March 13, 2009

BY EMAIL & BY COURIER

Ms. Kirsten Walli
Board Secretary
Ontario Energy Board
2300 Yonge St, Suite 2701
Toronto ON M4P 1E4

Dear Ms. Walli:

Board File No. EB-2008-0245
Thunder Bay Hydro Electricity Distribution Inc. – 2009 Rates Rebasing Application
Argument of Energy Probe

Pursuant to Procedural Order No. 2, issued by the Board on January 26, 2009, please find two hard copies of the Argument of Energy Probe Research Foundation (Energy Probe) in the EB-2008-0245 proceeding. An electronic version of this communication will be forwarded in PDF format.

Should you require additional information, please do not hesitate to contact me.

Yours truly,

David S. MacIntosh
Case Manager

cc: Robert Mace, Thunder Bay Hydro (By email)
Randy Aiken, Aiken & Associates (By email)
Intervenors of Record (By email)

EB-2008-0245

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

AND IN THE MATTER OF an application by **Thunder Bay Hydro Electricity Distribution Inc.** for an order approving just and reasonable rates and other charges for electricity distribution to be effective May 1, 2009.

ENERGY PROBE RESEARCH FOUNDATION
("ENERGY PROBE")

ARGUMENT

March 13, 2009

THUNDER BAY HYDRO ELECTRICITY DISTRIBUTION INC.
2009 RATES

EB-2008-0245

ARGUMENT OF ENERGY PROBE RESEARCH FOUNDATION

INTRODUCTION

This is the Argument of the Energy Probe Research Foundation ("Energy Probe") related to the setting of 2009 rates for Thunder Bay Hydro Electricity Distribution Inc. ("Thunder Bay") effective May 1, 2009.

This Argument has been structured to reflect the major components of the Thunder Bay evidence. Where readily available, Energy Probe has attempted to provide the impact of its submissions on the revenue requirement of Thunder Bay. However, in order to minimize intervenor time and costs, a comprehensive impact analysis has not been undertaken. If the Board accepts any or all of the Energy Probe submissions, it is assumed that the direct and indirect impacts will be determined by Thunder Bay and reviewed by intervenors and Board Staff through the associated draft rate order. An example of a comprehensive impact analysis would include the direct impact on rate base of a reduction in $10,000 in OM&A expenses and a $25,000 reduction in capital expenditures. Depreciation expense would also be directly impacted by the capital expenditure change. The indirect impacts would include the change in total cost of capital and taxes (due to CCA, interest and OM&A expense changes) and the change in the working capital allowance.

Thunder Bay is forecasting a significant deficiency. As shown in Exhibit 6, Tab 1, Schedule 1, the gross revenue deficiency is $1,414,077 on forecasted revenues of $17,907,651. The deficiency represents an increase in total revenues of nearly 8%. As part of the responses to the supplemental interrogatories, Thunder Bay has made a number of proposed changes to the various components of the revenue requirement. Based on these changes, the revised gross revenue deficiency is $1,117,815, or an increase in revenues of 6.2%.

ADJUSTMENTS TO THE COST OF SERVICE APPLICATION

On March 6, 2009 Thunder Bay filed a one page table showing a number of adjustments to the calculation of the revenue deficiency as part of its response to the second round of interrogatories. This table is labeled "Adjustments to Thunder Bay Hydro's 2009 Cost of Service Application". Energy Probe refers to this as the "Adjustments" table. While this table is helpful, some of the figures provided cannot be easily traced directly back to the interrogatory responses referenced. Energy Probe submits that further clarification should be provided by Thunder Bay to reflect the adjustments and to indicate where in the evidence the figures used can be found and/or how they have been calculated based on data found in the evidence.

RATE BASE

a) Working Capital

Energy Probe accepts the approach taken by Thunder Bay to calculate the working capital allowance component of rate base, with the adjustments noted below. However, Energy Probe continues to believe that the 15% methodology may be overstating the required allowance for working capital and recommends that the Board direct Thunder Bay to prepare a working cash (lead lag) study for its next rebasing application.

i) Cost of Power

Energy Probe submits that the cost of power component of the working capital allowance should be updated to reflect the most recent cost of power forecast presented to the Board. It should also be updated to reflect the forecast of network and connection transmission services provided by Hydro One Networks.

As shown in Exhibit 2, Tab 4, Schedule 1, the allowance for working capital associated with the cost of power (including transmission costs) represents nearly $11.0 million of rate base, which in turn is more than 14.5% of the total forecasted rate base for the distributor. Given the magnitude of the influence of the cost of power on rate base and the resulting revenue requirement Energy Probe submits that the Board should direct

Thunder Bay to update the calculation based on the most recent information available to the Board at the time of its Decision. Thunder Bay accepts that the costs should be updated to reflect the most current RPP price available at the time of the Board's Decision (Board Staff Interrogatory # 24c).

In the response to Energy Probe Interrogatory # 9, Thunder Bay updated the cost of power and transmission network and connection prices to reflect the most recent information available. Because the Tier 1 and Tier 2 price increases were somewhat offset by the "remainder" price, the net impact on the working capital allowance is an increase of only $1,766.

Energy Probe supports the methodology used by Thunder Bay to calculate the commodity component of the cost of power. Thunder Bay has used the Tier 1 and Tier 2 commodity prices for RPP customers and the "remainder" price for all non-RPP customers (Energy Probe Interrogatory # 9 and # 34). This "remainder" price is the forecast wholesale electricity price reported in the Regulated Price Plan Price Report. Energy Probe submits that the estimation of the kWh's that are associated with the Tier 1 and Tier 2 volumes for RPP consumers and the kWh's associated with non-RPP consumers and the application of the appropriate prices to these different sets of volumes to calculate the cost of power component of the working capital allowance is appropriate.

ii) MUSH Sector Adjustment

As part of the response to Energy Probe Interrogatory # 34, Thunder Bay indicated that it had made an error in the calculation of the cost of power component of the working capital allowance that relates to the fact that the MUSH sector will not be eligible for the RPP beginning May of 2009. Energy Probe accepts the calculation of a reduction of $475,629 in the working capital component of rate base as shown in the response to the interrogatory as being appropriate.

iii) Amortization Removal

Thunder Bay has allocated an amount of $295,567 of depreciation expense to OM&A expenses (Energy Probe Interrogatory #b). This amount has then been included in the OM&A controllable costs used to calculate the working capital component of rate base. This is confirmed in the response to part (c) of the Energy Probe interrogatory.

Energy Probe submits that depreciation expense is not a controllable expense and should be removed from the calculation of the working capital allowance. Thunder Bay appears to accept this removal, as this has been reflected in the "Adjustments" table and reflects a reduction in working capital of $44,335, which is 15% of the reallocated depreciation expense.

iv) Changes to Controllable Expenses

Energy Probe submits that if the Board makes any adjustments to the controllable OM&A expenses in its Decision, these changes should be reflected in the calculation of the working capital component of rate base.

b) Capital Expenditures

Thunder Bay's original capital expenditure forecast for 2009 was $7,620,832 (Exhibit 2, Tab 2, Schedule 1). This is significantly higher that the capital expenditures in 2006 of $5,832,976, in 2007 of $4,548,383, or the $5,530,013 forecast for 2008.

i) PCB Removal Plan Adjustment

Based on the response to Board Staff Interrogatory #9, Thunder Bay is proposing to make adjustments to the PCB plan and the ARO recovery. These adjustments are shown in the "Adjustments" table filed by Thunder Bay with the responses to the supplemental interrogatories.

The first of these adjustments related to capital expenditures is a net reduction in capital expenditures in 2009. The impact on rate base, as shown in the "Adjustments" table is a reduction in rate base of $11,270 (from $98,980 to $87,710), with an associated reduction in amortization expenses of $460. Energy Probe understands that these changes are the result of the revised PCB removal plan provided in the response to Board Staff Interrogatory #9c. Energy Probe accepts these changes related to the capital expenditures in 2009.

