



***PUBLIC INTEREST ADVOCACY CENTRE  
LE CENTRE POUR LA DEFENSE DE L'INTERET PUBLIC***

**ONE Nicholas Street, Suite 1204, Ottawa, Ontario, Canada K1N 7B7**

Tel: (613) 562-4002. Fax: (613) 562-0007. e-mail: [piac@piac.ca](mailto:piac@piac.ca). <http://www.piac.ca>

Michael Buonaguro  
Counsel for VECC  
(416) 767-1666

December 5, 2008

**VIA MAIL and E-MAIL**

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

Dear Ms. Walli:

**Re: Vulnerable Energy Consumers Coalition (VECC)  
Interrogatories: EB-2008-0245  
Thunder Bay Hydro Electricity Distribution Inc. – 2009 Electricity  
Distribution Rate Application**

Please find enclosed the interrogatories of the Vulnerable Energy Consumers Coalition (VECC) in the above-noted proceeding.

Thank you.

Yours truly,

Michael Buonaguro  
Counsel for VECC  
Encl.

**Thunder Bay Hydro Electricity Distribution Inc. (TBH)**  
**2009 Electricity Rate Application**  
**Board File No. EB-2008-0245**

**VECC's Interrogatories**

**Question #1**

**Reference: Exhibit 3/Tab 1/Schedule 2, page 1**

- a) Please confirm whether the rates used in each year to determine the revenues shown on page 1:
- Include/exclude the smart meter rate adder.
  - Recognize the lower revenues realized due to the transformer ownership allowance discount.

**Response**

*The rates used in each year to determine the revenues as simply the fixed and volumetric distribution rates and therefore do no include the smart meter rate adder.*

*Transformer ownership allowance discount is recognized in the distribution revenue.*

- b) Please confirm that the 2009 revenues are calculated using 2009 proposed rates.

**Response**

*Confirmed. See Response to Energy Probe Interrogatory #10.*

- c) If different from the filed schedule, please provide a similar schedule for 2009 but with the following adjustments:
- Use proposed 2009 rates (if required)
  - Exclude the smart meter rate adder (if required)
  - Recognize the lower revenue due to the transformer ownership allowance discount (as required).

**Response**

*N/A as filed schedule has properly included/excluded items noted above.*

## **Question #2**

**Reference:** Exhibit 3/Tab 2/Schedule 1, pages 5-8 and Appendix A

- a) Please explain how monthly population data was obtained from the Census population data.

### **Response**

*As outlined in Exhibit 3/Tab 2/Schedule 1, pages 6, the monthly population data was based on Census population data for the City of Thunder Bay. Census data for 1996, 2001 and 2006 was available. From this information the Census population for 1996, 2001 and 2006 was assumed to occur in the middle of the year. The monthly population from mid year 1996 to mid year 2001 was determined by taking the difference in Census population between 2001 and 1996, dividing by 60 (i.e. 12 months times 5 years) and adding this amount to the 1996 value until the 2001 value was achieved. The same approach was used for the months between 2006 and 2001. The monthly incremental amount between 2001 and 2006 was applied to the mid-year 2006 value to determine the monthly population for the months after mid-year 2006.*

- b) What was the source and publication date of the forecast 2008 and 2009 values for Thunder Bay's population and the Ontario real GDP monthly index?

### **Response**

*As provided in Toronto Hydro-Electric Systems Limited, EB-2007-0680, Exhibit K1, Tab 1, Schedule 3, Filed Aug 2, Page 1 of 2, the data source for Ontario real GDP index for 2008 and 2009 was forecasted based on the historical actual Ontario real GDP index from 1998 to 2005.*

- c) If based on a source earlier than May 2008, please update the Ontario real GDP monthly index forecast using a more recent source and re-do the forecast presented in Table 4 (page 8).

### **Response**

*The load forecast has been updated to assume a real Ontario GDP of 0.1 % for 2008 and 0.7% for 2009 based on the Ontario Ministry of Finance 2008 Ontario Economic Outlook and Fiscal Review dated October 22, 2008. The following table outlines the revised Table 4 (page 8) with the updated assumptions.*

| <i>GWh</i> | <i>Actual</i> | <i>Predicted</i> | <i>% Difference</i> |
|------------|---------------|------------------|---------------------|
| 1996       | 1,103.4       | 1,096.8          | -0.60%              |
| 1997       | 1,069.1       | 1,057.8          | -1.06%              |
| 1998       | 1,032.3       | 1,039.3          | 0.69%               |
| 1999       | 1,046.5       | 1,061.9          | 1.46%               |
| 2000       | 1,042.9       | 1,062.9          | 1.91%               |
| 2001       | 1,054.6       | 1,055.3          | 0.07%               |
| 2002       | 1,076.3       | 1,075.5          | -0.08%              |
| 2003       | 1,095.0       | 1,074.4          | -1.88%              |
| 2004       | 1,081.3       | 1,079.5          | -0.17%              |
| 2005       | 1,101.3       | 1,086.6          | -1.33%              |
| 2006       | 1,080.4       | 1,074.2          | -0.58%              |
| 2007       | 1,074.6       | 1,060.9          | -1.28%              |
| 2008 (WN)  |               | 1,034.2          |                     |
| 2009 (WN)  |               | 1,032.6          |                     |

- d) With respect to the Table on page 8 (Table 4), using Thunder Bay's model please provide a table that sets out the weather normalized purchases for 1996 to 2007 inclusive.

**Response**

*Thunder Bay Hydro does not have a method to weather normalize the actual purchases for 1996 to 2007. However, the following table outlines the predicted purchases from 1996 to 2007 using the prediction formula outlined in the application and replacing the actual monthly HDD and CDD from 1996 to 2007 with the average monthly HDD and CDD from 1996 to 2007.*

| <i>GWh</i> | <i>Actual</i> | <i>Predicted</i> | <i>Weather Normal Predicted</i> |
|------------|---------------|------------------|---------------------------------|
| 1996       | 1,103.4       | 1,096.8          | 1,075.8                         |
| 1997       | 1,069.1       | 1,057.8          | 1,067.1                         |
| 1998       | 1,032.3       | 1,039.3          | 1,065.7                         |
| 1999       | 1,046.5       | 1,061.9          | 1,067.8                         |
| 2000       | 1,042.9       | 1,062.9          | 1,067.7                         |
| 2001       | 1,054.6       | 1,055.3          | 1,058.5                         |
| 2002       | 1,076.3       | 1,075.5          | 1,063.5                         |
| 2003       | 1,095.0       | 1,074.4          | 1,067.1                         |
| 2004       | 1,081.3       | 1,079.5          | 1,074.8                         |
| 2005       | 1,101.3       | 1,086.6          | 1,078.3                         |
| 2006       | 1,080.4       | 1,074.2          | 1,081.6                         |
| 2007       | 1,074.6       | 1,060.9          | 1,057.1                         |

- e) With respect to pages 8-9, why won't the actual lower purchases in 2006 and 2007 (as a result of customer shut downs/operation reduction and CDM) influence the results of the regression analysis undertaken using the data and therefore be already reflected in the model?

**Response**

*In Exhibit 3/Tab 2/Schedule 1/Page 20, the actual kWh purchased in 2007 was 1,074.6 GWh and the predicted amount without the adjustments was 1,092.3 GWh. In Thunder Bay Hydro's view the 2007 predicted amount was too high and the regression analysis did not have enough history to be influenced enough by actual lower purchases in 2006 and 2007. As a result, manual adjustments from 2006 to 2009 were made to the predicted amount for customer shut downs/operation reduction and CDM.*

- f) Why is it reasonable (page 9, Tables 5 & 6) to adjust 2008 and 2009 for the full impact as opposed to just the incremental impact over 2007?

