

January 13, 2009

Ms. Kirsten Walli
Board Secretary
Ontario Energy Board
P.O. Box 2319
26th Floor - 2300 Yonge Street
Toronto, ON M4P 1E4

Dear Ms. Walli:

**Re: Thunder Bay Hydro Electricity Distribution Inc. - 2009 Cost of Service
Application
OEB File No. EB-2008-0245**
Responses to:
OEB Board Staff Interrogatories;
Interrogatories of Energy Probe Research Foundation ("Energy Probe"); and
Vulnerable Energy Consumers Coalition (VECC) Interrogatories

Enclosed please find two (2) paper copies of Thunder Bay Hydro's responses to the above mentioned Interrogatories.

Also included are the following two (2) Data CDs containing supporting data relative to our responses entitled:

1. Thunder Bay Hydro_EB 2008-0245_Response to Interrogatories_Excel Spreadsheet Data; and
2. Thunder Bay Hydro_EB 2008-0245_Interrogatory Response_OEB_LRAM-SSM.

An electronic copy of our complete application will be submitted through the OEB's RESS on-line filing system.

As outlined in the OEB's document "RESS e-Filing Guides" the Excel files (1 and 2 above) can not be submitted through RESS. Therefore, we will also be filing an electronic copy via email to all parties which will include the above mentioned Excel files.

...continued

If you require any further information, please contact the undersigned at (807) 343-1118.

Yours truly,



Cindy Speziale, CA
Vice President, Finance

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CS/dt

Enclosures.

Electronic cc: Robert Mace, President (Thunder Bay Hydro Electricity Distribution Inc.)
Shelley Grice (AMPCO)
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David S. MacIntosh (Energy Probe)
Randy Aiken (Aiken & Associates)
Bob Williams (Ontario Education Services Corporation)
John De Vellis (Shibley Righton LLP)
Rachel Chen (Institutional Energy Analysis Inc.)
Michael Buonaguro (Public Interest Advocacy Centre)
Bill Harper (Econalysis Consulting Services)

Board Staff Interrogatories
2009 Electricity Distribution Rates
Thunder Bay Hydro Electricity Distribution Inc. (“Thunder Bay”)
EB-2008-0245

ECONOMIC ASSUMPTIONS

1. Ref: N/A

- a. Given the general economic situation in Ontario has Thunder Bay assessed the situation and identified any specific issues that may have a material impact on its load and revenue forecasts and bad debt expense forecast?

Response

At this point, a meaningful assessment of the impact of the current economic crisis on Thunder Bay is not possible. While the current situation has the potential to have a serious negative impact on the economic performance of the Province as a whole, the extent to which this will impact Thunder Bay is unknown. The economy in the City has been weak for the better part of the last twenty five (25) years and has not enjoyed the growth that much of Ontario has experienced. Over time the local economy has seen the significant erosion of key local industries including the grain elevators, pulp and paper manufacturing, lumber and other forest products; as well as supporting transportation industries. While the utility does not anticipate a further dramatic decline in the local economy at this time, management will be monitoring the local economic situation in the upcoming months.

- b. If so, please indicate if Thunder Bay will be updating its current application, in whole or in part, to address any material impacts. If yes, please provide an estimate of the timing of the update.

Response

Thunder Bay will not be updating its current application.

2. Ref: E 2 / T 3 / S 1 and E 4 / T 2 / S 2

- a. Please provide a list of criteria and the rationale that Thunder Bay has used in the prioritization and selection of 2009 maintenance and capital projects in its application.

Response

TBH has performed detailed risk assessments of all of its assets and then based on the results of that risk ranking; further evaluated each project as is outlined in the submitted evidence. The scores of the evaluations for the 2009 to 2011 projects are provided in ‘Appendix A’ attached to this document.

As per its submitted evidence Thunder Bay Hydro's maintenance program is based on a Reliability Centered Maintenance (RCM) approach and as such the large majority of its line assets are maintained reactively based on its annual risk assessments of 1/3 of the system. The exceptions being reclosers and line switches which are preventatively maintained at fixed intervals. Thunder Bay Hydro's station maintenance program is also partially reactive but largely preventative for all equipment with moving parts and predictive for its largest assets, the substation transformers. The development of Thunder Bay Hydro's RCM maintenance program has been recent and continues to be developed with a program finalization expected in late 2009.

- b. Please identify, individually, maintenance and capital programs, if any, that Thunder Bay may consider as a candidate for a deferral, cut, or partial adjustment, given the current economic situation. Please identify these programs, if any, in a ranking order that Thunder Bay would consider, using a ranking of "1" as the first suitable candidate, ranking of "2" as the second suitable candidate, ranking of "3" as the third suitable candidate, etc.

Response

As outlined in the application, Thunder Bay Hydro has maintained significantly lower than sustaining capital expenditures for approximately 12 years. Accordingly, the condition of many assets has deteriorated to the point that an increase in the replacement program is required to maintain reliability to customers in the near future.

The requested replacement capital amounts in 2009 - 2011 are still below sustaining levels as indicated in the evidence submitted to ensure that resources are utilized effectively, while each year capital spending is increased incrementally. Simply put, even at the increased level of capital replacement requested, the utility will still not be replacing end of life infrastructure at a sustaining rate by 2011. With the exception of 'Wholesale metering upgrades', all of the capital infrastructure replacement projects outlined address the replacement of infrastructure at the end of its useful life. Undertaking these projects is critical to maintaining the integrity of the distribution system. Regarding 'Wholesale metering upgrades', this project is driven by IESO Market Rules. While Thunder Bay Hydro would be in favour of deferring this project (as this project does not address end of life system reliability issues) the deadlines imposed by IESO Market Rules do not allow this project to be delayed.

Thunder Bay Hydro does not consider any of the proposed infrastructure replacement projects as candidates for deferral, cut or partial adjustment. However, in the event that the Board determines that a reduction in infrastructure replacement projects cannot be avoided, the following ranking is provided:

- 1 - County Park Underground Replacement & Loop Completion; and*
- 2 - Any of the Overhead Line Replacement Projects.*

Given Thunder Bay Hydro's RCM approach where by most of its equipment is reactively maintained, there are minimal opportunities to reduce this program. If

a reduction of Thunder Bay Hydro's operating and maintenance programs was required in spite of this, they would be prioritized as follows:

- 1 - Asbestos Removal (subject to a review of the level of activity required to meet environmental regulations)*
- 2 - Substation Maintenance & Testing; and*
- 3 - Recloser & Line Switch Maintenance.*

- c. Please identify the rationale for the selection of these maintenance and capital programs and projects.

Response

The capital projects are ranked according to their potential Health & Safety impacts for both employees and the general public. While the deferral of either underground or overhead projects will result in a negative impact on system reliability, the failure of underground distribution equipment presents less of a hazard than the failure of overhead equipment.

The selection criterion for maintenance projects was first to identify work that would not have an impact on system reliability, while still meeting regulatory and legal compliance requirements. Next, substation maintenance which is preventative and predictive was identified. Lastly, preventative overhead maintenance was identified.

- d. Please describe the expected impacts on Thunder Bay's revenue requirement, operations and service quality and reliability to customers if the identified programs are reduced, deferred or cut during the economic downturn.

Response

If adjustments were made to Thunder Bay Hydro's capital and maintenance programs it is expected that corresponding adjustments would be made to its rates and as such its revenue requirements would be met.

With respect to its operations, if cuts were made to Thunder Bay Hydro's capital and maintenance programs, reductions might be required and all new positions would need to be eliminated.

The service quality and reliability of customers would be negatively impacted given that all replacement projects identified in 2009 – 2011 were ranked as Red – "required in one year or less" and thus equipment scheduled for replacement is at end of life. This is especially true for the underground replacements that should the equipment fail would subject customers to extended outages. It is also expected that reductions in the capital replacement program would have an immediate effect on maintenance costs as these assets require a significant amount of maintenance given their age and condition.

Any reductions in maintenance would also have a direct impact on service quality and reliability in the long run.

OPERATING COSTS

General

3. Ref: E 4 / T 1 / S 1

The figures in the table below are taken directly from the public information filing in the Reporting and Record-keeping Requirements (“RRR”) initiative of the OEB. The figures are available on the OEB’s public website. Please confirm the utility’s agreement with the numbers for OM&A, which are summarized in the table below.

	2002	2003	2004	2005
Operation	\$2,609,542	\$2,349,569	\$2,011,898	\$2,552,705
Maintenance	\$2,394,892	\$2,971,401	\$2,977,751	\$2,414,855
Billing and Collection	\$2,638,395	\$2,598,019	\$2,690,686	\$2,452,585
Community Relations	\$236,085	\$200,394	\$196,518	\$537,694
Administrative and General Expenses	\$2,700,078	\$2,921,724	\$2,830,919	\$2,679,539
Total OM&A Expenses	\$ 10,578,992	\$ 11,041,107	\$ 10,707,772	\$ 10,637,379

Response

Thunder Bay Hydro confirms agreement with the numbers for OM&A.

4. Ref: E1 / T2 / S1 / p5

Please identify the inflation rate used for the 2009 OM&A forecast and the source document for the inflation assumptions.

Response

Inflation rate used was 2%. This was based on an analysis of the 2007 and 2008 Consumer Price Index as reported by the Bank of Canada. The average CPI for the 12 months ended December 31, 2007 was 2.15, the average CPI for the 6 months ended June 2008 was 2.07. Therefore 2% was used to be conservative.

5. Ref: E4 / T2 / S1

Do the 2008 and 2009 OM&A forecasts include costs for the change to International Financial Reporting Standards? If so, please provide the total amount included.

Response

The 2008 and 2009 OM&A forecasts do not include costs for the change to International Financial Reporting Standards.

6. Ref: E4 / T 2 / S1

Do the 2008 or 2009 OM&A forecasts include a provision for a Winter Warmth program or other assistance to low income customers? If so, please indicate the amount.

Response

Yes, Thunder Bay Hydro has forecasted approximately \$8,000 in the 2008 bridge year as well as the 2009 Test Year for Winter Warmth program costs.

7. Ref: E4 / T2 / S4 / p1-7

Thunder Bay indicates that it is addressing the challenges of an aging workforce by introducing an apprentice program and through the strategic hiring of technical staff (the "plan"). In 2009 Thunder Bay is forecasting that it will be adding two management/non supervisory positions and seven unionized positions of which two and five respectively are due to the plan.

- a. Please identify the approximate dollar amount in the 2009 OM&A forecast related to the plan.

Response

The approximate dollar amount in the 2009 OM&A forecast related to the apprentice program and strategic hiring is \$209,800. This estimate includes the cost of wages, applicable overtime, benefits, training and travel costs associated with the 5 apprentice positions related to succession planning for retirements. The two management/non supervisory positions are not related to succession planning. They are necessary to ensure sufficient resources are available to enable completion of the utility's 20 year capital plan.

- b. In which year after 2009, will these additional positions no longer be required?

Response

The increase in Management/Supervisory complement by two is not a temporary increase, as outlined in the rate application. The increase in complement (Program Manager in AME and a person in Purchasing) are directly attributable to the increase in capital spending and resulting workload issues as previously stated.

With respect to the addition of seven to our union complement, two (PLTs) are permanent to coincide with the increase in capital spending. The other five apprentices (3 PLTs, 1 Meter Technician, and 1 System Operator) are to account for pending retirements. As stated, and provided in chart form in our rate application on page 545, these (and future) hirings are part of the corporation's overall succession plan to address upcoming retirements over the next 10 years. Therefore, if a specific year is required to be provided to the OEB, I would suggest that the year we use is 2019.

The advanced hiring of these complement, again, is necessary due to the fact that they are apprentices and they are not fully qualified to perform all required tasks safely for between four and five years.

8. Ref: E1 / T2 / S1 /p5

Thunder Bay states that a consideration of cost and efficiency is an important part of expenditure decisions.

- a. Are there any cost efficiency programs (e.g. investing in a technology or new program today that will reduce operating costs, say, over the next 5 years) at the utility that are in place now or contemplated in the test year?

Response

The statement "Cost reduction and efficiency are always an important part of expenditure decisions at Thunder Bay Hydro" is a statement which reflects the priority the utility places on economic efficiency when making both operating and expenditure decisions. As an example, in an operating context, over the past 2 years several key performance measures and targets have been developed related to the efficiency of the utility's capital planning, design and construction processes. Management has used these measures and targets as a tool to effectively manage both processes and employee performance. In terms of expenditures, the term "cost efficiency programs" does not properly reflect the application of the statement in question. When decisions on how best to manage the business are made, cost reduction and efficiency are key considerations. However, there is no specific "cost efficiency program" in place at the utility. Rather, it is an underlying philosophy. Nonetheless, when faced with evaluating options involving new or additional expenditures, a cost benefit analysis is often undertaken.

- b. If so, please describe the programs and include a cost benefit analysis.

Response

One example of an expenditure decision supported by a formal cost benefit analysis was the decision to migrate a number of stand-alone computer servers into a single rack mounted server system. The internal utility expenditure proposal, including a cost/benefit analysis, is attached to this document as 'Appendix B'.

9. Ref: E1 / T2 / S3 / p6-8

The evidence indicates that Environment Canada has proposed revisions to the existing Chlorobiphenyl Regulations and the Storage of PCB Material Regulations of the *Canadian Environmental Protection Act, 1999* (CEPA1999) that would set specific dates for the complete destruction of all PCBs in service and storage. In this regard, Thunder Bay indicated that its long term plan ("plan") to address "outstanding" transformers would cost about \$3 million and of this \$403,281 would be spent in 2009. Thunder Bay also

advised that “should the legislation come into force and Thunder Bay’s present plan not ensure compliance, the plan will have to be accelerated and a variance account created....”

- a. Please confirm whether the \$3 million pertains solely to meeting the PCB destruction dates in the proposed legislation. If not, please indicate whether this money is also targeted to address new “PPM” standards, as compared to what is required under existing legislation.

Response

The \$3 million dollars was solely to meet all new proposed PCB destruction dates as outlined within the regulations.