The "Adjustments" table also reflects a change related to the asset retirement obligations ("ARO"). In particular, the rate base impact in 2009 is an increase from $41,931 to $166,297, or $124,366. There is an accompanying decrease in the amortization and accretion expense from $65,100 to $63,720. It is Energy Probe's understanding that this increase relates the longer period over which expenses will be incurred as the length of the removal program has been increased from 6 years to 12 years. Given that the net impact on the revenue requirement is very small, Energy Probe accepts this change.

ii) Kam River Crossing – 2008

Thunder Bay had three major infrastructure projects forecast for 2008, as shown in Table 1 of Exhibit 2, Tab 2, Schedule 3. Based on the response to Energy Probe Interrogatory # 4, the Tarbutt St. and Hill St. projects were completed in 2008 and put into service as forecast. However, the Kam River crossing, which has a total capital expenditure of $801,129, has been delayed and was not completed as per schedule. The project is now scheduled for completion in early 2009.

As a result of the delay, Energy Probe submits that the Board should direct Thunder Bay to recalculate the 2009 rate base to reflect that this $800,000 + expenditure is not reflected in the 2009 opening balance of the assets in service. Any expenditures made to the end of the 2008 should be classified as work in progress. Work in progress is not included in the calculation of rate base. The capital expenditures would be reflected in the capital additions for 2009.

Energy Probe estimates that the deferral of this expenditure (for rate base purposes) from 2008 to 2009 would reduce depreciation expense by $16,023. This figure is calculated based on a depreciation rate of 4% applied to the $801,129 cost. In the evidence as filed, the depreciation for 2009 would be for a full year, or $32,045. However, since the asset will now be placed into service in 2009 rather than in 2008, only one-half of the depreciation expense would apply to 2009, or $16,023. The corresponding reduction in rate base would be approximately $376,531 (See Appendix A). There would also be corresponding reduction to the CCA calculation for income tax purposes.

iii) Contingency Amounts

The evidence (Exhibit 2, Tab 2, Schedule 3) indicates that a "sizeable contingency" was included in the estimated cost for the Frankwood Rebuild that took place in 2007. This contingency was one of the contributing factors for this project being substantially under budget. This contingency was included because this was the first very large scale rebuild undertaken by Thunder Bay. The evidence then goes on to indicate that Thunder Bay has undertaken an extensive re-organization of the Power System Division and its process so that there is improved coordination and efficiencies among groups. Further, this project has redefined the way that budgets for large scale projects are done.

Thunder Bay has included a substantial amount in the 2009 capital expenditure forecast for contingencies. As shown in the response to Energy Probe Interrogatory #5a & b, there is a total of $417,014 included in the 2009 capital expenditure forecast $7,141,622 shown in Table 2 of Exhibit 2, Tab 2, Schedule 3. These contingencies represent nearly 6% of the forecasted expenditures.

Energy Probe submits that the Board should not allow contingencies to be included in the capital expenditure addition forecast. Rate base should be calculated based on the best available forecast for capital expenditures. Thunder Bay's best forecast for these capital projects, is the forecast excluding any contingency. Ratepayers should not be expected to pay for a return on a contingency.

The impact of the removal of these contingencies on rate base is a reduction of approximately $204,337, being the average of the opening and closing net book value. The depreciation expense would also decline by approximately $8,340. There would also be corresponding reduction to the CCA calculation for income tax purposes.

iv) Contributions and Grants

Thunder Bay recorded contributions and grants (account 1995) of approximately $1.045 million in 2006 and $0.953 million in 2007. Thunder Bay forecast an amount of $0.646 million for 2008 and $0.650 million for 2009. These figures are found in Exhibit 2, tab 2, Schedule 1, Tables 1 through 4. In the response to Energy Probe Interrogatory # 8f, Thunder Bay indicates that the significant drop in contributions and grants in 2008 and 2009 as compared to those recorded in 2006 and 2007 was due to the fact that 2006 and 2007 included both cash contributions and contributions in-kind, while for the forecast for 2008 and 2009 Thunder Bay only forecast cash contributions. The response to Energy Probe Interrogatory #43 indicates that contributions in kind for 2006 were more than $440,000 and for 2007, they were more than $260,000.

Energy Probe submits that the contributions and grants forecast for 2009 of $650,000 is understated and should be increased. In particular, it should be increased by a significant amount.

As noted above, Thunder Bay forecast contributions and grants for 2008 to total $646,000. This was cash only and did not include contributions in kind. The response to Energy Probe Interrogatory #8g shows that the year-to-date September, 2009 contributions and grants totaled $1,118,350. Moreover, as shown in the response to Energy Probe Interrogatory # 43b, the total cash contributions to December 31, 2008 are $1,095,369. In other words, the cash contributions alone are almost $450,000 above forecast. Contributions in kind would be over and above this amount, but they have not yet been fully reviewed and costed.

Energy Probe submits that the Board should direct Thunder Bay to provide the estimate of the contributions in kind received in 2008. This value, along with the $450,000 in cash contributions that were over and above the forecast for 2008 should be used to reduce the opening balance for the rate base calculation for 2009. For example, if the contributions in kind were valued at $250,000, similar to the value in 2007, there would be a reduction in rate base for 2009 of nearly $700,000 (excluding the impact of accumulated depreciation). This is a significant reduction to rate base based on 2008 actual contributions.

In addition, Energy Probe submits that the 2009 forecast for contributions and grants should be increased from the current $650,000 to same level as that for 2008, including the value of contributions in kind. Rate base for 2009 would be reduced by approximately one-half of this amount, again net of the impact of accumulated depreciation. Thunder Bay has under forecast the cash contributions for 2008 and this should be reflected in an increase in 2009. Thunder Bay has not forecast any contributions in kind in 2009, but the evidence indicates significant amounts in 2006 and 2007 as well as some yet to be determined level in 2008. A forecast of $0 for contributions in kind is not justified.

OM&A EXPENSES

Thunder Bay has proposed a number of changes to the OM&A expenses from those originally filed. These changes are shown in the "Adjustments" table filed by Thunder Bay. Energy Probe supports these adjustments, with the exceptions/additions noted below.

a) Board of Director Costs

Thunder Bay has included the entire Board Honorarium for Thunder Bay Hydro Corporation (Energy Probe Interrogatory # 18). Thunder Bay Hydro Corporation is the holding company that owns the electricity distribution company, along with other affiliates (Exhibit 1, Tab 1, Schedule 13).

Energy Probe submits that it is not appropriate for the ratepayers of a regulated utility to pay for the Board of Director costs for the parent company.

In the response to Energy Probe Interrogatory #37, Thunder Bay indicates that these costs will be removed in the final reconciliation of adjustments. This reduction in OM&A costs is reflected in the "Adjustments" table filed by Thunder Bay.

b) PCB Plan Change

Thunder Bay had originally included $228,000 in OM&A costs associated with the original PCB removal plan. This estimate was based on a three year average of the forecasted OM&A costs (Board Staff Supplemental Interrogatory #3c). Energy Probe agrees with the removal of the $228,000 amount.

The revised PCB removal plan reflects OM&A costs of $148,333, as shown in the "Adjustments" table. This figure is based on the three year average (2009 through 2011) of the OM&A costs that can be calculated based on the figures provided in response to Board Staff Interrogatory #9. In particular, the OM&A expense for 2009 is $201,000 ($380,000 less $179,000 in capital), while for 2010, 2011 and 2012, the OM&A expense is $122,000 ($230,000 less $108,000) in capital. The average of the 2009 through 2011 figures is $148,333. The three year period was chosen to reflect the length of time that the current rates would be the base rates for the IRM period. However, this period is actually four years as determined by the Board – the rebasing year followed by three years under IRM. Energy Probe, there submits that the average OM&A expense to be built into the 2009 revenue requirement should the four year average for 2009 through 2012. This average works out to $141,750, rather than $148,333. This results in an additional reduction to OM&A costs of $6,583.

c) One Time Meter Reading Costs

Thunder Bay has included meter reading costs of $255,000 in the 2009 budget. These costs are forecast to decrease to $125,000 in 2010 and to $25,000 in 2011 and after as a result of the Smart Meter implementation plan (Board Staff Interrogatory #18).