**Response**

*As outlined in response to e) it is Thunder Bay Hydro's view the 2007 predicted amount did not reflect the customer shut downs/operation reduction and CDM and manual adjustments in 2007 were made to account for these reductions. For the 2008 and 2009 the GWh reductions for customer shut downs/operation reduction and CDM are expected to be higher than 2007. These reductions have adjusted the predicted amount for 2008 and 2009 to reflect a better forecast of purchases.*

- g) To which customer class does each of the three customers in Table 6 belong?

**Response**

*The customers in Table 6 belong to the General Service 1,000 to 4,999 kw class.*

**Question #3**

**Reference: Exhibit 3/Tab 2/Schedule 1, pages 13-17**

- a) With respect to page 13 (Table 11), please confirm that – for weather sensitive classes - the year to year growth in average customer usage will be impacted by year to year changes in weather. If this is confirmed, please explain why the average historical growth rate provides a reasonable forecast of non-weather normalized average use as suggested in the derivation of Tables 12 and 13.

**Response**

*Thunder Bay Hydro confirms that – for weather sensitive classes - the year to year growth in average customer usage will be impacted by year to year changes in*

*weather. The average historical growth rate provides a reasonable forecast of non-weather normalized average use as suggested in the derivation of Table 13 since the non-weather normalized average use reflects the average use including weather conditions.*

- b) With respect to page 16, is it TBH’s contention that 100% of Residential and GS<50 kW load is weather sensitive? If so, why is this contention reasonable? If not, what does the 100% represent?

**Response**

*Thunder Bay Hydro has assumed that 100% of Residential and GS<50 kW load is weather sensitive based on Thunder Bay Hydro's understanding of the weather normalization process used by Hydro One to provide weather normalized load data for the cost allocation study.*

- c) Please provide the Hydro One data and the TBH analysis that supports the percentages in Table 15.

**Response**

*Please refer to Excel file entitled: 'VECC\_Interrogatory\_#3c)\_Thunder Bay\_RUN2.xls' provided on the enclosed disk.*

- d) Please provide the Retail NAC by customer class calculated based on the Hydro One weather normalized 2004 data and in the same schedule set out the average weather normalized use per customer forecast by TBH for 2008 and 2009 by customer class.

**Response**

*The Retail NAC (i.e kWh/annual) by customer class calculated based on the Hydro One weather normalized 2004 data for those classes that are weather sensitive is as follows.*

|                    |                                  |  |   |
|--------------------|----------------------------------|--|---|
|                    | <i>General Service &lt;50 kW</i> | <i>General Service 50 kW to 999 kW</i> | <i>General Service 1000 kW to 4999 kW</i> |
| <i>Residential</i> | <i>8,034</i>                     | <i>32,747</i>                          | <i>576,928</i>                            |
|                    |                                  |  | <i>10,162,672</i>                         |

**Question #4**

**Reference: Exhibit 6/Tab 1/Schedule 1**

- a) Please provide a schedule that sets out the calculation of the \$16,104,861 Distribution Revenue at existing rates, showing the rates, billing units and revenues by customer class.

**Response**

| Class                    | Annual kWh         | Annual kW For Dx | Annualized Customers | Annualized Connections | Fixed Distribution Revenue | Variable Distribution Revenue | Dist. Rev. Including Transformer | Transformer Allowance | Dist. Rev. Excluding Transformer | Dist Rev At Existing Rates % |
|--------------------------|--------------------|------------------|----------------------|------------------------|----------------------------|-------------------------------|----------------------------------|-----------------------|----------------------------------|------------------------------|
| Residential              | 337,772,229        |                  | 535,617              |                        | 5,865,006                  | 4,661,257                     | 10,526,263                       |                       | 10,526,263                       | 65.36%                       |
| GS <50 kW                | 143,961,424        |                  | 53,592               |                        | 914,280                    | 1,799,518                     | 2,713,797                        |                       | 2,713,797                        | 16.85%                       |
| GS>50 kW                 | 304,722,102        | 717,262          | 6,129                |                        | 1,141,523                  | 762,952                       | 1,904,474                        | 77,679                | 1,826,795                        | 11.34%                       |
| GS 1,000 to 4,999 kW     | 194,129,052        | 560,145          | 228                  |                        | 372,285                    | 804,592                       | 1,176,878                        | 332,726               | 844,151                          | 5.24%                        |
| Street Light             | 10,616,947         | 31,276           |                      | 157,092                | 53,411                     | 64,332                        | 117,743                          | 0                     | 117,743                          | 0.73%                        |
| Sentinel                 | 146,789            | 402              |                      | 2,117                  | 12,954                     | 1,975                         | 14,929                           |                       | 14,929                           | 0.09%                        |
| Unmetered Scattered Load | 1,335,240          |                  |                      | 5,244                  | 44,626                     | 16,557                        | 61,183                           |                       | 61,183                           | 0.38%                        |
| 0                        | 0                  | 0                |                      |                        | 0                          | 0                             | 0                                |                       | 0                                | 0.00%                        |
|                          | <b>992,683,783</b> | <b>1,309,085</b> | <b>595,566</b>       | <b>164,453</b>         | <b>8,404,085</b>           | <b>8,111,182</b>              | <b>16,515,267</b>                | <b>410,406</b>        | <b>16,104,861</b>                | <b>100%</b>                  |

- b) Please confirm whether the rates used to determine the Distribution Revenues (at existing rates):
- Excluded the smart meter rate adder.
  - Recognized the lower revenues realized due to the transformer ownership allowance discount.

**Response**

*See response to #1 above.*

- c) If different from the schedule prepared in response to part (a), please provide an alternate schedule for the rates, volumes and revenues by customer class for 2009 Distribution Revenues at existing rates that:
- Excludes the smart meter rate adder (if required)
  - Recognizes the lower revenue due to the transformer ownership allowance discount (as required).

**Response**

*See response to #1 above.*

**Question #5**

**Reference: Exhibit 7/Tab 1/Schedule 2, pages 3-4**

- a) Please provide the supporting calculations and schedules that show the revenue split set out in Table 4 yields the proposed revenue to cost ratios.

**Response**

*Please refer to spreadsheet on next page.*



Thunder Bay Hydro Electricity Distribution Inc.  
 2009 Distribution Rate Application  
 EB-2008-0245

