

1 **Association of Major Power Consumers in Ontario (AMPCO) INTERROGATORY #1**
2 **List 1**

3
4 **Interrogatory**

5
6 Issue Number: 1.4

7 Issue: Are Hydro One's Economic and Business Planning Assumptions for 2008
8 appropriate?

9
10 Ref: A/Tab 3/Sch 1/Page 2/Table 1

- 11
12 a. Does Hydro One measure customer satisfaction for its distribution customers by
13 geographic zone or area? If so, please provide a table indicating how customer
14 satisfaction results vary across the service territory.
15 b. If there is more than one, please identify the major customer segments Hydro One
16 includes in its customer service goal, and current measured levels of customer
17 satisfaction for each.

18
19
20 **Response**

- 21
22 a) The Hydro One Overall customer satisfaction results can be segmented by geographic
23 zone. The 2007 results are included in the table below:

24

2007 Overall Satisfaction	Geographic Area				
	North	West Central	East Central	East	West
Residential/Small Business	80%	81%	83%	84%	82%

- 25
26 b) Please see the IR response in Exhibit H, Tab 7, Schedule 19.
27

1 **Association of Major Power Consumers in Ontario (AMPCO) INTERROGATORY #2**
2 **List 1**

3
4 **Interrogatory**

5
6 Issue Number: 1.4

7 Issue: Are Hydro One's Economic and Business Planning Assumptions for 2008
8 appropriate?

9
10 Ref: A 1 /Tab 3/Sch 1/Page 2/Table 1

- 11
12 a. Please provide the date and rationale supporting establishment of the 2010 strategic
13 goal of first quartile (like for like) reliability.
14 b. Also, please provide any source information the company relied on with respect to
15 customer expectations, customers' willingness to pay and expected impacts on rate
16 base and operations costs that were considered in the establishment of the reliability
17 goal.

18
19
20 **Response**

- 21
22 a. Since 2002, Hydro One has clearly and consistently articulated our mission statement
23 and strategic goals and targets through our business values, our Transmission and
24 Distribution rate filings, and other public pronouncements such as Annual Reports,
25 Annual Information Forms, and speeches by Hydro One senior management.

26
27 The strategic goal of first quartile reliability in a like for like comparison was first
28 drafted in 2005 as an element of a five year objectives initiative. Our current Mission
29 Statement now reads:

30
31 ***"Our mission is to be an efficient transmission and distribution company that is***
32 ***best in North America in the areas of safety, customer service and reliability, while***
33 ***focusing on the development and retention of our employees and creating***
34 ***shareholder value."***

35
36 Hydro One Distribution is driven by the Corporate Mission and business values and
37 together, they provide the basis to deliver on targeted performance objectives. Our
38 current revenue requirement is therefore based on achieving these objectives in a
39 staged manner.

- 40
41 b. Hydro One's key stakeholders have been consulted regarding our level of
42 performance, which we have used to translate into our Mission Statement and
43 business values. Our Mission Statement was jointly developed using input from
44 various stakeholders including, but not limited to:

- 1 • Our shareholder
- 2 • Customer Advisory Boards (CABs)
- 3 • Stakeholder meetings and consultations
- 4 • Discussions with the shareholder
- 5 • Direct customer contact
- 6 • Customer surveys focusing on the importance of such attributes as reliability
- 7 and the importance of price.

8

9 The costs associated with achieving our corporate objectives are inherently contained

10 within the Revenue Requirements of both our Distribution and Transmission rate

11 filings. There is no analysis available which correlates dollars spent with specific

12 steps or stages in achieving Hydro One's strategic targets and goals.

13

1 *Association of Major Power Consumers in Ontario (AMPCO) INTERROGATORY #3*
2 *List 1*

3
4 *Interrogatory*

5
6 Issue Number: 1.4

7 Issue: Are Hydro One's Economic and Business Planning Assumptions for 2008
8 appropriate?

9
10 Ref: A/Tab 14/ Sch 2/Page 3/Table 3

- 11
12 a. This table appears incorrect, in that it defines the exchange rate as CDN\$/US\$ and the
13 ratios provided do not seem to match the definition. Moreover, the projections for
14 2007 and 2008 seem out of line with experience. Please either explain or correct.

15
16
17 *Response*

- 18
19 a. The CDN\$/US\$ ratio indicates the number of Canadian dollars per US dollar (i.e., the
20 number of Canadian dollars required to purchase a single US dollar) which is the
21 conventional market quotation. The rates for 2004, 2005 and 2006 are the annual
22 noon exchange rate averages for each year from the Bank of Canada's website. The
23 rates shown for 2007 and 2008 were forecast in 2006 and hence will differ from the
24 actual rates.

25

1 *Association of Major Power Consumers in Ontario (AMPCO) INTERROGATORY #4*
2 *List 1*

3
4 *Interrogatory*

5
6 Issue Number: 1.4

7 Issue: Are Hydro One's Economic and Business Planning Assumptions for 2008
8 appropriate?

9
10 Ref: A/Tab 14/Sch 2/Page 7/ Line 10

- 11
12 a. This section refers the reader to Appendix A of Exhibit A, Tab 14, Schedule 1 for a
13 table of labour rate escalation factors. However, the appendix seems to be missing.
14 Please provide the appendix mentioned.

15
16
17 *Response*

18
19 Appendix A of Exhibit A, Tab 14, Schedule 1 is provided in the pre-filed evidence dated
20 August 15, 2007. The cited reference can be found in Appendix A, Section 3.0 Labour
21 Escalation on, page 2 of 3, line 8.
22

1 *Association of Major Power Consumers in Ontario (AMPCO) INTERROGATORY #5*
2 *List 1*

3
4 *Interrogatory*

5
6 Issue Number: 1.5

7 Issue: Is the load forecast and methodology appropriate and have the impact of
8 Conservation and Demand Management initiatives been suitably reflected?

9
10 Ref: A/Tab 14/Sch 3/Page 2/Table 1

- 11
12 a. Please provide the source energy or demand data (forecast, actual and weather
13 corrected) from which this table was calculated, including the corresponding 2007
14 data if available.

1 **Association of Major Power Consumers in Ontario (AMPCO) INTERROGATORY #6**
2 **List 1**

3
4 **Interrogatory**

5
6 Issue Number: 1.5

7 Issue: Is the load forecast and methodology appropriate and have the impact of
8 Conservation and Demand Management initiatives been suitably reflected?

9
10 Ref: A/Tab 14/Sch 3/Page 8/Line 16

11
12 The 350MW reduction ordered by the Board in EB-2006-0501 was for the forecast of
13 average monthly peak Ontario demand.

14 a. Please provide the calculation details regarding how this reduction was translated
15 from Ontario demand into Hydro One Distribution energy sales.

16
17
18 **Response**

19
20 a. To follow the Board's directive in EB-2006-0501, Hydro One Distribution applied an
21 adjustment factor of 1000/1350 (1350 MW-350 MW = 1000 MW) to the CDM
22 impact for 2007. The following table shows the CDM impact in 2007 before and
23 after the adjustment.

24 **CDM Impact on Hydro One Distribution Load (GWh)**

Year	Hydro One Retail	Embedded Direct and LDC Customers	Total
<u>Before Adjustment</u>			
2007	420	327	747
<u>After Adjustment</u>			
2007	311	242	554

25 Adjustment factor is 1000/1350

1 **Association of Major Power Consumers in Ontario (AMPCO) INTERROGATORY #7**
2 **List 1**

3
4 **Interrogatory**

5
6 Issue Number: 1.5

7 Issue: Is the load forecast and methodology appropriate and have the impact of
8 Conservation and Demand Management initiatives been suitably reflected?

