Ontario Energy
Board

Commission de l'énergie
de l'Ontario

Ontario

EB-2010-0142

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

AND IN THE MATTER OF an application by Toronto Hydro-Electric System Limited for an order approving just and reasonable rates and other charges for electricity distribution.

BEFORE: Ken Quesnelle
Presiding Member

Marika Hare
Member

Karen Taylor
Member

DECISION AND ORDER ON SUITE METERING ISSUES
Issued February 22, 2012 and as corrected March 9, 2012

Toronto Hydro-Electric System Limited ("THESL") filed an application, dated August 23, 2010, with the Ontario Energy Board under section 78 of the *Ontario Energy Board Act, S.O. 1998*, c.15, Schedule B, seeking approval for changes to the rates that THESL charges for electricity distribution, to be effective May 1, 2011.

The Board issued a Notice of Application and Hearing dated September 15, 2010*.*

On March 25, 2011, a Settlement Agreement was filed with the Board which incorporated settlement of most outstanding issues in this proceeding. On March 29, 2011, the Board announced its acceptance of the Settlement Agreement. Unsettled issues remained in five areas, one of which was the appropriateness of THESL's suite metering cost allocation and whether or not THESL should establish a separate rate class for multi-unit residential customers that are served directly by THESL through its suite metering provision.

On July 7, 2011, the Board issued its Partial Decision and Order (the "Partial Decision") in this proceeding. Among other things, the Partial Decision found that while all findings in the Partial Decision are final and would result in a final rate order for 2011 rates, the Board would require supplementary evidence to be filed on the suite metering issues as outlined in the Partial Decision (the "supplementary evidence"). The Board stated that any rate implications that arise from the findings in the supplementary proceeding would be reflected in THESL's 2012 rates and will not have retroactive effect in any way. A final Rate Order was issued by the Board on July 28, 2011.

The Partial Decision stated that the Board would issue a procedural order under the current docket number containing filing instructions to THESL and outlining subsequent procedural steps to facilitate further discovery and examination.

Intervenors active in this phase of the proceeding are the Consumers Council of Canada ("CCC"), the School Energy Coalition ("SEC"), the Smart Sub-metering Working Group ("SSMWG") and the Vulnerable Energy Consumers' Coalition ("VECC").

On July 28, 2011, the Board issued Procedural Order No. 10 which required THESL to file the supplementary evidence by August 31, 2011.

On July 29, 2011, THESL sent a letter to the Board which noted that it had received Procedural Order No. 10 and while it was prepared to file the required evidence, for the reasons outlined in the letter, it could not do so by the August 31, 2011 date established in Procedural Order No. 10. THESL requested that Procedural Order No. 10 be amended to provide for a filing date of October 17, 2011 for the filing of THESL's evidence.

On August 8, 2011, the Board issued Procedural Order No. 11 which granted THESL an extension until September 30, 2011 and revised the remaining dates established in Procedural Order No. 10. THESL filed the supplementary evidence on September 30, 2011.

On October 7, 2011, the SSMWG filed a Notice of Motion (the “Motion”) requesting, among other things, that the Board make a finding that THESL’s proposal, disclosed for the first time as part of its September 30th filing, to establish a meter-only rate, was outside the scope of this proceeding.

On October 12, 2011, the Board issued Procedural Order No. 12 which established that the Board would hear the Motion orally on October 14, 2011.

The Board issued its Decision on the Motion at the conclusion of the oral hearing. Where THESL’s proposal for a meter-only rate was concerned, the Board found that this was not a subject matter identified in the previous phase of this hearing and was not contemplated by the Board in its findings in the Partial Decision. The Board, accordingly, disagreed with THESL’s interpretation of the Partial Decision, and agreed with the SSMWG that a meter-only rate was not a subject matter identified in the previous phase of this hearing and was not contemplated by the Board in its findings in the Partial Decision. The Board found that the transition proposal referred to by THESL was a new issue outside the scope of this proceeding.

The Board further determined that it would be assisted by further examination of the evidence and that supplementary interrogatories could be filed by parties on or before October 20, 2011. THESL was to respond to all such interrogatories on or before November 4, 2011. The Board also determined that a technical conference would be held on November 9, 2011.

On November 4, 2011, THESL filed its interrogatory responses.

A one-day oral hearing was held on December 7, 2011. At the conclusion of the hearing, the Board established the steps for the remainder of the proceeding. THESL filed its argument-in-chief on December 14, 2011. Board staff and intervenors filed their submissions by December 23, 2011. THESL’s reply submission was filed on January 12, 2012.

(1) July 7, 2011 Partial Decision & Order

The Partial Decision made the following findings with respect to suite metering:

For clarity with respect to terminology, the Board notes that for the purposes of this Partial Decision and Order, a reference to “suite metering” means the installation of a separate meter for each unit of a multi-unit residential building where there is no bulk meter that is used for the purposes of settlement. Suite metering is a monopoly activity that can only be conducted by a licensed distributor and the rates for suite metering are, therefore, regulated.

Unit sub-metering (sometimes called suite sub-metering or smart sub-metering) is the installation by a licensed unit sub-meter provider of a separate meter for each unit of a multi-unit residential building “behind” the bulk meter, which is owned and operated by a licensed distributor. Unit sub-metering is a competitive and, therefore, non rate-regulated activity.

The Board has heard issues pertaining to suite metering, and specifically suite metering requiring Quadlogic meters, on numerous occasions in recent years. The matters arise due to the unique situation that exists whereby THESL, in the fulfilment of its regulated responsibilities, provides services that are in essence the same services that are provided in a competitive environment by members of the SSMWG.

However, the rather unique regulatory framework involving both monopoly and competitive services occupying the same space introduces another consideration that must be recognised by the Board. It would be insufficient for the Board to limit its review of the situation to a consideration of whether or not THESL is operating in a manner that has been accepted in the past and whether or not it has applied well established principles of ratemaking. The legislative framework that has been introduced brings with it matters of public policy that must be considered in the review of THESL’s operating protocols associated with its provision of suite metering services. It is not a matter of whether or not THESL is operating in a predatory fashion. The simple co-existence of the monopoly and competitive services necessitates a thorough and purposeful review.

