreover, are such that they can dominate the FIM calculations. In an undertaking at the request of the Board[68], THESL Illustrated the sensitivity of the FIM model to different estimates of customer outage cost. For convenience, the table is reproduced here:

[68] EB-2012-0064, Tab 8, Schedule 1-5

14 **Table 1 – Avoided Risk Cost Results for Underground Job #1 with different inputs**

Job #	Outage Event Cost, Outage Duration Cost	Job Cost ($M)	PV (2015 Cost of Deviating from Optimal Intervention) ($M)	2012 Cost of Deviating from Optimal Intervention ($M)	2012 Concurrent Intervention Benefit ($M)	PV (2015 Net Project Benefit) ($M)	2012 Net Project Benefit ($M)	PV (2015 Project Net Cost) ($M)	2012 Project Net Cost ($M)	Three-Year Avoided Risk Cost ($M)
1	$3, $1.5	$2.90	$5.38	$5.57	$2.12	$4.27	$5.10	$1.11	$0.47	$0.64
1	$6, $3	$2.90	$8.13	$7.67	$2.12	$6.77	$8.07	$1.37	-$0.40	$1.77
1	$30, $15	$2.90	$31.58	$26.56	$2.12	$26.71	$31.87	$4.87	-$5.31	$10.18

115. It is clear from this table that the use of specific proxies for customer outage cost has a strong influence on the outcomes of the FIM. THESL indicated that as part of a sensitivity analysis with a 30% reduction in outage costs used in various business cases not all remained "directionally aligned", but a majority were.[69]

116. One of THESL's independent consultants, BIS, noted, "THESL should investigate ways of improving its estimates of customer outage cost. There is not necessarily anything wrong with the values currently being used, however this is a notoriously difficult parameter to evaluate; new surveys and methods are continually being published."[70]

117. In addition, other sensitivities occur in the business cases directly related to the magnitude of the customer cost selection:

- Because the event cost is markedly greater than the lost energy cost, the methodology favours a higher proxy cost for large numbers of small customers than for small numbers of large customers. This methodology provides a business case incentive to projects serving residential customers over projects serving commercial, institutional or industrial customers, even though these groups may be providing greater revenue to THESL. It is noteworthy that, in the table of research studies provided by THESL, three of the five had the event cost lower than the lost energy cost.

- Inappropriate customer outage proxy costs, especially for projects involving large numbers of customers, can result in inflated avoided risk costs or potentially advance the optimum intervention date.

The use of peak loading data for outage cost calculation purposes maximizes outage costs.

> *"The FIM bases the magnitude of an outage on the peak load interrupted, which is calculated based on the location of the asset and the configuration of the*

[69] EB-2012-0064 Transcript of Oral Hearing Vol1 20121210 Pages 63 Lines 26,27,28 Page 64 Lines 1,2,3
[70] EB-2012-0064 , Tab 4 Schedule D2 Page 13

distribution system at its location. This is good proxy for the magnitude of customer impacts because it accounts for the combined load of different customer classes that are served by the asset and the fact that more outages occur during peak periods when assets are heavily loaded".[71]

118. AMPCO believes that this is a difficult argument to accept, for several reasons. While outages may occur at peak load, it is far from established that this is fact. Logically, distribution equipment that is load sensitive, such as transformers, switches and circuit breakers will be more prone to failure during peak load periods. At the same time, outages caused by weather, tree growth, pole rot and vehicles are not load related. THESL did not provide any "hard" evidence to its assertion that outages occur, primarily during peak load periods.

119. The following table was excerpted from this application[72]:

Table 2: 2010 SAIFI and SAIDI Contributions by Cause Codes

Cause Code	Contribution % to SAIFI	Contribution % to SAIDI
Defective Equipment	39.7	37.9
*Loss of Supply	13.2	8.5
Adverse Weather	10.8	9.8
Unknown	9.7	2.6
Foreign Interference	8.2	6.1
Tree Contacts	8.1	14.9
*Scheduled Outage	4.2	12.4
Human Element	3.1	1.3
Lightning	1.7	1.9
Adverse Environment	1.4	4.6

*Excluded from further analysis in this document to reflect the true status of the system.