9
10 Ref: A/Tab 14/Sch 3/Page 8/Line 17

11
12 In the IPSP (Ex D, Tab 4, Sch 1, Attachment 2, page 1, Table 1) the OPA identifies
13 600MW cumulative of naturally occurring conservation by the end of 2007.

- 14
15 a. Please provide the calculation details as to how this 1 was accounted for in the Hydro
16 One distribution load forecast.
17 b. Please provide the specific data references in the IPSP that support the statement "The
18 2008 CDM impact is consistent with the OPA's IPSP filed with the Board on August
19 29, 2007."

20
21
22 **Response**

- 23
24 a. Hydro One Distribution's load forecast is already net of natural conservation.
25 Therefore, there is no need to make further adjustment to account for natural
26 conservation.
27
28 b. Hydro One Distribution used the 2008 provincial CDM impacts provided by the OPA
29 to calculate its share of the CDM impacts. The provincial CDM peak and energy
30 savings for 2008 used in the IPSP are 251 MW and 0.8 TWh respectively (EB-2007-
31 0707 Exhibit D, Tab 4, Schedule 1, Attachment 4, page 2, Table 1 and Table 2).

32

1 **Association of Major Power Consumers in Ontario (AMPCO) INTERROGATORY #8**
2 **List 1**

3
4 **Interrogatory**

5
6 Issue Number: 1.5

7 Issue: Is the load forecast and methodology appropriate and have the impact of
8 Conservation and Demand Management initiatives been suitably reflected?

9
10 Ref: A/Tab 14/Sch 3/Page 10/Lines 11 – 14

11
12 This projection indicates that customer growth in 2008 is expected to be 9,400, down
13 from the 2002-2006 average of 12,000 annually (exclusive of Terrace Bay addition). This
14 seems to represent a decline of about 22%. However, in Exhibit D1, Tab 3, Sch 4, page
15 14, Lines 12-28, new connections are estimated at the historical average of 17,600
16 annually.

17
18 a. It would appear that both these assertions cannot be correct. Please provide a
19 discussion, explanation or correction.

20
21
22 **Response**

23
24 a. The table below provides the details for Ontario housing starts, new connections, and
25 customer additions:

26

Year	Ontario Housing Starts	New Connects	Customer Additions
2003	85900	17,994	10,814
2004	84500	18,177	14,306
2005	77800	18,320	12,403
2006	74400	18,231	10,575
2007	67000	17,412	10,963
2008	68000	17,583	9,413

27 Note: 2007 and 2008 are forecast

28
29 Customer additions are new (net) customer additions that are closely related to the
30 housing activities in the province. In Hydro One Distribution, new connections
31 include new customer additions, service cancellations, street lights, central metering
32 connections and multiple connections within one account. The following example
33 will help reconcile the new connections with new customer additions in 2008.
34

Filed: April 4, 2008

EB-2007-0681

Exhibit H

Tab 11

Schedule 8

Page 2 of 2

1	New Connections:	17,600
2	Less service cancellation	5,500
3	Less central metering	1,000
4	Less multiple service points	1,000
5	Less streetlight	<u>700</u>
6	Equals New Customer Additions	9,400
7		

1 **Association of Major Power Consumers in Ontario (AMPCO) INTERROGATORY #9**
2 **List 1**

3
4 **Interrogatory**

5
6 Issue Number: 1.5

7 Issue: Is the load forecast and methodology appropriate and have the impact of
8 Conservation and Demand Management initiatives been suitably reflected?

9
10 Ref: A/Tab 14/Sch 3/Page 20/Table 4

11
12 a. Please provide actual (weather normal) as opposed to forecast load data for 2006 and
13 2007.

14
15
16 **Response**

17
18 a. The requested information is provided below:

19
20 **Weather Normal Actual Hydro One Distribution Load (GWh)**

21

Year	Retail	Embedded	Total
2006	22,921	17,688	40,609
2007	22,966	17,562	40,529

22

1 **Association of Major Power Consumers in Ontario (AMPCO) INTERROGATORY #10**
2 **List 1**

3
4 **Interrogatory**

5
6 Issue Number: 1.5

7 Issue: Is the load forecast and methodology appropriate and have the impact of
8 Conservation and Demand Management initiatives been suitably reflected?

9
10 Ref: A/Tab 14/Sch 3/Page 20/Table 4
11 A/Tab 10/Sch 1/Inside cover

- 12
13 a. Please provide a reconciliation or explanation for the difference between the 2006
14 load forecast(s) in this table and the figure of 29.0 TWh provided in the 2006 annual
15 report (inside cover, Ex A/Tab 10/Sch 1).

16
17
18 **Response**

- 19
20 a. The figure of 29.0 TWh provided in the 2006 annual report (inside cover, Exhibit
21 A/Tab 10/Schedule 1) measures Hydro One Retail customers plus embedded non-
22 market participant load (25.1 TWh) plus Hydro One Brampton load.(3.9 TWh). In
23 contrast, Hydro One Distribution load in Exhibit A, Tab 14, Schedule 3, page 20,
24 Table 4 measures Hydro One Retail customers (22.7 TWh) and all embedded
25 customers, including market participants and non-market participants (17.6 TWh)
26 summing up to (40.3 TWh).
27

1 *Association of Major Power Consumers in Ontario (AMPCO) INTERROGATORY #11*

2 *List 1*

3
4 *Interrogatory*

5
6 Reference: Ex. A, Tab 15, Sch. 1, p. 7, Table 1

7 Issue: Is service quality on the OEB specified performance indicators
8 acceptable?

- 9
10 a) Please provide the System Average Interruptions Duration Index (SAIDI),
11 System Average Interruption Frequency Index (SAIFI) and Customer Average
12 Interruption Duration Index (CAIDI) targets the company believes it will need
13 by 2010 to meet if it is to achieve its strategic goal of being a first quartile
14 (like for like) performer in these categories.

15
16
17 *Response*

18
19 The benchmark for achieving “top quartile” performance changes over time based on the
20 latest performance of comparable utilities rather than historical or projected results. The
21 benchmark could also change as the group of comparable utilities is refined to better
22 reflect like-for-like comparisons. Improvement over historical results may appear to be
23 significant, however if the comparable utilities make larger improvements the
24 benchmarking ranking may deteriorate. Similarly, it is not possible to project future
25 changes in performance of other comparable utilities. Therefore, as stated in the filing,
26 the strategic goal is broadly stated as becoming a leading (“top quartile”) utility in
27 reliability, based upon like for like comparisons.

28
29 Assuming the historical performance levels stay the same for the current panel of existing
30 comparable Canadian utilities (not all of which provide true like-for-like comparisons
31 without some additional normalizing of performance results) Hydro One’s estimate of
32 what it means in 2008 to achieve “top quartile” performance levels would be a SAIDI of
33 3.9 hours of interruption per customer, a SAIFI of 2.1 interruptions per customer, and a
34 corresponding CAIDI of 1.9 hours per interrupted customer. This compares to 2008
35 performance targets of 8.0 hours for SAIDI and 2.9 interruptions for SAIFI.

1 **Association of Major Power Consumers in Ontario (AMPCO) INTERROGATORY #12**

2 **List 1**

3
4 **Interrogatory**

5
6 Issue Number: 1.6

7
8 Issue: Is service quality on the OEB specified performance indicators acceptable?