As shown in the "Adjustment" table, Thunder Bay has reduced this OM&A expense to $135,000. This is the average over the three years 2009 through 2011. Energy Probe submits that the average should be over a four year period, 2009 through 2012, for the reasons noted above. The IRM period for Thunder Bay, including the rate rebasing year, will be four years long. The four year average of these meter reading costs is $107,500 (2012 cost is $25,000). This results in a further reduction of $27,500.

d) 2009 Rate Rebasing Costs

Thunder Bay is forecasting a total cost associated with the 2009 rate rebasing application of $99,000 (Energy Probe Interrogatory #39b). Thunder Bay has included one-third of this amount, or $33,000 in the 2009 revenue requirement. Energy Probe submits that the cost of this application should be recovered over a four year period since base rates determined in this case will be used for the current rebasing year and the following three years under IRM. This reduces the amount in the revenue requirement to $24,750, a reduction of $8,250.

e) Meter & Service Costs

Energy Probe accepts the rationale for the reduction in the meter & service costs from $600,000 to $425,000, as shown in the "Adjustments" table. It is Energy Probe's understanding that this decrease is related to capitalization of costs related to the installation of smart meters in 2009. The $425,186 cost shown in the "Adjustments" table is a three year annualized figure. This reflects Thunder Bay's proposal to annualize this cost "over the three years to next rebasing" (Board Staff Interrogatory # 15b, page 17).

To be consistent with the approach taken elsewhere, Energy Probe submits that this should be a four year annualized figure to match the four year term of the IRM currently in place. Energy Probe does not have the information to calculate the adjustment needed and submits that the Board should direct Thunder Bay to provide the information used to calculate the cost based on a four year average.

f) Overall Increase in OM&A Costs

Thunder Bay is proposing an increase in overall OM&A costs in 2009 of $421,483 or 3.5% over the 2008 forecasted levels. These figures can be determined from the Controllable Costs sub-total in Table 1 of Exhibit 4, Tab 1, Schedule 1.

The increase forecast for 2009 is on top of an increase forecast for 2008 of $911,242 from the 2006 level. This increase is equivalent to an annual average increase of more than 4.0%.

Energy Probe also notes the year-to-date OM&A expenses for the year-to-date September 2008 period are nearly $350,000 or 3.9% below the corresponding period for 2007. However, Thunder Bay has forecast a decrease in OM&A costs in 2008 of only $132,000 or 1.1% as compared to the 2007 levels.

Based on the "Adjustments" table, Thunder Bay appears to be accepting a reduction in the OM&A costs of $389,543. This figure does not include the $295,567 transfer from OM&A to amortization. Energy Probe accepts these changes, with the exceptions noted earlier.

With this subsequent reduction of nearly $390,000 in OM&A costs the increase in 2009 over the forecast 2008 figure is now only approximately $32,000 or 0.3%. Given that the costs forecast for 2008 may be high, the increase in 2009 may actually be higher than this amount.

In addition to the reductions shown by Thunder Bay in the "Adjustments" table, Energy Probe submits that the additional reductions detailed in parts (b) through (e) above should also be reflected in the OM&A forecasts. All of these reductions ($6,583 related to the PCB plan, $27,500 related to meter reading expenses, $8,250 related to the rebasing application costs), which total $42,333, reflect a four year IRM period rather than three years as used by Thunder Bay. In addition to these changes, there is the unknown change related to the meter and service costs.

Energy Probe submits that the reductions to OM&A as proposed by Thunder Bay in the "Adjustments" table, supplemented by the additional reductions noted in the preceding paragraph are appropriate.

DEPRECIATION & AMORTIZATION

a) Over Amortization

In response to Energy Probe Interrogatory # 32 (Supplemental) Thunder Bay acknowledged that it had over estimated the depreciation expense associated with accounts 1920 – Computer Equipment and 1925 – Computer Software. Thunder Bay agreed, stating that this correction would be adjusted in the final reconciliation of adjustments.

As shown in the supplemental interrogatory response to Energy Probe noted above, the rate filing depreciation expense for these two accounts totaled $310,418. The components of this total can be seen in Exhibit 2, Tab 2, Schedule 1, Table 4. The corrected total, as calculated by Thunder Bay using the same three year amortization for computer equipment and computer software as in the original filing is $218,791. The difference of $92,627 is the difference due to the estimation of amortization identified by Thunder Bay in the Energy Probe response.

Energy Probe submits that the depreciation expense claimed by Thunder Bay as part of the revenue requirement in this application should be reduced by the $92,627 over estimate of depreciation for computer hardware and software. This reduction in depreciation expense will reduce the accumulated depreciation for 2009, resulting in an increase in rate base of one-half of the reduction in depreciation, or $46,314. This change will also have to be reflected in the income tax calculation as it will increase the utility income before income taxes and reduce the additions to accounting income.

b) Computer Hardware

Thunder Bay has amortized account 1920 – computer hardware over a three year period, rather than the five year period specified in Appendix B of the Board's 2006 Electricity Distribution Rate Handbook (Board Staff Interrogatory # 25b). Further, Thunder Bay has not provided any documentation to support a depreciation rate of 33.3% (Board Staff Supplemental Interrogatory #10a). Neither has Thunder Bay requested or received approval from the Board for the depreciation rate for computer hardware utilized.

Energy Probe submits that Thunder Bay should be directed to use the 5 year amortization period for computer hardware, as stated in Appendix B of the 2006 Electricity Distribution Rate Handbook. Thunder Bay has not filed any study or any other information that has been reviewed by intervenors or the Board. The Board has not approved the rate of 33.3% used by Thunder Bay.

In the response to Energy Probe Interrogatory # 32b (Supplemental) Thunder Bay provided a calculation of the 2009 depreciation expense based on the 3 year amortization used and the 5 year amortization requested by Energy Probe. The reduction in the depreciation expense is shown as $9,638. However, Energy Probe submits that the calculation using the 5 year amortization period is incorrect. In its calculation, Thunder Bay has recalculated the depreciation expense for capital additions in this category back to 2004. Energy Probe submits that only the calculation for the 2009 expense should reflect the 5 year amortization period. Thunder Bay should not go back into history for

2004 through 2008 and change the depreciation expense, the accumulated depreciation, net book value and capital tax historical figures. It used a higher depreciation rate for those years without Board approval. It should not now go back and change that.

Energy Probe submits that the depreciation expense for computer hardware should be calculated for 2009 based on the application of the 20% rate that reflects a 5 year amortization applied to the gross asset value of the assets acquired in the 2004 through 2009 period that are not fully depreciated, based on the depreciation rates actually used by Thunder Bay in those years. This impacts the calculation provided by Thunder Bay in the Energy Probe Interrogatory #32b (Supplemental) response as follows. The 2004 expense of $9,148.08 reflects the final year of depreciation for the assets acquired in 2004 (and depreciated at a 20% rate). As a result this amount is the appropriate figure to be used for 2009 with the 5 year amortization, not the $14,790.27 figure provided by Thunder Bay. The assets acquired in 2005 have been fully depreciated at the end of 2008 as illustrated in the 3 year calculation. As a result there is no depreciation expense that should be included in 2009. Thunder Bay has calculated a 2009 amount of $17,500.80. 2009 would be the final year for depreciation for the assets acquired in 2006 based on the 3 year amortization period used by Thunder Bay. This figure is shown to be $11,359.04 in the 3 year calculation. As this amount is less than 20% of the asset cost in 2006 this amount should be used, not the $16,643.48 used by Thunder Bay. Energy Probe agrees with the 2007, 2008 and 2009 figures provided by Thunder Bay in the 5 year calculation. The table below summarizes the appropriate depreciation expense for 2009 for computer hardware.