- b. Will the entire \$3 million in plan costs be charged to OM&A over the 2008 to 2014 period? If not, please identify by year the amounts that would be charged to capital.

Response

No, the entire amount will not be charged to OM&A; the distribution transformers and poles will be capitalized. All disposal, miscellaneous material, labour and trucking activities will be charged to OM&A accounts.

The following represents approximate capital charges to replace all Thunder Bay Hydro’s >50 PPM PCB transformers for the indicated years in compliance with the regulation:

<i>Capital Cost for 2009</i>	<i>= \$ 179,000</i>
<i>Capital Cost for 2010</i>	<i>= \$ 108,000</i>
<i>Capital Cost for 2011</i>	<i>= \$ 108,000</i>
<i>Capital Cost for 2012</i>	<i>= \$ 108,000</i>
<i>Capital Cost for 2013</i>	<i>= \$ 108,000</i>
<i>Capital Cost for 2014</i>	<i>= \$ 108,000</i>
<i>Capital Cost for 2015</i>	<i>= \$ 108,000</i>
<i>Capital Cost for 2016</i>	<i>= \$ 108,000</i>
<i>Capital Cost for 2017</i>	<i>= \$ 108,000</i>
<i>Capital Cost for 2018</i>	<i>= \$ 108,000</i>
<i>Capital Cost for 2019</i>	<i>= \$ 108,000</i>
<i>Capital Cost for 2020</i>	<i>= \$ 15,000</i>
<i>Total Capital Expenditure</i>	<i>= \$1,274,000.</i>

- c. Board staff notes that the proposed PCB regulations noted in the evidence was enacted on September 5, 2008. Does Thunder Bay’s PCB plan comply with the newly enacted regulations? Please update the evidence on pages 6-8, including the table on page 8, if the enacted legislation differs from your understanding at the time the evidence was prepared.

Response

Thunder Bay Hydro's PCB plan as submitted does not comply with the new regulation. The items out of compliance or not in alignment with regulation being:

- Thunder Bay Hydro did not have any provisions in their PCB plan to replace any >50 PPM PCB equipment that was in proximity to sensitive locations for 2009 (these activities were scheduled to be done in 2010).*
- Thunder Bay Hydro has now identified 5, >50 PPM PCB transformers that are in proximity to sensitive areas and have now been scheduled to be removed in 2009.*
- The regulation as passed has extended the timeframe for replacement of pole top transformers that are > 50 PPM and not in sensitive locations. Thunder Bay Hydro has chosen to make use of this extension.*

Pages 6 – 8 outlining Thunder Bay Hydro's PCB plan should now read:

PCB Removal

Polychlorinated biphenyls (PCBs) are a class of organic compounds commercially produced in response to the electrical industry's need for a "safer" cooling and insulating fluid for industrial transformers and capacitors.

Concerns over the toxicity of PCBs in the environment led to the USA banning the production in 1977. Some use continues in closed systems such as transformers at Thunder Bay Hydro and other utilities.

A few studies of workers indicate that PCBs are associated with specific kinds of cancer in humans, such as cancer of the liver and biliary tract. Rats that ate food containing high levels of PCBs for two years developed liver cancer.

Despite the large reductions in PCB inventories by utilities since the implementation of regulatory controls, PCB use continues and the potential for release to the environment through spills and fires continues to exist.

Environment Canada is concerned that the goal of elimination of PCBs from Canada may not be reached for another generation at the present pace of reduction. In addition Canada is signatory to several international agreements on the phase-out PCBs thus leading to the new legislation?

Environment Canada has therefore revised the existing Chlorobiphenyl Regulations and the Storage of PCB Material Regulations of the Canadian Environmental Protection Act 1999 (CEPA 1999) which identifies specific dates for the complete destruction of all PCBs in service and in storage.

The legislation was made law September 5, 2008.

The legislation introduced in September 2008 by the Canadian federal government required that PCBs still in use be phased out completely as outlined:

- From 2008 onward; a maximum storage period of one year for PCBs and waste products that contain PCBs at the owner's PCB storage site.
- At the end of 2009 all PCBs in concentrations > 500 PPM are to be removed from service.
- At the end of 2009 all PCBs in concentrations > 50 PPM PCBs in environmentally sensitive areas are to be removed from service.
- At the end of 2025 all remaining PCBs in concentrations > 50 PPM are to be removed from service.

A copy of the legislation may be downloaded from:

<http://gazetteducanada.gc.ca/partII/2008/20080917/html/sor273-e.html>

PCBs are presently contained only in station breakers and distribution transformers at Thunder Bay Hydro as all other equipment types have been verified to be PCB free. The station breakers will be managed through a retro fill program where they are refilled with PCB free oil until the PCB contamination levels are below the required guidelines. This will occur in 2008 and will be monitored in 2009 and subsequent years to verify the results.

Presently Thunder Bay Hydro owns 6900 distribution transformers and a long term PCB elimination program has been underway since the late 1990s. Of Thunder Bay Hydro's existing transformers, 238 are >50 PPM and 33 are >500PPM.

Thunder Bay Hydro's revised PCB plan to address the >50 PPM PCB transformers; is to remove all 33 >500PPM transformers and the 5 >50 PPM transformers that have been identified as being in proximity to sensitive areas in 2009.

Removal of approximately 23 >50PPM transformers will occur each year starting in 2010 and end in 2020.

The cost of this PCB transformer removal, replacement and waste disposal program will be approximately \$3.45M and will require 12 years to complete; costs are further detailed in the table below.

Year	Testing / Sampling	Transformer Replacement (avg 10,000 ea)	Oil Destruction For all PCB+ Transformers (ARO)	Destruction of PCB Solid Waste Material (ARO)	Additional Destruction (norm activity) (ARO)	Transport (ARO)	Estimated Cost
2008	-	-	\$ 1,956.08	\$ 4,390.46	\$25,000.00	\$15,000.00	\$ 46,346.54
2009	-	\$380,000.00	\$24,198.48	\$16,958.00	\$25,000.00	\$15,000.00	\$461,156.48
2010	-	\$230,000.00	\$11,360.16	\$ 6,440.00	\$25,000.00	\$15,000.00	\$287,800.16
2011	-	\$230,000.00	\$11,360.16	\$ 6,440.00	\$25,000.00	\$15,000.00	\$287,800.16
2012	-	\$230,000.00	\$11,360.16	\$ 6,440.00	\$25,000.00	\$15,000.00	\$287,800.16
2013	-	\$230,000.00	\$11,360.16	\$ 6,440.00	\$25,000.00	\$15,000.00	\$287,800.16
2014	-	\$230,000.00	\$11,360.16	\$ 6,440.00	\$25,000.00	\$15,000.00	\$287,800.16
2015	-	\$230,000.00	\$11,360.16	\$ 6,440.00	\$25,000.00	\$15,000.00	\$287,800.16
2016	-	\$230,000.00	\$11,360.16	\$ 6,440.00	\$25,000.00	\$15,000.00	\$287,800.16
2017	-	\$230,000.00	\$11,360.16	\$ 6,440.00	\$25,000.00	\$15,000.00	\$287,800.16
2018	-	\$230,000.00	\$11,360.16	\$ 6,440.00	\$25,000.00	\$15,000.00	\$287,800.16
2019	-	\$230,000.00	\$11,360.16	\$ 6,440.00	\$25,000.00	\$15,000.00	\$287,800.16
2020	-	\$ 30,000	\$ 1,481.76	\$ 840.00	\$25,000.00	\$15,000.00	\$ 72,321.76
TOTAL							\$3,457,826.38

- d. On page 8 lines 11-13 Thunder Bay indicates that should legislation come into force and Thunder Bay's present plan does not ensure compliance, a variance account will have to be created to track all costs above the existing plan replacements. Given the enacted legislation, is Thunder Bay seeking Board approval for the establishment of a PCB variance account? If so, please indicate the approximate amount it expects to record in the account and over what period.

Response

A variance account is not anticipated at this time given that Thunder Bay Hydro's present proposed plan as submitted in question 9(c) is now in compliance with the regulation passed in September of 2008. The variance account was only proposed at the time as it was unknown what the costs of meeting the regulation would be.

- e. What is the proposed accounting treatment for in-service transformers to be removed and / or retired from service under this plan? Are any potential write-offs or stranded costs proposed for recovery in rates? If so, please explain the proposed method of recovery and the amounts.

Response

Thunder Bay will charge accumulated amortization with the book cost of the transformers retired. The transformers will all have been fully amortized and as such there will be no write-offs or stranded costs.

Capitalization

10. Ref: E4 / T2 / S2 / p2 and E4 / T2 / S4

The evidence indicates that between 2006 EDR and 2009 forecast there is a decrease of \$134,093 in Supervision and Engineering (accounts 5505 and 5105). The decrease is described as "... mainly attributable to the increased capital work resulting in a large base to allocate the overheads."

- a. Please provide a copy of the methodology Thunder Bay uses to calculate the amount of gross OM&A that should be allocated to Capital.

Response

Thunder Bay Hydro uses the following "Overhead" Accounts:

- Corporate Benefits *This account accumulates the costs of fringe benefits associated with labour such as dental benefits, medical benefits, long-term disability, vested sick leave and the Employee Assistance Program. These costs are distributed to an employee's Division/Department as a percentage of their regular wages as they are paid during the year.*

- *Downtime* *This account accumulates the related payroll costs for our PLE group for payroll costs associated with vacations, statutory holidays, sick leave and other leaves of absence, employee training, safety programs and any other unproductive labour time. These costs are allocated to Operating, Maintenance or Capital expenditures as a % based on PLE work order labour costs.*
- *Material costs* *This account accumulates the related costs associated with our Purchasing and Stores Departments. The overhead is 75% of the Purchasing Department and 100% of Stores. These costs include payroll costs of employees directly related with the purchasing and stores, and purchasing and stores operation costs. These costs are allocated as a percentage of materials issued through stores.*
- *Supervisory* *This account accumulates the related payroll and operation costs related to the PLE Supervisor group. These costs are allocated to Operating, Maintenance or Capital expenditures as a % based on PLE work order labour costs.*
- *Engineering* *This account accumulates the costs associated with the costs of the engineering operation, including engineering staff and their support staff payroll costs, facilities, equipment and supplies. These costs are allocated to Operating, Maintenance or Capital expenditures as a % based on PLE work order labour costs.*
- *Rolling Stock Operations* *This account accumulates the costs associated with maintaining trucks, equipment and trailers etc. These costs include payroll costs related to the mechanics and common rolling stock operation costs such as fuel, lubricants, repairs, parts, insurance as well as office and computer costs directly related to the rolling stock operations. These costs are allocated based on a per hour available for use basis.*

All overhead charges are reviewed regularly. Any residual balances remaining after regular distribution are cleared to the applicable capital, operating or maintenance accounts depending on the actual occurrence of the cost allocation relationships.

- b. Please provide the actual calculations that underpin the overheads capitalized in the 2007 actuals, 2008 forecast and 2009 forecast.

Response

**Thunder Bay Hydro Distribution Inc
Summary of Overhead Allocations**

	2009		2008		2007	
Operations & Maintenance	\$2,400,902	42.02%	\$2,471,869	46.60%	\$2,457,818	51.32%
Recoverables	\$ 83,234	1.46%	\$ 70,218	1.32%	\$ 120,914	2.52%
Overhead	\$ 343,368	0.00%	\$ 320,060	0.00%	\$ 416,755	0.00%
Capital	\$3,230,009	56.53%	\$2,762,649	52.08%	\$2,210,525	46.16%
Total Overheads Allocated	\$6,057,513		\$5,624,796		\$5,206,013	

- c. Table 3 in the first reference above indicates that in 2008 total compensation amounts to \$10,773,951 and that total salary, wages and benefits that are charged to OM&A total \$5,939,265. On the basis of these amounts, it appears that 45% of Thunder Bay's compensation costs are "capitalized" and, on this basis, the capitalization rates for 2006, 2007 and 2009 appear to be 44%, 41% and 46% respectively. Please confirm these rates. If these rates are not correct, please provide the correct compensation capitalization rates.

Response

Upon review of the amounts of compensation reported in Exhibit 4 Tab 2 Schedule 4 Table 3, total compensation should have been reported as:

<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>
\$10,284,863	\$10,553,250	\$10,837,573	\$11,392,151.

Further, the amount originally reported as total salary, wages and benefits charged to OM&A only included direct OM&A expenses, (the overhead accounts had not been considered) and did not include overtime.

The total compensation should be allocated as follows:

	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>
OM&A	\$ 7,499,964	\$ 7,728,485	\$ 7,391,264	\$ 7,714,335
Capital	2,702,717	2,635,498	3,357,190	3,568,330
Recoverable	<u>82,182</u>	<u>189,267</u>	<u>89,119</u>	<u>109,486</u>
Total	\$10,284,863	\$10,553,250	\$10,837,573	\$11,392,151
OM&A	72.92%	73.24%	68.20%	67.72%
Capital	26.28%	24.97%	30.98%	31.32%
Recoverable	0.80%	1.79%	0.82%	0.96%

Forestry Management

11. Ref: E1 / T2 / S3 / p3

The evidence indicates the following Forestry Management related expenditures. The evidence also notes that increased funding in 2009 is needed to address current vegetation issues:

2006 Actual	\$286,445
2007 Actual	\$545,858
2009 Forecast	\$767,000.

- a. Please provide the amounts for 2006 EDR and 2008 Forecast.

Response

The 2008 budget for forest management at Thunder Bay Hydro has been determined as \$523,574.

- b. Assuming the 2009 Forecast is approved, in what year will the Forestry Management budget revert back to the \$518,000 level? This level was identified in evidence as the estimated costs to maintain a sustainable 7 year cycle.

Response

The increased level of funding is anticipated to be required until 2016 in order to achieve the sustainable forestry levels described in the evidence.