9
10 Ref: A/Tab 15/Sch 1/Page 7/Table 1

11
12 a. Does Hydro One break out reliability measures by territory, zone or area? If so,
13 please provide a table indicating the 2006 and/or 2007 results by geography?

14
15
16 **Response**

17
18 Hydro One does not break out reliability measures by territory, zone or area as part of its
19 annual reporting to the Ontario Energy Board. However, the table below provides an
20 indicator of distribution reliability by geography.

21

Geography	YEAR	Excluding Force Majeure		Including Force Majeure	
		Cust Hr/Route Km	Cust Int/Route Km	Cust Hr/Route Km	Cust Int/Route Km
CENTRAL	2006	155	50	915	101
NORTH	2006	103	37	159	43
SOUTH	2006	56	26	199	47

CENTRAL	2007	164	57	225	68
NORTH	2007	105	45	114	47
SOUTH	2007	77	34	104	39

1 *Association of Major Power Consumers in Ontario (AMPCO) INTERROGATORY #13*

2 *List 1*

3
4 *Interrogatory*

5
6 Issue Number: 1.7

7 Issue: Are the proposed distribution loss factors appropriate?

8
9 Ref: A/Tab 15/Sch 3/Page 6/Line 1

10
11 Since subtransmission class customers use only a portion of the Hydro One distribution
12 assets, it is difficult to understand why they should be allocated the same proportion of
13 non-technical losses as other customers.

- 14 a. Please identify whether Hydro One has experienced any unrecovered theft of power
15 from its subtransmission system in the past five years.
16 b. Please identify the metering accuracy requirements for Large User meters, and the
17 range of meter inaccuracies Hydro One has found through its meter verification
18 program.
19 c. Please provide a description of the types and numbers of un-metered loads Hydro
20 One has that are serviced by its subtransmission system.

21
22
23 *Response*

- 24
25 a. Hydro One has not identified theft of power from its subtransmission system in the
26 past five years. This does not mean that it does not happen.
27
28 b. Hydro One retail metering accuracy requirements conform to Measurement Canada's
29 requirement for electricity revenue metering. Hydro One has not tracked the range of
30 meter inaccuracies through its meter verification program except for sampled meters
31 related to our energy-only meter sample re-verification program, but will resolve any
32 metering accuracy issues as required. Hydro One has encountered a very small
33 number of instances, averaging one or two per year, where meter data inaccuracies
34 have been encountered.
35
36 c. All loads supplied by Hydro One are serviced through its sub-transmission system.

37
38 The types and numbers of un-metered loads served by Hydro One, through its sub-
39 transmission system, are as follows:

40 Street Lights Accounts = about 5,000

41 Sentinel Light Connections = about 30,000

42 Un-metered Scattered Load Connections = about 5,000
43

1 *Association of Major Power Consumers in Ontario (AMPCO) INTERROGATORY #14*

2 *List 1*

3
4 *Interrogatory*

5
6 Issue Number: 1.7

7 Issue: Are the proposed distribution loss factors appropriate?

8
9 Ref: A/1 Tab 15/Sch 3/Attachment A, p11.

10
11 The discussion in this section seems to suggest that all customer classes have identical
12 portions of non-technical losses associated with their use of the system (1.2%). If the total
13 non-technical losses represent 1.2% of total energy billed, then it seems logical to assume
14 that, as with technical losses, these would accumulate as power flows from
15 subtransmission to primary and on to the secondary system, with the largest portions
16 likely occurring where such factors as theft of power are most likely to occur. In turn, this
17 would suggest that the subtransmission system on its own must have a non-technical
18 loss factor of less than 1.2%. The explanation given in the Kinectrics report at the bottom
19 of page 11 seems overly cursory. Using Kinectrics' figures in Table 6, it appears that non-
20 technical losses account for over 30% of all subtransmission losses (1.2/3.8), while
21 accounting for less than 13% (1.2/9.4) of the losses attributed to customers taking power
22 at secondary voltage.

- 23 a. Please provide the calculation detail Kinectrics used in arriving at the 1.2%
24 factor for all classes.

25
26
27 *Response*

28
29 Kinectrics did not evaluate non-technical losses on a class by class basis. The analysis
30 was based on establishing non-technical losses for all customers.

31
32 Kinectrics' analysis determined a value of 1.2% non-technical losses based on a review
33 of experience in other jurisdictions.

34
35 It is Kinectrics' view that the assertion that non-technical losses "would accumulate as
36 power flows from subtransmission to primary and on to the secondary system" is
37 incorrect. Kinectrics is not aware of any references that support the contention that non-
38 technical losses are lower at higher voltages. Non-technical losses include both theft and
39 fraud, as well as metering inaccuracies. Although theft may be easier at lower voltages,
40 the larger customers at higher voltages have more to gain from theft and fraud and
41 metering inaccuracies result in much larger impacts. Therefore non-technical losses are
42 equally possible at any level.

Filed: April 4, 2008

EB-2007-0681

Exhibit H

Tab 11

Schedule 14

Page 2 of 2

1 Hydro One does not propose to change the loss factors currently approved by the OEB.
2 The current total loss factors include an estimate for non-technical losses. The estimate is
3 10% of the technical losses as shown in the footnote to Table 2, on page 2 of Exhibit A,
4 Tab 15, Schedule 3, Attachment A. Hydro One's application proposes to use this OEB
5 approved estimate for non-technical losses and is not seeking approval to use the 1.2%
6 estimate in the Kinectrics study.

7

1 **Association of Major Power Consumers in Ontario (AMPCO) INTERROGATORY #15**

2 **List 1**

3
4 **Interrogatory**

5
6 Issue Number: 3.1

7 Issue: Are the overall levels of the 2008 Operation, Maintenance and Administration
8 budgets appropriate?

9
10 Ref: C1/Tab 2/Sch 4/Table 1

- 11
12 a. Please explain in more detail the reasons for the cost increase for Operations from
13 \$11.1M in 2007 to \$13.4M in 2008.

14
15
16 **Response**

17
18 Refer to Interrogatory response in Exhibit H, Tab 13, Schedule 13.

19

1 **Association of Major Power Consumers in Ontario (AMPCO) INTERROGATORY #16**
2 **List 1**

3
4 **Interrogatory**

5
6 Issue Number: 3.1

7 Issue: Are the overall levels of the 2008 Operation, Maintenance and Administration
8 budgets appropriate?

9
10 Ref: C1/Tab 2/Sch 5/Page 9/Line 15

11
12 a. Please provide the number of manual meter readings performed each year from 2004-
13 2007, as well as the expected level for 2008.

14
15
16 **Response**

17
18 The table below provides the number of manual meter readings from 2004-2007 and the
19 2008 plan amount.

20

Description	Historic			Bridge	
	2004	2005	2006	2007	2008
Total no. of manual meter reads	4,321,354	4,418,151	4,457,764	4,510,251	4,110,000

1 *Association of Major Power Consumers in Ontario (AMPCO) INTERROGATORY #17*
2 *List 1*

3
4 *Interrogatory*

5
6 Issue Number: 3.1

7 Issue: Are the overall levels of the 2008 Operation, Maintenance and Administration
8 budgets appropriate?

9
10 Ref: C1/Tab 2/Sch 2

- 11
12 a. Are the sustaining OM&A programs for lines, stations and vegetation management
13 designed to maintain current service reliability, or to improve service reliability on a
14 schedule to achieve the corporate strategic goal for reliability by 2010?

15
16
17 *Response*

18
19 OM&A programs are designed to address a number of business values, including
20 reliability, as discussed in Exhibit A, Tab 14, Schedule 5, page 3. Not all programs
21 impact reliability to the same extent and as a result, Hydro One has different reliability
22 objectives for each program.