Year of Acquisition	Additions ($)	2009 Depreciation	Rationale
2003	106,218.09	0.00	Fully depreciated
2004	144,524.94	9,148.00	Remaining net book value
2005	87,504.02	0.00	Fully depreciated
2006	83,217.40	11,359.00	Remaining net book value
2007	41,277.12	8,255.42	As calculated
2008	205,555.00	41,111.00	As calculated
2009	77,310.00	7,731.00	As calculated
Total		77,604.42	

Thunder Bay has calculated the 2009 depreciation using a 5 year amortization period to be $106,032. Energy Probe submits that the figure of $77,604 is the appropriate amount to be included in the 2009 revenue requirement as it reflects the application of the proper rate to the current asset values and reflects the actual level of depreciation booked in past years under the rate used for those years. The resulting reduction in depreciation expense is $28,428.

c) Computer Software

Thunder Bay is depreciating computer software over a three year period (Board Staff Interrogatory # 25b). Energy Probe submits that the depreciation expense should be based on a five year amortization period.

The 2006 EDR Handbook does not include a specific rate that is to be used for account 1925. However, the only other IT account is account 1920 for computer hardware and the depreciation rate is 20%, based on a five year life for assets in this account.

Energy Probe has reviewed a number of 2008 and 2009 cost of service applications and has found that most distributors have used a 20% depreciation rate for all IT assets, including computer software. Energy Probe believes that a consistent approach should be applied across distributors and therefore recommends the use of a 20% (five year life) for computer software.

Based on the calculations provided in the response to Energy Probe Interrogatory # 32b (Supplemental) changing the amortization period from three years to five (changing the depreciation rate from 33.3% to 20%) would reduce the 2009 depreciation expense for this account from $103,122 to $61,586, for a reduction of $41,536. The calculation of the depreciation expense of $61,586 is shown in the following table and reflects the same approach utilized in part (b) above. In particular, based on the 3 year amortization period used by Thunder Bay, all software purchases in 2005 an earlier would be fully depreciated at the end of 2008. The purchases in 2006 have a net book value at the

beginning of 2009 that is less than a full year of depreciation so it is limited to the remaining net book value.

Year of Acquisition	Additions ($)	2009 Depreciation	Rationale
2003	0	0.00	Fully depreciated
2004	5,166.03	0.00	Fully depreciated
2005	201,600.14	0.00	Fully depreciated
2006	85,087.34	14,181.00	Remaining net book value
2007	95,892.34	19,178.47	Calculated using 20%
2008	87,600.52	17,520.10	Calculated using 20%
2009	107,068.66	10,706.87	Calculated using 20% and half year rule
Total		61,586.44	

d) Minor Changes

Energy Probe submits that a number of minor adjustments should be made to the depreciation expense, and in some cases including the resulting net book value used to determine rate base based on the reply to Board Staff Interrogatory # 25.

First, for account 1935 – Stores Equipment, the claimed depreciation expense of $582 should be denied. Thunder Bay has not depreciated this account in 2006, 2007 or 2008. Had they done so, the account would be fully depreciated for 2009 and no depreciation expense would be calculated. Because this account would have been fully depreciated by the end of 2008, the opening net book balance in 2009 should be $0, not $582. This would result in a reduction in rate base of $291.

Second, for account 1950 – Power Operated Equipment, no depreciation expense is forecast for 2008, despite there being a positive net book value. There should be a 2008 depreciation expense of $500. This would have no impact on the depreciation expense for 2009, but this would impact the opening balance in 2009 for rate base calculation purposes and reduce the 2009 rate base by the full $500.

Third, for account 1940 – Tools, Shop and Garage Equip., Thunder Bay is amortizing $42,000 over 5 years instead of the 10 year period as specified by the Board. This results in an overstatement in 2009 of the depreciation expense by $4,200. Reducing this depreciation expense would increase rate base by $2,100.

In total, these three adjustments total a reduction to depreciation expense of $4,782. Rate base would be increased by $1,309.

e) Changes to Gross Assets

Thunder Bay has made changes to the capital expenditure forecast for 2009. These changes, along with any further changes that may result from the Board's Decision in this matter, should be reflected in changes to the depreciation expense calculated for the 2009 test year.

TAXES

Energy Probe submits that Thunder Bay should calculate its income and capital taxes using the most recent information available, including tax rates that are expected to be applicable to 2009. This would include any changes that have resulted from the recent federal budget. It would also include any other changes as the result of the provincial budget that is known to the Board and other parties when the Decision is issued. Further the appropriate tax rates should be applied. For example, there are different provincial tax rates when the taxable income is below $1.5 million than when it is above this level.

a) Capital Tax

Energy Probe does not agree with the calculation used by Thunder Bay to forecast the capital tax in 2009 (Exhibit 4, Tab 3, Schedule 1) of $10,499. In particular, Energy Probe does not agree with the total rate base figure of $90,318,279 shown in this calculation.

As shown in Exhibit 2, Tab 1, Schedule 1, the total rate base for 2009 is forecast to be $75,169,648, substantially less than the amount used in the capital tax calculation.

Thunder Bay has inflated rate base by an average of the amount of taxable capital in excess of rate base in 2006 and 2007 (Energy Probe Interrogatory # 24d). This addition adds more than $15 million to the taxable capital of the distributor.

However, as shown in the response to Energy Probe Interrogatory # 41, this $15 million is made up amounts related to regulatory assets, employee future benefits, UCC differences, goodwill and customer deposits. Energy Probe submits that the Board should deny the recovery of any capital tax associated with these amounts because the costs associated with these items are reflected elsewhere in the revenue requirement, or should not be reflected in the revenue requirement at all. For example, the regulatory asset balances are attracting interest costs at the deemed Board interest rate. Similarly, the interest costs associated with customer deposits are included in the OM&A costs. Employee future benefits are not a current period expense and should not add to the revenue requirement in the test year. No costs associated with goodwill should be paid by ratepayers.

Removing the above noted additions to taxable capital and using the rate base as the starting point in calculating the capital tax would reduce this expense from $169,466 (Exhibit 4, Tab 3, Schedule 1) to $135,382 (Energy Probe Interrogatory #24e).

Energy Probe further submits that the rate base changes that result from the change in the forecasted capital expenditures, changes in the working capital allowance and any further changes in capital expenditures and/or OM&A costs as determined by the Board should also be reflected in the calculation of the capital tax since these changes will have an impact on the rate base calculation.

Energy Probe accepts the tax rate of 0.225% used by Thunder Bay in this calculation for 2009.

b) Income Tax

i) Tax Rates

Thunder Bay used a total tax rate of 30.72% in the calculation of income taxes in 2009 (Exhibit 4, Tab 3, Schedule 1, Table 2). This rate included a federal tax rate of 19.00% and a provincial tax rate of 14.00%, as well as an Apprenticeship Tax Credit of (2.28354%). Energy Probe agrees with the federal and provincial tax rates, but not with the application of the apprenticeship tax rate.

The apprenticeship tax credit rate is calculated by dividing the total apprenticeship tax credit by the regulatory taxable income to arrive at the 2.28354%. However, this rate will change if the regulatory taxable income changes. The 2009 Apprenticeship Tax Credits total $59,524, as shown in the response to Energy Probe Interrogatory # 24g. This level of tax credits is independent of the level of regulatory taxable income.

Energy Probe submits that Thunder Bay should use a corporate tax rate of 33.0% (this is the tax rate applicable to corporations with taxable income in excess of $1.5 million) and then deduct the $59,524 in apprenticeship credits from the resulting figure.

ii) Impact of the Federal Budget

The January 27, 2009 federal budget introduced a number of changes that may have an impact on the regulatory taxable income in 2009. In particular, there is a change that increases the CCA deduction for computers and system software in Class 50 acquired after January 27, 2009 and before February, 2011 from 55% to 100%. It also eliminates the half-year rule. In other words, businesses can fully deduct the cost of these computers and systems software in 2009.