Bad Debt Expense

12. Ref: E4 / T2 / S1 p34

The evidence indicates the following expenditure patterns for Bad Debt Expense:

2006 EDR Approved	\$146,686
2006 Actual	\$105,590
2007 Actual	\$ 80,362
2008 Forecast	\$160,000
2009 Forecast	\$160,000

- a. Please provide the bad debt expense actuals for 2003, 2004 and 2005.

Response

2003 Actual	\$333,535
2004 Actual	\$404,453
2005 Actual	\$236,697.

- b. Please provide the reasons for the (i) 28% decrease between 2006 EDR and 2006 actual and (ii) the 99% increase between 2007 actual and 2008 forecast.

Response

- (i) *Bad debt recoveries in 2006 were much higher (58%) than the historical average.*
- (ii) *We historically budget conservatively for this account given that in any particular year a larger account (as occurred in 2002 – two larger commercial accounts totalling \$152,000 required write-off) could easily cause the expense to increase over the past few year's experience. Additionally, a review of inactive accounts (customers that are in collection or finaled status) generated December 2008 versus the same report generated in 2007 reflects a 10% increase in the balance; our bad debt recoveries have reduced by 10% in 2008 and finally the accounts outstanding greater than six months in 2008 versus the comparative 2007 amount has likewise increased 19%. In light of the current economic times, Thunder Bay Hydro feels that the bad debt expense of \$160,000 is reasonable.*

Conservation

13. Ref: E4 / T2 / S2 / p2-3

The evidence indicates that the OPA is now funding Thunder Bay's CDM programs and this accounts for the decrease in forecasted expenditures in the Energy Conservation Account (5415) i.e. 2007 actual is \$381,627; 2008 forecast is \$58,431; 2009 forecast is \$78,732.

Please identify and provide a description of the program(s) in account 5415 that are funded in the amounts of \$58,431 and \$78,732 for 2008 and 2009 respectively.

Response

Prior to our 3rd tranche funding for CDM TBH had an Energy Services Advisor position who took care of key customer accounts (typically those over 200kW), high bill complaints, voltage issue investigations and advised customers on how to lower their bills. This position has been and for the foreseeable future will be necessary to meeting our customers' needs. The dollars reported within 5414 are simply the continuation of the allocation of the Energy Services Advisor position.

Actual expenditures reported in 5414 have been as follows:

*2005 \$381,160
2006 \$401,746
2007 \$381,627.*

OPA expenditures have not been reported on the OEB Trial Balance for 2007, Forecasted 2008 and Budgeted 2009. All expenditures related to OPA Programs have been offset by the related OPA Funding.

Compensation

14. Ref: E4 / T2 / S2 / p6-7

The evidence indicates that Thunder Bay's Board of Directors decided that members of the executive team should be compensated at levels consistent with the mean of the surveyed comparable; and that this resulted in an annual increase in compensation of about \$75,000.

- a. Please provide a copy of the annual Management Salary Survey completed by the Mearie Group which is stated to have aided Thunder Bay's Board of Directors in its consideration of executive compensation.

Response

The Board of Directors considered information from management salary surveys based on both 2006 and 2007 data. These salaries were provided by the Mearie Group and are attached as 'Appendix C'. Additionally, a custom survey was completed by Cyr and Associates Management Consultants (also attached in Appendix B) at the request of the utility. Cyr and Associates completes the Mearie Group Survey. The custom survey narrows the LDC's used in order to improve on the comparator group.

- b. Please describe the "outside consultant expertise" which is stated to have aided Thunder Bay's Board in its consideration of executive compensation.

Response

Annette Cyr, principal of Cyr and Associates, provided direct consulting to the Board of Directors on issues related to executive compensation in the Ontario LDC industry. Additionally, Gary Groves, Chair of Halton Hills Hydro and President of Comprehensive Benefit Solutions, also provided input on executive compensation issues to the Board of Directors.

15. Ref: E4 /T2 / S4 / p11

Please provide the base salary percentage increases budgeted for 2008 and 2009 broken down by major employee grouping (e.g., executive, management, unionized workers).

Response

Base salary percentage increases budgeted as follows:

	<u>2008</u>	<u>2009</u>
<i>Executive Economic Salary Increase</i>	<i>13.1%</i>	
<i>% Increase</i>	<i>4.0%</i>	<i>4.0%</i>
<i>Management</i>	<i>4.0%</i>	<i>4.0%</i>
<i>Unionized</i>		
<i>-Distribution Designer/IT Support</i>	<i>3.5%</i>	<i>3.5%</i>
<i>-Remaining Office Staff</i>	<i>2.0%</i>	<i>2.0%</i>

-Skilled Trades/System		
Control Station Elec	4.0%	4.0%
-Remaining Outside Staff	2.0%	2.0%.

Purchased Services

16. Ref: E4 / T2 / S3

The above reference identifies services provided by Thunder Bay to its affiliates. There appear to be no services that are purchased by Thunder Bay from its affiliates.

However, there appears to be no evidence (as required by the *Filing Requirements for Transmission and Distribution Applications* dated November 14, 2006) regarding the purchase of services by Thunder Bay from third parties.

For services purchased or to be purchased from other parties in excess of \$50,000 per annum, please identify the services, the vendors and the costs of each service for each of the years 2006 actual, 2007 actual, 2008 forecast and 2009 forecast. Please include a brief description of the specific methodology used in determining the price of each service.

Response

2006 Purchased Services > \$50,000

<u>Vendor #</u>	<u>Vendor</u>	<u>Service Description</u>	<u>Price Methodology</u>	<u>Amount</u>
	TD Bank	Banking service charges	Competitive bidding process	\$ 75,335
23	AON Reed Stenhouse Inc	Insurance premiums	Competitive bidding process	\$ 79,721
546	Potter Pumping Services	Vacuum excavation services	Pre-qualification/competitive bidding process	\$ 103,977
568	Survalent Technology Corp	Software maintenance and support	Single sourced	\$ 58,695
692	Thunder Bay Telephone	Communication services	Sole sourced	\$ 182,416
783	Campbell Trucking & Backhoe	Tree trimming	Pre-qualification/competitive bidding process	\$ 190,276
1129	K-Tek Electro-Services Ltd	Power line design and build	Pre-qualification/competitive bidding process	\$ 494,622
1163	Cheadles LLP	Legal fees and services	Competitive bidding process	\$ 53,564
1484	City of Thunder Bay - Realty Service	Rental of office space	Negotiation	\$ 288,475
1917	Mearie	Insurance liability premium	Single sourced	\$ 88,404
1943	Marvac	Power line services	Pre-qualification/competitive bidding process	\$ 52,550
1948	Hydro One	Instrument transformer feasibility studies and metering upgrades	Sole sourced	\$ 55,125
2094	DST Technologies Inc	Directional boring	Pre-qualification/competitive bidding process	\$ 63,200
2237	Mearie Management Inc	Basic life insurance premiums	Competitive bidding process	\$ 127,666
2350	Advantage Electric Thunder Bay	Various Capital and Electrical Maintenance services	TBH sets hourly rates based on market rates	\$ 73,314
	Total			\$ 1,987,340

2007 Purchased Services > \$50,000

<u>Vendor #</u>	<u>Vendor</u>	<u>Service Description</u>	<u>Price Methodology</u>	<u>Amount</u>
	TD Bank	Banking service charges	Competitive bidding process	\$ 74,294
23	AON Reed Stenhouse Inc	Insurance premiums	Competitive bidding process	\$ 85,925
546	Potter Pumping Services	Sew age services	Pre-qualification/competitive bidding process	\$ 77,405
692	Thunder Bay Telephone	Communication services	Sole source	\$ 174,114
783	Campbell Trucking & Backhoe	Tree trimming	Pre-qualification/competitive bidding process	\$ 281,610
1129	K-Tek Electro-Services Ltd	Power line design and build	Pre-qualification/competitive bidding process	\$ 437,622
1331	Grant Thornton LLP	Audit fees and services	Part of City of Thunder Bay Competitive bidding process	\$ 51,000
1381	Olameter Inc	Meter reading services	Pre-qualification/competitive bidding process	\$ 59,478
1484	City of Thunder Bay - Realty Service	Rental of office space	Negotiation	\$ 293,474
1917	Mearie	Insurance liability premium	Single sourced	\$ 100,171
2242	Jaco Environmental Systems Co	Transformer oil sample, extraction, and testing services	Pre-qualification/competitive bidding process	\$ 317,723
2237	Mearie Management Inc	Basic life insurance premiums	Competitive tender	\$ 139,828
2350	Advantage Electric Thunder Bay	Various Capital and Electrical Maintenance services	TBH sets hourly rates based on market rates	\$ 116,610
2361	Aevitas Inc.	PCB Waste Disposal	Pre-qualification/competitive bidding process	\$ 57,841
	Total			\$ 2,267,096

2008 Purchased Services > \$50,000

<u>Vendor</u>	<u>Service Description</u>	<u>Price Methodology</u>	<u>Amount</u>
TD Bank	Banking service charges	Competitive bidding process	\$ 68,000
Thunder Bay Telephone	Communication services	Single sourced	\$ 188,464
Campbell Trucking & Backhoe	Tree trimming	Pre-qualification/competitive bidding process	\$ 300,000
Hydro One	Wholesale meter upgrades	Sole Sourced	\$ 364,390
Grant Thornton LLP	Audit fees and services	Part of City of Thunder Bay Competitive Bidding process	\$ 50,000
Olameter Inc	Meter reading services	Pre-qualification/competitive bidding process	\$ 250,000
City of Thunder Bay - Realty Service	Rental of office space	Negotiation	\$ 307,136
Northwest Insurance Group	Insurance premiums	Competitive bidding process	\$ 54,810
Mearie	Insurance liability premium	Single sourced	\$ 110,000
Mearie Management Inc	Basic life insurance premiums	Competitive bidding process	\$ 124,900
Capital Projects	Ray Blvd reconstruction, Maple Ward, Kam River Cable Crossing	Pre-qualification/competitive bidding process	\$ 429,564
Total			\$ 2,247,264

2009 Purchased Services > \$50,000

Vendor #	Vendor	Service Description	Price Methodology	Amount
	TD Bank	Banking service charges	Competitive bidding process	\$ 69,360
692	Thunder Bay Telephone	Communication services	Single sourced	\$ 173,997
783	*	Tree trimming	Pre-qualification/competitive bidding process	\$ 543,426
1163	Cheadles LLP	Legal fees and services	Competitive bidding process	\$ 52,450
1314	Hydro One Networks	Wholesale meter upgrades	Sole Sourced	\$ 516,585
1331	Grant Thornton LLP	Audit fees and services	Part of City of Thunder Bay Competitive Bidding process	\$ 42,250
1381	Olameter Inc	Meter reading services	Pre-qualification/competitive bidding process	\$ 255,000
1484	City of Thunder Bay - Realty Service	Rental of office space	Negotiated	\$ 312,292
1773	Northwest Insurance Group	Insurance premiums	Competitive bidding process	\$ 73,425
1917	Mearie	Insurance liability premium	Single sourced	\$ 112,200
2237	Mearie Management Inc	Basic life insurance premiums	Single sourced	\$ 127,398
2350	*	County Fair Rebuild	Pre-qualification/competitive bidding process	\$ 322,979
2361	*	Transportation and destruction of PCB waste material	Pre-qualification/competitive bidding process	\$ 65,000
	Total			\$ 2,666,362
	*Vendor to be determined based on outcome of competitive process			

Shared Services

17. Ref: E4 / T2 / S3 / p4 and E3 / T3 / S1

The evidence indicates that Thunder Bay provides services to Thunder Bay Hydro Utility Services Inc. and to Thunder Bay Hydro Energy Services Inc. Per Tables 1 and 2 in the first reference above, "Services Billed" are forecast to total \$193,000 in 2008 and \$63,000 in 2009.

- a. Please confirm whether or not costs that will be directly or indirectly incurred by Thunder Bay in providing these "Billed Services" are included in Thunder Bay's 2008 and 2009 OM&A forecast i.e. \$11,919,481 and \$12,340,964 respectively. If so, please identify the amounts.

Response

This is to confirm that no incremental costs incurred for providing "Billed Services" are included in Thunder Bay Hydro's 2008 and 2009 OM&A forecast. Costs related to provision of "Other Electric Services" are netted against the revenue reported in account 4220 and costs related "Non-Utility Operations" are reported in account 4380

- b. Please confirm whether or not costs directly or indirectly incurred by Thunder Bay in providing these "Billed Services" in 2007 are included in Thunder Bay's total OM&A expenditures of \$12,051,634. If so please identify the amounts.

Response

This is to confirm that no incremental costs directly incurred for providing "Billed Services" are included in Thunder Bay Hydro's 2007 OM&A expenditures. Costs related to provision of "Other Electric Services" are netted against the revenue reported in account 4220 and costs related "Non-Utility Operations" are reported in account 4380.

- c. Please provide the calculations used to derive the "Billed Services" amounts of \$193,000 and \$63,000.

Response

Revenue reported for "Billed Services" were calculated based on the projected 2008 revenue. The 2009 revenue reported in account 4375 was reduced as a result of the sale of our Water Heater Division in 2008.

- d. The table presented in the second reference above provides a Summary of "Other Distribution Revenue". Please identify the four digit account which records the forecasted "Billed Services" proceeds of \$193,000 and \$63,000.

Response

<i>Billed Services Revenue</i>	<i>2008</i>	<i>\$155,000</i>	<i>4375</i>
		<i><u>\$ 38,000</u></i>	<i>4220</i>
		<i>\$193,000</i>	
	<i>2009</i>	<i>\$ 25,000</i>	<i>4375</i>
		<i><u>\$ 38,000</u></i>	<i>4220</i>
		<i>\$ 63,000.</i>	

Non-Recurring Items

18. Ref: E4 / T 2 / S1

Please identify any non-recurring expenditure items (in excess of \$50,000) that are included in the 2009 OM&A forecast.

Response

Meter Reading Costs of \$255,000 are included in the 2009 budget. As a result of our Smart Meter implementation plan it is estimated that these costs will decrease to approximately \$125,000 in 2010 and then to \$25,000 in 2011 and annually thereafter.