23
24 Analysis shown in Exhibit A, Tab 3, Schedule 1, pages 18 and 19 indicates that by the far
25 the greatest contributor to unreliability is “Tree Contacts”. With this in mind, Hydro One
26 has designed the Vegetation Management Program in a manner that improves reliability
27 consistent with the direction set by the corporate 2010 strategic goals.

28
29 Analysis shown in Exhibit A, Tab 3, Schedule 1, pages 18 and 19 also shows that the
30 next greatest contributor to unreliability is “Defective Equipment”. This category is very
31 broad and captures failures of all equipment types. Due to the wide array of equipment
32 on the system and the relative impact of equipment compared to vegetation, it is very
33 difficult to greatly influence the overall reliability of the system through targeted Lines or
34 Stations maintenance programs. As a result, Lines and Stations programs are planned to
35 meet some reliability improvement objectives, but are generally influenced more by the
36 need to restore asset condition, maintain a high level of safety for the public and workers,
37 as well as maintaining equipment performance.

38

1 **Association of Major Power Consumers in Ontario (AMPCO) INTERROGATORY #18**

2 **List 1**

3
4 **Interrogatory**

5
6 Issue Number: 3.2

7 Issue: Is the 2008 vegetation management budget appropriate?

8
9 Ref: C1/Tab 2/Sch 2/Page 30/Table 9

- 10
11 a. Please provide accomplishment data (km) for line clearing and brushing for each year
12 from 2004-2007.

13
14
15 **Response**

16
17 Please refer to the interrogatory response in Exhibit H, Tab 1, Schedule 63.

18

1 *Association of Major Power Consumers in Ontario (AMPCO) INTERROGATORY #19*

2 *List 1*

3
4 *Interrogatory*

5
6 Issue Number: 3.3

7 Issue: Is the proposed level of 2008 Shared Services and Other O&M spending
8 appropriate?

9
10 Ref: C1/Tab2/Sch6/Pages 3&4, Tables 1&2

11
12 Table 2 indicates that the corporate total cost of asset management in 2008 will be
13 \$118.9M, of which \$46.3M will be allocated to the distribution function. From Table 1,
14 this represents an increase of over 20% from the 2007 level of \$38.1M. The Board
15 decision in EB-2006-0501 approved the 2008 transmission work program based on a
16 proposed corporate total budget for asset management of \$96.4M.

- 17 a. Please explain in detail the reasons for a more than 20% increase in asset
18 management cost for distribution.
19 b. Please explain the difference between the approved total shared services budget for
20 asset management budget of \$96.4M from EB-2006-0501 and the figure of \$118.9M
21 provided in this application.

22
23
24 *Response*

- 25
26 a. Please see Interrogatory response Exhibit H, Tab 1, Schedule 85.
27
28 b. The 2008 total cost for Asset Management activities of \$118.9M provided in this
29 filing is based on more current information, as compared to the cost of the 2008
30 total Asset Management activities of \$96.4M submitted in EB-2006-0501

31
32 The information in EB-2006-0501 was developed in the spring of 2006 while the
33 information for this filing was developed in the spring of 2007. During that
34 period the understanding of the complexity of size of the activities that Asset
35 Management undertakes to support the business became greater and several new
36 activities grew in scope (e.g. Distribution Generation Connections).

37
38 A summary of the cost comparison between this application and EB-2006-0501 is
39 provided in the following table:

1

Description	2008 Costs		Difference
	Distribution Application EB-2007-0681 C1/2/6, pg 4	Transmission Application EB-2006-0501 C1/2/5, pg 4	
SBD	9.6	8.3	1.3
System Investment	32.2	21.9	10.3
Business Integration	20.3	16.1	4.2
Facility & Real Estate	44.0	40.5	3.5
Business Transformation	3.2	2.5	0.7
Customer & Business Relations	4.9	4.1	0.8
Work Program Operations	4.7	3.0	1.7
Asset Management	118.9	96.4	22.5

2

3

The increase in Asset Management is primarily due to:

4

5

- Approximately \$17.8M increase across the functions is to support increasing OM&A and Capex work program for scoping and planning, Cornerstone project support, increasing regulatory and rate filing work load, compliance activities including bill 198 and IESO programs and succession and demographics planning.

6

7

8

9

10

11

- Approximately \$1.3M increase in consultants/contract staff in System Investment to support increased work related to generation connections and Cornerstone project.

12

13

14

15

- Approximately \$3.5M increase in Facility & Real Estate costs due to new employee workspace accommodation requirements and staffing related costs (work-load driven).

16

17

18

19

Further related information can be found in interrogatory response Exhibit H, Tab 1, Schedule 85.

20

21

21

1 **Association of Major Power Consumers in Ontario (AMPCO) INTERROGATORY #20**
2 **List 1**

3
4 **Interrogatory**

5
6 Issue Number: 3.3

7 Issue: Is the proposed level of 2008 Shared Services and Other O&M spending
8 appropriate?

9
10 Ref: C1/Tab 2/Sch 6/Attachment A/Section 4.5/Lines 26-28

11
12 a. Please identify the rate of efficiency and productivity improvement assumed or
13 specified in the Inergi contract for 2008-2010.

14
15
16 **Response**

17
18 a. The pricing for the Inergi outsourcing arrangements was negotiated with a fixed
19 decline of 30% in real terms over the 10 year term of the agreement for the same
20 volume and quality of services experienced during the 12 months prior to the
21 commencement of the outsourcing arrangements. The actual decline in base service
22 fees (before cost-of-living adjustments and contract changes) for the period 2008-
23 2010 is as follows:

24
25 2008/2007 3.2% decline
26 2009/2008 3.6% decline
27 2010/2009 3.3% decline

28

1 **Association of Major Power Consumers in Ontario (AMPCO) INTERROGATORY #21**
2 **List 1**

3
4 **Interrogatory**

5
6 Issue Number: 3.3

7 Issue: Is the proposed level of 2008 Shared Services and Other O&M spending
8 appropriate?

9 Ref: C1/Tab 4/Sch 2/Page 3/Section 2.0

- 10
11 a. Please identify whether Hydro One regards the INERGI outsource contract as a cost
12 efficiency initiative.
13 b. If so, please provide a short analysis if its success as a cost efficiency initiative.

14
15
16 **Response**

- 17
18 (a) The Inergi outsource contract is identified as a cost efficiency initiative for Hydro
19 One Networks.
20
21 (b) Hydro One has successfully achieve expected annual savings to date. The pricing
22 for the Inergi outsourcing arrangements was negotiated with a fixed decline of
23 30% in real terms over the 10 year term of the agreement for the same volume and
24 quality of services experienced during the 12 months prior to the commencement
25 of the outsourcing arrangements. These arrangements are compared with internal
26 projections that Hydro One could not have achieved the contracted price decline if
27 delivered internally. The annual price decline is partially offset by adjustments
28 for the following elements during the term of the agreement:
29 a. Adjustments for cost-of-living (COLA) based on specified Ontario labour
30 related indices published by Statistics Canada.
31 b. Adjustments for changes in volume, scope or quality of services demanded by
32 Hydro One Networks.