As shown in Exhibit 4, Tab 3, Schedule 3, Thunder Bay has forecast the addition of $77,310 to this Class in 2009 (Thunder Bay has identified this Class as Class 45.1). This results in a deduction to taxable income of $21,260 ($77,310 x ½ x 55%). The allowable deduction is now the full $77,310, or a reduction in taxable income of $56,050. This

would increase the CCA deduction in 2009 shown in Table 2 of Exhibit 4, Tab 3, Schedule 1 from $4,405,206 to $4,461,256.

iii) Update to Regulatory Taxable Income

Energy Probe submits that if the regulatory taxable income is changed as a result of the Board's Decision and/or adjustments that Thunder Bay has proposed to make, then the income tax calculation should also be updated to reflect the revised level of regulatory taxable income.

LOSS ADJUSTMENT FACTOR

Thunder Bay originally calculated the distribution loss factor to be 1.0478 with a corresponding total loss factor of 1.0536 (Exhibit 4, Tab 2, Schedule 6). However, as shown in the response to Energy Probe Interrogatory # 23, Thunder Bay indicates that it made an error in the calculations. As shown in the response to the interrogatory, the correct distribution loss factor is 1.0390 with an associated total loss factor of 1.0448. Energy Probe submits that this corrected loss factor is the one that should be utilized.

REVENUES

a) Forecast Methodology

i) A Flawed Methodology

Thunder Bay uses a combination of a top down and a bottom up approach to preparing a forecast of volumes by rate class. The top down methodology involves the use of an econometric model to forecast total system purchases. This forecast is a normalized forecast. Energy Probe has a number of submissions on the econometric equation used in this top down approach in section (ii) below. Energy Probe also has a number of adjustments that it believes should be made to arrive at the total energy billing forecast. These suggested adjustments are detailed in part (b) below.

The bottom up approach takes a projection of the number of customers by rate class and multiplies it by a projection of the average use by rate class to arrive at a non-normalized volume forecast. The weather sensitive rate classes (or portions thereof) are then adjusted so that the total bottom up forecast by rate class in aggregate equals the normalized total energy billing forecast from the top down approach.

Energy Probe has a number of concerns with this approach. Suggestions for future forecast methodologies are presented in section (iii) below.

The major concerns with this methodology that forces the rate class non-normalized forecasts to add up to the normalized total energy billing forecast are summarized below.

- The weather adjustment shown in Table 16 of Exhibit 3, Tab 2, Schedule 1 is done to force the sum of the non-normalized forecasts to add up to the normalized total energy billing forecast that is derived through the use of the econometric equation. There are two flaws with the methodology used. The first flaw assumes that the weather adjustment is proportional to the weather sensitive kWh forecast for each of the rate classes. For example, in Tables 15 & 16, for 2009, the residential class has 38% of the weather sensitive energy, so the weather adjustment assigned to the residential class is 38% of the total adjustment needed to bring the two forecasts into agreement (i.e. 13.8 GWh). There is no reason to expect that residential customers have the same level of sensitivity to the weather as do GS < 50 kW or GS 50 to 999 kW or GS 1,000 to 4,999 kW customers. Indeed, it would be expected that all four classes have different levels of sensitivity to the weather.

- Second, the use of non-normalized average use forecasts for the weather sensitive accounts will bias the forecast because the impact of weather on average use is different by rate class. A change of one degree day or heating degree days cannot be expected to have the same proportional impact on the average use of the weather sensitive customer classes. This bias can be seen by looking at the forecasts proposed by Thunder Bay for the residential and GS < 50 kW classes. Thunder Bay proposes to use a forecast of annual kWh usage per customer that is based on the growth rates in use over the 2000 through 2007 period. The average use for the GS < 50 kW class declined on average by 0.23% over this period; residential use decreased on average by 0.18%; The GS 50 to 999 kW average use declined by 0.61%; the GS 1,000 to 4,999 average use increased by 1.49% (Table 12, Exhibit 3, Tab 2, Schedule 1). Yet all of these customer classes experienced the same weather conditions over this period. This illustrates that historically, the impact of weather on these four classes of customers is quite different from one another.

- If there is change in the average use for a class from that originally forecast, this change does not have an impact on the total energy billing forecast using the Thunder Bay methodology. This is a perverse result. As an example, the response to Board Staff Interrogatory # 38 illustrates this result. In this interrogatory response, an increase in the average use per customer in some of the rate classes increases the weather normalized billed energy forecast in 2009 for these rate classes. However, because the total weather normalized billed energy forecast for all rate classes does not change under the forecasting methodology employed by Thunder Bay, the volumes for other classes decline. In particular, the residential and GS < 50 kW volumes increase. Since the number of customers for both of these rate classes is unchanged, the underlying increase in these volumes implies a increase in the normalized average use for each of the customer groups. The impact of this increase in normalized average use results in lower volumes for streetlights, sentinel lights, unmetered loads, etc. This is not a logical result.

  A similar illogical result happens when the number of customers is changed, as shown in the response to Board Staff Interrogatory # 39a. In particular, an increase in residential, GS < 50 kW and GS 50 to 999 kW customers actually decreases the volumes forecast for each of these classes. Increased customers in the other rate classes increase the volumes associated with those class. This perverse result is because the total billed energy is constrained and does not change. The weather normalized adjustment forces the volumes associated with these weather sensitive classes to decline because volumes for the non-weather sensitive accounts increase. In other words, an increase in the number of customers in any class has impacted on the normalized average use forecast for all the weather sensitive customers. This result is neither logical nor defensible.

- The econometric equation used to forecast the total system purchases cannot adequately and/or accurately reflect the relevant drivers when these drivers are different for different rate classes. Further details are provided in the following section.

ii) Econometric Equation

The econometric equation used to forecast the total system purchases suffers from a number of deficiencies. Each of these deficiencies is noted below.

- By aggregating all volumes into a single equation, the methodology assumes that all rate classes are affected by the same drivers such as heating degree days, cooling degree days and real GDP. This is most likely not true.

- By aggregating all volumes into a single equation, the methodology assumes that all rate classes are affected to the same degree for each driver included. It is unlikely that the weather, for example, has the same impact on residential customers as it does on large general service customers. Similarly, general service volumes are likely to be more influenced by changes in real GDP than are residential volumes.

- The equation does not have any explicit relationship to the number of customers. It is in effect, independent of the number of customers. It is not reasonable to expect that the total purchases are not driven at least in part by the number of new customer additions.

- The equation implicitly assumes that the impact of weather (heating and cooling degree days) has the same impact across all months (or seasons) of a year. For example, 1 additional heating degree day in January has the same impact on total system purchases as one additional heating degree day in July. It is extremely doubtful that this is true. The impact of weather will be different by month.

- The data used is based on total system purchases. The resulting forecast is then adjusted for the distribution loss factor to arrive at total energy billed. This approach does not recognize the actual loss factors each month over the historical period. The data used should have been the actual total energy billed each month. No adjustment for losses would then be required and the equation would have been estimated based on the true figures. This is important as the loss factors used between 2000 and 2007 range from 3.6% to 6.1% (Exhibit 3, Tab 2, Schedule 1, Table 7). The loss factors within each year are also likely to vary significantly from month to month, reflecting different load profiles in the summer as compared to the winter. Moreover, as indicated in the response to Energy Probe Interrogatory # 23, the loss factors calculated by Thunder Bay in the original evidence are incorrect. It is not known how this error has affected the data used to estimate the equation.

- The model used does not include any type of variable to model conservation. The inclusion of a simple trend variable may capture both conservation (including naturally occurring conservation) and other trends in the use of electric appliances.

- The equation used includes the Ontario Real GDP as an explanatory variable. This variable has a T-statistic of 3.21, which indicates it is statistically significant (Energy Probe Interrogatory # 11). However, Thunder Bay openly admits that the Ontario Real GDP index would not reflect the industrial volume changes shown in Table 6 of Exhibit 3, Tab 2, Schedule 1 (Energy Probe Interrogatory # 12) as this is a provincial index and would be weighted towards activity in the GTA more than that in the Thunder Bay area.

