

**AMPCO Compendium**  
**Enersource 2013/2014 Electricity Rate Application**  
**EB-2012-0033**

**Panel 2**

**September 6, 2012**

## Appendix 2-O Cost Allocation

Enersource Mississauga Hydro's previous Cost Allocation was the 2008 Cost of Service Application.

### a) Allocated Costs

Small Commercial and Unmetered Scatter Load (UMSL) were combined into one rate class in the previous Cost Allocation Study. For purposes of comparison the combined total from previous study is split based on the number of customer accounts.

Classes	Costs Allocated from Previous Study	%	Costs Allocated in Test Year Study (Column 7A)	%
Residential	\$ 46,484,474	41.3%	\$ 59,831,172	44.6%
Small commercial*	\$ 225,746	0.2%		0.0%
GS < 50 kW	\$ 14,982,784	13.3%	\$ 16,549,924	12.3%
GS > 50 kW	\$ 27,222,124	24.2%	\$ 30,328,404	22.6%
GS > 500 kW	\$ 16,965,654	15.1%	\$ 19,851,007	14.8%
Large User, if applicable	\$ 4,202,131	3.7%	\$ 5,475,286	4.1%
Street Lighting	\$ 2,123,429	1.9%	\$ 1,615,703	1.2%
UMSL	\$ 448,123	0.4%	\$ 465,398	0.3%
<b>Total</b>	<b>\$ 112,654,465</b>	<b>100.0%</b>	<b>\$ 134,116,893</b>	<b>100.0%</b>

Table a) Allocated Costs is restated below to reflect the changes in the rate classes - Small Commercial rate class is to be retired, current small commercial customers will migrate to GS < 50 kW, Unmetered Scattered Load will be split out from the formerly combined Small Commercial UMSL.

Classes	Costs Allocated from Previous Study	%	Costs Allocated in Test Year Study (Column 7A)	%
Residential	\$ 46,484,474	41.3%	\$ 59,831,172	44.6%
GS < 50 kW	\$ 15,208,530	13.5%	\$ 16,549,924	12.3%
GS > 50 kW	\$ 27,222,124	24.2%	\$ 30,328,404	22.6%
GS > 500 kW	\$ 16,965,654	15.1%	\$ 19,851,007	14.8%
Large User, if applicable	\$ 4,202,131	3.7%	\$ 5,475,286	4.1%
Street Lighting	\$ 2,123,429	1.9%	\$ 1,615,703	1.2%
UMSL	\$ 448,123	0.4%	\$ 465,398	0.3%
<b>Total</b>	<b>\$ 112,654,465</b>	<b>100.0%</b>	<b>\$ 134,116,893</b>	<b>100.0%</b>

b) Calculated Class Revenues

Classes (same as previous table)	Column 7B	Column 7C	Column 7D	Column 7E
	Load Forecast (LF) X current approved rates	LF X current approved rates X (1 + 14.71%)	LF X proposed rates	Miscellaneous Revenue
Residential	\$ 42,136,554	\$ 48,335,652	\$ 51,089,888	\$ 2,683,366
GS < 50 kW	\$ 15,583,951	\$ 17,876,652	\$ 17,187,128	\$ 795,011
GS > 50 kW	\$ 28,965,017	\$ 33,226,331	\$ 32,133,607	\$ 814,417
GS > 500 kW	\$ 18,246,214	\$ 20,930,585	\$ 20,940,097	\$ 426,622
Large User, if applicable	\$ 5,878,800	\$ 6,743,685	\$ 5,945,824	\$ 49,325
Street Lighting	\$ 1,315,572	\$ 1,509,118	\$ 1,500,969	\$ 44,131
UMSL	\$ 579,869	\$ 665,179	\$ 489,692	\$ 16,813
<b>Total</b>	<b>\$ 112,705,976</b>	<b>\$ 129,287,203</b>	<b>\$ 129,287,204</b>	<b>\$ 4,829,685</b>

c) Rebalancing Revenue-to-Cost (R/C) Ratios

Class	Previously Approved Ratios	Status Quo Ratios	Proposed Ratios	Policy Range
	Most Recent Year: 2008	(7C + 7E) / (7A)	(7D + 7E) / (7A)	
	%	%	%	%
Residential	92	85	90	85 - 115
GS < 50 kW	111	113	109	80 - 120
GS > 50 kW	111	112	109	80 - 120
GS > 500 kW	92	108	108	85 - 115
Large User, if applicable	111	124	109	70 - 120
Street Lighting	92	96	96	80 - 120
UMSL	111	147	109	80 - 120