120. While the largest contributor to SAIDI and SAIFI is clearly defective equipment, it is still a minority contributor. Not all defective equipment, moreover, fails due to peak loading stress. For example, insulators, surge arrestors and wood poles all fail for reasons unrelated to feeder loading.

121. AMPCO contends that the use of peak load to calculate customer cost of an outage exaggerates the benefits of programs aimed at improving reliability.

122. The use of peak feeder load in the proxy cost calculations will also estimate a disproportionate benefit to feeders with lower demand factors, such as residential feeders.

[71] Application, Tab 2/App 4, Page 3, lines 13-17
[72] EB-2011-0144, Ex D1/Tab7/Sch 3/Page 11.

123. Finally, THESL provided no evidence that any of the studies quoted to justify customer outage cost proxies used peak load data; this approach was repeatedly questioned in cross examination.[73]

Unitized reliability statistics in the FIM can introduce unintended results.

124. The use of reliability statistics at the feeder level and unitized across the whole feeder on a per metre basis, will allocate specific reliability causes to all assets on the feeder allowing an inappropriate calculation of risk or ownership costs for any specific project, i.e. historical feeder reliability that includes a reoccurring failure on an upstream asset will have these reliability statistics reflected in some proportion to downstream elements on the same feeder.[74]

125. In addition the use of historical reliability statistics for larger upstream type projects that improve reliability such as load transfer or automated switching projects may not accommodate past or imminent future root cause improvements that have the effect of lowering the probability of failure over the historical metric thereby erroneously enhancing the total customer outage cost.

The Choice of Life Cycle

126. Use of a 100 year life cycle cost in calculating total cost of ownership for "not in kind" business analysis can introduce costs and benefits, including annual proxy customer costs for risk and ownership, for multiple life cycles which are not necessarily reflective of the life cycle of the assets under comparison.

127. In cross-examination, THESL said that 100 year life cycles for "not in kind" project comparisons are "very reasonable"[75] without providing specific evidence as to whether or not that life cycle value is reflective of their current asset base life cycle or suitable for NPV analysis given the long time frame under study.

The high avoided risk value derived from customer proxy costs supports wholesale reliability improvement projects that may not be warranted.

128. There is no indication in the evidence that THESL has placed any limit on the values of reliability it seeks to achieve. The Board's requirement of LDCs is that they should, at a minimum, remain within the range of their three year historical performance. This direction implicitly recognizes that reliability has a price and also that there is little evidence supportive of customers willing to pay significantly more to their distributor for increased reliability. While the Board's direction does not discourage LDCs from seeking to improve reliability above their historical average, it also does not encourage LDCs to pursue radical improvements at great cost. Respectfully, this is exactly the approach that is being pursued by THESL in this application.[76]

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[73] Transcript Vol 2, Page 63 line 11- Page 64 line 3
[74] EB-2012-0064 Transcript of Oral Hearing Vol 1 20121210 Pages 67 to 70
[75] EB-2012-0064 Transcript of Oral Hearing Vol1 20121210 Page 111 Line 6
[76] Filing Requirements for Transmission and Distribution Applications June 22 2011 Chapter 3 Section 2.2

129. If THESL were in a derelict or declining position with respect to reliability, this approach might be more understandable. It is not, however and the evidence it has provided suggests that current reliability is at worst showing no deteriorating trend.

130. AMPCO submits that the Board should not sanction THESL's proposal to use the FIM proxy customer outage costs and, therefore, to determine whether projects and/or programs are non-discretionary without further study. Acceptance of such a methodology and the specific parameters proposed by Toronto Hydro without an extensive review would, in AMPCO's opinion, set a dangerous precedent, and could result in inaccurate outcomes that should not be relied upon in determining the need or prudence of specific projects and programs.

Review of Capital Projects – General Discussion

131. The evidence states indicates "The capital expenditure amounts requested have a significant impact on the operations of THESL directly, first of all with respect to the reliability of service provided to customers by THESL, and secondly with respect to the staffing levels and staff deployment, together with all the support and ancillary activities associated with THESL's capital program (e.g. supplies, vehicles and equipment, hiring, financial accounting, etc.) Furthermore, the level of THESL's capital program will have direct effects on the requirements for access to short and long term capital markets."[77]

132. THESL also indicates the proposed ICM projects/segments are new and incremental to the rebasing year (2011) revenue requirement and many of the projects are continuations of programs that have been in existence for some time but the ICM projects address geographical areas and infrastructure that have not been previously renewed.