The metering of individual multi-residential dwellings is a significant Government initiative in support of its energy conservation policies. The legislative intent that a competitive market for the provision of unit sub-metering should exist is clear. It is also clear that the provision of suite metering by regulated monopolies such as THESL is permitted. The fact that multi-unit residential building developers have the option to obtain separate smart meters for individual units within a building from either the competitive unit sub-metering market or a regulated monopoly (suite metering) introduces a complication that must be managed, not ignored or avoided. It is not business as usual when it comes to setting rates in this environment.

The Board finds that due to the existence of a competitive market for the provision of unit sub-metering it is appropriate to ensure that procurement choices, as between licensed distributors (suite metering) and licensed unit sub-meter providers (unit sub-metering) are made on a comparable economic basis both within the competitive unit sub-metering marketplace and between this competitive market place and the monopoly service. Within the competitive market place the conduct of the service providers will be driven by normal competitive forces and the best price will emerge. The determination of the true cost of the provision of suite metering as part of the monopoly service for comparison purposes is more complicated but the Board considers it to be warranted.

The Board has determined that the creation and maintenance of a separate rate class for multi-residential customers that at the present time are served utilizing Quadlogic technology is the most effective and transparent manner in which to address the aforementioned issues.

The transparency of the specific costs of the suite metering service is required on an ongoing basis. The Board has concluded that it would be more effective to utilize the existing cost allocation tools and input protocols to set a specific rate for these customers than to have THESL periodically perform the types of studies that have been produced for this application.

A virtue of establishing an ongoing cost-allocation process is that the accounting protocols are established in advance and real activity costs are tracked with the intent to identify the class revenue requirement. The Board considers the merit of this approach of exposing the specific costs to be superior to the options that require the deconstruction of pooled costs of the much larger residential rate class on a retroactive basis.

The Board will therefore require supplementary evidence to be filed on this suite metering issue. The objective of the subsequent phase of the proceeding is to establish both the cost allocation protocols for the new customer class and to establish the initial tariff that THESL will charge for this service. The Board will issue a procedural order under the current docket number containing filing instructions to THESL and subsequent procedural steps to facilitate further discovery and examination to facilitate this objective.

To be clear, all findings in this current Partial Decision and Order are final and will result in a final rate order for 2011 rates. Any rate implications that arise from the findings in the supplementary proceeding will be reflected in THESL's 2012 rates (whether determined as part of a rebasing or IRM application) and will not have retroactive effect in any way.[1]

(2) Scope of the Proceeding and THESL's Response to the Partial Decision

Positions of the Parties

All of the parties and Board staff acknowledged and agreed that the issues that are to be determined by the Board in this phase of the proceeding are clearly specified in the Partial Decision, which stated, as referenced above, that: "The objective of the subsequent phase of the proceeding is to establish both the cost allocation protocols for the new customer class and to establish the initial tariff that THESL will charge for this service."[2]

Staff stated that there is not any evidence on the record in this proceeding to suggest that THESL has used the Board's cost allocation model in either an incorrect or inappropriate manner. Intervenors also did not suggest that this had been the case.

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[1] Toronto Hydro-Electric System Limited, EB-2010-0142, *Partial Decision & Order*, ("Partial Decision") July 7, 2011, pp.33-36

[2] Partial Decision, p.36

Board Findings

As noted above, the Board finds the proper scope of this phase of the proceeding is limited to determining whether or not THESL has fully complied with the Board's requirements for this phase of the proceeding, as outlined in the Partial Decision and summarized above, and if so, to determine what would be an appropriate cost allocation methodology and tariff design to be used for the Quadlogic class.

The Board is also of the view that THESL has used the Board's cost allocation model in a correct and appropriate manner, given the assumptions that it has made.

(3) THESL's Supplementary Evidence

The supplementary evidence is referenced as required in the subsequent sections to outline THESL's proposals. THESL stated that the supplementary evidence had been prepared to facilitate the Board's effort to create and maintain a separate rate class for multi-residential customers that at the present time are served utilizing Quadlogic technology.

THESL stated that it relied on the Board's cost allocation model and adjusted input assumptions only where the factual circumstances of the Quadlogic class merited such an adjustment.

THESL stated that it had identified three significant cost drivers that differed between Quadlogic and other residential customers and these were the same cost drivers as were identified in the two BDR studies[3], specifically meter capital costs, meter reading costs and secondary voltage system costs that are attributable to the Quadlogic customers.

THESL stated that it had not directly allocated any costs to the Quadlogic class, which it said was consistent with the BDR studies, where the only costs that were directly allocated were Quadlogic marketing costs. THESL stated that it had no Quadlogic specific marketing costs in its 2012 budget.

[3] *Cost of Service Study for Individually Metered Suites in Multi-Unit Residential Buildings,* BDR North America Inc., November 29, 2010 ("November 29, 2010 BDR Study") and *Cost of Service Study for Individually Metered Suites in Multi-Unit Residential Buildings Alternative Scenario Ordered by the Ontario Energy Board,* BDR North America Inc., ("February 18, 2011 BDR Study") February 18, 2011.

THESL noted that with respect to the results of the cost allocation model, as demonstrated through the various evidence provided during the proceeding based on differing input assumptions, the resulting revenue-to-cost ratio for the Quadlogic class can vary from a low of 90.2% to a high of 122.6%. THESL submitted that this degree of variance is within the generally recognized degree of "tolerance" of the Board's cost allocation model.

THESL noted the views of the Board on the appropriate approach to cost allocation as outlined in its 2007 Cost Allocation Report (EB-2007-0667) and submitted that these views should be an important consideration of the Board in developing the initial tariff for the Quadlogic Class.

THESL noted that the Board had stated in its Partial Decision that:

> The Board finds that due to the existence of a competitive market for the provision of unit sub-metering it is appropriate to ensure that procurement choices, as between licensed distributors (suite metering) and licensed unit sub-meter providers (unit sub-metering) are made on a comparable economic basis both within the competitive unit sub-metering marketplace and between this competitive market place and the monopoly service.[4]

THESL stated that it had interpreted this finding to imply that the revenue-to-cost ratio for the new class was to be set at unity, the point at which the revenues collected from the class are set equal to the costs incurred to serve the class, to ensure that suite meter customers are neither receiving nor paying any subsidies from/to consumers in other rate classes.

THESL argued that it was appropriate that only the remaining residential class had been adjusted since the suite meter class was previously part of the (existing) Residential class, and therefore it was proper that any impacts due to the split of this class would be affected only on that class and not on other rate classes.