33
34 For further information regarding % annual savings for 2008-2010, see
35 interrogatory Exhibit H, Tab 11, Schedule 20.
36

1 **Association of Major Power Consumers in Ontario (AMPCO) INTERROGATORY #22**
2 **List 1**

3
4 **Interrogatory**

5
6 Issue Number: 4.2

7 Issue: Are the amounts proposed for 2008 Capital Expenditures appropriate?

8
9 Ref: D1/Tab 2/Sch1/Page 7

- 10
11 a. Please identify any assets for which the basis for establishing the health index has
12 changed significantly since Hydro One's filing in EB-2005-0378.
13 b. For any assets where the basis for establishing the health index has changed, please
14 provide an estimate of the effect this has had on placing these assets into the
15 condition categories listed in Table 4.1.

16
17
18 **Response**

- 19
20 a. and b. The table below summarizes the changes that were made to the basis for
21 establishing the health index for assets listed in Table 4.1 of Exhibit D1, Tab 2,
22 Schedule 1. Comments on changes and impacts are relative to results in Hydro
23 One's last filing (EB-2005-0378).
24

Asset	Significant Change	Impact
Station Transformers	ACA results were based on DGA results. In EB-2005-0378, results were based on a combination of tests and condition ratings, the most heavily weighted of which were DGA Tests, Winding Doble Tests, and Furan Tests. The changes to the ACA calculation were made to focus on highly weighted factors and the emphasis on DGA was driven by the following: <ul style="list-style-type: none">• Hydro One focused on DGA as it is considered to be one of the most telling markers of transformer condition and tests are conducted annually.• Winding Doble Tests are not conducted frequently for distribution assets.• The industry has recently raised concerns with Furan Test results and their validity as condition markers.	No Significant Impact

Land Assessment & Remediation	The 2006 assessment was based MOE guidelines for agriculture/residential land-use. The condition rating has been adjusted to reflect land use for industrial properties and only those sites where there is a risk of contaminants migrating off site, or where there is a safety issue associated with the contamination have been classified as “Very Poor”. This assessment aligns with work planning practices.	Approximately 40% moved from “Very Poor” to “Good” or “Very Good”
Wood Poles	No Significant Change	No Significant Impact
Distribution Line Sections	No Significant Change	No Significant Impact
Rights of Way	ACA results were based on condition criteria (i.e. tree clearance, overhang, danger trees, and tree density). In EB-2005-0378, results were based on condition criteria and the “Forestry Outage Index (FOI)” that incorporated reliability performance. Hydro One excluded the FOI to focus on “condition” since reliability impacts are considered separately for both program funding and specific feeder scheduling. The aspect of reliability representing a marker for condition was removed from the ACA. Reliability receives a separate focus to manage and schedule work.	No Significant Impact on results.

1 *Association of Major Power Consumers in Ontario (AMPCO) INTERROGATORY #23*

2 *List 1*

3
4 *Interrogatory*

5
6 Issue Number: 4.2

7 Issue: Are the amounts proposed for 2008 Capital Expenditures appropriate?

8
9 Ref: D1/Tab 2/Sch1/Page 10/Table 4.2

- 10
11 a. Please confirm that "Transformer Failure" as defined in this table, means a failure that
12 required the transformer to be removed from its location for either major repair or
13 replacement. If this is not the definition Hydro One is using, please provide the
14 definition that is being used.

15
16
17 *Response*

- 18
19 a) The transformer failures shown in Table 4.2 are the sum of Class 1 and Class 2
20 Failures. The definitions for Class 1 and Class 2 are as follows:

- 21
22 1. Class 1 Failures: Refers to major failures which require off-site assessment and
23 repair. Typically the failure will involve the core, windings, and/or tank.
24
25 2. Class 2 Failures: Refers to failures of a less severe nature where damage is such that
26 repairs can be executed on site. Typical examples are tapchanger contact/reversing
27 switches, bushings, minor oil leaks, etc.

28

1 **Association of Major Power Consumers in Ontario (AMPCO) INTERROGATORY #24**

2 **List 1**

3
4 **Interrogatory**

5
6 Issue Number: 4.2

7 Issue: Are the amounts proposed for 2008 Capital Expenditures appropriate?

8
9 Ref: D1/Tab 2/Sch 1/Page 14/Fig. 3

- 10
11 a. Please identify what, if any, maintenance, life extension, or reinforcement ties Hydro
12 One performs on its wood pole population.
13 b. If Hydro One does not perform life extension activities for poles, please provide the
14 analysis and assumptions supporting this decision.

15
16
17 **Response**

- 18
19 a. Hydro One performs life extension on poles that are tested (i.e. drilled to measure the
20 remaining sound shell thickness) by applying wood preservatives to the interior of the
21 pole at the drill locations. In-situ applications of wood pole preservatives to the
22 exterior of a pole are not currently in use, nor is the reinforcement of poles at the
23 ground line.
24
25 b. Hydro One has assessed pole reinforcement (e.g. steel stubbing) methods. Although
26 the concept of reinforcement is promising, there are still challenges related to
27 climbability of reinforced poles, fall protection, total cost, and expected life gain.
28 Considering these factors, pole reinforcement has not been adopted as a standard
29 practice.

30
31 Hydro One has investigated the use of preservative wraps on the exterior of poles,
32 however these are not being applied at this time. To fully capture the benefits of
33 preservative wrap, a targeted approach is required by applying the wrap at cost-
34 effective pole locations as opposed to usage on a wide scale basis. Hydro One has
35 elected to defer usage of preservative wraps until it can obtain the detail information
36 on its wood pole plant through the wood pole assessment and data collection
37 program. Once the detailed plant information has been obtained, Hydro One will
38 determine locations where added ground line preservative is cost effective solution
39 for wood pole life extension.
40

1 **Association of Major Power Consumers in Ontario (AMPCO) INTERROGATORY #25**

2 **List 1**

3
4 **Interrogatory**

5
6 Issue Number: 4.2

7 Issue: Are the amounts proposed for 2008 Capital Expenditures appropriate?

8
9 Ref: D1/Tab3/Sch 2/Page 13/Table 1

- 10
11 a. Please provide the number of poles replaced or expected to be replaced under the
12 trouble call and storm damage capital category in the historic, bridge and test years.

13
14
15 **Response**

16
17 The number of poles replaced under the trouble call program is provided in the following
18 table. An accurate number of the poles replaced under the capital storm damage program
19 is not available.

20

2004	2005	2006	2007	2008 Projection
890	1,428	1,393	1,321	1,300

21

1 **Association of Major Power Consumers in Ontario (AMPCO) INTERROGATORY #26**

2 **List 1**

3
4 **Interrogatory**

5
6 Issue Number: 4.2

7 Issue: Are the amounts proposed for 2008 Capital Expenditures appropriate?

8
9 Ref: D1/Tab 3/Sch2/Page 27, line 18 to Page 28, line 8

- 10
11 a. Please identify separately the costs for the Cost Information System (CIS) upgrade
12 needed to meet the government directive on smart meters from the incremental
13 project cost to leverage the Automated Information System (AMI) system for service
14 improvements.
15 b. Please provide the business case for the enhancements to leverage the AMI system.