**Enersource Hydro Mississauga Inc.  
Response to Interrogatories by Issue**

**Interrogatory #44**

**Board Staff**

**6. Cost Allocation**

**Issue 6.1: Is the proposed cost allocation methodology for 2013 and 2014 appropriate?**

**Reference: E7-T1-S1 p.9**

The initial application of the 2013 Cost Study results in 2 Revenue to Cost ratios that fall outside the Board's required ranges. Enersource indicates that it was necessary to reallocate revenues among all rate classes and proposed to re-balance all classes to within 10% of unity.

Please explain the basis for choosing 10%. Were any other percentages considered?

**Response:**

As noted in the preamble to this question, the initial application of the 2013 Cost Study resulted in all classes falling within the Board's target range, with the exception of two classes - Large Users and USL. Enersource then adjusted the Residential Class from 85% to 90% so as to reduce these two outlier classes and bring them within the target range. The result of this adjustment to the Residential class brought all classes to within 10% of unity.

The 10% threshold was not a pre-defined choice, or target, as Enersource completed its cost allocation exercise. Enersource believes that the adjustment described in the previous paragraph was appropriate as this brought all classes well within the Board's targeted ranges and also balanced competing principles of rate stability and avoidance of rate shock.

## **2 Revenue-to-cost Ratios – A Range Approach**

### **2.1 Policy Summary**

This section sets out an overview of the Board's policy as it relates to revenue-to-cost ratios.

The Board has concluded that an incremental approach is appropriate in light of the influencing factors identified below, and that a range approach is preferable to implementation of a specific revenue-to-cost ratio. Influencing factors aside, a revenue-to-cost ratio of one may not be achievable or desirable for other reasons (for example, to accommodate different rate design objectives). In addition, as a practical matter there may be little difference between a revenue-to-cost ratio of near one and the theoretical ideal of one.

The Board has therefore adopted, with some modification, the proposal set out in the Discussion Paper of creating bands or ranges of tolerance around revenue-to-cost ratios of one. As the influencing factors are addressed over time, the Board expects that these bands will narrow and move closer to one.

The ranges established by the Board are set out in section 3, and are intended to be minimum requirements. To the extent that distributors can address influencing factors that are within their control (such as data quality), they should attempt to do so and to move revenue-to-cost ratios nearer to one. As indicated in the Report other issues such as addressing the fact that the Uniform System of Accounts is less detailed than required to accommodate the methodology and certain rate design matters are beyond the control of individual distributors. These exogenous issues also need to be addressed before moving to an appropriate specific revenue-to-cost ratio.

### **2.2 The Underlying Analysis**

Board staff conducted an analysis of the informational cost allocation filings to evaluate the reasonableness of the results filed by each distributor. The analysis and the results are more fully described in the Discussion Paper. By way of summary, Board staff employed two different approaches to test for reasonableness, both of which used the ratio of the class revenue compared to the allocated costs to the class as a measure of reasonableness.

The first approach was a statistical cross-sectional analysis to determine if the results by rate class across distributors tended to cluster. The second examined whether the clustering or lack of clustering could be explained by the input assumptions or judgments in the Methodology. This second analysis tested the sensitivity of the results to the judgements used to categorize the most significant component of the revenue

realignments could result in large rate increases, particularly when combined with other plans that affect the distributor's revenue requirement.

The Board expects to address these concerns as and when they arise in the context of individual rate applications. Distributors should endeavour to move their revenue-to-cost ratios closer to one if this is supported by improved cost allocations. However, if a large increase is required to move closer to one, rate mitigation plans should be proposed by the distributor. Distributors should not move their revenue-to-cost ratios further away from one.

**Enersource Hydro Mississauga Inc.  
 Response to Interrogatories by Issue**

**Interrogatory #45**

**Board Staff**

**6. Cost Allocation**

**Issue 6.1: Is the proposed cost allocation methodology for 2013 and 2014 appropriate?**

**Reference: E7T1/S1 p8 Table 1 and p. 10 Table 3**

The Table below sets out the Revenue to Cost ratios per the 2008 Settlement and as proposed for 2013.