THESL's evidence contained a table which provided sensitivities of the revenue-to-cost ratios to alternative assumptions. This table is reproduced below[5]:

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[4] Toronto Hydro-Electric System Limited, *Suite Metering Supplementary Evidence*, ("THESL Evidence") p.7
[5] THESL Evidence, p.7

Table 3: Sensitivity of R/C Ratios to Alternative Assumptions

Alternative Assumption	Impact on R/C Ratio for Suite Meter class	Resulting Suite Meter R/C range
Average Monthly load - +/- 1 Std Deviation based on sample	+/- 4-5%	104.4-95.1%
Estimated per Meter Cost +/- $100	+/- 6%	106.5-94.5%
Directly Allocated Meter Costs	- 5.6%	95.0%
Percentage of Secondary allocated +/- 8%	+/- 3.4%	103.9-97.1%

In its submission, Board staff expressed the view that the real issues and debate in this proceeding relate to the assumptions that have been made by THESL in its application of the Board's cost allocation model, not the model itself. Accordingly, Board staff's submission reviewed each of these assumptions.

The Board believes that this approach has merit.

As such, the Board will make findings on the following: estimated per Quadlogic meter cost; directly allocated meter costs, service drop factor, meter reading costs, percentage of secondary costs allocated, maintenance costs, marketing costs, direct assignment of primary feeders, average monthly load, and rate design.

(4) Estimated per Quadlogic Meter Cost

Positions of the Parties

THESL estimated its 2012 installed per meter cost as being $550, which was higher than the $440 value used in the February 18, 2011 BDR Study which was based on 2009 costs[6]. THESL stated that it had estimated this number based on the number and types of meters in service in 2012 and that factors driving the increased per meter cost estimate compared to the previous value included costs related to inspections, network meters and larger 3-phase meters which are more costly.

Staff, VECC and SEC agreed that this was the appropriate value to use.

[6] Transcript, Vol. 3, p. 17, L 4 - L22

The SSMWG argued that the costs to acquire, install, read and promote Quadlogic meters would be materially greater than the costs to perform similar activities in respect of THESL's standard smart meters but did not provide an alternative estimate.

THESL submitted that none of the parties had disputed its estimate of $550 for its 2012 installed per meter costs.

Board Findings

The Board notes that no parties disputed THESL's estimated 2012 installed per meter costs of $550, or provided an alternative estimate. The Board accepts THESL's evidence and finds that this estimate is reasonable

(5) Directly Allocated Meter Costs

In this section, the Board will determine whether it is appropriate to directly allocate the Quadlogic meter costs directly to the Quadlogic class.

Positions of the Parties

THESL's evidence showed that the direct allocation of meter costs would reduce the revenue-to-cost ratio for the suite meter class by 5.6%. A Board staff interrogatory[7] asked THESL to state why it had used the model's meter cost weighting factors rather than direct allocation for these costs and which approach THESL would view as the most accurate.

THESL responded that the Board's cost allocation model incorporated detailed information on costs by meter type for each rate class and allocated these weighted meter costs using sound allocation logic to all rate classes. THESL expressed its belief that this was a reasonable methodology for all rate classes.

THESL stated that under the direct allocation methodology, while the Quadlogic meter costs (as well as associated depreciation and meter expenses) are allocated directly to the Quadlogic class, the remaining meter costs are allocated to all classes – including the Quadlogic class – using the weighted meter logic. THESL further stated that this shortcoming could be overcome by assigning zero costs to the Quadlogic class in Tab

[7] Exhibit R4, Tab 1 Schedule 10.

I7.1 of the cost allocation model, which THESL noted is the part of the model that determines the class allocations for the meter capital costs account.

THESL submitted that the direct allocation of the estimated Quadlogic meter costs to the Quadlogic class in the sensitivity analysis was performed to transparently demonstrate the results using a second method of allocation and did not adjust for the shortcoming noted above. THESL stated that both methods likely provide a reasonable estimate for the allocation of meter costs and the relatively narrow range of the result (especially considering the relatively small size of the Quadlogic class) demonstrates this.

Board staff submitted that THESL had provided adequate justification for its approach to the direct allocation issue given the relatively small size of the Quadlogic class and the desirability of a uniform application of the cost allocation model to all customer classes.

The SSMWG argued that Quadlogic meter costs should be directly allocated, but using a different approach than that employed by THESL. The SSMWG stated that what THESL should have done when allocating meter costs to the Quadlogic customer class was to create two inputs for Sheet I7.1: (1) a value of “0” to directly allocate the Quadlogic meter costs to the Quadlogic class; and (2) a value other than “0” be used by the composite allocators used in the cost allocation model. The SSMWG noted that Elenchus had estimated the costs that would be allocated to the Quadlogic class by composite allocators to be approximately $400,000.

The SSMWG noted that there had only been one specific objection by THESL to directly allocating the Quadlogic meter costs to the Quadlogic class and that during cross-examination it had been established by THESL that upon further consideration its concern in this regard had disappeared.

VECC, supported by CCC also submitted that the Board should direct THESL to directly assign the costs of Quadlogic meters to the Quadlogic class.

THESL submitted that it has already acknowledged that both the cost allocation model logic and direct allocation of meter costs are likely to provide reasonable estimates of the revenue to cost ratio. THESL argued that the assertion by the SSMWG that it had incorrectly applied the meter capital sheet of the model in this context was incorrect.

THESL submitted that ultimately it was for the Board to decide which methodology it would adopt. THESL stated that to assist the Board in this regard, it had performed a sensitivity analysis on its cost allocation model run using the direct allocation methodology and noted a limitation of its direct allocation sensitivity analysis which was that while the direct allocation methodology ensures that Quadlogic meter costs are allocated directly to the Quadlogic class, the remaining meter costs are allocated to all classes including the Quadlogic class using the model's weighted meter logic.

THESL further stated that it did not originally propose zeroing out these other meter costs because THESL was concerned that by doing so it could have inadvertent side effects. However, in response to cross-examination, THESL confirmed that after further investigation its original concern regarding wholesale meter costs was not an issue because these costs were included in a separate account. THESL noted that as a result of this exchange, the Board panel had asked it to redo the sensitivity analysis by directly allocating the Quadlogic meter costs to the Quadlogic class and pulling out the allocated other metering costs. THESL stated that in response to this request it had prepared another sensitivity analysis in response to an undertaking[8] by assigning zero costs to the Quadlogic class in Tab I7.1 of the cost allocation model.