Thunder Bay further states in the reply to Board Staff Interrogatory # 1 that the economy in the city has been weak for the better part of the last 25 years and has not enjoyed the growth that much of Ontario has experienced. The response then goes on to list a number of industries that have declined significantly over this period. Energy Probe submits that if any economic growth variable is applicable to Thunder Bay, it is not the Ontario Real GDP index, but rather more specific indices for pulp & paper, forestry and/or other industries that are of importance in the Thunder Bay area.

- The Ontario Real GDP data included in the equation estimation as an explanatory variable only includes actual data for this variable up to 2005 (VECC Interrogatory # 2b). Forecasted rather than actual values were used for 2006 and 2007. This would result in inaccurate coefficients being estimated since one of the key explanatory variables was not based on actual data.

Energy Probe submits that these are just some the major deficiencies of the current econometric equation and the forecast that results from its use. In the following section, suggestions are provided for improvements in the forecast methodology, including using a bottom up regression analysis by rate class that would eliminate or minimize most of the deficiencies noted above.

iii) Future Forecasts

Energy Probe recommends that the Board direct Thunder Bay to develop a forecasting methodology that generates a forecast of billed energy on a bottom up basis. In other words, a forecast is developed for each rate class and these forecasts add up to the overall forecast, rather than the top down approach used by Thunder Bay in this application.

The forecast for each rate class would be based on a forecast for the number of customers in each rate class and a forecast of normalized average use for each rate class. The latter would be based on an econometric estimation of average use based on a number of explanatory variables that could differ by rate class. The forecast of customers could be driven by economic activity and/or local developments.

Such a process would enable Thunder Bay to distinguish between the drivers of volumes by rate class. The current methodology groups all volumes together and attempts to determine what the drivers are of the total. Energy Probe submits that this approach loses much of its explanatory power because different rate classes are driven by different factors. As well, different classes are driven to different degrees by the same factor. As noted earlier, the impact of weather on residential customers is likely to be different than the impact on large general service customers. The current methodology attempts to "average" these impacts across all customer classes.

b) Adjustments to the Forecast

Energy Probe submits that a number of adjustments should be made to the forecast as filed. The adjustments are listed below.

i) Loss Factor Adjustment

Thunder Bay has converted the total system weather normalized purchases forecast by dividing this forecast by a loss factor of 1.047 to determine the weather normalized energy billing forecast (Exhibit 3, Tab 2, Schedule 1, page 11). The loss factor is the average over the 2000 through 2007 period. However, as indicated in the response to Energy Probe Interrogatory # 23, Thunder Bay has discovered that it made an error in calculating the loss factors. In particular, the actual purchases shown in Table 7 of Exhibit 3, Tab 2, Schedule 1 are incorrect. The correct figures are shown in line A of the response to Energy Probe Interrogatory # 23d.

The loss factor calculated in Table 7 is based on data for 2000 through 2007. However, the corrected figures provided in the Energy Probe response are only available for 2003 through 2007. Over the 2003 to 2007 period, the loss factor based on the correct information is 3.8% (5,403,986,476 / 5,204,770,000). The average over the same period in Table 7 is 4.4%. Energy Probe therefore submits that a reduction of 0.6% should be applied to the loss factor used by Thunder to convert the total system purchases to billed energy, reducing the loss factor from 1.047 to 1.041. This would result in a total billed

energy forecast of 998.6 GWh (1,039.5 / 1.041) in place of the 992.7 GWh calculated by Thunder Bay

ii) Manual Adjustment to Forecast

Thunder Bay has made manual adjustments to the forecast to reflect changes in volumes related to three large use customers and for CDM (Exhibit 3, Tab 2, Schedule 1, pages 8 – 10).

Energy Probe accepts the reductions related to the three large customers. However, Energy Probe notes that the decline in use by these customers in the period used to estimate the equation should reflect some of the decline for these customers within the equation itself. Thunder Bay should have removed the volumes associated with these customers from the historical data used to estimate the econometric equation.

Thunder Bay has also reduced the forecast to reflect CDM initiatives. This reduction is 12.9 GWh. However, as shown in the response to Board Staff Interrogatory # 51, Thunder Bay made an error in the calculation of the CDM adjustment. The total resulting adjustment is now shown as 56.7 GWh, in place of the 59.9 GWh originally forecast. This has the result of increasing the total energy purchased from 1,039.5 GWh (Exhibit 3, Tab 2, Schedule 1, Table 5) to 1,042.7 GWh (Board Staff Interrogatory # 51a).

Application of the corrected loss factor as submitted above in section (i) would then result in a total billed forecast of 1,001.6 GWh (1,042.7 / 1.041).

iii) Average Use Changes

The average use figures calculated in Tables 11 and 12 of Exhibit 3, Tab 2, Schedule 1 are based on actual consumption, not normalized for weather. As a result the calculated changes in average use for the weather sensitive customer classes are heavily influenced by the actual weather. Energy Probe submits that a more accurate way to forecast the volumes associated with these customers is to use the normalized average consumption figures for these customers as calculated by Hydro One based on 2004 data. While this

approach is not perfect, it does reflect a true estimate of normalized use for these customer classes.

As shown in the response to VECC Interrogatory # 3d, the normalized average use calculated by Hydro One based on 2004 weather normalized data was 8,034 kWh for residential customers, 32,747 kWh for GS < 50 kW customers and 576,928 kWh for GS 50 to 999 kW. Energy Probe submits that these figures should be used in the calculation of the volumes for these three customer classes. Energy Probe submits that no change is required for the GS 1,000 to 4,999 kW class because Thunder Bay makes a direct adjustment to this class of customers for the three customers that have significant reductions in use forecast.

The following table shows the calculation of the change in volumes associated with the change in average use applied to the forecasted number of customers. The average use numbers are based on the normalized average use figures provided in the response to VECC Interrogatory # 3d relative to the 2009 forecast figures derived from the figures provided in the revised Weather Normal Load Forecast provided in the response to Board Staff Interrogatory # 51 for 2009. The customer numbers are taken from this table as well. The residential average use figure of 7,830 kWh is calculated before the reduction related to CDM savings. It is calculated based on the figures shown in Table 16 of Exhibit 3, Tab 2, Schedule 1 of 344.2 GWh plus the 5.3 GWh adjustment for weather, but excluding the 11.7 GWh reduction for CDM.

Class	Average Use	Customers	Incremental Volumes
Residential	(8,034 – 7,830)	44,635	9,105,540
GS < 50 kW	(32,747-32,235)	4,466	2,286,592
GS 50 to 999 kW	(576,928 – 596,325)	511	(9,911,867)
Total			1,480,265

Although the net impact on incremental volumes is relatively small, Energy Probe submits that these adjustments are appropriate as they have a significant impact on the volumes within each of the three classes shown.

As noted above under the forecast methodology discussion, Energy Probe believes that this addition of 1,480,265 kWh should be on top of the total forecast and not simply an increase for some rate classes accompanied by a decrease in some rate classes to make the totals fit to the overall forecast total. This adjustment should be made to the overall forecast total because it is the result of higher normalized average uses that were not included in the original forecast.

iv) Summary

In aggregate, the adjustments proposed by Energy Probe for 2009 total approximately 10.4 GWh (5.9 GWh to reflect correction in loss factor; 3.0 GWh to reflect the corrected CDM adjustment with corrected loss factor applied and 1.5 GWh to reflect adjustment for average use). This represents an overall increase in the billed kWh of approximately 1.0%.

c) Other Distribution Revenue

Thunder Bay is forecasting a decrease in other distribution revenue from $1,874,498 in 2008 to $1,802,790 in 2009, for a total decrease of $71,708. These figures are provided in Exhibit 3, Tab 3, Schedule 1. Based on the "Adjustments" table, this decline has increased by a further $240,000.

i) Interest and Dividend Income

As shown in the "Adjustments" table, Thunder Bay is proposing to reduce the interest income from $439,000 to $130,000. Of the original $439,000 forecast, $150,000 is related to interest income associated with net regulatory liability balances (Energy Probe Interrogatory # 36). Energy Probe submits that this amount should be removed from the interest income forecast for 2009. This interest will ultimately be paid to customers as part of the deferral and variance account disposition. Including this income has a revenue offset would be double counting this income.