<b>REVENUE TO COST RATIOS</b>			
in %	<b>2008 Settlement</b>	<b>2013 Proposed</b>	<b>Board Target</b>
<b>Residential</b>	91.50	90.00	85-115
<b>Small Commercial &lt; 50kW</b>	111.00	na	na
<b>GS &lt; 50kW</b>	111.00	109.00	80-120
<b>GS 50kW- 499kW</b>	111.00	109.00	80-120
<b>GS 500kW - 4999 kW</b>	91.50	108.00	80-120
<b>GS Large Use (&gt; 5000kW)</b>	111.00	109.00	85-115
<b>Street lighting</b>	91.50	96.00	70-120
<b>Unmetered Scattered Load</b>	na	109.00	80-120

There does not seem to be a material change (move toward unity) for a number of classes, and for the Residential class there is a move away from unity.

- Please explain why Enersource is proposing to reduce its 2013 Residential Class Revenue to Cost ratio from 91.5% to 90.0%
- Are there any other reasons, other than the proposed Revenue to Cost ratios are within the Board's ranges, that support Enersource decision to not re-balance Revenue to Cost ratios for 2013 which would result in a more material move toward unity?

- c) Please prepare a Residential class @ 800 kWh bill impact (using Appendix 2-template) that reflects a change in the 2013 Revenue to Cost ratio from 90% to 95%.

**Response:**

- a) The revenue-to-cost ratios calculated for each customer class are based on a modelling exercise which has multiple influencing factors such as data quality issues, and limited modelling experience. The prior ratio of 91.5% was calculated based on 2004 actual data with version 1 of the cost allocation model. The new proposed ratios are based on Test Year forecasted data with the more recent, version 2, of the cost allocation model. For further explanation, please see the response to Board Staff Issue 6.1 IR 44.
- b) Please see the responses to Board Staff Issue 6.1 IR 44 and 45 (a) above. Enersource is amenable to adjust customer class cost allocation ratios in future years towards unity.
- c) Based on the 95% revenue-to-cost ratio, the bill for a typical Residential RPP customer consuming 800 kWh per month would increase 7.6%, significantly higher than the 6.1% increase proposed in the original pre-filed evidence. A typical Residential non-RPP customer would experience an increase 8.1%, again higher than the 6.6% increase in the original pre-filed evidence. Attached to this response is Appendix 2-V Bill Impacts based on this scenario.

Please note by adjusting the residential revenue-to-cost ratio from 90% to 95%, all classes can be brought to within 5% of unity, as shown in the revised version of Appendix 2-O attached to this response, also based on this scenario.



**Enersource Hydro Mississauga Inc.  
Response to Interrogatories by Issue**

**Interrogatory # 17**

**Association of Major Power Consumers in Ontario  
(AMPCO)**

**6. Cost Allocation**

**6.1: Is the proposed cost allocation methodology for 2013 and 2014 appropriate?**

**Reference 1: OEB Filing Requirements for Electricity Transmission and Distribution Applications, 2.10 Exhibit 7, Cost Allocation, Page 42**

Preamble: The Board's Filing Requirements states:

**2.10 Exhibit 7. Cost Allocation**

"Distributors should refer to section 2.6.4 of the March 31, 2011 report concerning weighting factors for allocation of certain costs. A description of the weighting factors is required, including an explanation of why the distributor has chosen to use the default placeholders if applicable."

**Reference 2: EB-2010-0219 Report of the Board, Review of Electricity Distribution Cost Allocation Policy, 2.6.4**

Preamble: The Board's Guideline EB-2010-0219 states:

"The Board is of the view that default weighting factors should be utilized only in exceptional circumstances. In general, distributors have had sufficient time since preparing their 2006 Cost Allocation Information Filings to have gained the experience necessary to enable them to propose appropriate distributor-specific weighting factors."

**Reference 3: Exhibit 7, Tab 1, Schedule 1**

Preamble: The evidence states:

"Enersource has made no changes to the weighting factors used in prior cost studies and notes that these weighting factors are consistent with the default weighting factors for services and billings established in the "Staff Report to the Board – Implementation of the Revisions to the Board's Electricity Distributor Cost Allocation Policy, Aug 4, 2011"<sup>4</sup>. Enersource has no information that would lead it to depart from the previously-used weighting factors.

- a) Please explain further why Enersource does not have information to determine appropriate distributor-specific values.

**Response:**

- a) To determine appropriate, accurate and defensible distributor-specific weighting values for Enersource would require considerable data mining and analysis that was not feasible at this time. Enersource intends to do a more in- depth review of the weighting factors for services, billing and collections, and meter reading before filing its next cost allocation model.