THESL disagreed with the allegations of the SSMWG that THESL's response to this undertaking was intuitively wrong, that THESL did not view its own response as credible and worthy of adoption and that THESL had ignored the impact of directly allocating Quadlogic meter costs on the composite allocators used in the cost allocation models.

THESL argued that the SSMWG's proposal in this regard represents a proposal for a fundamental change in the Board's cost allocation model which THESL argued is out of scope for this proceeding.

Board Findings

The Board notes that no impediments have been identified to directly assigning the capital cost of Quadlogic meters to the Quadlogic rate class. The Board notes that it is generally accepted that direct assignment of costs is preferable to allocating costs where the use of a clearly identifiable and significant distribution facility can be tracked in its entirety to a single rate class, and identifying such facilities is the first step in a

[8] Toronto Hydro-Electric System Limited, EB-2010-0142 Exhibit T3, Tab 1, Schedule 1, Undertaking No. JH3.1

cost allocation study[9]. As such, the Board considers that direct cost allocation is the preferable approach and finds that it should be adopted (including the adjustment identified by THESL in which zero cost is assigned at Tab I 7.1) in determining the class revenue requirement of the Quadlogic class. Consistent with this approach, the Board confirms that replacement costs should be used to allocate the costs in USoA account 1860 to all customer classes.[10]

The Board recognizes the submission by the SSMWG that the composite allocators in the model should be adjusted to ensure that the applicable costs are allocated to the Quadlogic class appropriately. In particular, this would mean that the composite allocators based on Net Fixed Assets (NFA and NFA ECC) would need to be increased to the Quadlogic class if its meter costs were to be to directly allocated using the Board's current model. Similarly, the composite allocators based on operating and maintenance costs (O&M and OM&A) would need to be increased if there were direct allocation of certain other costs elsewhere in this Decision.

While recognizing that the lump sum adjustment of $400,000 proposed by the SSMWG is correct directionally, the Board finds that changes to the cost allocation model would be required to yield a reliable adjustment to the composite allocators and the Board does not consider it appropriate to make such changes in this proceeding. The Board would consider it appropriate for changes of this kind to be considered during the next review of the cost allocation model. Once the necessary changes to the cost allocation model have been made, the approach proposed by the SSMWG can be considered in a subsequent proceeding. While a new rate class is being created in this proceeding, the Board is of the view that the development of this new rate class will be an iterative process that is likely to span more than one proceeding. The Board accordingly directs that THESL will not alter the cost allocation model's calculation of the composite allocators for the purpose of this proceeding.

(6) Service Drop Factor

The net book value of distributor-owned service drops is recorded in Account 1855 "Services", including the cost of overhead and underground physical assets together

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[9] Ontario Energy Board *Cost Allocation Review Board Directions on Cost Allocation Methodology for Electricity Distributors*, EB-2005-0317 September 29, 2006, p. 30

[10] Ontario Energy Board *Review of Electricity Distribution Cost Allocation Policy* (EB-2010-0219), Instructions Sheet for Cost Allocation Model version 2

with installation and inspection costs. The cost allocation model requires an index entry for each class, with the net book value of the service drop to a typical Residential customer equal to unity and the value for a typical customer in every other class relative to this amount. The allocation is proportional to the number of customers in each class, weighted by the index assigned to the class.

The matter is more complex because a significant number of customers may be served from a single service drop to a multi-unit building. In the current proceeding, this complexity has additional importance because all of the members of the proposed Quadlogic class are in this situation.

Positions of the Parties

VECC, supported by CCC, noted that in its Supplementary Evidence THESL has maintained a weighting factor of 1.0 (per customer) for Services, which is the same factor as is applied to the Residential class, but has acknowledged that a weighting factor of less than one may be appropriate to recognize the fact that for a multi-unit building one service drop actually services a number of residential customers.

VECC observed that during the oral proceeding it had explored the impact of these two factors and THESL had agreed that based on the number of Quadlogic customers and related buildings served by secondary facilities in 2012, the appropriate weighting factor should be 0.064. VECC submitted that the 0.064 factor was derived by taking the weighting factor of 10 used for services for the GS 50-599 and GS 1,000-4,999 classes, as set out in the case record of this proceeding, divided by the number of Quadlogic customers per building which is presently estimated to be 155. VECC submitted that the Board should direct THESL to adopt this factor for 2012 and to use the associated logic to derive the allocation factor in future years.

THESL submitted that while it agreed conceptually a service weighting factor of less than 1.0 per customer may be appropriate, it was concerned that the use of the factor of 0.064 suggested by VECC may be overly precise for use in the cost allocation logic for the new Quadlogic customer class and that a round number of 0.1 would be sufficient to achieve the desired result without implying an overly confident level of precision in the underlying data.

Board Findings

The Board notes that THESL agreed that the appropriate weighting factor should be 0.064 and also notes that no empirically based alternatives were presented. The Board therefore finds that THESL should use a service drop factor of 0.064 for 2012, as proposed by VECC and the associated logic to derive this allocation factor when the cost allocation study is next updated.

Specifically, the Board directs THESL to derive the service drop allocation factor when the cost allocation study is next updated by taking the weighting factor of 10 used for services for the GS 50- 599 and GS 1,000-4,999 classes divided by the average number of Quadlogic customers per building.

(7) Meter Reading Costs

Positions of the Parties

THESL noted that where meter reading costs were concerned, these costs were expected to be reduced as the reading of meters is moved in-house. THESL observed that in the February 18, 2011 BDR Study, meter reading for the Quadlogic customers was assigned a weighting factor of 7 compared to 1 for a smart meter residential customer. THESL stated that based on 2012 data, the weighting factor compared to other residential meters applicable to this evidence has been lowered to an estimated factor of 3.6, which is reflective of lower costs.

The SSMWG argued that the meter reading costs factor should be 4.3, not 3.6 as suggested by THESL since the meter reading function was only to be taken in-house beginning the second quarter of 2012, and should also be updated for the increase in budgeted costs specified by THESL of $100,000.

VECC stated that it agreed with the SSMWG's proposed weighting factor change for 2012, but that for subsequent years a factor of 3.6 would be appropriate, subject to an update of the relative costs.