There is a budget of \$50,000 for annex demolition included in the budget for the Operations Centre. Given that the Operations Centre is an allocated cost, of this amount approximately \$36,000 impacts OM&A.

Regulatory Costs

19. Ref: E1 / T3/ S2

The pro-forma account (Regulatory Exepnses-5655) for 2009 does not appear to include an amount for regulatory expenses.

- a. Does the 2009 forecasted OM&A include an amount for regulatory expenses? If so, please provide the amount, and the account in which it is recorded.

Response

The 2009 forecasted OM&A does not include any amounts for regulatory expenses in OEB account 5655. Thunder Bay Hydro has historically reported costs associated with OEB Assessments, OEB Cost Awards, ESA Fees etc. in account 5665. For 2008 consulting fees related to the Rate Rebasing were reported in account 5630.

- b. Please provide a break-out of the items or components that comprise the amount.

Response

Regulatory expenses have been reported in the following OEB account numbers:

	5630	5655	5665
2006			
Ontario Energy Board - Cost Awards and Assessments		116,463	
ESA		18,194	
	0	\$134,657	0
2007			
Consulting Services Related to OEB Oral Hearing	23,154		
Consulting Services related to Conditions of Service Review	9,934		
Ontario Energy Board – Cost Awards and Assessments		125,422	
ESA	3,386	18,742	
Other Professional Services Related to OEB filings	1,530		
	\$38,004	\$144,164	0
2008			
Consulting services related to Rebasing	25,000		
Ontario Energy Board - Cost Awards and Assessments		130,000	
Ontario Energy Board - Rate Filing Intervenor Cost Awards		5,000	
ESA		21,000	
	\$25,000	\$156,000	0
2009			
Consulting Services related to Rebasing	33,000		
Ontario Energy Board - Cost Awards and Assessments		136,050	
ESA		21,420	
	\$33,000	\$157,470	0

c. Please complete the following regarding regulatory expenses:

2006 actual	\$
2007 actual	\$
2008 forecast	\$

Response

See b. for details of regulatory expenses by year

RATE BASE AND CAPITAL EXPENDITURES

General

20. Ref: E2

Please provide information for the period 2006 to 2009 in the following table format:

	2006 Actual	2007 Actual	2008 Bridge	2009 Test
Allowed Return on Equity (%) on the regulated rate base	2.93%	2.93%	2.93%	3.75%
Actual Return on Equity (%) on the regulated rate base	1.56%	0.81%	1.25%	3.28%
Retained Earnings	4,185,103	4,482,344	4,911,226	5,977,343
Dividends paid to shareholders	-	-	-	-
Sustaining capital expenditures (excluding smart meters)	3,500,612	3,237,170	3,922,252	4,868,732
Development capital expenditures (excluding smart meters)	1,974,705	1,733,617	1,205,289*	1,296,187
Operations capital expenditures	948,957	488,960	829,089	1,129,187
Smart Meters capital expenditures	-	-	-	-
Other capital expenditures (please specify) – Wholesale Meter Upgrades, PCB Regulatory Work including Asset Retirement Obligation	-	325,000	611,585	976,748
Total capital expenditures (including smart meter meters) (Net of contributions in-kind)	6,424,274	5,784,747	6,568,215	8,270,854
Total capital expenditures (excluding smart meters)	6,424,274	5,784,747	6,568,215	8,270,854
Depreciation expense	5,083,796	5,324,447	5,379,642	5,472,382
Construction Work in Progress	323,066	101,799	494,000	494,000
Rate Base	71,778,536	73,254,018	73,583,178	75,169,648
Number of Customer Additions (total) Gross New				
- Residential	118	205	238	175
- General Service < 50 kW	49	60	51	15
- General Service > 50 kW, Intermediate and Large Use	-	-	-	-
Number of Customers (total, December 31)				
- Residential	44,420	44,460	44,348	44,635
- General Service < 50 kW	4,468	4,436	4,425	4,466
- General Service > 50 kW, Intermediate and Large Use	512	525	528	530

** This sustaining capital level will be approximately \$1.6M; however, this is 100% offset by the capital contributions.*

21. Ref: E2

Thunder Bay has discussed at some length the need for increased capital expenditures to refurbish and replace its distribution network, following a cycle of cost minimization from 1994 to 2006. Please provide, if possible, a break out of 2007 actual, 2008 bridge and 2009 test year capital expenditures, with respect to the capital expenditures needed

to catch up, and that necessary on a sustained basis, including normal growth. Please provide this break down in dollar and percentage terms.

Response

As indicated in the evidence, Thunder Bay Hydro has been below its sustaining capital levels for approximately 12 years. With the proposed increases over the rate application period Thunder Bay Hydro will continue to be below the sustaining capital levels and the requested increases have been such to ensure that Thunder Bay Hydro is effective in executing its capital replacement. At its next rate application Thunder Bay Hydro will be in a position to reach its sustaining levels over the projected period and at that time will examine and justify any catch up requirements beyond sustaining levels.

See #20 above, 'Sustaining capital expenditures (excluding smart meters)' and 'Development capital expenditures (excluding smart meters)'.

Thunder Bay Hydro's anticipated developmental growth capital is expected to remain the same with the exception of a City of Thunder Bay road widening project recently announced that is expected to cost Thunder Bay approximately \$1.0M in 2010 and again in 2011. This is still in the very preliminary stages at this time and as such, not incorporated in the 2009 test year.

Historical Capital Expenditures

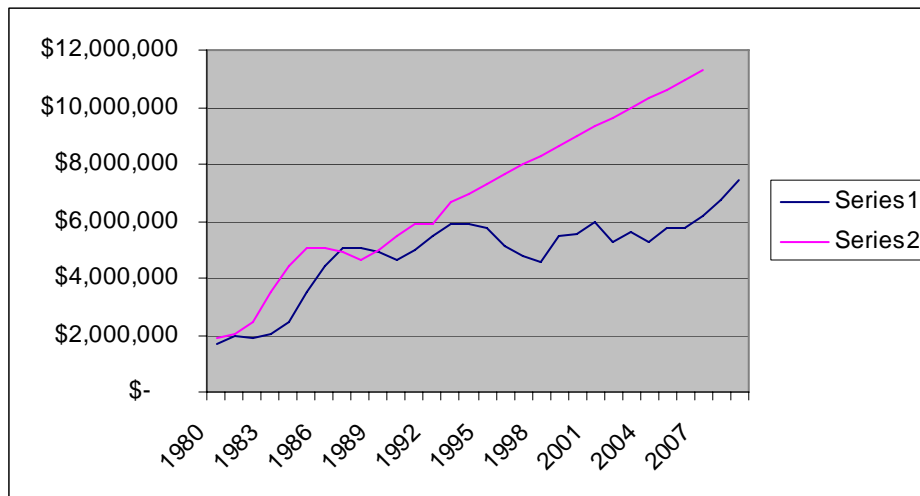
22. Ref: E2 / T3 / S1 / Appendix A

- a. Please provide the annual capital expenditure data shown in the graph at the above reference from 1980 actual to 2009 test year.

Response

Year	Capital Expenditures, excluding Contributions in Kind, Water Heaters & TB Hydro Building	Smoothed Capital	Extended Trend **
1980	\$ 1,487,848	\$ 1,658,889	\$ 1,658,889
1981	\$ 1,829,930	\$ 1,966,681	\$ 1,966,681
1982	\$ 2,582,266	\$ 1,913,658	\$ 1,913,658
1983	\$ 1,328,778	\$ 2,024,077	\$ 2,024,077
1984	\$ 2,161,186	\$ 2,471,399	\$ 2,471,399
1985	\$ 3,924,233	\$ 3,485,811	\$ 3,485,811
1986	\$ 4,372,015	\$ 4,445,098	\$ 4,445,098
1987	\$ 5,039,045	\$ 5,064,532	\$ 5,064,532
1988	\$ 5,782,535	\$ 5,037,112	\$ 5,037,112
1989	\$ 4,289,756	\$ 4,882,855	\$ 4,882,855
1990	\$ 4,576,273	\$ 4,611,942	\$ 4,611,942
1991	\$ 4,969,798	\$ 4,979,390	\$ 4,979,390
1992	\$ 5,392,100	\$ 5,506,027	\$ 5,506,027
1993	\$ 6,156,184	\$ 5,902,236	\$ 5,902,236

Capital Expenditures, excluding Contributions in Kind, Water Heaters & TB Hydro Building			
Year		Smoothed Capital	Extended Trend **
1994	\$ 6,158,423	\$ 5,909,894	\$ 5,909,894
1995	\$ 5,415,074	\$ 5,788,140	\$ 6,646,674
1996	\$ 5,790,922	\$ 5,148,949	\$ 6,978,678
1997	\$ 4,240,851	\$ 4,762,279	\$ 7,310,683
1998	\$ 4,255,065	\$ 4,539,220	\$ 7,642,687
1999	\$ 5,121,743	\$ 5,461,706	\$ 7,974,691
2000	\$ 7,008,309	\$ 5,529,767	\$ 8,306,695
2001	\$ 4,459,248	\$ 5,949,848	\$ 8,638,700
2002	\$ 6,381,988	\$ 5,286,766	\$ 8,970,704
2003	\$ 5,019,061	\$ 5,641,531	\$ 9,302,708
2004	\$ 5,523,543	\$ 5,288,503	\$ 9,634,712
2005	\$ 5,322,904	\$ 5,780,143	\$ 9,966,717
2006	\$ 6,493,981	\$ 5,749,542	\$ 10,298,721
2007	\$ 5,431,742	\$ 6,159,763	\$ 10,630,725
2008	\$ 6,553,566	\$ 6,752,055	\$ 10,962,729
2009	\$ 8,270,856	\$ 7,412,211	\$ 11,294,734



****** The extended trend is a function of the smoothed capital investment for the period to 1994 when the rate freeze started. Excel was used to trend the investment from 1995 to 2009.

- b. Please provide the mathematical basis for the increasing “extended trend” shown as the red line in the graph.

Response

The extended trend was provided for illustrative purposes to support the provided narrative. The extended trend is based on historical capital expenditure data from 1980 to 1994. The graph presents a three year moving trend of this data in order to smooth the line for ease of illustration. The 'Auto-fill' function of

Microsoft Excel was used to extend the data from 1994 to 2008, producing an illustrative Extended Trend. Microsoft Excel Auto-fill provides the trend by calculating a least squares fit for a trend line using the equation: $y = mx + b$, where m is the slope and b is the intercept. The equation of the line is $y = 332004X + 1334606$, and $R^2 = 0.9854$.

- c. Please explain the logic behind this forecast.

Response

As indicated, the extended trend line was provided to illustrate the fact that historically capital spending had been slowly increasing until 1994. After 1994, Hydro-Electric Commission of Thunder Bay decisions to reduce electricity rates impacted annual capital spending, causing the upward trend cease and move into a downward trend from 1995 to 2007. TBHEDI believes that if these decisions to reduce rates had not been made, annual capital spending would have continued to increase, reflecting inflationary pressures, in a trend consistent with the extended trend provided.

Meter Capital Expenditures

23. Ref: E2 / T2 / S3 / Table 1

In Table 1, Thunder Bay shows \$589,309 for capital expenditures in Account 1860 – Meters.

- a. Please provide details of 2008 meter expenditures by:
- i) Wholesale meters;
 - ii) Interval meters for General Service, Intermediate and Large Use customers; and
 - iii) Residential and General Service non-interval meters.

Response

- i) *Wholesale meter project costs to date in 2008 is approximately \$507,000.*

Purchases for 2008 meters were as follows:

- ii) *General Service Interval Meters \$14,000*
- iii) *Residential \$37,000*
- General Service Non-Interval \$30,000.*

- b. Please identify the meter capital expenditures for residential non-interval meters that are due to verification of expired seals.

Response

Purchases due to verification of expired seals amounted to \$35,700.

- c. Please identify any efforts that Thunder Bay has considered or undertaken to defer replacement of meters with expired seals until Thunder Bay begins smart meter deployment in 2009.

Response

Meter dispensation was requested from Measurement Canada for the 2007 (3362) meters that had expired seal dates. Measurement Canada required that Thunder Bay Hydro remain in compliance with its regulations irrespective of the Smart Metering initiative that it planned to undertake in 2009. Thus Thunder Bay Hydro replaced the 2007 meters (3362) that had expired seal dates in 2008.

Upon completion of a sampling program, seal date extensions were granted by Measurement Canada for all 2008 meters which had expired seal dates.

Working Capital Allowance

24. Ref: E2 / T4 / S1

- a. Please provide the derivation of the components of Cost of Power, shown in the table on page 3 of the exhibit, for each of the 2008 Bridge and 2009 Test years.

Response

The cost of power components were estimated for 2008 and 2009 as follows:

KwH purchases were based on weather normalized predicted KwH purchases for both 2008 and 2009. The April 11, 2008 Navigant Report was used to establish both the 2008 and 2009 cost of power prices.

Cost of Power – Used the weather normalized predicted KwH purchases. The RPP eligible purchases were estimated based on the 2007 actual allocation. These eligible purchases were then allocated into rate components and tiered according to the 2007 actual experience.

Rates for Wholesale Market, Network and Connection were estimated for 2008 and 2009 based on the actual KwH purchases and costs for January to June 2008.

- b. Please identify the commodity price, and wholesale market service and retail transmission charges used.

Response

*Commodity Price used \$.05 for Tier 1, \$.059 for Tier 2, Remainder \$.06072.
Wholesale Market Service price used \$.005562
Network price used \$.003838
Connection price used \$.003393.*

- c. Does Thunder Bay concur that the working capital allowance should be updated at the time of the Board's decision based on the most current RPP price then available? If not, please explain.

Response

Yes Thunder Bay Hydro concurs that the working capital allowance should be updated at the time of the Board's decision based on the most current RPP price available.

Depreciation Expense

25. Ref: E1 / T1 / S1, E2 / T2 / S1 and E4 / T1 / S1

Thunder Bay provides the following data with respect to gross fixed assets, net fixed assets, accumulated depreciation and depreciation expense. Board staff has calculated the geometric average annual growth rate from 2006 actuals to 2009 test. Thunder Bay's application shows depreciation expense increasing less than either gross fixed assets or net fixed assets.