133. In response to interrogatories and discussions at the hearing, THESL indicated it was unable to provide a meaningful comparison of THESL's previous capital work program to the capital work program in this application. On January 4, 2012, THESL filed a capital cost comparison that compares historic spending (2008 to 2011 actuals) with THESL's proposed ICM capital work for 2012 and 2013. As a general comment AMPCO submits that the comparison shows that the spending levels in the areas provided are trending upwards in 2013 at a substantial rate.

134. THESL indicates that projects are essential and non-discretionary based on one or more of the following five criteria: statute, code, provincial policy or external requirement; public and employee safety; imminent reliability degradations; imminent capacity shortages; and material increase in cost.

135. In response to an interrogatory[78], THESL provided a chart that lists the criteria that THESL is relying on for each segment to determine that the work is non-discretionary.

136. AMPCO takes no issue with the specific criteria THESL uses to evaluate its projects, however, AMPCO makes the following comments with respect to the weight that should be given to reliability in the context of THESL's reliability performance.

[77] Tab 2, Page 16
[78] Tab 6E, Schedule 10-9

Reliability

137. THESL states that the specific projects it 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.[79]

138. EP IR#3 (Exhibit 6A, Tab 7-2) provides reliability service quality indicators for the last 5 years and 2012 which shows that THESL's overall SAIDI and SAIFI results have improved over the past three years.

Indicator	2007	2008	2009	2010	2011	2012 (YTD)[1]	2012 (E)
SAIFI	2.01	1.76	1.64	1.77	1.62	0.98	1.44
SAIDI	1.35	1.24	1.38	1.29	1.43	0.79	1.09
CAIDI	0.67	0.70	0.84	0.73	0.88	0.80	0.76

(MEDs [2] not included)

139. In response to Board Staff [80], THESL indicates it has been able to maintain relatively stable reliability over the referenced period. Specifically THESL states "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. However, 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."

140. In response to CUPE [81], THESL states "Nevertheless, while THESL's reliability indicators are below (i.e., better than) the composite Canada-wide averages as reported by the CEA and noted in THESL's Annual Information Form, THESL does not consider these statistics as indicating that THESL's reliability is currently at an acceptable level. In addition, contrary to what was implied, THESL has not and does not consider its current reliability results as "good." Furthermore, average reliability statistics mask reliability degradations in specific locations that are essential to address."

141. In response to VECC Interrogatory Tab 6F Schedule 11-20 on the question, "How does THESL's reliability performance compare with that of the of the other electricity distributors in its IRM cohort?" a table was provided from a list of distributors taken from the "Third Generation Incentive Regulation Stretch Factor Updates for 2012 (EB-2011-0387)" document that again indicated that THESL's "reliability indicators are below (i.e., better than) the cohort …" THESL went on to caution ", it is important to understand that utilities identified in the IRM Cohort are significantly smaller in size, making THESL an outlier in the sample. As well, the utilities operate under different business conditions. THESL serves the largest urban centre in Canada. The nature of its service area, including the presence of numerous large businesses and the inherent

[79] EB-2012-0064 Tab 2, ORIGINAL, Page 2
[80] EB-2012-0064 Tab 6F Schedule 1-23
[81] EB-2012-0064 Tab 6F, Schedule 4-2

difficulties in acquiring real estate, result in more demanding requirements for plant undergrounding, system reliability, and safety procedures." . THESL went on to repeat it's viewpoint on "good" reliability as noted previously in response to Board Staff. [82]

142. In each of these responses no evidence is provided to quantify THESL's interpretation of "good" in relation to industry accepted metrics.

143. Further, considering that maintaining existing reliability is a key driver of THESL ICM proposal, THESL makes no reference to address what it considers to be unacceptable reliability indices in its stated 2012 company objectives or in the Chairman and CEO's general message in THESL's 2011 Annual Report. [83]

144. In DBRS's Bond Rating report it is noted: "Historically, the Company has been in line with industry standards as measured by their System Average Interruption Duration Index (SAIDI) and System Average Interruption Frequency Index (SAIFI).."[84]

145. In addition references from Standard & Poor's Global Credit Portal-Ratings Direct report on THESL indicates the following; "In our view, THESL's monopoly position and the asset-intensive nature of electricity distribution limit competitive risk. The electricity distribution business carries relatively low operating risk. Operational efficiency and reliability are within provincial industry norms, avoiding regulatory risk linked to poor performance. "[85]

146. The Board noted the following In its EB-2011-0144 Decision:

"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."