2009 Test Year Class Revenue Design

| Customer Class           | Cost Allocation | Existing Rates | Revenue Split to Achieve Close to 2004 Cost Revenue Ratio with 2009 Revenue | Rate Application | Cost Allocation      | Existing Rates       | Rate Application     | Total Base Revenue Requirement | Cost of Service Results | Acceptable Ranges |         | Forced Rate Application | Target 50% of the way to low/high range |
|--------------------------|-----------------|----------------|---|------------------|----------------------|----------------------|----------------------|--------------------------------|-------------------------|-------------------|---------|-------------------------|---|
| Residential              | 51.21%          | 65.36%         | 66.10%  | <b>61.76%</b>    | 8,971,794.03         | 11,450,514.17        | 10,819,713.63        | 10,819,713.63                  | 126.08%                 | 85.00%            | 115.00% | 119.13%                 | 120.54%                                 |
| GS <50 kW                | 14.64%          | 16.85%         | 16.90%  | <b>16.85%</b>    | 2,563,959.21         | 2,952,080.49         | 2,952,080.49         | 2,952,080.49                   | 113.61%                 | 80.00%            | 120.00% | 113.61%                 |   |
| GS>50 kW                 | 17.32%          | 11.34%         | 10.83%  | <b>12.55%</b>    | 3,033,812.66         | 1,987,195.28         | 2,198,801.86         | 2,198,801.86                   | 65.96%                  | 80.00%            | 180.00% | 72.98%                  | 72.98%                                  |
| GS 1,000 to 4,999 kW     | 9.99%           | 5.24%          | 5.06%   | <b>6.11%</b>     | 1,749,543.03         | 918,271.54           | 1,069,706.33         | 1,069,706.33                   | 60.17%                  | 80.00%            | 180.00% | 70.09%                  | 70.09%                                  |
| Street Light             | 6.47%           | 0.73%          | 0.69%   | <b>2.26%</b>     | 1,134,103.31         | 128,081.22           | 395,840.40           | 395,840.40                     | 13.51%                  | 70.00%            | 120.00% | 41.75%                  | 41.75%                                  |
| Sentinel                 | 0.07%           | 0.09%          | 0.07%   | <b>0.09%</b>     | 12,107.54            | 16,239.32            | 16,239.32            | 16,239.32                      | 105.21%                 | 70.00%            | 120.00% | 105.21%                 |   |
| Unmetered Scattered Load | 0.31%           | 0.38%          | 0.34%   | <b>0.38%</b>     | 53,617.83            | 66,555.59            | 66,555.59            | 66,555.59                      | 111.25%                 | 80.00%            | 120.00% | 111.25%                 |   |
| <b>0</b>                 | 0.00%           | 0.00%          | 0.00%   | <b>0.000000%</b> | 0.00                 | 0.00                 | 0.00                 | 0.00                           |                         |                   |         |                         |   |
| <b>TOTAL</b>             | <b>100.00%</b>  | <b>100.00%</b> | <b>100.00%</b>  | <b>100.00%</b>   | <b>17,518,937.60</b> | <b>17,518,937.60</b> | <b>17,518,937.60</b> | <b>17,518,937.60</b>           |                         |                   |         |                         |   |

b) Please complete the following schedules:

- kWh by Customer Class (delivered)

| Customer Class (all)              | Updated Cost Allocation Filing |            | 2009 Application |            |
|-----------------------------------|--------------------------------|------------|------------------|------------|
|                                   | kWh                            | % of Total | kWh              | % of Total |
| Residential                       | 356,069,127                    | 35.82      | 337,772,229      | 34.02      |
| General Service < 50 kw           | 147,826,584                    | 14.87      | 143,961,424      | 14.5       |
| General Service 50 to 999 kw      | 294,465,063                    | 29.62      | 304,722,102      | 30.7       |
| General Service 1,000 to 4,999 kw | 181,786,271                    | 18.29      | 194,129,052      | 19.55      |
| Street Light                      | 10,787,529                     | 1.08       | 10,570,061       | 1.06       |
| Sentinel                          | 130,673                        | .01        | 136,712          | .02        |
| Unmetered Scattered Load          | 3,033,972                      | .31        | 1,475,860        | .15        |

- Customer/Connection Count

| Customer Class (all)              | Updated Cost Allocation Filing |            | 2009 Application         |            |
|-----------------------------------|--------------------------------|------------|--------------------------|------------|
|                                   | # Customers/ Connections       | % of Total | # Customers/ Connections | % of Total |
| Residential                       | 44,167                         | 70.68      | 44,635                   | 70.47      |
| General Service < 50 kw           | 4,495                          | 7.19       | 4,466                    | 7.05       |
| General Service 50 to 999 kw      | 471                            | .75        | 511                      | .81        |
| General Service 1,000 to 4,999 kw | 19                             | .03        | 19                       | .03        |
| Street Light                      | 12,769                         | 20.43      | 13,091                   | 20.67      |
| Sentinel                          | 140                            | .22        | 176                      | .28        |
| Unmetered Scattered Load          | 431                            | .70        | 437                      | .69        |

c) Based on the results from part (b), please comment on the appropriateness of assuming that the revenue requirement proportions from the Cost Allocation Informational filing are appropriate to utilize for setting 2009 rates as TBH has presumably done in deriving Table 4.

**Response**

*The 2009 customer/connection proportions are essentially the same as proportions in the updated cost allocation filings. The 2009 kWh and kW proportions are somewhat different than the proportions in the updated cost allocation filings. However, considering the cost allocation model basically assigns 50% of the distribution costs to customers and the other 50% to demand, it appears to Thunder Bay Hydro that it is reasonable to use results of the updated cost allocation model for the 2009 application.*

*In addition, it was costly to prepare the 2006 cost allocation informational filing. It is Thunder Bay Hydro's view it is cost effective to use the results of this study at least once*

to adjust rate. To update the cost allocation study Thunder Bay Hydro would need to request load data from Hydro One again and the data would be an estimate. Thunder Bay Hydro submits it would be more prudent to update the cost allocation study at the time the next rebasing/cost of service application is complete, since at this time smart meters will be installed and actual peak demand load data will be available by rate class.

**Question #6**

**Reference: Exhibit 7/Tab 1/Schedule 2, pages 3-4**

- a) Given the bill impacts of TBH’s proposed rates (including the cost allocation shifts) on the GS 50-999 and GS 1,000-4,999 are significantly less than 10% why is it not appropriate to move the revenue to cost ratios for these classes closer to the lower bound of the OEB’s guidelines?

**Response**

Although the overall impact is less than 10%, the distribution rate component change is 18-20%, as such Thunder Bay Hydro feels the phased-in adjustment is the preferable option.

- b) Please provide the results of an alternative cost allocation for 2009 whereby:
- The ratios for GS<50; Street Light; Sentinel Light and USL are as proposed by TBH.
  - The ratio for Residential is reduced to 115%
  - The ratios for the remaining two GS classes are increased to make up the revenue loss from Residential.

In terms of results, please provide the resulting revenue to cost ratios for each class and the bill impacts for a typical customer in each class.

**Response**

| Customer Class           | Cost Allocation | Existing Rates | Revenue Split to Achieve Close to 2004 Cost Revenue Ratio with 2009 Revenue | Rate Application | Cost Allocation      | Existing Rates       | Rate Application     | Total Base Revenue Requirement | Cost of Service Results | Acceptable Ranges | Forced Rate Application |
|--------------------------|-----------------|----------------|---|------------------|----------------------|----------------------|----------------------|--------------------------------|-------------------------|-------------------|-------------------------|
| Residential              | 51.21%          | 65.36%         | 66.10%  | <b>59.68%</b>    | 8,971,794.03         | 11,450,514.17        | 10,454,794.16        | 10,454,794.16                  | 126.08%                 | 85.00% 115.00%    | 115.11%                 |
| GS <50 kW                | 14.64%          | 16.85%         | 16.90%  | <b>16.85%</b>    | 2,563,959.21         | 2,952,080.49         | 2,952,080.49         | 2,952,080.49                   | 113.61%                 | 80.00% 120.00%    | 113.61%                 |
| GS >50 kW                | 17.32%          | 11.34%         | 10.83%  | <b>13.76%</b>    | 3,033,812.66         | 1,987,195.28         | 2,410,605.81         | 2,410,605.81                   | 65.96%                  | 80.00% 180.00%    | 80.01%                  |
| GS 1,000 to 4,999 kW     | 9.99%           | 5.24%          | 5.06%   | <b>6.98%</b>     | 1,749,543.03         | 918,271.54           | 1,222,821.84         | 1,222,821.84                   | 60.17%                  | 80.00% 180.00%    | 80.13%                  |
| Street Light             | 6.47%           | 0.73%          | 0.69%   | <b>2.26%</b>     | 1,134,103.31         | 128,081.22           | 395,840.40           | 395,840.40                     | 13.51%                  | 70.00% 120.00%    | 41.75%                  |
| Sentinel                 | 0.07%           | 0.09%          | 0.07%   | <b>0.09%</b>     | 12,107.54            | 16,239.32            | 16,239.32            | 16,239.32                      | 105.21%                 | 70.00% 120.00%    | 105.21%                 |
| Unmetered Scattered Load | 0.31%           | 0.38%          | 0.34%   | <b>0.38%</b>     | 53,617.83            | 66,555.59            | 66,555.59            | 66,555.59                      | 111.25%                 | 80.00% 120.00%    | 111.25%                 |
| 0                        | 0.00%           | 0.00%          | 0.00%   | <b>0.000000%</b> | 0.00                 | 0.00                 | 0.00                 | 0.00                           |                         |                   |                         |
| <b>TOTAL</b>             | <b>100.00%</b>  | <b>100.00%</b> | <b>100.00%</b>  | <b>100.00%</b>   | <b>17,518,937.60</b> | <b>17,518,937.60</b> | <b>17,518,937.60</b> | <b>17,518,937.60</b>           |                         |                   |                         |