THESL submitted that the SSMWG suggestion that the correct weighting factor is no less than 4.3 should be rejected as the Board should take a long-term view of meter

reading costs, rather than accepting what THESL characterized as an incorrect result derived based on a known short-term anomaly.
VECC submitted that the inclusion of the relative billing frequency in the determination of the weighting factors for meter reading is meant to reflect the fact that reading costs are likely to be higher if customers are billed monthly, as opposed to every two months.

VECC argued that THESL's adjustment for billing frequency is unnecessary and results in an over allocation of meter reading costs to the Quadlogic class relative to the Residential class and indeed all other classes.

THESL accepted that as a result of the functioning of the current metering technology, there is no longer a need to adjust the units used in this component of the spreadsheet. THESL noted that the Board's cost allocation model was developed prior to the widespread use of smart meters or Quadlogic meters and the automatic reading that these meters employ.

Board Findings

The Board finds that the appropriate weighting factor to be used should be 3.6. The Board is in agreement with the submissions of VECC that it should take a long-term view of meter reading costs and that the 4.3 weighting factor proposed by SSMWG is a short-term anomaly.

The Board finds that an additional amount of $100,000 in costs should be allocated to the Quadlogic rate class to reflect the increase in budgeted costs specified by THESL.

(8) Percentage of Secondary Costs Allocated

The net book value of the secondary voltage system, together with associated depreciation and operation and maintenance, are to be allocated as accurately as possible amongst the customers who are served at this voltage. The matter is complicated by the fact that some customers in a rate class may be served at secondary voltage, while other customers are served at primary voltage and reduce the voltage for utilization at their own expense. The information on what proportion of the class demand is at each voltage level may not be readily available, necessitating an estimate to be made by the distributor. The situation is pertinent to this proceeding because there are multi-unit buildings involved that are large enough to be served at primary voltage.

Positions of the Parties

THESL noted that in the November 29, 2010 BDR Study a weighting factor of 30% had been applied to its secondary costs to adjust the amount of these costs being allocated to the entire individually metered multi-residential customer class. This estimate had been based on engineering estimates of the proportion of THESL's secondary system which had been used to service individually metered multi-residential customers (which included Quadlogic metered customers).

THESL stated however that in the February 18, 2011 BDR study, this weighting factor had been reduced to 8% for the customers served using Quadlogic meters to reflect the fact that very few of the buildings with Quadlogic installations are served by secondary assets. This 8% weighting factor has been maintained in THESL's present evidence.

Intervenors and Board staff made submissions as to whether or not the 8% weighting factor was appropriate.

The SSMWG argued that secondary costs should not be adjusted since secondary costs have been and will continue to be treated as pooled costs to be shared by all members of the residential rate class which should not be changed.

THESL rejected the SSMWG argument stating that BDR had originally used an allocation of 8% of secondary costs to the Quadlogic customer class as part of its independent cost analysis in its February 18, 2011 BDR Study. THESL stated that the Supplementary Evidence was consistent with and applying the same methodology that BDR used in its independent expert cost allocation study in this regard.

VECC submitted that subject to any clarification THESL may provide in its Reply Submission, the allocation factor for the customer-related portion of the Quadlogic class' secondary costs should be the number of "secondary" connections. VECC further submitted that a similar issue exists regarding the allocation of the customer portion of the primary system costs associated with specified accounts, a similar allocation factor (i.e. total number of Quadlogic connections/buildings) should be used in this instance as well. THESL argued that this would be an inappropriate allocation, as all customers receive primary service.

Board Findings

The Board finds that no adjustment for secondary costs should be made on the basis that there is insufficient evidence on the record in this proceeding to determine an appropriate allocation of these costs between the two residential classes. The Board is of the view that in the absence of a move to more detailed asset-based cost allocation, which the Board does not presently plan to adopt; it would not be possible to appropriately allocate such costs.

The Board finds that the cost of the secondary voltage system will be allocated to the Quadlogic class in proportion to the number of customers and the non-coincident load of the class, without regard for whether customers receive service at secondary versus primary voltage. The Board recognizes that many customers in the Quadlogic class do not receive their service through the secondary voltage system. However, the same is true of the remaining Residential class, although proportionately to a lesser degree, based on the cost allocation studies done by BDR. The same may be true of other classes as well. The Board does not have reliable information on this record on the number of customers or their load statistics in the classes other than Quadlogic.

The Board directs that the secondary load of the Quadlogic class will be the same as the primary load.

The Board notes that this finding eliminates the need raised by some parties to distinguish between secondary customers and secondary connections.

The Board expects that THESL will incorporate the distinction between the secondary and primary systems in future cost allocation studies, and that it will include the appropriate proportions within each class where some customers are served from the secondary system and the rest are served from the primary system.

(9) Maintenance Costs

Positions of the Parties

THESL included the costs of maintenance for Quadlogic meters in the costs of maintenance for other meters and allocated the total costs to all classes, including the Quadlogic class, in accordance with the logic of the Board’s cost allocation model.

VECC, supported by CCC, submitted that it agreed with THESL’s cost allocation treatment of meter maintenance costs. THESL rejected the SSMWG’s assertion that it was more costly to maintain Quadlogic meters vis-à-vis traditional smart meters, arguing that THESL had provided evidence during the proceeding that such costs do not differ greatly and that the SSMWG had produced no evidence to support its assertions.

Board Findings

The Board accepts THESL’s evidence with respect to the maintenance costs associated with the Quadlogic meters and finds that THESL’s cost allocation treatment of meter maintenance costs is appropriate. The Board notes that no parties provided any evidence on this matter which would support the view that it is more costly to maintain Quadlogic meters.

(10) Marketing Costs

Positions of the Parties

THESL noted that in the February 18, 2011 BDR Study, a direct allocation of marketing costs associated with the suite meter program had been included in the amount of $90,000, but in 2012 there were no marketing costs included in the budget for suite meter activity and hence no expenses had been directly allocated to the suite meter class. THESL did state however that its overall marketing expenses had been allocated to this class based on the cost allocation model logic, which allocated marketing costs to all customer classes based on the OM&A allocator.

The SSMWG submitted that the marketing costs which have been removed should be added back in as while there may be some reduction in promotional and marketing expenses directed towards Quadlogic class customers, BDR’s reasoning for directly allocating such costs to the Quadlogic class remains valid.

THESL stated that for 2012, there are no marketing costs that warrant direct allocation. THESL further stated that the marketing role had been transitioned to the same third party vendor that will supply the meters and the costs of those marketing efforts are now included in the increased costs of $550 per meter.