147. In AMPCO's view the evidence shows that THESL's average reliability indicators are stable and improving over the past three years. It is recognized that a good portion of THESL assets will reach the end of their serviceable life over the next five to nine years[86] and the overall reliability impacts need to be considered in any asset replacement program addressing this issue. This suggests that THESL may have some discretion over when work in its capital plan is undertaken and still maintain an appropriate system average level of service and reliability.

148. AMPCO contends that the suite of capital work proposed contains individual programs or program elements that do not address the key issue of aging infrastructure and will result in unnecessary spending potentially improving average system reliability beyond existing levels. In

[82] EB-2012-0064 Tab 6F Pages 1-4
[83] EB -2012-0064 Tab 6C Schedule 10-1 Appendix A Pages 1-3, 23
[84] EB- 2012-0064 Tab 6C Schedule 10-1 Appendix F Pages 1 and 2
[85] EB-2012-0064 Tab 6c Schedule 10-1 Appendix H
[86] EB- 2012-0064 Tab 6C Schedule 10-1 Appendix F Pages 1 and 2

order to demonstrate this point, AMPCO has evaluated specific projects in THESL's proposed capital plan and makes the following comments.

Review of Specific Capital Projects

AMPCO Position on Schedule B Capital Modules B9-B16 & B19

149. Some of the capital modules identified below do not appear to meet THESL's own requirement for status as non-discretionary and adhering to the Boards own requirement for Materiality, Need, and Prudence.

150. Many of the projects identified by THESL as non-discretionary are driven by a single criteria.[87] This driver - "Imminent Reliability Degradation" - suggests reliability degradation from existing levels if the project does not go ahead. In the programs described below and discussed throughout the hearing, there are numerous evidence references by THESL to maintaining existing reliability or not eroding existing reliability as a driver in determining an appropriate course of action.[88] THESL has consistently conflated the opportunity for long term reliability improvement with "imminent reliability degradation". The two are not the same and projects that seek to meet aspirational objectives for reliability improvements beyond Board requirements do not, in AMPCO's opinion, meet the threshold of being clearly non-discretionary. Moreover, such projects can in no way be described as extraordinary or "out of the normal course of business".

151. The specific circumstances relating to each project's impact on existing reliability and the discretionary status of all or a portion of the capital module is outlined in the module discussions below.

152. Table 4 below summarizes AMPCO's monetary estimate of the impact of what it considers discretionary spending on the capital modules below.

Table 4: Summary of AMPCO's Proposed Reductions by Capital Module ($ millions)

Ref	Segment	2012 Cost ($M)	2013 Cost ($M)	Total Cost of Program AMCPCO considers discretionary and not to be funded through ICM ($M)	THESL Non-Discretionary Project Driver[89]
B10	Fibertop Network Units	1.48	7.71	9.19	Imminent Reliability Degradations/Public Employee Safety
B13.1	Stations Switchgear Municipal	1.73	21.31	4.38	Imminent Reliability

[87] EB-2012- 0064 Tab 6E Schedule 10-9
[88] EB-2012-0064 Transcript Oral Hearing Vol 4 20121213 Page 16 Lines 6,7, EB2012-0064 Tab 2 Page 24 Lines 19
[89] EB-2012-0064 Tab 6E Schedule 10-9

B13.2	and Transformer Stations				Degradations
B15	Stations Control & Communications System	.14	1.0	0.51	Imminent Reliability Degradations
B16	Downtown Stations Load Transfer	.68	2.14	2.82	Imminent Reliability Degradations
B19	Feeder Automation	2.3	20.66	22.6	Imminent Reliability Degradations
B21	Externally Initiated Plant relocations	10.16	24.84	21.03	Statute code or external requirement/ Material Increase in Cost
	TOTAL			**60.53**	

Table 5: Summary of AMPCO's Proposed Reductions by In Service Additions 2013 ($ millions)