**Response – General Service >50kw (100 kw)**

|                               | 2008 BILL |         |                 | 2009 BILL |         |                 | IMPACT        |               |                 |
|-------------------------------|-----------|---------|-----------------|-----------|---------|-----------------|---------------|---------------|-----------------|
|                               | Volume    | RATE \$ | CHARGE \$       | Volume    | RATE \$ | CHARGE \$       | \$            | %             | % of Total Bill |
| Monthly Service Charge        |           |         | 186.25          |           |         | 245.77          | 59.52         | 31.96%        | 1.58%           |
| Distribution (kW)             | 100       | 1.0637  | 106.37          | 100       | 1.3690  | 136.90          | 30.53         | 28.70%        | 0.81%           |
| Smart Meter Rider (per month) |           |         | 0.27            |           |         | 1.25            | 0.98          | 362.96%       | 0.03%           |
| LRAM & SSM Rider (kWh)        | 100       |         |                 | 100       | 0.0021  | 0.21            | 0.21          | #DIV/0!       | 0.01%           |
| Regulatory Assets (kW)        | 100       | 0.0000  | 0.00            | 100       | 0.0000  | 0.00            | 0.00          | #DIV/0!       | 0.00%           |
| <b>Sub-Total</b>              |           |         | <b>292.89</b>   |           |         | <b>384.13</b>   | <b>91.24</b>  | <b>31.15%</b> | <b>2.42%</b>    |
| Other Charges (kWh)           | 41,828    | 0.0132  | 552.13          | 41,912    | 0.0132  | 553.24          | 1.11          | 0.20%         | 0.03%           |
| Other Charges (kW)            | 100       | 2.2519  | 225.19          | 100       | 2.8116  | 281.16          | 55.97         | 24.85%        | 1.49%           |
| Cost of Power Commodity (kWh) | 41,828    | 0.0607  | 2,539.80        | 41,912    | 0.0607  | 2,544.90        | 5.10          | 0.20%         | 0.14%           |
| <b>Total Bill</b>             |           |         | <b>3,610.01</b> |           |         | <b>3,763.43</b> | <b>153.42</b> | <b>4.25%</b>  | <b>4.08%</b>    |

**Response – GS >1,000 to 4,999 kw (3,500 kw)**

|                               | 2008 BILL |         |                  | 2009 BILL |         |                  | IMPACT          |               |                 |
|-------------------------------|-----------|---------|------------------|-----------|---------|------------------|-----------------|---------------|-----------------|
|                               | Volume    | RATE \$ | CHARGE \$        | Volume    | RATE \$ | CHARGE \$        | Change \$       | Change %      | % of Total Bill |
| Monthly Service Charge        |           |         | 1,632.83         |           |         | 2,365.29         | 732.46          | 44.86%        | 1.14%           |
| Distribution (kW)             | 3,500     | 1.4364  | 5,027.40         | 3,500     | 1.8143  | 6,350.05         | 1,322.65        | 26.31%        | 2.06%           |
| Smart Meter Rider/month       |           |         | 0.27             |           |         | 1.25             | 0.98            | 362.96%       | 0.00%           |
| LRAM & SSM Rider (kWh)        | 3,500     |         |                  | 3,500     | 0.0027  | 9.45             | 9.45            | #DIV/0!       | 0.03%           |
| Regulatory Assets (kW)        | 3,500     | 0.0000  | 0.00             | 3,500     | 0.0000  | 0.00             | 0.00            | #DIV/0!       | 0.00%           |
| <b>Sub-Total</b>              |           |         | <b>6,660.50</b>  |           |         | <b>8,726.04</b>  | <b>2,065.54</b> | <b>31.01%</b> | <b>3.22%</b>    |
| Other Charges (kWh)           | 605,617   | 0.0132  | 7,994.15         | 606,833   | 0.0132  | 8,010.20         | 16.05           | 0.20%         | 0.03%           |
| Other Charges (kW)            | 3,500     | 2.4265  | 8,492.75         | 3,500     | 3.0354  | 10,623.90        | 2,131.15        | 25.09%        | 3.32%           |
| Cost of Power Commodity (kWh) | 605,617   | 0.0607  | 36,773.07        | 606,833   | 0.0607  | 36,846.92        | 73.85           | 0.20%         | 0.12%           |
| <b>Total Bill</b>             |           |         | <b>59,920.47</b> |           |         | <b>64,207.06</b> | <b>4,286.59</b> | <b>7.15%</b>  | <b>6.68%</b>    |

**Response** – Residential 1,000 kwh

|                               | 2008 BILL |         |               | 2009 BILL |         |               | IMPACT      |              |                 |
|-------------------------------|-----------|---------|---------------|-----------|---------|---------------|-------------|--------------|-----------------|
|                               | Volume    | RATE \$ | CHARGE \$     | Volume    | RATE \$ | CHARGE \$     | \$          | %            | % of Total Bill |
| Monthly Service Charge        |           |         | 10.95         |           |         | 10.88         | (0.07)      | (0.64%)      | (0.03%)         |
| Distribution (kWh)            | 2,000     | 0.0138  | 27.60         | 2,000     | 0.0137  | 27.40         | (0.20)      | (0.72%)      | (0.10%)         |
| Smart Meter Rider (per month) |           |         | 0.27          |           |         | 1.25          | 0.98        | 362.96%      | 0.48%           |
| LRAM & SSM Rider (kWh)        | 2,000     |         |               | 2,000     | 0.0005  | 1.00          | 1.00        | #DIV/0!      | 0.49%           |
| Regulatory Assets (kWh)       | 2,000     | 0.0000  | 0.00          | 2,000     | 0.0000  | 0.00          | 0.00        | #DIV/0!      | 0.00%           |
| <b>Sub-Total</b>              |           |         | <b>38.82</b>  |           |         | <b>40.53</b>  | <b>1.71</b> | <b>4.40%</b> | <b>0.84%</b>    |
| Other Charges (kWh)           | 2,091     | 0.0194  | 40.57         | 2,096     | 0.0209  | 43.80         | 3.22        | 7.95%        | 1.59%           |
| Cost of Power Commodity (kWh) | 600       | 0.0500  | 30.00         | 600       | 0.0500  | 30.00         | 0.00        | 0.00%        | 0.00%           |
| Cost of Power Commodity (kWh) | 1,491     | 0.0590  | 87.99         | 1,496     | 0.0590  | 88.24         | 0.25        | 0.28%        | 0.12%           |
| <b>Total Bill</b>             |           |         | <b>197.39</b> |           |         | <b>202.57</b> | <b>5.18</b> | <b>2.63%</b> | <b>2.56%</b>    |

**Question #7**

**Reference:** Exhibit 8/Tab 1/Schedule 1, page 6

- a) Please confirm that for purposes of the 2006 Updated Cost Allocation Informational Filing:
- The Revenues are based on distribution rates (excluding the discounts for transformer ownership allowance)
  - The Costs include the cost of the Transformer Ownership Allowance
  - The cost of the Transformer Ownership Allowance is allocated to all customer classes

**Response**

- Confirmed.
- Confirmed.
- Confirmed.