16
17
18 **Response**

- 19
20 a) The breakout of capital costs for 2008 is provided in the IR response in Exhibit H,
21 Tab 10, Schedule 28. The forecast costs to upgrade the CIS, and related open
22 market systems, to provide for TOU billing are approximately \$18.2M This
23 includes the costs of adding TOU tariff capability, accepting automated time
24 differentiated consumption data, automated meter related service orders and to
25 synchronize with AMI and MDMR systems. This does not include integration
26 costs for other systems or automation to manage the end to end meter to bank
27 processes and transactions efficiently (this has been identified as “Integration and
28 Transaction Management”).
29
30 b) Business benefits related specifically to the smart meter initiative are outlined in
31 Exhibit C1 Schedule 2 Tab 2 and discussed in the IR response in Exhibit H, Tab
32 1, Schedule 127, part i).
33

1 **Association of Major Power Consumers in Ontario (AMPCO) INTERROGATORY #27**
2 **List 1**

3
4 **Interrogatory**

5
6 Issue Number: 4.4

7 Issue: Are the 2008 amounts proposed for Development capital appropriate?

8
9 Ref: D1/Tab 3/Sch 3/Page 3/Table 2

- 10
11 a. Please provide a table similar to Table 2, with accomplishment units for the historic
12 years and bridge years and projected accomplishment units for the test year. This is
13 not required for meter purchases.
14 b. Please explain in some detail the reasons for the expected increase in cost for service
15 upgrades and whether this estimate includes consideration of the impact of
16 Conservation Demand Management (CDM) programs in slowing the increase in
17 energy consumption.

18
19
20 **Response**

21
22 a)

23
24 New Connections & Service Upgrade Volumes

25

	Actual	Actual	Actual	Actual	Forecast
	2004	2005	2006	2007	2008
<i>New Connections</i>	17,959	18,320	17,110	18,023	17,600
<i>Service Upgrades</i>	5,906	5,759	5,524	4,892	5,500*

26 * This is a correction to the figure of 6,500 provided in Exhibit D1, Tab 3, Schedule 3, page 5.

- 27
28 b) Projected cost increases in service upgrades are mainly due to escalation in material
29 and equipment costs, however year over year costs also fluctuate with the type of
30 upgrades implemented.

31
32 The volumes are not expected to be significantly impacted by CDM activities.
33 Although energy use may be lower due to CDM, service upgrades are generally
34 associated with new construction/renovation activities at existing customer premises
35 and most customers require the service entrance equipment to be upgraded to meet
36 code requirements when such activities take place.

37

1 **Association of Major Power Consumers in Ontario (AMPCO) INTERROGATORY #28**

2 **List 1**

3
4 **Interrogatory**

5
6 Issue Number: 4.6

7 Issue: Is the proposed level of 2008 Shared Services and Other Capital expenditures
8 appropriate?

9
10 Ref: D1/Tab 3/Sch 5/Page 1/Table 1
11 D2/Tab 2/Sch 3/Ref #IT1

12
13 For the Cornerstone Phase 1 Project. Table 1 shows costs for 2007 and 2008 as \$60.4M
14 and \$63.0M respectively. However, the Investment Justification indicates net investment
15 for 2007 and 2008 of \$83.7 and \$63.4M respectively.

- 16 a. Please provide an explanation or confirm that the figures on Table 6 are the most
17 up to date.

18
19
20 **Response**

- 21
22 a. In 2008, the \$56.3M in the Investment Justification relates to Phase I Capital and
23 OM&A. The \$63.0M in Table 6 for 2008 is only for Capital, and relates to Phase
24 I and subsequent phases. The 2007 numbers in the question differ because of the
25 inclusion of OM&A in Investment Justification IT1.
26

1 *Association of Major Power Consumers in Ontario (AMPCO) INTERROGATORY #29*

2 *List 1*

3
4 *Interrogatory*

5
6 Issue Number: 4.6

7 Issue: Is the proposed level of 2008 Shared Services and Other Capital expenditures
8 appropriate?

9
10 Ref: D1/Tab3/Sch 5/Page 32/Lines 21-24

11
12 The explanation given for the increase in Transport & Work Equipment (TW&E) capital
13 investment is that the increase is directly related to the increase in work programs.

14 a. Please identify the specific work program increases that are driving the increase in
15 TW&E acquisitions.

16
17
18 *Response*

19
20 Per Exhibit D1, Tab 3, Schedule 5, page 35, lines 7 and 8, the additional capital identified
21 in 2008 is a direct reflection of the increase in the work program and additional staffing
22 identified by all the Lines of Business within Hydro One.

23
24 The following are the primary items contributing to the TW&E capital increases from
25 2007 to 2008:

- 26
27
- 28 • additional staffing requirements, primarily due to the apprenticeship program, the
smart metering program and hiring hall requirements;
 - 29 • supporting the changes and additional clearing in the Forestry Program; and
 - 30 • purchasing units rather than increase equipment rentals
- 31

1 **Association of Major Power Consumers in Ontario (AMPCO) INTERROGATORY #30**

2 **List 1**

3
4 **Interrogatory**

5
6 Issue Number: 7.2

7 Issue: Is Hydro One's cost allocation appropriate?

8
9 Ref: G1/Tab3/Sch 1/Page 2-3, Table 1

10
11 On page 3 of the Board Report on Application of Cost Allocation for Electricity
12 Distributors, the Board states: "To the extent that distributors can address influencing
13 factors that are within their control (such as data quality), they should attempt to do so
14 and to move revenue-to-cost ratios nearer to one."

- 15 a. Please advise whether Hydro One has sufficient data to set revenue to cost ratios to
16 one.
- 17 b. If Hydro One does not have sufficient data,
18 a. what data is missing?;
19 b. what steps Hydro One is taking to collect this data?; and
20 c. when will the missing data be available?
- 21 c. Please advise if Hydro One interprets the Board's Report on Application of Cost
22 Allocation for Electricity Distributors to require a revenue to cost ratio of one if it is
23 possible to do so;
- 24 d. If Hydro One does not interpret the board's Report to require a revenue to cost ratio
25 of one if possible, please advise what requirement is imposed by the Board's Report?
- 26 e. If Hydro One does not interpret the Board's Report to require a revenue to cost ratio
27 of one if possible, please identify all of the factors that Hydro One believes that it
28 either has considered or is entitled to consider in determining whether to set revenue
29 to cost ratios at something other than one.

30
31
32 **Response**

- 33
34 a. Hydro one, like all other distributors in Ontario, does not have interval hourly data for
35 most of its customers. Specifically, for Residential and most General Service
36 customers, load profiles used in the Cost Allocation study were developed based on
37 Load Research and not actual hourly data for all customers. Good hourly data would
38 be needed to establish with more confidence revenue to cost ratio equal to one for
39 customer classes in a Cost Allocation Study. This is also the first time that a Cost
40 Allocation Study results are being used in Ontario to establish cost based distribution
41 rates. Establishing revenue to cost ratio equal to one for all customer classes will
42 result in some customer classes having significant bill impacts. The suggested ranges
43 of revenue to cost ratio by the OEB are an acceptable mechanism to mitigate bill
44 impact resulting from the application of Cost Allocation Studies.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

- b. Hourly data for Residential and most General Service customers will be available in the future, once Smart meters are in service. There still would be some data for unmetered load that would need to be developed based on agreed upon assumptions for some customer classes.
- c. Hydro One interprets the OEB range of revenue to cost ratio as recommended guidelines.
- d. The Board report mentions the avoidance of rate shock as a criteria to be considered in establishing revenue to cost ratios, page 6, section 2.3.4 of OEB report.
- e. Bill impacts was one criteria used by Hydro One in establishing the proposed revenue to cost ratio. Another criteria was to recover the proposed revenue requirement.

1 **Association of Major Power Consumers in Ontario (AMPCO) INTERROGATORY #31**
2 **List 1**

3
4 **Interrogatory**

5
6 Issue Number: 7.2

7 Issue: Is Hydro One's cost allocation appropriate?

8
9 Ref: G1/Tab 3/Sch 1/Page 3

10
11 The evidence states that the revenue to cost ratio for Distributed Generation is to be
12 changed from 1.63 to 1.0 "in support of Government policy to promote Distributed
13 Generation in Ontario."