Ref	**Segment**	**From**	**To**	**Proposed AMPCO Reductions:** Amounts AMCPCO considers discretionary and not to be funded through ICM ($M)	**THESL Non-Discretionary Project Driver**[90]
THESL 2012/2013 In Service 2013		**424.4**	**386.31**	**38.09**	
B10	Fibertop Network Units	5.5	0.0	5.5	Imminent Reliability Degradations/Public Employee Safety
B13.1 B13.2	Stations Switchgear Municipal and Transformer Stations	14.2	11.65	2.55	Imminent Reliability Degradations
B15	Stations Control & Communications System	.69	.55	0.14	Imminent Reliability Degradations

[90] EB-2012-0064 Tab 6E Schedule 10-9

B16	Downtown Stations Load Transfer	1.7	0.0	1.7	Imminent Reliability Degradations
B19	Feeder Automation	13.9	0.0	13.9	Imminent Reliability Degradations
B21	Externally Initiated Plant relocations	20.8	6.5	14.30	Statute code or external requirement/ Material Increase in Cost
	TOTAL			**38.09**	
	Percentage Reduction				**9%**

153. It is AMPCO's contention that all or a portion of the project costs identified in Table 5 above do not support the accepted definition of "Imminent Reliability Degradation" if not completed and therefore should be considered as discretionary projects.

Project Module B10- Fibertop Network Units

154. In response to cross-examination by counsel for AMPCO, THESL produced Undertaking No. J4.1[91]. In this undertaking, THESL identified two Fibertop units scheduled for replacement currently contained within vaults scheduled for rebuilt projects. THESL then indicated it would remove these replacement jobs from the ICM module and bring forward two Fibertop unit jobs that were originally scheduled for 2014 to compensate.

155. AMPCO is of the opinion that a key rationale for ICM treatment is the non- discretionary nature of the work to be performed in the targeted year it is forecast to be performed in. AMPCO questions then the appropriateness of movement of a segment of this module into 2013 in what appears to be an arbitrary manner and therefore questions the non-discretionary status of the entire segment.

B13.1 Switchgear at Municipal Stations

156. This program is to replace failing and/or end of life switchgear equipment at various Municipal Stations ("MS") located outside downtown Toronto because of advanced equipment age, equipment obsolescence , and safety related equipment issues.[92]

157. THESL indicates in its evaluation of the various options reviewed in addressing the above problems that the preferred option, "includes the installation of SCADA/RTU controlling and

[91] EB-2012-0064 Tab8 Schedule 4-1
[92] EB-2012-0064 Tab 4 Schedule 13.1 Page 1

monitoring systems"[93]. Section IV of that module expands further on the advantages of installing SCADA/RTU equipment along with the switchgear citing increased reliability and increased operational efficiency and flexibility due to the installation of SCADA/RTU along with the switchgear replacement. It is noted that for undefined reasons SCADA/RTU installation is not considered for the other options evaluated involving Type B or Type A switchgear replacement.[94] Cost and risk comparisons for various switchgear classes for each of the installations is not provided. It is AMPCO's contention then that cost and risk factors associated with option 4 is not adequately addressed.

158. In keeping with the FIM model the BCE in Appendix 1 would also include customer costs associated not only with the switchgear replacement but also with expected reliability improvements from the SCADA/RTU installation in the calculations of life cycle risk and avoided risk cost.[95]

159. No cost data was presented in the evidence breaking out the SCADA/RTU replacement portion of the work. As the installation of any new SCADA/RTU equipment is over and above a true like for like replacement and that no installation of new RTU/SCADA equipment would avoid imminent reliability degradation it is AMPCO's position that the SCADA/RTU portion of this capital project is discretionary. AMPCO has arbitrarily assigned a monetary value of $1.96 Million for the cost of the project considered discretionary.

160. For the purposes of calculating impact to 2013 In Service additions as referenced in Tab 8 Schedule 5-1 Appendix A – THESL identifies "In Service Capital for 2012 carried over to 2013" and forecast "2013 In Service" additions. AMPCO reduced the dollar values presented in that table where portions of this program where considered discretionary and/or imprudent by subtracting the assumed dollar amount which represented discretionary or imprudent spending from the total program amounts.