- b) Please confirm that (per Exhibit 8/Tab 1/Schedule 1, page 6) TBH is proposing to allocate the cost of the transformer ownership allowance to the appropriate GS>50 Classes.

**Response**

Confirmed.

c) Please provide the results of an alternative cost allocation where:

- The Revenues by class are based the rates reduced by the transformer ownership allowance where applicable
- The Costs allocated exclude the “cost” of the Transformer Ownership Allowance.  
(Note: For purposes of the response please just file the revise Output Sheet O1)

## Response



2006 Cost Allocation Information Filing  
Thunder Bay Hydro Electricity Distribution Inc.  
EB-2005-0419 EB-2007-0001  
February 28, 2007

Sheet O1 Revenue to Cost Summary Worksheet - Second Run

### Class Revenue, Cost Analysis, and Return on Rate

| Rate Base | Assets                              | Total                                   | 1                   | 2                   | 3                            | 4          | 5                               | 6                 | 7                  | 8               | 9                           |
|-----------|-------------------------------------|---|---------------------|---------------------|------------------------------|------------|---------------------------------|-------------------|--------------------|-----------------|-----------------------------|
|           |                                     |   | Residential         | GS <50              | General Service<br>50 to 999 | GS> 50-TOU | General Service<br>1000 to 4999 | Large Use<br>>5MW | Street Light       | Sentinel        | Unmetered<br>Scattered Load |
|           | Distribution Revenue (sale)         | \$16,137,828                            | \$10,663,900        | \$2,740,846         | \$1,762,327                  | \$0        | \$789,375                       | \$0               | \$114,938          | \$11,709        | \$54,733                    |
| crev      | Miscellaneous Revenue (mi)          | \$1,367,052                             | \$821,918           | \$284,946           | \$167,866                    | \$0        | \$61,102                        | \$0               | \$28,459           | \$657           | \$2,105                     |
| mi        | <b>Total Revenue</b>                | <b>\$17,504,880</b>                     | <b>\$11,485,818</b> | <b>\$3,025,792</b>  | <b>\$1,930,193</b>           | <b>\$0</b> | <b>\$850,477</b>                | <b>\$0</b>        | <b>\$143,397</b>   | <b>\$12,366</b> | <b>\$56,838</b>             |
|           | <b>Expenses</b>                     |   |                     |                     |                              |            |                                 |                   |                    |                 |                             |
| di        | Distribution Costs (di)             | \$4,661,974                             | \$2,139,765         | \$608,139           | \$848,377                    | \$0        | \$697,919                       | \$0               | \$348,055          | \$3,820         | \$15,900                    |
| cu        | Customer Related Costs (cu)         | \$2,753,110                             | \$1,793,507         | \$615,668           | \$308,150                    | \$0        | \$15,848                        | \$0               | \$17,212           | \$260           | \$2,464                     |
| ad        | General and Administration (ad)     | \$3,628,607                             | \$1,890,300         | \$577,847           | \$584,801                    | \$0        | \$372,323                       | \$0               | \$191,651          | \$2,134         | \$9,551                     |
| dep       | Depreciation and Amortization (dep) | \$4,056,140                             | \$1,964,156         | \$506,094           | \$726,859                    | \$0        | \$547,717                       | \$0               | \$294,774          | \$3,236         | \$13,304                    |
| INPUT     | PLs (INPUT)                         | \$1,349,014                             | \$635,999           | \$174,279           | \$253,994                    | \$0        | \$183,013                       | \$0               | \$96,033           | \$1,056         | \$4,639                     |
| INT       | Interest                            | \$3,566                                 | \$1,681             | \$461               | \$672                        | \$0        | \$484                           | \$0               | \$254              | \$3             | \$12                        |
|           | <b>Total Expenses</b>               | <b>\$16,452,411</b>                     | <b>\$8,425,409</b>  | <b>\$2,482,489</b>  | <b>\$2,722,852</b>           | <b>\$0</b> | <b>\$1,817,304</b>              | <b>\$0</b>        | <b>\$947,978</b>   | <b>\$10,509</b> | <b>\$45,871</b>             |
|           | Direct Allocation                   | \$7,484                                 | \$5,484             | \$1,000             | \$1,000                      | \$0        | \$0                             | \$0               | \$0                | \$0             | \$0                         |
| NI        | Allocated Net Income (NI)           | \$1,044,984                             | \$492,663           | \$135,002           | \$196,751                    | \$0        | \$141,767                       | \$0               | \$74,390           | \$818           | \$3,594                     |
|           | Revenue Requirement (includes       | \$17,504,880                            | \$8,923,556         | \$2,618,490         | \$2,920,602                  | \$0        | \$1,959,072                     | \$0               | \$1,022,368        | \$11,327        | \$49,465                    |
|           |                                     | Revenue Requirement Input equals Output |                     |                     |                              |            |                                 |                   |                    |                 |                             |
|           | <b>Rate Base Calculation</b>        |   |                     |                     |                              |            |                                 |                   |                    |                 |                             |
|           | <b>Net Assets</b>                   |   |                     |                     |                              |            |                                 |                   |                    |                 |                             |
| dp        | Distribution Plant - Gross          | \$110,246,737                           | \$54,394,337        | \$13,854,134        | \$18,727,826                 | \$0        | \$13,637,261                    | \$0               | \$9,137,407        | \$100,303       | \$395,469                   |
| gp        | General Plant - Gross               | \$10,814,143                            | \$5,128,374         | \$1,392,261         | \$2,010,923                  | \$0        | \$1,450,730                     | \$0               | \$785,821          | \$8,641         | \$37,394                    |
| accum dep | Accumulated Depreciation            | (\$58,223,541)                          | (\$29,723,458)      | (\$7,156,436)       | (\$9,053,955)                | \$0        | (\$6,658,286)                   | \$0               | (\$5,357,088)      | (\$58,735)      | (\$215,582)                 |
| co        | Capital Contribution                | (\$3,694,801)                           | (\$1,886,218)       | (\$454,139)         | (\$574,554)                  | \$0        | (\$422,527)                     | \$0               | (\$339,955)        | (\$3,727)       | (\$13,681)                  |
|           | <b>Total Net Plant</b>              | <b>\$59,142,538</b>                     | <b>\$27,913,036</b> | <b>\$7,635,819</b>  | <b>\$11,110,240</b>          | <b>\$0</b> | <b>\$8,007,177</b>              | <b>\$0</b>        | <b>\$4,226,184</b> | <b>\$46,481</b> | <b>\$203,601</b>            |
|           | Directly Allocated Net Fixed Asset  | \$0                                     | \$0                 | \$0                 | \$0                          | \$0        | \$0                             | \$0               | \$0                | \$0             | \$0                         |
| COP       | Cost of Power (COP)                 | \$70,013,765                            | \$25,101,895        | \$10,405,729        | \$20,727,826                 | \$0        | \$12,796,201                    | \$0               | \$759,350          | \$9,198         | \$213,566                   |
|           | OM&A Expenses                       | \$11,043,691                            | \$5,823,572         | \$1,801,654         | \$1,741,327                  | \$0        | \$1,086,090                     | \$0               | \$556,918          | \$6,214         | \$27,916                    |
|           | Directly Allocated Expenses         | \$7,484                                 | \$5,484             | \$1,000             | \$1,000                      | \$0        | \$0                             | \$0               | \$0                | \$0             | \$0                         |
|           | <b>Subtotal</b>                     | <b>\$81,064,940</b>                     | <b>\$30,930,951</b> | <b>\$12,208,383</b> | <b>\$22,470,154</b>          | <b>\$0</b> | <b>\$13,882,291</b>             | <b>\$0</b>        | <b>\$1,316,268</b> | <b>\$15,412</b> | <b>\$241,481</b>            |
|           | Working Capital                     | \$12,159,741                            | \$4,639,643         | \$1,831,258         | \$3,370,523                  | \$0        | \$2,082,344                     | \$0               | \$197,440          | \$2,312         | \$36,222                    |
|           | <b>Total Rate Base</b>              | <b>\$71,302,279</b>                     | <b>\$32,552,678</b> | <b>\$9,467,076</b>  | <b>\$14,480,763</b>          | <b>\$0</b> | <b>\$10,089,521</b>             | <b>\$0</b>        | <b>\$4,423,625</b> | <b>\$48,792</b> | <b>\$239,823</b>            |
|           |                                     | Rate Base Input equals Output           |                     |                     |                              |            |                                 |                   |                    |                 |                             |
|           | Equity Component of Rate Base       | \$35,651,139                            | \$16,276,339        | \$4,733,538         | \$7,240,382                  | \$0        | \$5,044,760                     | \$0               | \$2,211,812        | \$24,396        | \$119,912                   |
|           | Net Income on Allocated Assets      | \$1,044,985                             | \$3,054,925         | \$542,303           | (\$793,659)                  | \$0        | (\$966,828)                     | \$0               | (\$804,581)        | \$1,857         | \$10,967                    |
|           | Net Income on Direct Allocation A   | \$0                                     | \$0                 | \$0                 | \$0                          | \$0        | \$0                             | \$0               | \$0                | \$0             | \$0                         |
|           | <b>Net Income</b>                   | <b>\$1,044,985</b>                      | <b>\$3,054,925</b>  | <b>\$542,303</b>    | <b>(\$793,659)</b>           | <b>\$0</b> | <b>(\$966,828)</b>              | <b>\$0</b>        | <b>(\$804,581)</b> | <b>\$1,857</b>  | <b>\$10,967</b>             |
|           | <b>RATIOS ANALYSIS</b>              |   |                     |                     |                              |            |                                 |                   |                    |                 |                             |
|           | REVENUE TO EXPENSES %               | 100.00%                                 | 128.71%             | 115.55%             | 66.09%                       | 0.00%      | 43.41%                          | 0.00%             | 14.03%             | 109.17%         | 114.91%                     |
|           | EXISTING REVENUE MINUS ALLO         | \$0                                     | \$2,562,262         | \$407,301           | (\$990,409)                  | \$0        | (\$1,108,595)                   | \$0               | (\$878,971)        | \$1,039         | \$7,373                     |
|           | RETURN ON EQUITY COMPONENT          | 2.93%                                   | 18.77%              | 11.46%              | -10.96%                      | 0.00%      | -19.16%                         | 0.00%             | -36.38%            | 7.61%           | 9.15%                       |