Staff and VECC, supported by CCC, accepted THESL's position that there is no basis for directly allocating marketing costs to the Quadlogic class for 2012 as it is no longer directly marketing suite metering and has no budget costs for the activity.

Board Findings

The Board accepts THESL's position that there are no unique marketing costs attributable to the Quadlogic class and finds that no specific allocation of these costs to this class is necessary. The Board notes that the Quadlogic class has been allocated a share of THESL's overall marketing expenses based on the cost allocation model logic, which allocated marketing costs to all customer classes based on the OM&A allocator.

(11) Direct Assignment of Primary Feeders

Direct assignment of costs to a customer class is preferable to allocating costs, where the use of a clearly identifiable and significant distribution facility can be tracked in its entirety to a single rate class. A consequence of implementing suite metering may be that a multi-unit building ceases to be a single General Service customer, and becomes instead a combination of Residential customers together with a smaller General Service customer comprising the electricity requirements of the common spaces such as hall lighting and air conditioning. In other words, it becomes necessary to allocate the cost of distributor-owned assets that were previously directly assigned to the applicable General Service class.

Positions of the Parties

VECC, supported by CCC, noted that in previous rate filings THESL had directly assigned to the GS 50-999 class the costs of dedicated feeders used to serve the class' customers. VECC noted THESL's acknowledgement that with the introduction of the Quadlogic class some of the directly allocated costs may no longer meet the required criteria of serving a single class – as the buildings concerned have both Residential (Quadlogic) customers as well as a GS 50-999 customer (i.e. the common elements). VECC further noted that for purposes of its current cost allocation evidence, THESL had not done a detailed assessment and revised the costs that should be directly assigned.

VECC submitted that there are two issues that arise with respect to THESL's current practice in this regard with the first of these being the extent of the problem. VECC argued that THESL’s cost allocation treatment of all such buildings needs to be reviewed in order to ensure that the primary feeders involved are not being directly assigned to the GS 50-999 class. VECC, however, acknowledged that such a review should occur within the context of a cost of service (“COS”) review of THESL’s rates.

VECC submitted that the second issue is how the costs of the primary feeders used exclusively to serve such buildings (and previously directly assigned) should now be allocated. VECC expressed its agreement with THESL on this point, specifically since direct assignment is meant to be used when the facilities concerned serve a single rate class, therefore as these feeders serve customers from two rate classes, they are not candidates for direct assignment and the costs should be included in the pool of costs to be allocated to all customer classes.

SEC expressed the concern that Multiple Unit Residential Buildings (“MURBs”) that can be suite metered are typically in the GS>50 KW rate class which is the class in which the schools spend the bulk of their distribution dollars. SEC argued that the applicants’ witnesses have agreed that when each building is suite metered by THESL, it is likely that the unit rates for the GS>50 KW class will go up because the building’s billing determinants in that class will go down, which would not be the case when the same building is suite metered by the private sector since the building’s load from THESL’s perspective is unchanged.

SEC submitted that whether or not the Board approves the proposed Quadlogic rates (with or without adjustments), it should in any case also direct that THESL provide in its next COS proceeding detailed evidence on the reductions in revenues and allocated costs in the GS>50 KW class when a building is suite metered. SEC submitted that such evidence should be sufficient for the Board to determine whether the remaining GS>50 KW customers are subsidizing THESL’s suite metering activities through higher rates.

VECC, supported by CCC, expressed its disagreement with the concern raised by SEC.

THESL submitted that the issue raised by SEC was clearly outside the scope of the proceeding as the Board had been clear in the Partial Decision that the purpose of this hearing is to establish the cost allocation protocols for the new Quadlogic customer class and to establish initial rates.

Board Findings

The Board finds that the issues arising from the direct assignment of primary feeders are out of scope for this proceeding. The Board notes the views of VECC, supported by CCC that such a review to consider the issues raised should occur within the context of a COS review of THESL's rates.

The Board is in agreement with THESL and VECC on the issue as to how the costs of the primary feeders used exclusively to serve buildings having both Residential (Quadlogic) customers as well as a GS 50-999 customer (and previously directly assigned) should now be allocated. The Board finds that since direct assignment is meant to be used when the facilities concerned serve a single rate class, as these feeders serve customers from two rate classes, they are not candidates for direct assignment and the costs should be included in the pool of costs to be allocated to all customer classes.

With respect to the issue raised by SEC, the Board notes that this issue should be monitored through the use of a tracking account to reflect any amounts that may be at risk, and if material, this issue could be considered at THESL's next COS filing. THESL is directed to establish a tracking account that will record any such amounts related to the direct assignment of primary feeders which arise as a result of this Decision and Order.

(12) Average Monthly Load

Positions of Parties

THESL stated that in the February 18, 2011 BDR Study, based on the 2009 sample of Quadlogic customers, the average monthly load was estimated to be 361 kWh on a normalized basis (or 355 kWh non-normalized). THESL noted that it had updated its information on loads for this class using the most recent hourly load information and that, as in the February 18, 2011 BDR Study, some of the raw load data contains periods with zero use due to unoccupied units.

THESL further stated that it had used the same methodology employed in the February 18, 2011 BDR Study to obtain an updated estimate of average monthly load. This updated estimate was 334 kWh per month.

Each of Staff and VECC, supported by CCC supported THESL's position.

THESL noted that none of the parties disputed its estimate and submitted that it represented the most recent information available for Quadlogic-served customers and served as a practical update to the 2009 numbers used in the second BDR cost allocation study.

Board Findings

The Board notes that no party objected to the 334 kWh value proposed by THESL and finds that this is a reasonable assumption for the purpose of establishing the Quadlogic class revenue requirement in this proceeding. The Board directs that the updated customer count of 24,898 and the average consumption of 334 kWh per customer are to be used by THESL to allocate costs and for the purpose of calculating revenue in the revenue to cost ratio. The class load parameters in worksheet I8 'Demand Data' should be scaled to be consistent with this amount of energy consumption.

(13) Rate Design

Once the revenue requirement has been established for each customer class and the revenue to cost ratio has also been established for each class, there remains the issue of determining for each class the Monthly Service Charge and the volumetric rate (¢ / kWh) that together will yield the resulting revenue amount. Within a given class, customers consume differing amounts of electricity. For those that consume relatively small amounts of electricity, the Monthly Service Charge is a relatively large proportion of the delivery cost. For those that consume relatively large amounts, the Monthly Service Charge is less as a percentage of the distribution charges while the volumetric rate determines a larger proportion of the bill.