Thunder Bay has proposed to reduce the interest income on the average cash balance excluding the net regulatory liabilities from $289,000 to $130,000 to reflect lower interest rates than forecast in the original evidence. Energy Probe accepts this reduction related to the decline in interest rates as being appropriate.

ii) Proceeds on Disposal - Vehicles

Thunder Bay had not originally forecast any proceeds associated with the sale or scrap value of the vehicles being replaced in the 2009 test year (Energy Probe Interrogatory # 8j). Upon further review Thunder Bay has now forecast a level of $4000 for the proceeds related to the disposition of vehicles and has included this increase in the revenue offset column in the "Adjustments" table. Energy Probe supports this inclusion.

iii) Proceeds on Disposal – Meters

Thunder Bay has not forecast any proceeds from the disposal of meters as they are replaced with smart meters. Thunder Bay, does however, indicate that they are "seeking to get the greatest return possible on these investments and options such as scrapping, selling, recycling and shipping out of country are being investigated (Energy Probe Interrogatory # 6b). The net book value of the meters that are going to be replaced is approximately $2.2 million. Energy Probe submits that the proceeds from the disposition of the replaced meters should be used to offset the stranded costs of these assets. As such a deferral account should be established to record the proceeds from the disposition of the meters.

iii) Non-Utility Operations

Revenue from non-utility operations (account 4375) net of expenses of non-utility operations (account 4380) was approximately $24,000 in 2006, $29,000 in 2007 and is forecast at $72,000 in 2008, but only $7,000 in 2009 (Exhibit 3, Tab 3, Schedule 1). Based on the year-to-date figures for November, 2008, the net revenue is approximately $42,000 (Energy Probe Interrogatory #44). No reasons have been provided for the significant decrease to $7,000 in 2009 from the 2006 through 2008 (November year-to-date) average of more than $31,000.

Energy Probe submits that Thunder Bay has under forecast the net revenues associated with non-utility revenues for the test year. Energy Probe submits that in light of the historical net revenue figures in 2006 through 2008, an increase from $7,000 to $25,000 is appropriate.

DEFERRAL AND VARIANCE ACCOUNTS

Thunder Bay is not applying for the disposition of the balances of any deferral or variance accounts. Should the Board determine that some or all of the accounts should be recovered as part of this application, Energy Probe submits that the recovery should be over a minimum two year period. This would help mitigate the potential impact on customers.

As shown in the response to Board Staff Interrogatory #47b, if only those accounts listed are cleared, the recovery would $1,149,835. Thunder Bay states in the interrogatory response that because of the relatively small impact, the one year rider would be requested if these amounts were to be recovered as part of this application. The spreadsheet attached as the response to part (b) of the interrogatory shows that the impact on a residential customer consuming 1,000 kWh is a charge of $1.70 per month. This represents nearly one-half of the total increase forecast. Energy Probe submits that this is a significant impact on customers and should be spread out over at least 2 years, if not longer.

Energy Probe notes that in the response to part (d) of Board Staff Interrogatory #47, that if all the deferral and variance accounts were cleared (except the ones listed), there would be a net rebate to customers of $2,139,323. The impact on the residential customer consuming 1,000 kWh per month would be a reduction in costs of $1.60 per month. This highlights the issue of whether or not a distributor should be allowed to collect balances from customers while the distributor continues to hold the credits that are due back to customers. Energy Probe submits that this approach would not be fair to ratepayers. And since the allocators tend to be different between the accounts where there are amounts to

be recovered from customers as compared to those where the customers will receive a rebate, the amounts cannot simply be offset against one another.

Energy Probe submits that if the Board decides to clear the balances in some of the deferral and variance accounts that it should do so with balanced approach to ensure that the net impact on customers is minimal. As noted above, it is not fair to recovery amounts from ratepayers while those same ratepayers are owed money from other accounts.

LRAM AND SSM

Thunder Bay is requesting the recovery of the 2005, 2006 and 2007 LRAM and 2005 SSM as part of this application. Recovery would be based on a three year rate rider.

As part of the Decision and Order in the Toronto Hydro EB-2007-0096 proceeding, issued September 11, 2007, the Board indicated at Page 11, that it and stakeholders would be assisted by an independent third party review of program results and claim amounts. Thunder Bay has not provided this and has requested the approval of their LRAM and SSM without being subject to a further review. Thunder Bay also commented that their claim in the amount of $574,345 is a small proportion of their distribution revenue and does not have a material impact on their rates so it believed it should not be subject to any further review (Exhibit 8, Tab 1, Schedule 10, page 14).

It is informative, however, to note that in response to Board Staff Interrogatory #51, Thunder Bay discovered an error in the original calculation related to the 2007 LRAM. The new claim has been reduced to $489,097 in total for the LRAM and SSM. This is a reduction of more than $85,000 or nearly 15%. Energy Probe submits that this is precisely why an independent review is needed. In the alternative, the amount requested for recovery ($489,097) could be reduced by 10% to $440,187. This approach would be similar to the option provided to distributors for the recovery of regulatory assets in which there was an option for a comprehensive review or a minimum review that reduced the claim by 10%.

COST OF CAPITAL

a) Capital Structure

Thunder Bay is requesting a deemed equity component of 43.3%, short term debt of 4.00% and long term debt of 52.7% (Exhibit 5, Tab 1, Schedule 2). Energy Probe accepts this capital structure as it is in compliance with the *Report of the Board on Cost of Capital and 2nd Generation Incentive Regulation for Ontario Electricity Distributors* dated December 20, 2006.

b) Return on Equity

Thunder Bay has requested a return on equity of 3.75% in the test year, reflecting Shareholder Declaration that the distribution company should be operated in accordance with a "rate minimization model" (Exhibit 1, Tab 2, Schedule 1, page 2). Energy Probe supports this approach and notes that the requested return on equity is lower than maximum allowed ROE of 8.01% for 2009 as calculated in the Board's February 24, 2009 letter related to "Cost of Capital Parameter Updates for 2009 Cost of Service Applications".

c) Short Term Debt Rate

Thunder Bay has requested a short term debt rate of 4.47% in the test year (Exhibit 5, Tab 1, Schedule 1), but notes that his rate would finalized by the OEB in accordance with the *Report of the Board on Cost of Capital and 2nd Generation Incentive Regulation for Ontario Electricity Distributors* dated December 20, 2006. Energy Probe notes that the Board has determined that the short term debt rate for 2009, set in accordance with the *Report of the Board* has been calculated as 1.33%.

d) Long Term Debt Rate

The majority of Thunder Bay's long term debt is held by the shareholder at a rate of 0%, as part of the Shareholder's rate minimization model. Energy Probe supports the continued interest free loan from the Shareholder to help keep rates affordable.

Thunder Bay is forecasting the need for additional long term debt, in the amount of approximately $1.2 million that it will require to fund the capital expenditures in 2009 (Exhibit 5, Tab 1, Schedule 3). Thunder Bay has used a rate of 6.0% for this loan.

Thunder Bay has indicated that this rate of 6.0% to be applicable (Energy Probe Interrogatory # 26). However, Thunder Bay also indicated that it had not yet determined whether the loan would be from an affiliate. The deemed long term debt rate as set out in the Board's February 24, 2009 letter has been calculated to be 7.62%. This is significantly higher than interest rates available to municipal distribution companies from Infrastructure Ontario. As of March 10, 2009, as shown on their website, the interest rate charged on a 25 year loan was 5.67%. Lower rates are also available for shorter term loans, ranging from 3.19% for a 5 year term, 4.43% for a 10 year term, 5.06% for a 15 year term and 5.44% for a 20 year term. At the long end, a 40 year term loan carries a rate of 5.84%. All of these rates are significantly lower than the 7.62% that is to be used for affiliate loans.