- d) Please provide a schedule that sets out the proposed 2009 transformer ownership allowance discount, the eligible kW's by class and the total "cost" of the 2009 transformer ownership allowance by customer class.

**Response**

**Transformer Ownership Allowance  
Thunder Bay Hydro Electricity Distribution Inc.  
CALCULATIONS BASED ON 2006 EDR COST ALLOCATION STUDY**

| Description             | 2009 Test      |                    |
|-------------------------|----------------|--------------------|
|                         | kW             | \$                 |
| <b>General Service:</b> |                |                    |
| GS>50 kW                | 129,466        | (\$77,679)         |
| GS 1,000 to 4,999 kW    | 554,544        | (\$332,726)        |
| <b>Total</b>            | <b>684,009</b> | <b>(\$410,406)</b> |

**Transformer Allowance rate** \$0.60

**Question #8**

**Reference: Exhibit 8/Tab 1/Schedule 1, page 4**

- a) Please provide a schedule that sets out the derivation of the fixed/variable splits for each customer class as shown on page 4 (Table 5).

**Response**

*Forecast Class Billing Determinants for 2009 Test Year Based on Existing Class Revenue Proportions-Revenue At Existing Rates*

| 2009 Distribution Rate Application<br>EB-2008-0245                             |                            |                   |                     |                         |                     |                        |                       |                            |                       |                      |
|--|----------------------------|-------------------|---------------------|-------------------------|---------------------|------------------------|-----------------------|----------------------------|-----------------------|----------------------|
| Distribution Rate Allocation Between Fixed & Variable Rates For 2008 Test Year |                            |                   |                     |                         |                     |                        |                       |                            |                       |                      |
| Customer Class   | Total Net Rev. Requirement | Rev Requirement % | Proposed Fixed Rate | Resulting Variable Rate | Total Fixed Revenue | Total Variable Revenue | Transformer Allowance | Gross Distribution Revenue | LV & Wheeling Charges | Total                |
| Residential  | 10,819,714                 | 61.76%            | 11.26               | \$0.0142                | \$ 6,028,510        | \$ 4,791,203           |                       | 10,819,713.63              | 0.00                  | 10,819,713.63        |
| GS <50 kW  | 2,952,080                  | 16.85%            | 18.56               | \$0.0136                | \$ 994,557          | \$ 1,957,523           |                       | 2,952,080.49               | 0.00                  | 2,952,080.49         |
| GS>50 kW   | 2,198,802                  | 12.55%            | 224.18              | \$1.2583                | \$ 1,373,981        | \$ 824,820             | \$ 77,679             | 2,276,481.33               | 0.00                  | 2,276,481.33         |
| GS 1,000 to 4,999 kW   | 1,069,706                  | 6.11%             | 2,069.12            | \$1.6615                | \$ 471,759          | \$ 597,947             | \$ 332,726            | 1,402,432.46               | 0.00                  | 1,402,432.46         |
| Street Light   | 395,840                    | 2.26%             | 1.14                | \$6.9151                | \$ 179,564          | \$ 216,277             |                       | 395,840.40                 | 0.00                  | 395,840.40           |
| Sentinel   | 16,239                     | 0.09%             | 6.66                | \$5.3435                | \$ 14,091           | \$ 2,148               |                       | 16,239.32                  | 0.00                  | 16,239.32            |
| Unmetered Scattered Load   | 66,556                     | 0.38%             | 9.26                | \$0.0135                | \$ 48,545           | \$ 18,011              |                       | 66,555.59                  | 0.00                  | 66,555.59            |
| 0  | 0                          | 0.00%             |                     | #DIV/0!                 | \$ -                | \$ -                   |                       | 0.00                       | 0.00                  | 0.00                 |
| <b>TOTAL</b>   | <b>17,518,938</b>          | <b>100.00%</b>    |                     |                         | <b>\$ 9,111,008</b> | <b>\$ 8,407,930</b>    | <b>\$ 410,406</b>     | <b>\$ 17,929,343</b>       | <b>\$ -</b>           | <b>\$ 17,929,343</b> |
| Forecast Fixed/Variable Ratios   |                            |                   |                     |                         | <b>50.816%</b>      | <b>46.895%</b>         | <b>2.289%</b>         | <b>100.000%</b>            |                       |                      |