- 14
15 a. Please advise how government policy is relevant for the purposes of determining
16 revenue to cost ratios;
17 b. Please advise what steps Hydro One took to discern government policy with respect
18 to Distributed Generation;
19 c. Please advise what steps Hydro One took to discern government policy with respect
20 to any other class of customer;
21 d. Please identify all policy matters that Hydro One considers relevant in setting revenue
22 to cost ratios that depart from one.

23
24
25 **Response**

- 26
27 a. As mentioned in Exhibit H, Tab 11, Schedule 30, bill impact and recovering the
28 revenue requirement are the main criteria considered in arriving at the proposed
29 revenue to cost ratio. Additional criteria can and are sometimes used by distributors
30 and regulators in cost allocation and rate design. In the book "Principles of Public
31 Utility Rates" by Bonbright, Danielsen and Kamerschen, on page 382, a set of
32 attributes is provided that should be considered in a sound rate structure.

33
34 The Distributed Generation class is a very small class compared to the other customer
35 classes. Even if the revenue to cost ratio would have been maintained at 1.63, the
36 additional revenue to be collected, approximately \$200,000, would have an
37 insignificant impact on the other customer classes. Hydro One will implement any
38 revenue to cost ratio for the Distributed Generation class or any other customer class
39 that the OEB may decide is applicable.

- 40
41 b. Hydro One is aware of Government intention to promote Distributed Generation as is
42 OEB staff. In proceeding EB-2007-0630 OEB and the staff discussion Paper issued
43 July 13, 2007, the following is said: "Encouraging DG from renewable or clean energy
44 sources is an important energy policy objective of the Government of Ontario, as

1 evidenced most recently by the Government's June 14, 2007 announcement on the Clean
2 Energy Standard Offer Program.”

3
4 Additionally, in the Minister letter dated August 18, 2005 to the OEB and OPA, the
5 Minister requests that barriers be eliminated in order to promote small generation in
6 Ontario.

7
8 Finally, in the Government Directive to OPA concerning the Integrated Power System
9 Plan, dated June 13, 2006, specific mention is made to increase use of renewable energy
10 sources.

- 11
12 c. No steps were taken to discern Government policy with respect to any other class.
13
14 d. Please see response to section a) above.
15

1 **Association of Major Power Consumers in Ontario (AMPCO) INTERROGATORY #32**

2 **List 1**

3
4 **Interrogatory**

5
6 Issue Number: 7.2

7 Issue: Is Hydro One's cost allocation appropriate?

8
9 Ref: G1/Tab 3/Sch 1/Page 3

10
11 The evidence states that the revenue to cost ratios for Street Light and Sentinel Light
12 classes is 0.7; the Urban General Service is 1.2; and the Sub-Transmission class is at
13 1.15.

- 14 a. For each of these classes, please specify why the revenue to cost ratio is not at one;
15 b. For each of these classes, please specify why Hydro One is proposing that some be at
16 the higher or lower ends of ratios proposed by the Board.

17
18
19 **Response**

20
21 Please see Exhibit H, Tab 11, Schedule 31 for the criteria used by Hydro One to
22 determine the recommended revenue to cost ratio. Exhibit G1, Tab 3, Schedule 1, page
23 2, line 13 to page 4, line 9 provide a detailed explanation on the proposed revenue to cost
24 ratios for each customer class. The proposed revenue to cost ratios for all customer
25 classes are within the recommended OEB revenue to cost ratio ranges.

26

1 **Association of Major Power Consumers in Ontario (AMPCO) INTERROGATORY #33**

2 **List 1**

3
4 **Interrogatory**

5
6 Issue Number: 7.2

7 Issue: Is Hydro One's cost allocation appropriate?

8
9 G1/Tab 3/Sch 1/Pages 3-4

10
11 The evidence states that the revenue to cost ratio for Acquired Residential customers is
12 0.88 because that is "considered to be the maximum that ... this customer class can
13 sustain."

14 a. Please advise of the research and analysis carried out by Hydro One to determine the
15 amount this or any other customer class could sustain.

16
17
18 **Response**

19
20 Hydro One conducted no study to determine the maximum bill impact that customers can
21 sustain. Hydro One is proposing to start addressing existing cross subsidies between
22 customer classes. Bill impact to customer is a consideration in determining the proposed
23 revenue to cost ratio. Recovery of Hydro One's revenue requirement is another criteria.
24 If the OEB recommends in its decision that Hydro One should implement different
25 revenue to cost ratios than those Hydro One is recommending, Hydro One will
26 implement the OEB's recommendations.

27

1 **Association of Major Power Consumers in Ontario (AMPCO) INTERROGATORY #34**

2 **List 1**

3
4 **Interrogatory**

5
6 Issue Number: 7.2

7 Issue: Is Hydro One's cost allocation appropriate?

8
9 Ref: G1/Tab 3/Sch 1/Page 4

10
11 The evidence states that the proposed revisions to revenue to cost ratios will lead to a
12 shortfall of \$2.5 million that Hydro One proposes to record in a deferral account for
13 recovery at a future date "from all customers".

- 14
15 a. What is the rationale for seeking recovery from all customers as opposed to the
16 customers that are under contributing to their cost?

17
18
19 **Response**

20
21 Hydro One will follow OEB recommendation as to how to recover the \$2.5 million
22 shortfall. It can be recovered from all customers, as Hydro one is proposing, or just from
23 the R1 customers.

24

1 *Association of Major Power Consumers in Ontario (AMPCO) INTERROGATORY #35*

2 *List 1*

3
4 *Interrogatory*

5
6 Issue Number: 7.2

7 Issue: Is Hydro One's cost allocation appropriate?

8
9 Ref: G1/Tab 3/Sch 1/Page 4

10
11 The evidence states that moving revenue to cost ratios to one would result in either
12 unacceptable bill impacts or the need for an excessively long mitigation period.

- 13 a. Please advise whether Hydro One views the departure from a revenue to cost ratio of
14 one to be a temporary transitional measure or an enduring feature of its rates;
- 15 b. If it is a temporary measure, what is the time frame for bringing revenue to cost ratios
16 to one;
- 17 c. If it is a temporary measure, how will Hydro One ensure that it will be rectified
18 before the imposition of performance-based regulation?
- 19 d. If Hydro One proposes that a departure will be enduring, what factors will it consider
20 in any subsequent changes to revenue to cost ratios for specific customers?

21
22
23 *Response*

24
25 Hydro One has followed and will continue to follow OEB Guidelines in determining
26 future revenue to cost ratio for customer classes.

27

1 *Association of Major Power Consumers in Ontario (AMPCO) INTERROGATORY #36*

2 *List 1*

3
4 *Interrogatory*

5
6 Issue Number: 7.2

7 Issue: Is Hydro One's cost allocation appropriate?

8
9 Ref: G1/Tab 3/Sch 1/Page 5/Table 3

10
11 The total bill impact results in this table are difficult to understand. For example, the total
12 bill impact of Sentinel lights is estimated at 118% when moving from an R/C of 0.62 to
13 1.00. At the maximum, it would seem that the total bill impact for this class could be no
14 more than slightly over 60%.

- 15 a. Please provide a detailed explanation of how these calculations were made, including
16 assumptions about the non-distribution portion of the total bills. Providing the
17 electronic form of spreadsheet that was used for the calculations would be preferred.
18 b. Please add a column to this table with the average monthly total bill dollar impacts
19 for each customer class and per unit for the un-metered Streetlight and Sentinel Light
20 classes.