Description (E1/T1/S1/ page 1/ Table 1)	2006 Board- approved	2006 Actual	2007 Actual	2008 Bridge	2009 Test	Annual % change 2006 actual to 2009 test
Gross Fixed Assets	\$ 117,366,079	\$ 128,359,838	\$ 132,593,627	\$ 137,977,953	\$ 145,434,516	4.25%
Accumulated Depreciation	\$ 58,223,541	\$ 68,017,440	\$ 71,981,194	\$ 76,881,949	\$ 81,830,062	6.36%
Net Book Value (E4/T1/S1)	\$ 59,142,538	\$ 60,342,398	\$ 60,612,433	\$ 61,096,004	\$ 63,604,454	1.77%
Depreciation Expense	\$ 4,056,140	\$ 4,382,390	\$ 4,564,773	\$ 4,526,557	\$ 4,573,436	1.43%

A detailed derivation of the depreciation expense for each of 2006 actual, 2007 actual, 2008 bridge and 2009 test years is provided in the Tables 1, 2, 3 and 4, respectively, in Exhibit 2 / Tab 2 / Schedule 1.

Board staff is unclear about a number of entries in these continuity schedules, where there appears to be a mismatch between additions and disposals with respect to gross fixed assets and depreciation for specific accounts. The following are certain examples identified for the purpose of this interrogatory. The list is not meant to be exhaustive:

- For all years, for account 1935 – Stores Equipment, the Gross Fixed assets are \$63,417.16 and opening accumulated depreciation is \$62,835.45, but there is no addition to depreciation expense for the year.

Response

This was noticed and the entire \$581.71 was depreciated in 2009. We felt the annual adjustments to the prior years would be immaterial.

- In Table 3 (2008 bridge year), for account 1950 – Power Operated Equipment, Thunder Bay shows an opening balance of gross assets of

\$3,583.39 and additions during the year of \$10,000, but the accumulated depreciation has an opening balance of \$2,550.36 and no depreciation expense during the year.

Response

We agree that there should have been depreciation calculated in the year of the additions. These purchases are depreciated beginning the month of purchase. Therefore there would be a \$166.67 per month error. The addition was not made until October 2008, therefore the error would be \$500 which we feel is immaterial.

- Under Table 1 (2006 actual), for account 1850 – Line Transformers, there is a disposal under accumulated depreciation of \$173,864.45 but no disposal under gross fixed assets.

Response

For accounts 1830, 1850 and 1860 the disposals under accumulated depreciation represent the old assets coming back from the field during construction that are scrapped. The additions on this table are the “net” additions. New purchases less scrapped assets.

- Also in Table 1, for Account 1860 – Meters, there is a disposal of \$78,547.38 under gross fixed assets but a disposal of \$274,265.76 under depreciation.

Response

See response noted above.

- a. Please provide, if available, Tables 1 to 4 inclusive from Exhibit 2 / Tab 2 / Schedule 1 in working Excel spreadsheet format.

Response

Table 1 to 4 inclusive from Exhibit 2/Tab 2/Schedule 1 are provided in working Excel spreadsheet format on the enclosed disk, saved as ‘OEB_Interrogatory_#25_Table 1 to 4.xls’.

- b. Please provide the depreciation rate used for each account shown in Exhibit 2 / Tab 2 / Schedule 1. Please confirm that the depreciation rate corresponds with those documented in Appendix B of the 2006 Electricity Distribution Rate Handbook. If the rates differ, please explain the basis for Thunder Bay’s depreciation rate.

Response

Depreciation Rates Used are as shown in the following Table.

Thunder Bay Hydro Depreciation Details				
OEB Acct	Description	Depreciation	Depreciation per OEB Appendix B	Explanation for Differences
1805	Land	Not Depreciable	Not Depreciable	
1808	Buildings			
	Pre 1992	60 Years	60 Years	
	1992 to Present	50 Years	50 Years	
1820	Distribution Station Equipment	30 Years	30 Years	
1830	Poles, towers, fixtures	25 Years	25 Years	
1835	Overhead Conductors Devices	25 Years	25 Years	
1840	Underground conduit			
	Pre 1981	40 Years		
	1981-1987	35 Years		
	1987 to present	25 Years	25 Years	
1845	Underground conduit and devices			
	Pre 1981	40 Years		
	1981-1987	35 Years		
	1987 to present	25 Years	25 Years	
1850	Lines transformers			
	Pre 1986	30 Years		
	1986 to present	25 Years	25 Years	
1855	Services	25 Years	25 Years	
1860	Meters			
	Pre 1986	35 Years		
	1986 to present	25 Years	25 Years	
1915	Office furniture and equipment	10 Years	10 Years	
1920	Computer equipment hardware	3 Years	5 Years	Thunder Bay Hydro has a three year replacement schedule for computer hardware, therefore the amortization period matches the use. The net impact to amortization is in 2008. Thunder Bay Hydro has expensed \$2,218 less and in 2009 \$9,255 more due to amortizing over 3 years.
1925	Computer equipment software	3 Years	No Rate Provided by OEB	
1930	Transportation equipment			
	Trucks under 3 tonnes	5 Years	5 Years	
	Trucks 3 tonnes and over	8 Years	8 Years	
1935	Stores equipment	10 Years	10 Years	

**Thunder Bay Hydro
Depreciation Details**

OEB Acct	Description	Depreciation	Depreciation per OEB Appendix B	Explanation for Differences
1940	Tools, shop and garage equip	5 or 10 years	10 Years	Thunder Bay Hydro bases the amortization on the expected useful life of 5 or 10 years depending on the equipment purchased. Please note that we are currently only amortizing \$42,000 over 5 years which will result in an immaterial difference from the OEB rate of 10 years.
1945	Measurement and testing equip	5 or 10 years	No Rate Provided by OEB	
1950	Power operated equipment	8 Years	8 Years	
1955	Communication equipment	5 Years	No Rate Provided by OEB	
1980	System supervisory equipment	15 Years	15 Years	
1996	Hydro One current voltage upgrades	25 Years	No Rate Provided by OEB	

- c. Please provide a detailed explanation of why the depreciation expense shows a lower annual growth rate than either gross fixed assets or net fixed assets.

Response

Depreciation growth will not necessarily vary to the same degree as gross fixed assets or net book value for a variety of reasons. Fully depreciated assets may cause depreciation to have a negative year over year growth. As an example: a fleet purchase in 1995 will cease to have any depreciation in 2003. Assuming the vehicle continues in use, depreciation for the subsequent years will be less; however, the physical disposal and removal from cost and accumulated depreciation have not occurred. This will cause the growth relationship to vary significantly. Additional factors impacting the relationship would be the timing of the assets put in service and timing of amortization rate changes.

Please see the spreadsheet on the following page revising the figures to include gross amortization. The revised result shows depreciation growth is marginally exceeding the growth in net book value.

	2006 Actual	2007 Actual	2008 Bridge	2009 Test	Annual % Change 2006 actual to 2009 Test
Gross Fixed Assets	\$ 128,359,838	\$ 132,593,627	\$ 137,977,953	\$ 145,434,516	4.18%
Depreciation-including capitalized depreciation*	\$ 4,833,597	\$ 5,044,446	\$ 5,046,443	\$ 5,112,386	1.86%
Accumulated Depreciation	\$ 68,017,440	\$ 71,981,194	\$ 76,881,949	\$ 81,830,062	6.17%
NBV	\$ 60,342,398	\$ 60,612,433	\$ 61,096,004	\$ 63,604,454	1.77%
Capitalized Depreciation Added to figures	\$ 451,207	\$ 479,673	\$ 519,886	\$ 538,950	5.88%
<u>Alternative Review of the Numbers</u>	(Excludes the Capital Contributions and Amortization of Contributed Capital)				
Gross Fixed Assets	\$ 135,036,488	\$ 140,223,652	\$ 146,253,977	\$ 154,360,541	4.47%
Depreciation-including capitalized depreciation	\$ 5,083,797	\$ 5,324,446	\$ 5,379,643	\$ 5,472,386	2.44%
Net Book Value	\$ 66,070,348	\$ 67,013,758	\$ 67,810,129	\$ 70,608,579	2.23%
Gross Contributed Capital	\$ (6,676,650)	\$ (7,630,025)	\$ (8,276,024)	\$ (8,926,025)	9.52%
Accumulated Amortization of Contributed Cap	\$ (250,200)	\$ (280,000)	\$ (333,200)	\$ (360,000)	11.97%
Net Book Value	\$ (5,727,950)	\$ (6,401,325)	\$ (6,714,125)	\$ (7,004,125)	6.58%
* Total depreciation (which includes the amount capitalized) needs to be the part of the table for comparison.					

COST OF CAPITAL

Capital Structure

26. Ref: E5 / T1 / S2

In the table shown in this exhibit for the 2008 Bridge year, Thunder Bay shows deemed capitalization of \$39,219,834 for each of long-term debt and equity, despite a total capitalization of \$73,583,178 and a deemed capital structure of 53.3% long-term debt and 46.7% equity. Please confirm or correct the 2008 deemed capital structure shown in this exhibit.

Response

Thunder Bay Hydro confirms that the deemed common equity should be \$34,363,344.

Long Term Debt

27. Ref: E5 / T1 / S3

In this exhibit, Thunder Bay provides a table showing its long-term debt for each year from 2006 actual to 2009 test. Thunder Bay identifies the principal and rates for three debt instruments but provides no other documentation on the nature of each, including new debt identified for the 2009 test year with a principal of \$1,153,142 and a calculated cost rate of 6.0%.

- a. Please provide further information on each debt instrument as shown in the above reference, including:
 - i. starting date and term of debt instrument;
 - ii. whether the rate is fixed or variable;
 - iii. any terms for re-negotiability; and
 - iv. whether the debt holder is affiliated with Thunder Bay or not.

Response

Note Payable to Shareholder

- i. *October 30, 2000*
- ii. *N/A*
- iii. *Payable to the Holder on Demand*
- iv. *Shareholder*

Capital Lease Obligation

- i. *April 1, 2005*
- ii. *Fixed*
- iii. *No*
- iv. *Not affiliated*

2009 Capital Funding

- i. *Undetermined; however, assumption is January 1 given that the loan will be in existence through to the next rebasing.*
 - ii. *Assumption is fixed*
 - iii. *Undetermined*
 - iv. *Undetermined.*
- b. For each debt instrument please describe how the terms and rate shown on Exhibit 5 / Tab 1 / Schedule 3 conform with the guideline documented in section 2.2.1 of the *Report of the Board on Cost of Capital and 2nd Generation Incentive Regulation for Ontario's Electricity Distributors*, issued December 11, 2006.

Response

Note Payable to Shareholder – No, this is payable on demand and as such the above report would dictate the rate at 6.1%; however, Thunder Bay has retained the 0% debt rate as approved in a prior decision.

Capital Lease Obligation – Yes, third party embedded debt with the rate approved in a prior decision.

2009 Capital Funding – Yes, assumption used was a market based rate.

- c. Please describe the purpose of the new debt of \$1,153,142 to be incurred in 2009.

Response

As noted in the application, Thunder Bay Hydro is increasing it's capital expenditure over historical levels and this is the estimated amount that will be funded by debt.

- d. Please provide a copy of the Promissory Note due to the City of Thunder Bay.

Response

A copy of the Promissory Note due to the City of Thunder Bay is shown on the following two (2) pages.

DEMAND PROMISSORY NOTE

CDN \$33,490,500

Thunder Bay, Ontario

Note Date: July 21, 2005

FOR VALUE RECEIVED, the undersigned, THUNDER BAY HYDRO ELECTRICITY DISTRIBUTION INC., a corporation existing under the laws of the Province of Ontario (the "**Promisor**"), hereby promises to pay to or to the order of THE CORPORATION OF THE CITY OF THUNDER BAY (the "**Holder**") the principal amount of THIRTY-THREE MILLION FOUR HUNDRED AND NINETY THOUSAND FIVE HUNDRED DOLLARS (CDN \$33,490,500) (the "**Principal Amount**") in lawful money of Canada on the following terms:

1. The Promisor shall repay the Principal Amount to the Holder on demand.
2. The Promisor shall not pay any interest to the Holder in connection with the Principal Amount hereunder.
3. The Promisor shall have the right to prepay at any time the Principal Amount, in whole or in part, without notice, bonus or penalty.
4. The Promisor hereby waives diligence, presentment, demand, protest, notice of any kind whatsoever and any other condition precedent to action against the Promisor for the repayment of this Promissory Note.
5. If the Promisor is required by law to make any deduction or withholding from any payment hereunder, it shall do so and the amount due from the Promisor in respect of such payment shall be increased to the extent necessary to ensure that, after making such deduction or withholding, the Holder receives a net amount equal to the amount it would have received had no deduction or withholding been required to be made. The Promisor shall promptly notify the Holder if at any time either Promisor is required by law to make any such deduction or withholding.
6. No change, modification, alteration or rescission of any terms of this Promissory Note shall be binding on the Holder or the Promisor unless made in writing and signed by both of them.
7. This Promissory Note shall be binding upon and enure to the benefit of the Promisor and the Holder and their respective successors and permitted assigns. This Promissory Note and the rights and obligations hereunder may not be assigned by the Promisor except with the written consent of the Holder.
8. This Promissory Note shall be governed by and construed in accordance with the laws of the Province of Ontario.

IN WITNESS WHEREOF the Promisor has caused this Promissory Note to be executed on the date noted above.

THUNDER BAY HYDRO ELECTRICITY
DISTRIBUTION INC.

By: 

Name: Robert Mace, MBA
Title: President

By: 

Name: C. Thomas Wright, CA
Title: Treasurer

SMART METERS

Smart Meter Program

28. Ref: E2 / T3 / S1 and E8 / T1 / S1

On October 22, 2008, the Board issued *Guideline G-2008-0002 Smart Meter Funding and Cost Recovery*. Section 1.4 of the Guideline specifies filing requirements to support a request for a utility-specific funding adder. Thunder Bay currently has a smart meter adder of \$0.27 per month per metered customer. For 2009, Thunder Bay has requested a utility-specific funding adder of \$1.25 per month per metered customer.