| Customer Class           | Current Volumetric Split | Current Fixed Charge Spilt | Total   | Fixed Rate Based on Current Fixed/Variable Revenue Proportions | 2008 Rates From OEB Approved Tariff | Minimum System with PLCC Adjustment (Ceiling Fixed Charge From Cost Allocation Model) |
|--------------------------|--------------------------|----------------------------|---------|--|-------------------------------------|---|
| Residential              | 44.28%                   | 55.72%                     | 100.00% | 11.26  | 10.95                               | 10.15   |
| GS <50 kW                | 66.31%                   | 33.69%                     | 100.00% | 18.56  | 17.06                               | 20.64   |
| GS>50 kW                 | 37.51%                   | 62.49%                     | 100.00% | 224.18   | 186.25                              | 110.97  |
| GS 1,000 to 4,999 kW     | 55.90%                   | 44.10%                     | 100.00% | 2,069.12   | 1,632.83                            | 332.62  |
| Street Light             | 54.64%                   | 45.36%                     | 100.00% | 1.14   | 0.34                                | 6.86  |
| Sentinel                 | 13.23%                   | 86.77%                     | 100.00% | 6.66   | 6.12                                | 6.71  |
| Unmetered Scattered Load | 27.06%                   | 72.94%                     | 100.00% | 9.26   | 8.51                                | 6.15  |
| 0                        |                          |                            |         |  |                                     |   |
| TOTAL                    |                          |                            |         |  |                                     |   |

- b) Please provide a schedule that sets out the range for the monthly service charge for each customer class based on the OEB's guidelines and TBH's Cost Allocation run.

**Response**

See response to a) above.

- c) Please confirm that the monthly service charges for GS 50-999; GS 1,000-4,999 and USL are all above the ceiling set out by the OEB in its November 28, 2007 Report (EB-2007-0667). If so, please explain why TBH is proposing to further increase these rates for 2009.

**Response**

*As per Exhibit 8/Tab 1/Schedule 1/Page 4 Thunder Bay Hydro proposes to maintain the current fixed and variable proportions for the proposed 2009 rates. Any changes in monthly service charges are due solely to changes in the total base revenue requirement attributable to each customer class. Consistent with the position of Norfolk Power in it's 2008 Rate Application EB-2007-0753, it is Thunder Bay Hydro's understanding that a ceiling was not established by the Board's report Application of Cost Allocation for Electricity Distributors. In the case of Norfolk Power the Board agreed with this position in the Board's Decision for the Norfolk Power's 2008 rate application. In that Decision the Board stated:*

**"Board Findings**

*As noted above the Applicant does not propose to change the relationship between the fixed portion of the customer's bill and the portion that varies with load.*



*The Board has convened a consultation with the industry and stakeholders respecting many aspects of rate design, including the fixed/variable split. (EB-2007-0031). The relationship between the fixed and variable portions of the customer bill has important implications for ratemaking, and the magnitude of the fixed charge has benefits and drawbacks for various stakeholders.*

*In light of the consultation initiated by the Board on these subjects it would be inappropriate to attempt to predict its outcome and to impose a new structure on the Applicant. Accordingly the Board accepts the Applicant's proposal."*

- d) Please provide a schedule that sets out the calculation of the Retail Tx Conn Revenue by customer class shown on page 7.

**Response**

*Please refer to response to OEB Interrogatory #46(c).*

**Question #9**

**Reference: Exhibit 8/Tab 1/Schedule 9, Appendix A**

- a) Based on a recent 12 consecutive months of actual billing data, please indicate the percentage of total residential customers that:
- Consume less than 100 kWh per month
  - Consume 100 -> 250 kWh per month
  - Consume 250 -> 500 kWh per month
  - Consume 500 -> 750 kWh per month
  - Consume 750 -> 1,000 kWh per month
  - Consume 1,000 -> 1,500 kWh per month
  - Consume 1,500 -> 2,000 kWh per month
  - Consume > 2,000 kWh per month.

**Response**

|                        | <i>Percentage of Total</i> |
|------------------------|----------------------------|
| <i>Under 100 Kwh</i>   | 1.42                       |
| <i>100 - 250 KwH</i>   | 6.83                       |
| <i>250 - 500 Kwh</i>   | 28.67                      |
| <i>500 - 750 KwH</i>   | 31.16                      |
| <i>750 - 1000 Kwh</i>  | 17.35                      |
| <i>1000 - 1500 KwH</i> | 10.52                      |
| <i>1500 - 2000 KwH</i> | 2.51                       |
| <i>Over 2000 Kwh</i>   | 1.53                       |

**Question #10**

**Reference: Exhibit 2 /Tab 2/Schedule 3, pages 2 and 3, Tables 1 and 2**

Preamble: The aggregate amount spent on infrastructure projects that are each individually immaterial exceeds the aggregate amount spent on infrastructure projects that are each individually material in both 2008 and 2009: in 2008, the total spending on “material projects” is \$2,651,183 while the total spent on “immaterial projects” is \$2,661,468. Comparable figures for 2009 are \$3,531,513 and \$3,610,109 respectively.

- a) Please provide the names of all projects included in the “All Other Infrastructure Capital” category for (i) 2008 and (ii) 2009.

**Response**

- (i) *The names of all projects included in the “All Other Infrastructure Capital” category for 2008 are:*

*Infrastructure capital projects not exceeding the materiality threshold of \$603,424:*

|    | <u>Project #</u> | <u>Project Description</u>                      |
|----|------------------|---|
| 1) | B81106           | County Fair Plaza Line Rebuild                  |
| 2) | B81213           | Ray Blvd. area Phase 1 Conversion/Rebuild       |
| 3) | B81304           | Arthur @ Mountdale 10M7/10M10                   |
| 4) | B82122           | Station 36 Fencing/Grounding/Concrete           |
| 5) | B82315           | Fort William TS Wholesale Revenue Meter Upgrade |

*Other infrastructure Capital Projects/Accounts:*

|     | <u>Project #</u> | <u>Project Description</u>   |
|-----|------------------|------------------------------|
| 1)  | A811             | Customer Driven Expansions   |
| 2)  | A812             | Services – Residential       |
| 3)  | A813             | Services – General           |
| 4)  | A814             | Subdivisions                 |
| 5)  | A815             | Relocations                  |
| 6)  | A816             | Small Unplanned Replacements |
| 7)  | A817             | Lines Safety Reports         |
| 8)  | A821             | Meter Replacements           |
| 9)  | A822             | Operations Safety Reports    |
| 10) | A801             | Regulatory/Legal             |

- (ii) *The names of all projects included in the “All Other Infrastructure Capital” category for 2009 are:*

*Infrastructure capital projects not exceeding the materiality threshold of \$603,424:*

|    | <u>Project #</u> | <u>Project Description</u>              |
|----|------------------|---|
| 1) | B91221           | Durban/Brodie Area Conversion/Rebuild   |
| 2) | B91230           | Ontario/Banning Area Conversion/Rebuild |
| 3) | B91237           | Amelia/Brown Area Conversion/Rebuild    |

Other infrastructure Capital projects/accounts:

|     | <u>Project #</u> | <u>Project Description</u>   |
|-----|------------------|------------------------------|
| 1)  | A911             | Customer Driven Expansions   |
| 2)  | A912             | Services – Residential       |
| 3)  | A913             | Services – General           |
| 4)  | A914             | Subdivisions                 |
| 5)  | A915             | Relocations                  |
| 6)  | A916             | Small Unplanned Replacements |
| 7)  | A917             | Lines Safety Reports         |
| 8)  | A921             | Meter Replacements           |
| 9)  | A922             | Operations Safety Reports    |
| 10) | A901             | Regulatory/Legal.            |

### **Question #11**

**Reference: Exhibit 2/Tab 3/Schedule 1, pages 3 and 4**

- a) Please indicate how the estimated per unit cost of single pole replacement of \$9 - \$11K/pole was determined and how this figure compares with industry benchmark standards.