21
22
23 *Response*

- 24
25 a. The "Average impact %" listed in Table 3 are customer weighted average impacts for
26 an average customer moving to the new rate class.

27
28 For example, for the new UR class, the total bill impacts at a residential average of
29 1,000 kWh for the mapped UR, R1, R2, F1 and 12 Acquired Distributor customers
30 are calculated from their existing rates to the new proposed rates. The impacts per
31 composition rate class are weighted by the customers per rate class to derive the
32 customer weighted average impact for the new UR class.

33
34 Existing rates are per Approved Rate Schedules, and new Retail Transmission Service
35 Charge per Exhibit G1, Tab 6, Schedule 1, and Rider 3 per Exhibit G1, Tab 5,
36 Schedule 3.

- 37
38 b. The incremental monthly bill for an average customer is listed for the proposed
39 Revenue-to-Cost Ratios. The value for the DGen class in Table 3 has been corrected.
40

1

	Proposed	Average	Ave Monthly	Average	R/C = 1	Average
	R/C	impact %	Total Bill Change	Per Customer		impact %
UR	1.00	3.4	\$ 560,595	\$ 3.60	1	3.4
R1	0.88	3.0	\$ 1,193,062	\$ 3.27	1	8.3
R2	1.04	1.0	\$ 492,526	\$ 1.37	1	(0.8)
Seasonal	1.00	9.7	\$ 953,302	\$ 6.17	1	9.7
UGe	1.20	(2.3)	\$ (88,910.24)	\$ (7.15)	1	(6.3)
UGd	1.00	0.3	\$ (5,859.34)	\$ (4.26)	1	0.3
Gse	1.08	0.5	\$ 108,772	\$ 1.18	1	(2.2)
GSd	1.02	(2.1)	\$ (769,096)	\$(112.29)	1	(2.7)
Dgen	1.00	(5.3)	\$ (14,333.58)	\$(176.96)	1	(5.3)
Street Light	0.70	5.0	\$ 41,312	\$ 8.61	1	21.7
Sentinel Lgt	0.70	25.0	\$ 52,083	\$ 1.78	1	118.1
ST	1.15	(4.7)	\$ (68,550,008)	\$ (198,121)	1	(5.0)

2

1 **Association of Major Power Consumers in Ontario (AMPCO) INTERROGATORY #37**

2 **List 1**

3
4 **Interrogatory**

5
6 Issue Number: 7.2

7 Issue: Is Hydro One's cost allocation appropriate?

8
9 Ref: G1/Tab 4/Sch 4/Page 2/Table 1

10
11 It is difficult to reconcile the figures in this table with the proposal to reduce the R/C ratio
12 from 2.35 to 1.15 for Sub-transmission customers. Each of the volumetric charges
13 proposed in Table 1 is more than half the current volumetric Charge, and a couple are
14 higher than current rates (Specific LV and Distribution Line charges). Also, a fixed
15 service charge is to be added.

16 a. Please provide a spreadsheet or table with discussion that illustrates how the new
17 charges result in a lowering of the R/C ratio from 2.35 to 1.15.

18
19
20 **Response**

21
22 The Revenue/Cost ratio of 2.35 reflects customers from not only the existing LV class,
23 but also customers from other existing classes. Please see Exhibit H, Tab 1, Schedule
24 151.

25

1 **Association of Major Power Consumers in Ontario (AMPCO) INTERROGATORY #38**

2 **List 1**

3
4 **Interrogatory**

5
6 Issue Number: 7.2

7 Issue: Is Hydro One's cost allocation appropriate?

8
9 Ref: G1/Tab 5/Sch 1/Page 3

- 10
11 a. Please confirm that this proposal does not involve allocating smart meter costs to
12 customer classes that will not receive smart meters or are currently using IESO
13 approved revenue grade meters.

14
15
16 **Response**

17
18 The proposed allocator for the smart meter variance account is number of customers.
19 This is consistent with the current OEB guidelines for recovery of the smart meter rider.
20 The current Hydro One approved smart meter rider of \$0.93 per month per customer is
21 recovered from all metered customers. The initial smart meter rider of \$0.30 per
22 residential customer in 2006 was approved by the OEB in its decision on proceeding RP-
23 2005-0020/EB-2005-0378, pages 46 and 47, section 6.3.4.

24

1 **Association of Major Power Consumers in Ontario (AMPCO) INTERROGATORY #39**

2 **List 1**

3
4 **Interrogatory**

5
6 Issue Number: 7.2

7 Issue: Is Hydro One's cost allocation appropriate?

8
9 Ref: G1/Tab 3/Sch 1/Page 2/Table 1

10
11 The combination of a revised cost allocation and new customer classes makes it difficult
12 to discern the actual impact on current customers of the combination of these two
13 changes.

14 a. Please provide the existing revenue/cost ratios for T Class and Hydro One Embedded
15 Direct Customers

16
17
18 **Response**

19
20 Using 2007 revenues and their corresponding share of the ST class allocated costs, the
21 revenue to cost ratio for T-class is 7.2 and for Embedded Direct is 1.2

22

1 **Association of Major Power Consumers in Ontario (AMPCO) INTERROGATORY #40**

2 **List 1**

3
4 **Interrogatory**

5
6 Issue Number: 7.2

7 Issue: Is Hydro One's cost allocation appropriate?

8
9 Ref: G2/Tab 1/Sch 1/Page 4/Line 7

10
11 This sentence is confusing as written. Should "that" be inserted after "customers" on line
12 7?

13
14
15 **Response**

16
17 No. Exhibit G2, Tab 1, Schedule 1, page 4, lines 5 to 8 describe which customers will be
18 included in the new General Service above 50 kW class. The new General Service above
19 50 kW class will include all customers that have not been reclassified to the ST class, are
20 currently demand billed, and are in the following customer classes:

- 21
22 1. General Service single phase
23 2. General Service three phase
24 3. T-class with consumption below 500 kW
25 4. Farms
26

1 **Association of Major Power Consumers in Ontario (AMPCO) INTERROGATORY #41**
2 **List 1**

3
4 **Interrogatory**

5
6 Issue Number: 7.3

7 Issue: Are Hydro One's proposed rates appropriate?

8
9 Ref: G1/Tab 7/Sch 3/Page 2/Table 1

- 10
11 a. Please provide a version of this table that illustrates the impacts to customers of the
12 Hydro One distribution charges only, including Retail Transmission Service Rates
13 (RTSR) changes (e.g., excludes commodity charges).
14 b. With the table requested above, please state the underlying assumptions on charge
15 determinants.

16
17
18 **Response**

19
20 a. (\$ in millions)

Existing Rate Class	Total current bill with RAR	2008 changes in Dx-related charges	2008 changes in RTSR charges	Total Bill Impact of Dx and RTSR changes
UG	6.6	(1.1)	0.1	(14.9%)
acqd GS	51.2	(2.6)	0.3	(4.5%)
G3	41.2	(8.9)	0.7	(19.9%)
T	92.7	(16.5)	2.0	(15.7%)
acqd LU	28.7	(2.8)	(0.5)	(11.5%)
LDC	1,004.1	(2.2)	(19.4)	(2.2%)
Direct	229.8	(0.1)	(3.4)	(1.5%)

- 21
22 b. Monthly charge determinant assumptions for the table in "a":
23 For HVDS-high, HVDS-low, LVDS-low, Common Line: peak kW.
24 For Specific Line: km.
25 For RTSR-Network: peak kW during business days 7 AM to 7 PM.
26 For RTSR Connection: peak kW "anytime".
27