- a. Please provide:
 - i) a detailed smart meter plan which includes the number of meters to be installed and a monthly installation schedule during which the proposed smart meter funding adder is expected to be in effect;

Response

Thunder Bay Hydro has contracted with Util-Assist for project management and is in negotiations with an installation company for the rollout. TBH has signed a letter of intent with Elster Metering for the AML. In addition TBH is in negotiations with a wide-area-network provider for the back hauling of meter data to Thunder Bay Hydro's servers. Thunder Bay Hydro's internal smart meter project team has been formed and responsible parties have been assigned duties by the Executive Team. Figure 1-Project Plan, on the following two (2) pages, shows the project plan.

Figure 1 – Project Plan

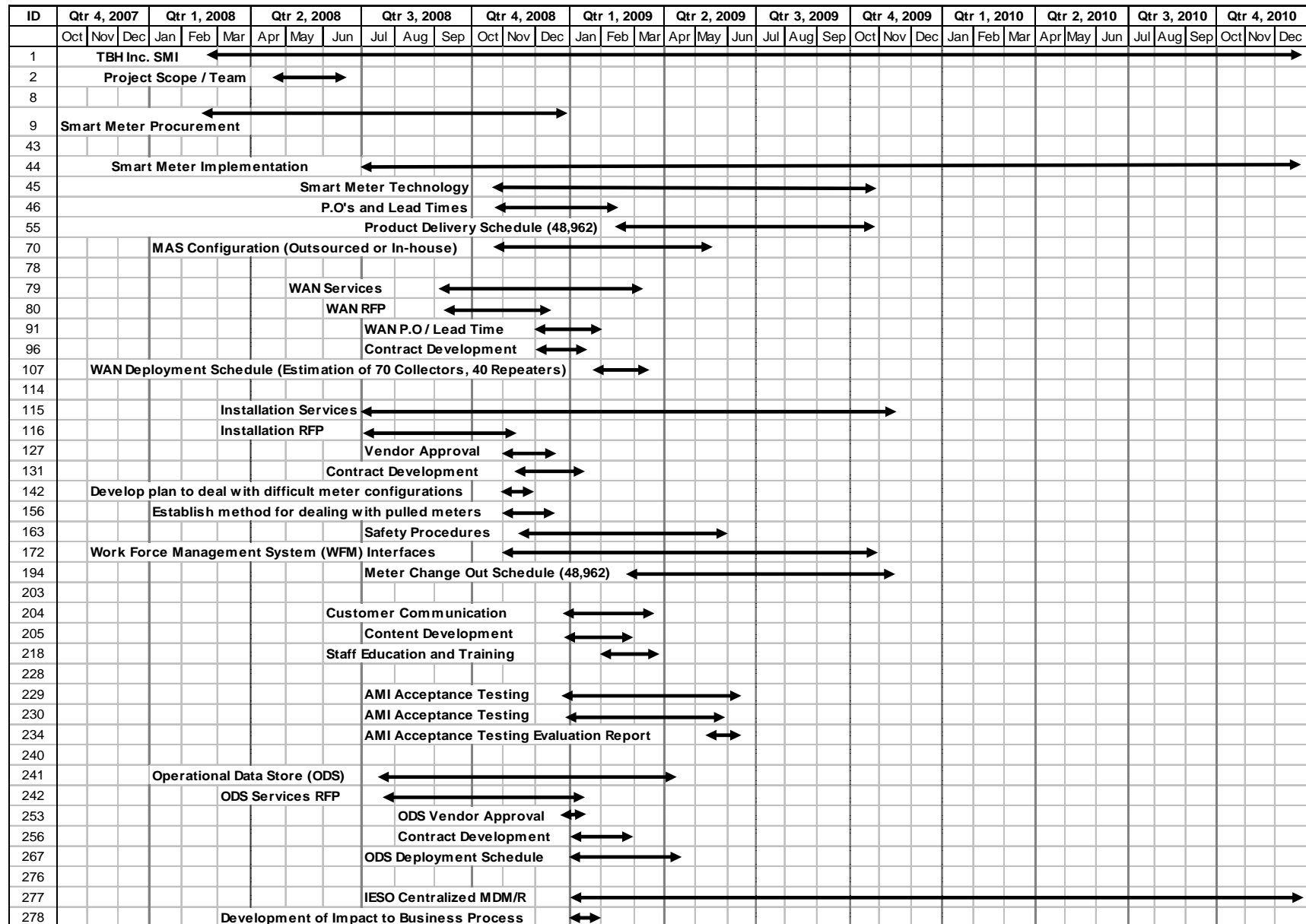
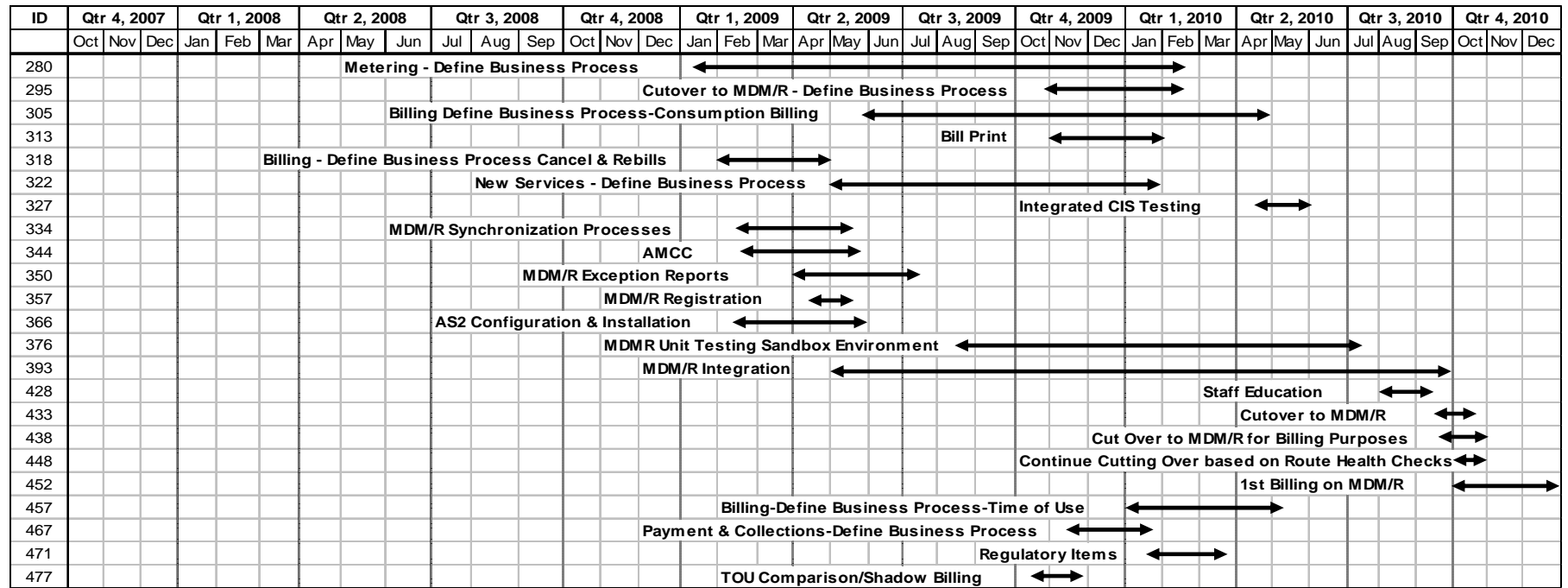


Figure 1 – Project Plan (continued)



The head-end (AMI) computer system will be configured and installed in early January of 2009. Collectors will be installed by TBH in February and March of 2009 and the monthly installation schedule will begin on March 16, 2009 ending on December 4, 2009. This schedule is based on the proponent's estimation of 180 installable days during that period using 6 installers with an average number of 44 installations per day. Figure XX shows the monthly schedule.

Figure 2 - 2009 Monthly Installation Schedule

MONTH	Number of Installations
March	500
April	6,000
May	6,000
June	6,000
July	6,000
August	6,000
September	6,000
October	6,000
November	6,000
December	601
TOTAL	49,101

	Total Cost	Per Meter Cost
<i>Procurement and installation of the components of the AMI system</i>	\$7,704,000	\$156.90
<i>Customer information system – Computer Hardware/Software Costs</i>	215,638	4.37
<i>Incremental operating and maintenance activities (four year average annual)</i>	260,604	5.31
<i>* Changes to ancillary systems: (1)</i>		
<i>Capital</i>	294,759	6.00
<i>Incremental operating and maintenance</i>	299,701	6.10
<i>Costs associated with Repair and Replacement of Customer Owned Equipment (1):</i>		
<i>Capital</i>	334,083	6.80
<i>Incremental operating and maintenance (2009 only)</i>	222,722	4.54
<i>Stranded meters (Costs are in Rate Based)</i>	\$2.2M	\$ 44.93

* The composition of the MDMR costs at Exhibit 2/Tab 3/Schedule 1, page 9, includes Smart Meter Customer Presentment Tools, Smart Meter Entity MDMIR, Bill Print Modifications, Customer Education Packages, Customer TOU Modifications and MDMIR Integration and Staff Training Costs. The Costs are estimated as follows:

	2009	2010	2011	2012
<i>Capital</i>	\$ 215,379	\$ 79,380	\$ -	\$ -
<i>Operating</i>	289,538	384,502	262,265	262,499
	\$ 504,917	\$ 463,882	\$ 262,265	\$ 262,499

- (1) *Thunder Bay Hydro has not included these costs in the Smart Meter Rate Adder calculation, as at the time of filing there was some uncertainty with respect to their treatment. These costs were also not included in the 2009 Test Year budget.*

The four year annual average incremental operating and maintenance costs for the changes to ancillary systems would be \$274,701 and the 2009 meter base operating and maintenance costs would be \$222,722, totalling \$497,423 estimated additional revenue requirement in 2009.

- ii) a business plan supporting any smart meter or AMI costs that are incurred to support functionality that exceeds the minimum functionality adopted in O. Reg. 426/06, and an estimate of those costs;

Response

Thunder Bay Hydro has no plans to incur costs that exceed the minimum functionality adopted in O. Reg. 426/06.

- iii) a statement as to whether Thunder Bay has incurred or expects to incur costs associated with functions for which the Smart Metering Entity has the exclusive authority to carry out pursuant to O. Reg. 393/07, and an estimate of any such costs; and

Response

Thunder Bay Hydro has not incurred nor does it expect to incur costs associated with the functions for which the Smart Metering Entity has the exclusive authority to carry out pursuant to O. Reg. 393/07.

- iv) copies of documentation, such as letters from the Fairness Commissioner, affirming that Thunder Bay is authorized to deploy smart meters pursuant to O. Reg. 427/06 as amended by O. Reg. 235/08.

Response

Please see the following Figure 3 – Correspondence from PRP International, Inc., Fairness Advisory Services relative to the Attestation of the Fairness Commissioner, Advanced Metering Infrastructure RFP, August 2007 – London Hydro & Consortium of LDCs Smartmetering Project.

Figure 3 – Attestation of the Fairness Commissioner



PRP International, Inc.
Fairness Advisory Services

May 30, 2008

Mr. Tim Wilson
Vice-President, Customer Service & Conservation
Thunder Bay Hydro Electricity Distribution
34 Cumberland Street North
Thunder Bay, ON P7A 4L4

Dear Mr. Wilson:

Subject: Attestation of the Fairness Commissioner
Advanced Metering Infrastructure RFP, August 2007
London Hydro & Consortium of LDCs Smartmetering Project

PRP International, Inc. is pleased to submit its letter report of the Fairness Commissioner for the noted Request for Proposal (RFP) evaluation and selection phase. This judgment is being provided for the information and use of each Consortium LDC Sponsor, in their consideration of the report from the Evaluation Phase, for this competitive transaction.

"It is the judgment of PRP International, Inc., as the Fairness Commissioner, that the determinations of the two (2) highest ranked Proponents for the "Group of the Northern Five LDCs" (Thunder Bay Hydro Electricity Distribution, Atikokan Hydro Inc., Fort Francis Hydro Power Corporation, Kenora Hydro Electric Corporation Ltd, and Sioux Lookout Hydro Inc.,) requirements are:

- Elster Metering, as the recommended Preferred Proponent, based on its highest ranking, and*
- KTI/Sensus Limited being the second ranked Proponent.*

These determinations were made in a fair (objective and competent) manner and consistent with the evaluation and selection processes set out in the RFP, issued August 14, 2007."

A detailed report for your records will be submitted to you, by August 31, 2008. Should you have any questions or require clarification of any matter contained in this letter report, please contact the undersigned.

Yours truly,

Peter Sorensen
President

cc: Mr. Gary Rains, RFP Project Director

203 - 8 QUEEN STREET, SUMMERSIDE, PEI C1N 0A6
TELEPHONE: 902.436.3930 FAX: 604-677-5409
EMAIL: fairness@telus.net

- b. Please indicate if the smart meters and AMI infrastructure being deployed by Thunder Bay are capable of two-way communication.

Response

The AMI infrastructure being deployed is capable of two-way communications. At no time before, during or after the London Hydro RFP process did TBH request any functionality other than that stated in the Ministry's minimum functionality specifications.

Smart Meter Rate Model

29. Ref: E8 / T1 / S1 / p8-17

- a. Please identify the balance of smart meter funding adder revenues as recorded in Account 1555 to April 30, 2009, including applicable interest charges.

Response

The balance on the smart meter funding adder revenues including carrying charges as at April 30, 2009, is estimated to be \$480,000.

- b. Please explain how funding adder revenues recovered to April 30, 2009 are factored into the calculation of the recovery of smart meter costs and the proposed funding adder of \$1.25.