B13.2 Switchgear Replacement at Transformer Stations

161. This program provides for end of life replacement for 13.8 KV switchgear in some downtown Toronto Transformer Stations ("TS"). Replacement is advocated based on obsolescence, age and condition of the existing equipment.[96]

162. It is also noted all the switchgear to be replaced will be replaced with "3,000A air-insulated, arc-resistant type C switchgear with double-bus, double-breaker or breaker-and-half configuration except Duplex switchgear which will be replaced with gas-1 insulated switchgear (GIS) due to space constraints."[97]

163. THESL's project descriptions do not identify whether or not the existing switchgear installations to be replaced are indeed like for like replacements with respect to the bus configurations currently used with the existing switchgear. For example an existing switchgear arrangement

[93] EB-2012-0064 Tab 4 Schedule 13.1 Page 5 Lines 17,18
[94] EB-2012-0064 Tab 4 Schedule 13.1Pages 15,16
[95] EB-2012-0064 Tab 4 Schedule 13.1 Page 17 Lines 20-27
[96] EB-2012-0064 Tab 4 Schedule 13.2 Pages 1,2
[97] EB-2012-0064 Tab 4 Schedule 13.2 Page 2 Lines 8,9 Page 3 Line 1

utilizing a single feeder breaker supply being replaced with a double bus double breaker arrangement would necessitate additional bus work and an additional breaker over the status quo. Even if THESL could establish that there would be additional reliability and operational improvements associated with double bus double breaker supply, it should not be overlooked that it is the most expensive option and not a true like for like replacement. As in other modules any reliability improvements from the new bus arrangement would be reflected in THESL's avoided cost calculations.

164. Lacking definitive evidence to the contrary, it would be AMPCO's position that the portions of this capital program associated with any bus configuration upgrades should be considered discretionary. As no data is provided as to the existing bus arrangement at each of the identified project sites, and because any refinement over the status quo being complex in scope, AMPCO has assigned a figure of $2.43 Million for discretionary spending as part of this module.

165. For the purposes of calculating impact to 2013 In Service additions as referenced in Tab 8 Schedule 5-1 Appendix A – THESL identifies "In Service Capital for 2012 carried over to 2013" and forecast "2013 In Service" additions. AMPCO reduced the dollar values presented in that table where portions of this program were considered discretionary and/or imprudent by subtracting the assumed dollar amount which represented discretionary or imprudent spending from the total program amounts. Refer to Table 5.

Project Module B15 – Stations Control and Communication

166. This particular segment is to add route redundancy in THESL's SONET fibre network and to accommodate end of life issues with the existing Scada/RTU replacement/installation.[98] AMPCO's concern is with the SONET system segment of this program which is to ask $0.51M.[99]

167. THESL claims that the SONET fibre redundancy is to reduce failures for loss of protection and control elements at the transmission level with Hydro One.[100] In cross-examination, THESL said that the existing system meets current Transmission System Code ("TSC") requirements (Section 10.1) which includes requirements for route diversification; however, THESL stated that they wanted continued improvement beyond the code requirements.[101]

168. THESL's evidence indicates the need for the SONET system redundancy is predicated mainly on the potential impact of a coincident outage occurring during loss of the SONET system.[102] While this can be serious, warranting manual local control intervention THESL has not presented any real evidence to show a probability of failure or "imminent reliability degradation" if the project does not proceed. The one example used to illustrate the potential magnitude of the reliability impacts which occurred on December 22, 2011 does not identify the root cause of the communication outage and states that no customer outages actually occurred during this six

[98] EB-2012-0064 Tab4 Schedule B15 Pages1-3
[99] EB-2012-0064 Tab 4 Schedule B15 Page 1 Line 14
[100] EB2012-0064 Tab 4 Schedule B15 Page 2 Lines 15-20
[101] EB-2012-0064 Transcript Oral Hearing Vol 4 20121213 Pages 29 and 30
[102] EB2012-0064 Tab4 Schedule B15 page 16 Lines 1-27

and a half hour communication failure. There was actually no outage impact to THESL customers from the December 22nd event. [103]

169. It is, therefore, AMPCO's submission that the SONET system segment of this program is discretionary and $0.51 Million should not be funded by an ICM.