### **Response**

*The per unit cost of a single pole replacement at \$9 - 11K/pole provided refers to the average on a per pole basis for all the costs associated with a complete neighbourhood rebuild within a urban residential setting as is typical for most of the Thunder Bay area. This includes all engineering, material, labour, contracts, equipment and overheads associated with setting the pole, stringing the conductors, installing hardware, switches, transformation, secondary work and disposals.*

*This figure was originally determined using Thunder Bay Hydro's standard estimating practices and has been confirmed during its 2007 and 2008 capital replacement projects which verified the estimate. This figure is adjusted within the range provided depending on the difficulty and complexity of the specific project.*

*A readily available \$/pole standard for or by utilities is not available to the knowledge of TBH at this time. However in discussions with other progressive utilities that did not actively monitor but could estimate this benchmark; Thunder Bay Hydro's figure compares very well at a similar or lower cost. Additionally when \$/pole was calculated for a project executed this year by a contractor selected via a*

RFP process, similar in scope and complexity to the complete neighbourhood rebuilds the result was \$17.3K/pole.

- b) Please provide a breakdown of the contractor and internal costs included in the Table at the top of page 4 indicating that “Total Overhead Line Replacement Cost” is estimated to be \$104.89M.

**Response**

The estimates provided within the table at the top of page 4 were based on Thunder Bay Hydro performing the capital work with its own construction staff and utilizing contractors for smaller components such as vacuum excavation, pole butt removals, rock drilling and some secondary (120/240V) work. As noted in the answers to the first part of this question, where Thunder Bay Hydro has contracted out the entire scope of work; per unit costs have been higher than our recent complete rebuild projects. However, Thunder Bay Hydro plans to contract out some work going forward and will continue to monitor its per unit cost against that of contractors.

*Replacement of TBH Existing Overhead Line/Transformer Assets*

| <b>Asset Type</b>                           | <b>km of Asset</b> | <b>Estimated Replacement Cost (\$000/km)</b> | <b>Estimated Contractor Component (\$000,000)</b> | <b>Replacement Cost (\$000,000)</b> |
|---|--------------------|--|---|-------------------------------------|
| Five Circuits/Pole                          | 0.08               | \$713  | \$0.001   | \$0.06                              |
| Four Circuits/Pole                          | 1.96               | \$594  | \$0.029   | \$1.16                              |
| Three Circuits/Pole                         | 16.16              | \$475  | \$0.211   | \$7.68                              |
| Two Circuits/Pole                           | 79.45              | \$356  | \$0.849   | \$28.30                             |
| One Circuit/Pole                            | 337.41             | \$238  | \$2.604   | \$80.13                             |
| Two Phases/Pole                             | 8.86               | \$200  | \$0.062   | \$1.77                              |
| Single Phase/Pole                           | 362.29             | \$188  | \$2.547   | \$67.93                             |
| Secondary Only                              | 59.49              | \$132  | \$0.314   | \$7.85                              |
| <b>Total Overhead Line Replacement Cost</b> |                    |  | <b>\$6.618</b>                                    | <b>\$194.89</b>                     |

**Question #12**

**Reference: Exhibit 2/Tab 3/Schedule 1, page 11**

- a) Please provide a breakdown of the 2008 computer hardware-related capital expenditures of \$199,555 and explain why the total spending on this is so much higher than such spending in other years, given the three-year lifecycle utilized by TBH for such equipment (except for printers).

**Response**

2008 computer hardware related purchases are as follows:

|                        |               |
|------------------------|---------------|
| I Series Upgrade       | \$ 82,555     |
| Server Replacements    | 10,000        |
| PC Rollouts            | 8,000         |
| Server Rack/Switch/UPS | 9,000         |
| External SAN Storage   | 20,000        |
| Network Tape Library   | 20,000        |
| Printer Replacements   | 20,000        |
| Computer Equipment     | <u>30,000</u> |
| Total                  | \$199,555.    |

Computer equipment spending is higher in 2008 due to the larger valued equipment which are forecasted to be purchased in 2008. Even though TBH uses a 3 year lifecycle for equipment replacement some pieces are equipment are of higher cost and therefore in the years they are replaced expenditures for those years will be increased.

**Question #13**

**Reference:** Exhibit 4/Tab 2/Schedule 1, page 32 and  
Exhibit 4/Tab 2/Schedule 2, page 7

- a) Please provide a breakdown of the dollar value of the cost driver components that resulted in the amounts in Account 5010, Load Dispatching, increasing significantly in each year since 2006.

**Response**

Account 5010 – Load Dispatching has increased since 2006 due to the following factors:

- 2 apprentices were hired in 2005. Therefore in 2006, 2007, 2008 and 2009 there were additional costs such as training, increased supervision and wage and benefit costs. Further, all apprentices require appropriate supervision. As a result whenever an apprentice was on schedule an appropriate supervisor was also on the schedule.
- During 2007 one employee in this department was on extended sick leave. As a result, there was an increase in overtime to compensate for his absence.
- At the end of 2006 of the individuals in the Department was promoted to Supervisor. As a result there was an increase in wages reflected in 2007 to 2009 plus applicable benefits.
- There was a budgeted general wage increase of 4% for 2008 and 2009.

- *There was an additional apprentice budgeted for in 2009 as part of Thunder Bay Hydro's succession planning.*

*Your question is referenced to Exhibit 4/Tab 2/Schedule 2, page 7. We question why this particular item was referenced here. Information discussed in this particular exhibit has no bearing on costs reported in 5010.*

#### **Question #14**

**Reference: Exhibit 4/Tab 2/Schedule 4, pages 1 and 2**

- a) Please explain the role of the personnel employed as "Management/Part-time."

#### **Response**

*The two employees that fit this category include:*

- 1. Communications & Events Coordinator who is responsible for developing/coordinating/assisting with the utility's internal and external public relations and advertising programs, as well as for coordinating Corporate events.*
- 2. Administrative Assistant, Human Resources & Safety who is responsible for performing clerical duties in support of the Division's initiatives, such as the scheduling of training and filing of all related correspondence and records, and sick leave and vacation record maintenance.*

#### **Question #15**

**Reference: Exhibit 4 /Tab 2/Schedule 4, page 1 and page 11, Table 3**

- a) Please reconcile the headcounts for "Unionized" in 2008 and 2009 shown on page 1 with the FTEs shown in Table 3 in 2008 and 2009.

#### **Response**

*Numbers reported on page 1 represent the applicable head count for each category by year. Numbers reported in Table 3 represent the actual FTE during the year of each employee in each category. Table 3 also encompasses the forecasted progressions throughout the year which may have employees moving to new categories during the year. As a result we feel providing such a reconciliation would be too complex.*

- b) Please reconcile the headcounts for "Unionized/Part-time" in 2008 and 2009 shown on page 1 with the FTEs shown in Table 3 in 2008 and 2009.

#### **Response**

*See response to a) above.*