Response

Thunder Bay Hydro did not factor the funding adder revenues anticipated to be recovered to April 30, 2009 in the Rate Application. However, please refer to the response in the preceding question outlining the costs that were likewise not factored into the calculation.

Additionally, as per response to Energy Probe Interrogatory #28(d) Thunder Bay Hydro requires the Rate of Return on Equity to be revised from 3.75% to 7.90% for purposes of the smart meter adder calculation. The 7.9% is the return required to fund the interest on the financing for the Smart Meter Program, as illustrated in the data provided (for simplicity \$8.2M was used as total capital). Using 3.75% would result in a \$1,075,716 funding shortfall.

TAXES AND PAYMENTS IN LIEU OF INCOME TAXES (“PILS”)

PILs Calculation

30. Ref: E4 / T3 / S1 / Table 2

- a. Please provide Table 2 – Tax Calculations in working Excel spreadsheet format, including calculations for 2006 actual and 2007 actual.

Response

Please see the attached file on Disk saved as ‘OEB_Interrogatory_#30(a)_Table 2 Tax Calculations.xls’.

- b. Please provide the derivation of the 2009 test year “Utility Income Before Taxes” of \$2,021,239.

Response

Please see the following from our Rate Application for the calculation of the \$2,021,239 (a copy of the excel worksheet is also included in the response to a. above).

THUNDER BAY HYDRO ELECTRICITY DISTRIBUTION INC.
EB-2008-0245
Exhibit 1
Tab 2
Schedule 4
Page 1 of 1
Filed: September 5, 2008

1

CALCULATION OF REVENUE DEFICIENCY 2009 TEST YEAR

	2009 Test Existing Rates	2009 Test Proposed Rates
Revenue		
Suff/ Def From Below.		\$1,414,077
Distribution Revenue	\$16,104,861	\$16,104,861
Other Operating Revenue (Net)	\$1,802,790	\$1,802,790
Total Revenue	\$17,907,651	\$19,321,728
Distribution Costs		
Operation, Maintenance, and Administration	\$12,340,964	\$12,340,964
Depreciation & Amortization	\$4,573,436	\$4,573,436
Property & Capital Taxes	\$169,466	\$169,466
Interest- Deemed Interest	\$216,623	\$216,623
Total Costs and Expenses	\$17,300,489	\$17,300,489
Utility Income Before Income Taxes	\$607,162	\$2,021,239

- c. Under "Calculation of Ontario Capital Tax", please provide the derivation of the "Total Rate Base" of \$90,318,279.

Response

As noted in the comments per the worksheet included in a. above, Thunder Bay Hydro used Option B as permissible in the 2006 EDR PILS calculations for the capital tax base. The amount that the rate base was grossed up for was the average of the actual capital tax over the rate base for 2006 and 2007.

	<u>2006</u>	<u>2007</u>
Rate Base	71,778,536.54	73,254,017.96
Taxable Capital as per PILS Filings	86,566,770.00	88,763,046.00
	<u>14,788,233.46</u>	<u>15,509,028.04</u>

2009

75,169,648.23

15,148,630.99

90,318,279.22

- d. Thunder Bay shows an addition to Accounting Income of \$40,000 for 2008 and \$59,524 for 2009 with Apprenticeship Tax Credit tax rate reductions of 1.93% for 2008 and 2.28354% for 2009. Please explain further the tax treatment used by Thunder Bay.

Response

Thunder Bay Hydro used the required actual corporate tax treatment of apprenticeship credits for purposes of calculation of the PILS. Should this treatment not be required for calculation of PILS funding in rates, we will adjust accordingly upon instruction.

LOAD AND REVENUE FORECAST

Customer Forecast

31. Ref: E3/ T2 /S4

- a. Please explain if Thunder Bay's test year customer count forecast is consistent with one or more external forecasts (such as Housing Outlook reports from CMHC or the Canadian Chartered Banks). Please provide the reports/forecasts used and explain how these forecasts support Thunder Bay's projections for customer additions in the test year. If the external reports/forecasts do not

support Thunder Bay's proposed customer forecast, please explain the reasons for any variances.

Response

For the customer/connection forecast outlined in ES/T2/S1/P13 Thunder Bay Hydro did not use an external source such as the Housing Outlook reports from CMHC or the Canadian Chartered Banks to prepare the forecast. As a result, any consistency between the customer/connection forecast outlined in an external report and the forecast used in the application would only be coincidental.

- b. Please prepare a test year customer forecast using a linear trend method applied to historical customer data from 1999 to 2007. Please also provide the impact on the proposed test year (Billed KWh) load and revenue forecast if this alternate customer forecast is adopted.

Response

The following table outlines by rate class a revised test year customer forecast using a linear trend method applied to historical customer data from 1999 to 2007. In addition, the impact on the proposed test year (Billed KWh) by rate class is provided.

2009 Test Year by Rate Class	Application		Revised using Linear Trend	
	Customer/Connections	kWh	Customer/Connections	kWh
Residential	44,635	337,772,229	44,666	339,587,531
General Service < 50 kW	4,466	143,961,424	4,497	145,604,311
General Service > 50 to 999 kW	511	304,722,102	501	300,346,751
General Service > 1000 to 4999 kW	19	194,129,052	19	195,048,638
Streetlights	13,091	10,616,947	13,093	10,618,252
Sentinel Lights	176	146,789	189	157,167
Unmetered Loads	437	1,335,240	434	1,321,133
Total	63,335	992,683,783	63,399	992,683,783

Weather Normalization

32. Ref: E3/ T2 /S1

At page 8 of the above reference, Thunder Bay states, "In order to incorporate weather normal conditions, the average monthly heating degree days and cooling degree days which have occurred from 1996 to 2007 is applied in the prediction formula".

Similar to the method used to develop the test year weather normal forecast, please provide the following "back-cast" scenarios:

- a. Assuming Thunder Bay is preparing a forecast for test year 2006, please develop a weather normal forecast using 12-years of historical weather data from 1993-2004 and compare this forecast to actual observed weather in 2006. Please calculate the variance and percent variance from actual observed weather.

Response

Assuming Thunder Bay Hydro is preparing a forecast for test year 2006, the following table outlines a weather normal forecast using 12-years of historical weather data from the Thunder Bay weather station for the years 1993-2004 and compares this forecast to actual observed weather in 2006:

HDD	<i>Average 1993 to 2004</i>	<i>Actual 2006</i>	<i>Variance</i>	<i>%Variance</i>
Jan	962.9	797.0	(165.9)	(20.8%)
Feb	804.0	873.4	69.4	7.9%
Mar	679.3	659.0	(20.3)	(3.1%)
Apr	468.2	366.0	(102.2)	(27.9%)
May	280.3	241.5	(38.8)	(16.1%)
Jun	111.0	81.5	(29.5)	(36.2%)
Jul	45.6	23.2	(22.4)	(96.7%)
Aug	60.5	57.7	(2.8)	(4.8%)
Sep	174.6	210.5	35.9	17.1%
Oct	396.2	440.9	44.7	10.1%
Nov	600.2	540.4	(59.8)	(11.1%)
Dec	818.6	747.4	(71.2)	(9.5%)
CDD				
Jan	0.0	0.0	0.0	0.0%
Feb	0.0	0.0	0.0	0.0%
Mar	0.0	0.0	0.0	0.0%
Apr	0.0	0.0	0.0	0.0%
May	1.3	2.4	1.1	47.6%
Jun	10.3	9.3	(1.0)	(10.5%)
Jul	28.3	70.1	41.8	59.6%
Aug	24.4	31.7	7.3	23.0%
Sep	6.0	1.2	(4.8)	(398.6%)
Oct	0.0	0.0	0.0	0.0%
Nov	0.0	0.0	0.0	0.0%
Dec	0.0	0.0	0.0	0.0%

- b. Assuming Thunder Bay is preparing a forecast for test year 2007, please develop a weather normal forecast using 12-years of historical data from 1994-2005 and compare this forecast to actual observed weather in 2007. Please calculate the variance and percent variance from actual observed weather.

Response

Assuming Thunder Bay Hydro is preparing a forecast for test year 2007, the following table outlines a weather normal forecast using 12-years of historical weather data from the Thunder Bay weather station for the years 1994-2005 and compares this forecast to actual observed weather in 2007:

HDD	Average 1994 to 2005	Actual 2007	Variance	%Variance
Jan	993.4	913.4	(80.0)	(8.8%)
Feb	810.0	924.7	114.7	12.4%
Mar	701.1	665.0	(36.1)	(5.4%)
Apr	462.1	474.1	12.0	2.5%
May	282.6	250.9	(31.7)	(12.6%)
Jun	106.6	96.7	(9.9)	(10.2%)
Jul	45.8	40.2	(5.6)	(13.9%)
Aug	61.1	62.9	1.8	2.9%
Sep	166.5	164.7	(1.8)	(1.1%)
Oct	390.5	310.6	(79.9)	(25.7%)
Nov	600.9	620.3	19.4	3.1%
Dec	834.7	925.8	91.1	9.8%
CDD				
Jan	0.0	0.0	0.0	0.0%
Feb	0.0	0.0	0.0	0.0%
Mar	0.0	0.0	0.0	0.0%
Apr	0.0	0.0	0.0	0.0%
May	1.3	0.6	(0.7)	(109.7%)
Jun	11.5	6.5	(5.0)	(76.9%)
Jul	32.2	51.8	19.6	37.9%
Aug	24.2	22.1	(2.1)	(9.4%)
Sep	7.3	9.6	2.4	24.5%
Oct	0.0	0.0	0.0	0.0%
Nov	0.0	0.0	0.0	0.0%
Dec	0.0	0.0	0.0	0.0%

- c. Assuming Thunder Bay is preparing a forecast for test year 2008, please develop a weather normal forecast using 12-years of historical data from 1995-2006 and compare this forecast to actual year-to-date observed weather in 2008. Please calculate the variance and percent variance from actual observed weather.

Response

Assuming Thunder Bay Hydro is preparing a forecast for test year 2008, the following table outlines a weather normal forecast using 12-years of historical

weather data from the Thunder Bay weather station for the years 1995-2006 and compares this forecast to actual observed weather in 2008:

HDD	Average 1995 to 2006	Actual 2008	Variance	%Variance
Jan	959.5	934.7	(24.8)	(2.7%)
Feb	805.8	921.5	115.7	12.6%
Mar	702.8	791.9	89.1	11.3%
Apr	451.5	456.9	5.4	1.2%
May	279.1	327.7	48.6	14.8%
Jun	105.9	109.9	4.0	3.7%
Jul	42.2	34.7	(7.5)	(21.5%)
Aug	58.0	50.4	(7.6)	(15.0%)
Sep	172.5	193.3	20.8	10.8%
Oct	400.4	373.1	(27.3)	(7.3%)
Nov	599.8	591.0	(8.8)	(1.5%)
Dec	833.5	753.8 (*)	(79.7)	(10.6%)
(*) only to Dec 22nd				
CDD				
Jan	0.0	0.0	0.0	0.0%
Feb	0.0	0.0	0.0	0.0%
Mar	0.0	0.0	0.0	0.0%
Apr	0.0	0.0	0.0	0.0%
May	1.5	0.0	(1.5)	0.0%
Jun	11.3	4.6	(6.7)	(145.8%)
Jul	37.1	22.1	(15.0)	(68.0%)
Aug	26.1	22.2	(3.9)	(17.3%)
Sep	7.3	7.0	(0.3)	(3.6%)
Oct	0.0	0.0	0.0	0.0%
Nov	0.0	0.0	0.0	0.0%
Dec	0.0	0.0	0.0	0.0%

33. Ref: E3/ T2 /S1

Similar to the scenarios described above, please provide the following “back-cast” scenario’s using a linear trend method based on 20-years of historical weather data.

- Assuming Thunder Bay is preparing a forecast for test year 2006, please develop a weather normal forecast for the 2006 test year using historical weather data from 1985-2004 and compare this forecast to actual observed weather in 2006. Please calculate the variance and percentage variance from actual observed weather.

Response

Assuming Thunder Bay Hydro is preparing a forecast for test year 2006, the following table provides a weather normal forecast for the 2006 test year using

historical weather data from 1985-2004 and a linear trend method. A comparison of this forecast to actual observed weather in 2006 is also provided.

HDD	<i>Linear Trend 1985 to 2004</i>	<i>Actual 2006</i>	<i>Variance</i>	<i>%Variance</i>
Jan	960.5	797.0	(163.5)	(20.5%)
Feb	786.1	873.4	87.3	10.0%
Mar	702.7	659.0	(43.7)	(6.6%)
Apr	482.0	366.0	(116.0)	(31.7%)
May	297.2	241.5	(55.7)	(23.1%)
Jun	114.2	81.5	(32.7)	(40.1%)
Jul	46.1	23.2	(22.9)	(98.8%)
Aug	59.1	57.7	(1.4)	(2.4%)
Sep	156.4	210.5	54.1	25.7%
Oct	395.4	440.9	45.5	10.3%
Nov	553.2	540.4	(12.8)	(2.4%)
Dec	799.2	747.4	(51.8)	(6.9%)
CDD				
Jan	0.0	0.0	0.0	0.0%
Feb	0.0	0.0	0.0	0.0%
Mar	0.0	0.0	0.0	0.0%
Apr	0.0	0.0	0.0	0.0%
May	-0.6	2.4	3.0	123.3%
Jun	8.8	9.3	0.5	5.0%
Jul	31.5	70.1	38.6	55.1%
Aug	25.8	31.7	5.9	18.8%
Sep	8.5	1.2	(7.3)	(610.9%)
Oct	0.0	0.0	0.0	0.0%
Nov	0.0	0.0	0.0	0.0%
Dec	0.0	0.0	0.0	0.0%

- b. Assuming Thunder Bay is preparing a forecast for test year 2007, please develop a weather normal forecast for the 2007 test year using historical weather data from 1986-2005 and compare this forecast to actual observed weather in 2007. Please calculate the variance and percentage variance from actual observed weather.