Thunder Bay has indicated that this long term debt is not expected to be in place by the end of April, 2009. Energy Probe submits that the rate of 7.62% as determined by the Board should not be used for this loan. Thunder Bay has not determined if this loan would be from an affiliate or a third party and since funding is available at much lower rates from a third party (Infrastructure Ontario), it would not be reasonable for Thunder Bay to pursue this loan from an affiliate at the higher deemed interest rate.

Energy Probe submits that the appropriate term that should be used for this loan is 25 years as this matches the life of the assets to be purchased in 2009. As a result, an interest rate of 5.67% would be applicable to this loan.

Energy Probe also notes that if the capital expenditures are changed from that forecast, the amount of the loan required may also change from the $1.2 million forecasted.

COST ALLOCATION & RATE DESIGN

Thunder Bay has updated the original cost allocation model to correct for a number of errors in the original model (Exhibit 7, Tab 1, Schedule 2, page 2). Energy Probe accepts the rationale for using the updated cost allocation model as the basis for the revenue to cost ratio comparisons.

As shown in Table 3 of Exhibit 7, Tab 1, Schedule 2, based on the updated cost allocation filing results, the General Service 50 to 999 kW, General Service 1,000 to 4,999 kW and Street Light customer classes are below the revenue to cost range identified as appropriate in the Board's "Report on Application of Cost Allocation for Electricity Distributors" dated November 28, 2007. The Residential customer class is above the appropriate range. The remaining classes are all within the ranges identified as appropriate.

Thunder Bay has proposed to move the revenue to cost ratio for the three customer classes that are below the range 50% of the way from what the current ratio is to the bottom of the OEB ranges. In particular, Thunder Bay proposed to increase the ratio for street lighting from 13.51% to 41.75%; general service 50 to 999 kW from 65.96% to 72.98%; and general service 1,000 to 4,999 kW from 60.7% to 70.09%. Further, Thunder Bay proposes to move these ratios to the bottom of the target ranges equally in 2010 and 2011, with the additional revenue generated by these increases used to reduce the ratio for the residential class (Energy Probe Interrogatory # 27a & b).

Energy Probe supports the proposal for the street class as this is consistent with the various 2008 Decision that the Board has made around this issue. Energy Probe notes that this is a rate mitigation strategy given that the increase in the 2009 test year is in excess of 10%.

However, Energy Probe does not accept the same proposal for the two general service classes that are currently under contributing. Energy Probe submits that both of these customer classes should be moved to the bottom of the Board approved range for these classes, 80%, in the 2009 test year. This would allow Thunder Bay to reduce the residential revenue to cost ratio below the proposed 119.13% level, closer to, and perhaps below the 115% top of the Board's range for this group of customers.

Unlike the street light class, the movement of the two general service classes in question to a revenue to cost ratio of 80% does not require any rate mitigation. As shown in the response to Energy Probe Interrogatory # 27, parts (c) and (d), the total bill impact on a typical general service 50 to 999 kW customer of moving to an 80% revenue to cost ratio is an increase of 4.25%. Similarly, the total bill impact on a typical general service 1,000 to 4,999 kW customer of moving to an 80% revenue to cost ratio is an increase of 7.15%. Both of these increases are well below the 10% threshold at which rate mitigation measures are employed.

RATE MINIMIZATION STRATEGY

Thunder Bay's evidence states that the Corporation of the City of Thunder Bay has a governing principle known as the "rate minimization model". Under this model electricity rates are kept as low as possible and economic development is encouraged without jeopardizing the reliability and efficiency of the distribution system (Exhibit 1, Tab 2, Schedule 1, page 2). This is accomplished by accepting a return on equity which is lower than the Board approved maximum and by foregoing debt and dividend payments.

In Energy Probe Interrogatory # 32, a proposal was put to the company based on the information summarized in Exhibit 6, Tab 1, Schedule 1, page 2 that shows the calculation of the revenue deficiency. The proposal was as follows:

> **In place of earning a return on equity of $1,220,567 on the deemed equity, reduce this amount to $0 and charge an interest rate on the $33,490,500 Note of approximately 3.6445% that would generate $1,220,567 in interest payable on the Note. This interest would be paid to the City which would then re-invest the same amount as equity back into Thunder Bay Hydro.**

As shown in Appendix B to this Argument, revenues can be reduced by nearly $650,000 with no impact on the shareholder. Instead of earning the $1,220,567 in equity and retaining it in the distributor, the $1,220,567 is paid as interest to the shareholder which then reinvests the same amount back into the distributor as equity. The shareholder is kept whole, the distributor is kept whole and ratepayers save $650,000. This is because the interest deductibility reduces income taxes. In addition, the reduction in taxable income would make Thunder Bay eligible for the provincial small business tax rate. In the end, the reduction in income taxes is fully transferred to ratepayers through lower rates.

Energy Probe encourages Thunder Bay to investigate the potential of this tax minimization strategy as part of its rate minimization strategy before its next rates rebasing application.

COSTS

Energy Probe requests that it be awarded 100% of its reasonably incurred costs. Recognizing the size of Thunder Bay, Energy Probe has attempted to minimize its time on this application, while at the same time ensuring a thorough review.

ALL OF WHICH IS RESPECTFULLY SUBMITTED

March 13, 2009

Randy Aiken

Consultant to Energy Probe

APPENDIX A

To Energy Probe Argument dated March 13, 2009

		2008 Opening Balance	2008 Closing Balance	2008 Rate Base	2009 Opening Balance	2009 Closing Balance	2009 Rate Base
In Service 2008	Gross Assets	0	801,129		801,129	801,129	
	Accum. Dep.	0	16,023		16,023	48,068	
	Net Book Value	0	785,106	392,553	785,106	753,061	769,084
In Service 2009	Gross Assets	0	0		0	801,129	
	Accum. Dep.	0	0		0	16,023	
	Net Book Value	0	0	0	0	785,106	392,553
Reduction in 2009 Rate Base							376,531

APPENDIX B
To Energy Probe Argument dated March 13, 2009

Calculation of Revenue Deficiency

	Proposed Rates	Rate Minimization	Difference
Revenue Sufficiency Grossed Up	1,414,077	**764,469**	**(649,608)**
Distribution Revenue	16,104,861	16,104,861	
Other Operating Revenue (Net)	1,802,790	1,802,790	
Total Revenue	19,321,728	18,672,120	
Costs and Expenses			
Operation & Maintenance	12,340,964	12,340,964	
Depreciation & Amortization	4,573,436	4,573,436	
Property & Capital Taxes	169,466	169,466	
Interest	216,623	**1,437,190**	**1,220,567**
Total Costs and Expenses	17,300,489	18,521,056	
Utility Income Before Income Taxes	2,021,239	151,064	
Income Taxes	800,671	151,064	
Utility Income	1,220,568	0	
Rate Base	75,169,648	75,169,648	
Equity Portion	43.30%	43.30%	
Equity Component of Rate Base	32,548,458	32,548,458	
Return on Equity	3.75%	0.00%	
Target Return on Equity	3.75%	0	
Return on Rate Base Equity	1,220,567	**0**	**(1,220,567)**
Revenue Sufficiency	0	0	

Calculation of Income Taxes

Utility Income Before Income Taxes	2,021,239	151,064	
Additions to Accounting Income	5,303,050	5,303,050	
Deductions from Accounting Income	4,717,636	4,717,636	
Regulatory Taxable Income	2,606,653	736,478	
Income Tax			
Federal Tax @ 19%	495,264	139,931	
Provincial Tax - First $500,000 @ 5.50%	27,500	27,500	
- All over $500,000 @ 14.00%	294,931	33,107	
- Clawback on $500,000 to $1,500,000 @ 4.25%	42,500	10,050	
Apprenticeship Tax Credit	(59,524)	(59,524)	
Total Taxes	800,671	**151,064**	**(649,607)**