170. For the purposes of calculating impact to 2013 In Service additions as referenced in Tab 8 Schedule 5-1 Appendix A – THESL identifies "In Service Capital for 2012 carried over to 2013" and forecast "2013 In Service" additions. AMPCO reduced the dollar values presented in that table where portions of this program were considered discretionary and/or imprudent by subtracting the assumed dollar amount which represented discretionary or imprudent spending from the total program amounts.. Refer to Table5.

Project Module B16 – Downtown Stations Load Transfer

171. This project module provides for feeder ties to enable load transfers to respond to low probability high impact events in Toronto's downtown core. [104] Some of this work appears to be a continuation of spending previously approved. In cross-examination THESL agreed that electricity service to this area of the city is as reliable as anywhere in Canada.

172. In attempting to establish need for this project, THESL relies, in part, on the calculation of customer interruption costs based on averaged historical outage events.[105] THESL, however, indicates in the pre-filed evidence as follows:

173. "THESL expects to be able to reduce likelihood of high impact station events and is proposing to do so elsewhere in this application with asset replacements"[106]

174. THESEL also states in the pre-filed evidence, "equipment replacement is proposed for some of these stations to mitigate these risks…."[107] The fact, however, that these remediation efforts will take place is ignored by THESL when calculating customer cost. This has the impact of overstating the net impact of those customer costs.

175. It is AMPCO's position, therefore, that 100 % of this project is discretionary in that imminent reliability impacts have not been demonstrated. This amount reduces THESL's forecast 2013 In Service Capital budget by $1.7 million.

Project Module B19 – Feeder Automation

176. THESL's Feeder Automation ("FA") project is to install automated switches, software and communications devices on selected trunk feeders. These devices improve reliability by reducing the impact of trunk-related outages. The FA system utilizes remote switching technology and specialized software loaded in each switch remote terminal unit (RTU) to reduce

[103] EB2012-0064 Tab 4 Schedule B15 Page 3 Lines 11-17
[104] EB2012-0064 Tab 4 Schedule B16 Page 2 Lines 3-7
[105] EB2012-0064 Tab 4 Schedule B16 Page 10 Lines 28 29, Pages 12 and 13
[106] EB2012-0064 Tab 4 Schedule B16 Page 9 Lines 17-18
[107] EB2012-0064 Tab 4 Schedule B16 Page 2 Lines 11-12

the duration of outages by automatically isolating the faulted area and restoring the power to the unaffected segments of the feeder within one minute.[108]

177. As with module B16 above, THESL does not indicate whether or not past or imminent outage root cause improvements has or will have an effect on the pre-filed CI and CHI savings to be achieved. In addition it is noted that the evidence indicates the Feeder Automation scheme "is an effective solution to mitigate the impact of outages on the main portions of the feeder (i.e., the trunk)"[109] by reducing the impact of outages to customers supplied by the unaffected segments of the feeder in under a minute; however, it does not affect the number of customers initially impacted by the outage. AMPCO contends that resulting identified savings to CI could be viewed by customers, especially industrial customers, as a statistical benefit only.

178. In the pre-filed evidence THESL indicates it considered this project non- discretionary "on the basis that it introduces a new technology into the system that will significantly reduce the impact of trunk related outages on targeted at risk feeders".[110] This is further explored in detail in THESL's business case citing large Customer Interruptions (CI) and Customer Hours Interrupted (CHI) savings and large cost/benefit ratios as a result.

179. It is AMPCO's position that projects undertaken that do not directly address the issue of aging infrastructure and introduce reliability benefits where adequate system reliability is demonstrated makes the project discretionary. This amount reduces THESL's forecast 2013 In Service Capital budget by $13.9 million.

Project Module B21- Externally Initiated Plant Relocations

180. This project module is driven by third party requests for THESL to relocate facilities in order for the third party to complete planned work. In addition to these relocations, "externally driven construction projects provide an opportunity for THESL to expand its infrastructure for future provisions in conjunction with a relocation project."[111]

181. Of particular interest to AMPCO is that $21.3 Million of the $35 Million total program costs in this module[112] are related to expansion costs for the 4 Phases of Queens Quay rebuild projects that are over and above like for like replacement and not a part of the third party request. Specifically the $21.03 million identified as expansion costs are earmarked for a new duct bank to accommodate future feeder egress from Bremner TS. The Queens Quay duct bank option is compared against a future feeder egress routing primarily along Lakeshore Blvd.