For each class the cost allocation model produces a calculation of customer-related cost on a per-customer-month basis. The model produces three calculations, based on three different definitions of which costs are classified as customer-related as opposed to demand-related. The Board considers these calculated values to be useful reference points for the design of the Monthly Service Charge for the respective customer classes.

Positions of the Parties

THESL is proposing a service charge of $16.29 per customer (per 30 days) and a volumetric rate of 2.701 cents per kWh for the Quadlogic class, as compared to $20.16 per customer and 1.646 cents per kWh for Residential customers other than those in the Quadlogic class. The rates for the Quadlogic class would yield a revenue- to-cost ratio of 100.0%, whereas those for the Residential class would yield a ratio in the 89% range.

Staff submitted that the rates proposed for the Quadlogic class are reasonable as they produce a revenue-to-cost ratio of 100% and the ratio for the Residential class would be comparable to those in previous applications and Decisions.

Staff stated that its concern with THESL's proposal was the approach to rate design that had been taken. Staff noted the much lower level of monthly consumption in the Quadlogic class relative to the Residential class which, as has been discussed earlier, is estimated as 361 kWh per month.

Staff submitted that because of this differential it would be more appropriate to have a higher monthly service charge for the Quadlogic class rather than the proposed $16.29 per month with the variable charge component then recalculated based on this higher level of fixed charge. Staff stated that it considered this approach to be more appropriate than that proposed by THESL since the proposal to have identical proportions of revenue from fixed versus variable charges is arbitrary, and runs contrary to the proportion of costs that are derived as customer-related versus demand-related in the cost allocation study.

VECC similarly argued that the problem with THESL's approach to rate design is that the two "new" classes of residential customers have significantly different consumption characteristics. VECC submitted that a more reasonable approach would be to calculate the fixed-variable split for each of the classes based on current rates and apply this split to the cost to be recovered from each class after any revenue to cost ratio adjustments.

VECC also expressed concern with THESL's proposal to assign any revenue reallocation required as a result of setting the Quadlogic class' revenue to cost ratio to unity relative to the Residential class. VECC submitted that the decision as to which classes should be affected by any required revenue reallocation should not be part of this proceeding as the introduction of the Quadlogic class will affect the revenue to cost ratios for all customer classes as will other changes in loads and costs.

VECC submitted that while the current proceeding can determine the appropriate cost allocation methodology and tariff design approach to be used for the Quadlogic class, it cannot establish what the status quo 2012 revenue to cost ratios are, what cost adjustments are required to achieve a ratio of 100% for 2012 or what the actual 2012 rates for the Quadlogic class will be. VECC submitted that these determinations would have to await the outcome of the EB-2011-0144 proceeding. CCC made similar submissions.

THESL submitted that it agreed with the principled concerns raised by CCC and VECC and submitted that the Board's Decision to dismiss the EB-2011-0144 application should effectively postpone the date at which the new rate class would be created to the time when the Board next accepts a COS Application from THESL.

THESL acknowledged that each of the approaches proposed by Board staff and VECC represent reasonable attempts to propose a rate design for the new Quadlogic class and that ultimately the determination as to which approach to adopt is the Board's to make.

The SSMWG submitted that THESL's rate design should be dismissed. The SSMWG argued that such a rate design was intended to mask any revenue deficiency that exists, while also giving the new Quadlogic rate class a rate which appears on its face to be more attractive than the existing residential rate class.

THESL rejected the SSMWG's argument. THESL submitted that it had proposed a fixed and variable split for the tariff based on full cost recovery and there was no revenue deficiency that could be masked as it has clearly indicated its methodology for deriving the proposed rate structure.

The SSMWG further submitted that given THESL's past actions and its participation throughout both phases of this proceeding, there is every reason to believe that the competitive unit sub-metering market requires protection in the form of rules and protocols that level the playing field so that informed decisions can be made by potential customers of THESL and members of the SSMWG.

The SSMWG argued that the most transparent method of identifying and making known to the competitive marketplace the costs of THESL providing and servicing Quadlogic customers is to calculate a competitive market unit sub-metering fixed charge rate adder and to leave the fixed and variable charges for the Quadlogic Class the same as that approved for the residential rate class.

THESL expressed its fundamental disagreement with the SSMWG proposal for a number of reasons. First, it argued, the SSMWG's approach to assign the entire differential to a fixed charge is arbitrary, since the SSMWG had not adduced any evidence of the customer confusion it is purporting to address and because it strays from the principle of maintaining a similar fixed-variable split as between the Quadlogic class and the Residential class, an issue which THESL noted both VECC and Board staff had raised and about which the SSMWG had also expressed concerns.

THESL stated that the second reason for its disagreement with the SSMWG's proposal is that it assumes implicitly that only additional costs will be reflected in the new Quadlogic customer class. THESL argued that it is not appropriate to "cherry pick" additional costs and to ignore evidence of lower costs.

THESL argued that finally if the SSMWG's proposal was accepted by the Board, it would serve to fundamentally skew any comparisons between the utility Quadlogic service and the competitive market for sub-metering in favour of the SSMWG's member constituency. THESL concluded that comparisons with unregulated sub-metering rates are difficult in any event.

The SSMWG submitted that THESL should be required to engage an independent third party cost allocation firm to complete a further cost allocation study for 2012 using the Board's cost allocation methodology subject to specified protocols.

THESL submitted that the SSMWG has not identified an appropriate reason that THESL should be asked to incur the costs of engaging another third party consultant to prepare another cost allocation study. THESL argued that the SSMWG's proposal was contrary to the stated purpose of this phase of the proceeding and was inappropriate.

THESL noted the concerns the SSMWG had raised related to the reliability and credibility of THESL's evidence and submitted that if the SSMWG had such serious concerns; it should have filed its own evidence.

Board staff submitted that the Board should require THESL to review each of its assumptions when it refreshes its cost allocation study for its next COS application, as by such time there should be better data about the Quadlogic class and that THESL should also note any of the assumptions that would require revision and provide explanations for any such revisions at that time.

Board Findings

In designing the rate for this new class, the Board will be governed by its finding in the Partial Decision, which states that procurement choices, as between licensed distributors and licensed unit sub-meter providers, are to be made on a comparable economic basis.

The Board notes that the cost allocation model will produce, for each class, three calculations of customer-related costs based on differing definitions of which costs are customer-related versus demand-related. These are avoided, directly-related, and minimum system costs.

The process of rate making often incorporates latitude with regard to the selection of the appropriate cost determination to be allocated where a suitable range of costs has been identified. In the absence of any overriding selection criteria the Board is of the view that the use of the mid-point between the highest and lowest customer-related monthly cost best reflects the “economically comparable” objective of the Partial Decision.

The Board directs THESL to calculate the mid-point between the lowest and the highest customer-related monthly cost for the Quadlogic class. The Quadlogic monthly service charge should be set at this amount. The kWh rate for the Quadlogic class should be set at the amount that will yield distribution revenue equal to the remaining class distribution revenue requirement, in other words, a revenue to cost ratio of 100%.

The monthly service charge of the residential class will be set at the existing level of $18.25. The Board recognizes that THESL’s monthly service charges are adjusted to a 30-day period and expects that THESL will make this adjustment for both the residential and Quadlogic classes.

The kWh rate for the residential class should be set such that it yields the residential distribution revenue requirement approved by the Board in the Partial Decision (net of Quadlogic class revenue and revenue from the residential monthly service charge).

Implementation

The Board will not adopt the rate adder approach put forth by the SSMWG. The Board finds that this approach is inconsistent with the purpose and scope of this phase of the proceeding.

The Board does not agree with the submissions of parties that new rates cannot be set until THESL's next COS hearing. The Board notes that this Decision and Order is a continuation of THESL's 2011 COS rates application (EB-2010-0142). As such, it is appropriate to use the 2011 revenue requirement data approved by the Board in its Partial Decision and Order dated July 7, 2011. Furthermore, it is also appropriate to use the specific 2012 cost assumptions arising from this proceeding (per Quadlogic meter cost, directly allocated meter costs, service drop factor, meter reading costs, percentage of secondary costs allocated, maintenance costs, marketing costs, direct assignment of primary feeders, and average monthly load) to update the 2011 cost allocation model to be filed with the Board, as this data represents the best information available to establish a prospective, initial rate for this new class.

THESL is directed to implement the new rate in conjunction with its rate setting process for 2012. As this Decision and Order represents a continuation of THESL's 2011 COS application, it is also appropriate that any changes that arise in THESL's residential revenue to cost ratio as a result of this Decision and Order be implemented in THESL's next rates proceeding, including a process to set rates via the Board's 3rd generation IRM approach. The Board notes that changes to customer class revenue to cost ratios approved in COS proceedings are routinely implemented in subsequent IRM proceedings.

In order to implement the cost allocation protocols for the new customer class as set out by the Board in this Decision and Order and to establish the initial tariff that THESL will charge for this service, THESL is directed to file a working version of the cost allocation model using the 2011 revenue requirement data previously approved by the Board in its Partial Decision and Order dated July 7, 2011 and incorporating the revised inputs and assumptions as specified by the Board in this Decision and Order.

The Board notes that with respect to revenue to cost ratios, the cost allocation model will produce only the status quo ratios, implying that the revenue from the Quadlogic and remaining residential classes will be based on identical rates in both classes.

THESL should also file: (1) what it believes should be the rates for the Quadlogic and remaining residential class arising out of these findings, (2) class revenue amounts and (3) calculated revenue to cost ratios based on the proposed rates along with all relevant assumptions and other information.

Intervenors and Board staff will have the opportunity to comment on whether or not the material filed by THESL appropriately implements this Decision and Order, and THESL will have the opportunity to make a reply submission.

As stated earlier in this decision, the Board believes that the development of a new rate class is an iterative process, one that is likely to span more than one proceeding.

The Board therefore directs THESL to review each of the assumptions set out in this Decision and Order when its cost allocation study is refreshed for its next COS application. THESL is directed to note any of the assumptions that would require revision and provide explanations for any such revisions at that time.

Furthermore, THESL is directed to record in a tracking account any amounts arising out of these findings which would impact on non-residential classes that cannot be adjusted to such classes in this proceeding including, but not limited to amounts related to the direct assignment of primary feeders noted earlier, for consideration in THESL's next COS application.

COST AWARDS

The Board may grant cost awards to eligible stakeholders pursuant to its power under section 30 of the *Ontario Energy Board Act, 1998*. When determining the amount of the cost awards, the Board will apply the principles set out in section 5 of the Board's *Practice Direction on Cost Awards*. The maximum hourly rates set out in the Board's Cost Awards Tariff will also be applied.

All filings to the Board must quote file number EB-2010-0142, be made through the Board's web portal at www.errr.ontarioenergyboard.ca, and consist of two paper copies and one electronic copy in searchable / unrestricted PDF format. Filings must clearly state the sender's name, postal address and telephone number, fax number and e-mail address. Parties must use the document naming conventions and document submission standards outlined in the RESS Document Guideline found at www.ontarioenergyboard.ca. If the web portal is not available parties may email their document to the address below. Those who do not have internet access are required to submit all filings on a CD in PDF format, along with two paper copies. Those who do not have computer access are required to file 7 paper copies.

THE BOARD ORDERS THAT:

1. THESL shall file with the Board, and shall forward to all intervenors, a revised cost allocation model and related rates and other material (the "filed material"), reflecting the Board's findings in this Decision, within 10 days of the date of this Decision.

2. Intervenors and Board staff shall file any comments on the filed material with the Board and forward to THESL within 7 days of the date of filing of the filed material.

3. THESL shall file with the Board and forward to intervenors its reply to any comments on the filed material within 7 days of the date of receipt of intervenor submissions.

4. THESL shall establish a tracking account that will record any amounts which arise as a result of this Decision and Order, impacting on classes other than the Quadlogic class established in this proceeding and the remaining residential class and report on any amounts that have accumulated in this account at the time of its next COS application filing.

5. Intervenors shall file with the Board and forward to THESL their respective cost claims within 28 days from the date of this Decision.

6. THESL shall file with the Board and forward to intervenors any objections to the claimed costs within 35 days from the date of this Decision.

7. Intervenors shall file with the Board and forward to THESL any responses to any objections for cost claims within 42 days of the date of this Decision.

8. THESL shall pay the Board's costs incidental to this proceeding upon receipt of the Board's invoice.

DATED at Toronto, March 9, 2012

ONTARIO ENERGY BOARD

Original signed by

Kirsten Walli
Board Secretary