182. AMPCO believes that the expansion portion of this project associated with the Queens Quay rebuild is discretionary in nature. This amount reduces THESL's forecast 2013 In Service Capital budget to $14.30 million. For the purposes of calculating impact to 2013 In Service additions as referenced in Tab 8 Schedule 5-1 Appendix A – THESL identifies "In Service Capital for 2012 carried over to 2013" and forecast "2013 In Service" additions. AMPCO reduced the dollar

[108] EB 2012-0064 Tab 4 Schedule B19 Page 1 lines 5-10
[109] EB 2012-0064 Tab 4 Schedule B19 Page 1 Lines 14,15
[110] EB 2012-0064 Tab 6F Schedule 11-90 Page 1
[111] EB 2012-0064 Tab 4 Schedule B21
[112] EB2012-0064 Tab 6F Schedule 10-23

values presented in that table where portions of this program were considered discretionary and/or imprudent by subtracting the assumed dollar amount which represented discretionary or imprudent spending from the total program amounts. In the alternate, this project should be considered separately with Bremner TS with which it is associated.

183. For the reasons noted above, AMPCO submits that a reduction of $ 38.09 million or 9% of THESL's request for ICM additions in 2013 should be approved by the Board.

4. Implementation

Issue 4.2 Are THESL's proposals relating to rate implementation appropriate for each of the years 2012, 2013 and 2014?

ICM Rate Adders

184. As indicated above, AMPCO's position is that ICM rate riders apply to 2013 only as in AMPCO's view, THESL did not meet the Board's ICM materiality criterion with respect to its 2012 capital.

185. THESL provided 2013 ICM rate rider calculations based on Option A (Fixed and Variable rates) and Option B (Variable rates).[113] However, THESL proposes fixed and variable ICM rate riders as reflected in the 2013 Tariff of Rates and Charges.[114]

186. AMPCO notes that in recent ICM decisions, the Board has determined that the incremental revenue requirement should be recovered by means of a variable rate rider as this approach is consistent with the Board's approach in the Guelph (EB-2010-0130) and Oakville (EB-2012-0104) decisions. Board Staff considered that the Fixed Variable rate rider design may create additional unwarranted complexity.[115]

187. On this basis, AMPCO submits the Board may wish to consider approving variable 2013 ICM rate riders to recover the incremental revenue requirement in 2013.

IV. Summary

On the issues identified herein of concern to AMPCO, the summary of our position is as follows:

ISSUE 1

Although AMPCO takes no issue with respect to the form of THESL's filing, AMPCO submits that the Board should not recognize in rates THESL's approved 2011 year end rate base and based on the arguments herein, should encourage THESL to withdraw Phase 2 of this application.

[113] Tab 4, Schedule E2.1
[114] Tab 3, Schedule B2
[115] Hydro Hawkesbury Inc. EB-2011-0173 Decision, Page 22

ISSUE 2

AMPCO submits that THESL's application of the ICM criteria is not appropriate. Its proposed spending is "business as usual", and not within the Board's expectations for ICM. If the Board agrees with this position, no further analysis of individual projects/programs and their appropriateness is necessary.

In the alternative, if the Board believes that THESL's work program is appropriate to be considered as an ICM application, AMPCO submits that THESL should only be granted revenue in the year in which projects come into service rather than when capital is spent.

AMPCO submits that THESL's circumstances do not warrant a departure from the Board's Standard ICM approach and as such, its modified approach and the other approaches it proposed should be rejected by the Board. AMPCO submits the Standard Method should be used to determine the ICM.

On this basis, AMPCO submits that THESL has not proved the materiality of their ICM revenue requirement for 2012; the ICM in-service capital does not exceed the threshold requirement and, therefore, no funding should be provided by the Board to THESL for 2012.

On the basis that projects/programs B10 to B19 are discretionary and do not meet the Board's test for Need and Prudence, $ 38.09 million, or 9% of THESL's request for these projects, should not be awarded THESL for 2013.

V. Recovery of Reasonably Incurred Costs

AMPCO submits that its participation in this proceeding has been focused and responsible. Accordingly, AMPCO requests an order of costs in the amount of 100% of its reasonably-incurred fees and disbursements.

All of which is respectfully submitted this 15th day of January 2013.