Response

Assuming Thunder Bay Hydro is preparing a forecast for test year 2007, the following table provides a weather normal forecast for the 2007 test year using historical weather data from 1986-2005 and a linear trend method. A comparison of this forecast to actual observed weather in 2007 is also provided.

HDD	<i>Linear Trend 1986 to 2005</i>	<i>Actual 2007</i>	<i>Variance</i>	<i>%Variance</i>
Jan	997.5	913.4	(84.1)	(9.2%)
Feb	781.3	924.7	143.4	15.5%
Mar	721.7	665.0	(56.7)	(8.5%)
Apr	469.4	474.1	4.7	1.0%
May	302.4	250.9	(51.5)	(20.5%)
Jun	110.3	96.7	(13.6)	(14.1%)
Jul	46.8	40.2	(6.6)	(16.4%)
Aug	57.9	62.9	5.0	8.0%
Sep	152.2	164.7	12.5	7.6%
Oct	378.4	310.6	(67.8)	(21.8%)
Nov	566.1	620.3	54.2	8.7%
Dec	819.3	925.8	106.5	11.5%
CDD				
Jan	0.0	0.0	0.0	0.0%
Feb	0.0	0.0	0.0	0.0%
Mar	0.0	0.0	0.0	0.0%
Apr	0.0	0.0	0.0	0.0%
May	-1.2	0.6	1.8	306.9%
Jun	9.0	6.5	(2.5)	(39.0%)
Jul	34.3	51.8	17.5	33.8%
Aug	25.8	22.1	(3.7)	(16.7%)
Sep	11.5	9.6	(1.9)	(19.4%)
Oct	0.0	0.0	0.0	0.0%
Nov	0.0	0.0	0.0	0.0%
Dec	0.0	0.0	0.0	0.0%

- c. Assuming Thunder Bay is preparing a forecast for test year 2008, please develop a weather normal forecast for the 2008 test year using historical weather data from 1987-2006 and compare the forecast to actual observed weather in 2008. Please calculate the variance and percentage variance from actual observed weather.

Response

Assuming Thunder Bay Hydro is preparing a forecast for test year 2008, the following table provides a weather normal forecast for the 2008 test year using historical weather data from 1987-2006 and a linear trend method. A comparison of this forecast to actual observed weather in 2008 is also provided.

HDD	<i>Linear Trend 1987 to 2006</i>	<i>Actual 2008</i>	<i>Variance</i>	<i>%Variance</i>
Jan	960.5	934.7	(25.8)	(2.8%)
Feb	794.6	921.5	126.9	13.8%
Mar	710.1	791.9	81.8	10.3%
Apr	443.4	456.9	13.5	2.9%
May	288.9	327.7	38.8	11.9%
Jun	107.4	109.9	2.5	2.3%
Jul	41.9	34.7	(7.2)	(20.7%)
Aug	59.5	50.4	(9.1)	(18.0%)
Sep	164.1	193.3	29.2	15.1%
Oct	387.7	373.1	(14.6)	(3.9%)
Nov	561.3	591.0	29.7	5.0%
Dec	791.0	753.8 (*)	(37.2)	(4.9%)
(*) only to Dec 22 nd				
CDD				
Jan	0.0	0.0	0.0	0.0%
Feb	0.0	0.0	0.0	0.0%
Mar	0.0	0.0	0.0	0.0%
Apr	0.0	0.0	0.0	0.0%
May	0.8	0.0	(0.8)	0.0%
Jun	7.6	4.6	(3.0)	(64.5%)
Jul	43.3	22.1	(21.2)	(95.9%)
Aug	25.3	22.2	(3.1)	(13.9%)
Sep	10.0	7.0	(3.0)	(43.3%)
Oct	0.0	0.0	0.0	0.0%
Nov	0.0	0.0	0.0	0.0%
Dec	0.0	0.0	0.0	0.0%

Load and Revenue Forecast

34. Ref: E3 / T2 / S1

At page 5 of the above reference, Thunder Bay states “Using stepwise regression techniques different explanatory variables were tested with the ultimate model being determined both by model statistics and by forecast accuracy”.

- Please identify any other explanatory variables that were tested. Please explain the reasons for rejecting these variables.

Response

Number of customers and number of peak hours in the month were tested. Number of customers was rejected as this variable decreased the R square results and the T stat for this variable was almost zero. Number of peak hours in

the month was also rejected as this variable did not improve the R square results and the T stat was only 0.4.

- b. Please explain the rationale for not using price or number of customers as explanatory variables in the proposed linear regression equations.

Response

Regarding number of customers please see response to a. Using the price of electricity as an explanatory was not considered since in Thunder Bay Hydro's view, electricity is essentially classified as an essential service and price has very little impact on the annual usage.

- c. Please prepare a Purchased KWh forecast using the regression equation: Purchased kWh=f(Total customers, HDD, CDD, Ontario Real GDP Monthly Index, Number of Days in the Month, Spring Fall Flag)+constant. If customer data is not available in the format required for the regression analysis, please make a reasonable assumption for the purposes of completing the interrogatory.

Response

Please see response to d. below.

- d. Please provide the statistical results of the above equation and the proposed equation and update Table 4 (Ex 3/T2/S1/page 8).

Response

The statistical results for the equation outlined in c are as follows:

<i>Regression Statistics</i>				
<i>R Square</i>		<i>0.94</i>		
<i>Adjusted R Square</i>		<i>0.94</i>		
<i>Standard Error</i>		<i>2,672,789</i>		
<i>F</i>		<i>385</i>		
<i>Observations</i>		<i>144</i>		

<i>Variable</i>	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>
<i>Intercept</i>	<i>-16,057,517</i>	<i>50,774,982</i>	<i>-0.32</i>	<i>0.75</i>
<i>Heating Degree Days</i>	<i>36,562</i>	<i>929</i>	<i>39.37</i>	<i>0.00</i>
<i>Cooling Degree Days</i>	<i>159,311</i>	<i>22,602</i>	<i>7.05</i>	<i>0.00</i>
<i>Ontario Real GDP Monthly %</i>	<i>27,669</i>	<i>41,084</i>	<i>0.67</i>	<i>0.50</i>
<i>Number of Days in Month</i>	<i>2,873,692</i>	<i>284,308</i>	<i>10.11</i>	<i>0.00</i>
<i>Spring Fall Flag</i>	<i>-2,619,524</i>	<i>530,370</i>	<i>-4.94</i>	<i>0.00</i>
<i>Customer #</i>	<i>-34</i>	<i>1,125</i>	<i>-0.03</i>	<i>0.98</i>

The following updates the information in Table 4 (Ex 3/T2/S1/page 8) with the results of the equation described in c above.

Table 4			
	<i>Actual</i>	<i>Predicted</i>	<i>% Difference</i>
1996	1,103.4	1,086.9	-1.50%
1997	1,069.1	1,054.6	-1.36%
1998	1,032.3	1,039.5	0.70%
1999	1,046.5	1,062.6	1.54%
2000	1,042.9	1,068.3	2.43%
2001	1,054.6	1,067.8	1.25%
2002	1,076.3	1,084.2	0.73%
2003	1,095.0	1,080.0	-1.36%
2004	1,081.3	1,081.3	0.00%
2005	1,101.3	1,083.3	-1.63%
2006	1,080.4	1,067.0	-1.24%
2007	1,074.6	1,049.3	-2.35%
2008 (WN)		1,021.1	
2009 (WN)		1,019.3	

- e. What is the impact on the proposed Purchased KWh and Billed KWh forecast if the above regression equation were used?

Response

The impact on the proposed Purchased KWh and Billed KWh forecast if the above regression equation were used is outlined in the following table.

	<i>Application</i>	<i>Revised Formula</i>	<i>Difference</i>
<i>Power Purchased (GWh)</i>			
2008	1,036.9	1,021.1	15.8
2009	1,039.5	1,019.3	20.2
<i>Billed (GWh)</i>			
2008	990.2	975.1	15.1
2009	992.7	973.4	19.3

35. Ref: N/A

Please provide the following information regarding the accuracy of previous load forecasts:

- a. The forecast error (i.e. variance between total normalized actual 2004 load versus forecast 2004 load) of the 2004 Purchased KWh and Billed KWh load forecast.

Response

Thunder Bay Hydro does not prepare annual weather normalized load forecasts on a regular basis and Thunder Bay Hydro does not have a methodology to weather normalize actual load data. Therefore, Thunder Bay Hydro is unable to answer this question.

- b. The forecast error (i.e. variance between total normalized actual 2005 load versus forecast 2005 load) of the 2005 Purchased KWh and Billed KWh load forecast.

Response

Thunder Bay Hydro does not prepare annual weather normalized load forecasts on a regular basis and Thunder Bay Hydro does not have a methodology to weather normalize actual load data. Therefore, Thunder Bay Hydro is unable to answer this question.

- c. The forecast error (i.e. variance between total normalized actual 2006 load versus forecast 2006 load) of the 2006 Purchased KWh and Billed KWh load forecast.

Response

Thunder Bay Hydro does not prepare annual weather normalized load forecasts on a regular basis and Thunder Bay Hydro does not have a methodology to weather normalize actual load data. Therefore, Thunder Bay Hydro is unable to answer this question.

- d. The forecast error (i.e. variance between total normalized actual 2007 load versus forecast 2007 load) of the 2007 Purchased KWh and Billed KWh load forecast.

Response

Thunder Bay Hydro does not prepare annual weather normalized load forecasts on a regular basis and Thunder Bay Hydro does not have a methodology to weather normalize actual load data. Therefore, Thunder Bay Hydro is unable to answer this question.

- e. The year-to-date (Jan-08 to Aug-08) forecast error (i.e. variance between total normalized actual 2008 load versus forecast 2008 load) of the 2008 Bridge year Purchased KWh and Billed KWh load forecast.

Response

Thunder Bay Hydro does not have a methodology to weather normalize actual load data. Therefore, Thunder Bay Hydro is unable to answer this question.

36. Ref: E3 / T2 / S1 /p8

At the above reference, Thunder Bay states, "In order to incorporate weather normal conditions, the average monthly heating degree days and cooling degree days which have occurred from 1996 to 2007 is applied in the prediction formula".

- a. Please prepare a weather normal forecast for test year 2009 using a linear trend method based on 20 years of historical weather data (1988-2007).

Response

Please see response to b. below.

- b. Please prepare a (Purchased KWh and Billed KWh) load and revenue forecast for test year 2009 by applying this weather normal forecast to the prediction formula.

Response

The following table outlines the load forecast (i.e. purchased kWh and billed kWh by rate class) for test year 2009 by applying the weather normal forecast for test year 2009 using a linear trend method based on 20 years of historical weather data (1988-2007).

	2009 Weather Normal
<i>Predicted kWh Purchases</i>	<i>1,095,934,726</i>
<i>Adjustments not in model</i>	<i>-59,857,541</i>
<i>Revised Predicted kWh Purchases</i>	<i>1,036,077,184</i>
<i>% Difference</i>	
<i>Billed kWh</i>	<i>989,390,865</i>
<i>By Class</i>	
<i>Residential</i>	
<i>Customers</i>	<i>44,635</i>
<i>kWh</i>	<i>336,503,931</i>
<i>General Service < 50 kW</i>	
<i>Customers</i>	<i>4,466</i>
<i>kWh</i>	<i>143,439,000</i>

	2009 Weather Normal
<i>General Service > 50 to 999 kW</i>	
<i>Customers</i>	511
<i>kWh</i>	303,736,098
<i>kW</i>	714,941
<i>General Service > 1000 to 4999 kW</i>	
<i>Customers</i>	19
<i>kWh</i>	193,612,860
<i>kW</i>	558,655
<i>Streetlights</i>	
<i>Connections</i>	13,091
<i>kWh</i>	10,616,947
<i>kW</i>	31,276
<i>Sentinel Lights</i>	
<i>Connections</i>	176
<i>kWh</i>	146,789
<i>kW</i>	402
<i>Unmetered Loads</i>	
<i>Connections</i>	437
<i>kWh</i>	1,335,240
<i>Total</i>	
<i>Customer/Connections</i>	63,335
<i>kWh</i>	989,390,865
<i>kW from applicable classes</i>	1,305,275

37. Ref: E3 / T2 / S1 /p19

At the above reference, Thunder Bay states, "It is Thunder Bay Hydro's view that CDM programs that were offered prior to June 2006 have impacted the historical usage per customer but programs that have been initiated after June 2006 have not impacted the historical usage per customer.... Consequently, a manual adjustment [12.9 Gwh] to the forecast has been made to reflect the savings in energy since June 2006 resulting from the CDM programs initiated after June 2006".

- a. Please advise whether historical load data used in the regression model included the effect of CDM programs.

Response

Confirmed, but only for CDM programs initiated prior to June 2006.

- b. If your answer to a. is affirmative, please explain the reasons for the proposed additional reduction to the test year load forecast of 12.9 GWh, when the historic load data already includes the impact of CDM programs.

Response

It is Thunder Bay Hydro's view that programs that were initiated after June 2006 did not impact the historical load data used in the regression model since once a program is initiated there is a time lag between the launching of a program and the response of the customer. As a result of this time lag, it is Thunder Bay Hydro's view that there is 12.9 GWh in savings that has occurred from CDM programs launched after June 2006 that should be addressed in the test year forecast but was not reflected in the regression model.

- c. Please provide detailed calculations showing the derivation of the proposed 12.9 GWh CDM impact. Please also identify the impacts of programs, delivered by the distributor and effects caused by other activities.

Response

The following table provides detailed calculations showing the derivation of the proposed 12.9 GWh CDM impact. The table also provides impacts of programs, delivered by Thunder Bay Hydro and effects caused by other activities.

Result of Thunder Bay Hydro's CDM programs (kWh)	After June 2006	2007	Total
Residential			
Seasonal LEDs	5,092	7,269	12,361
Energy Star Appliance Rebates	23,095	34,042	57,137
Secondary Fridge Retirement Program	73,800		73,800
Water Heater Fuel Conversion	20,000		20,000
Compact Fluorescent Bulbs	62,640	187,920	250,560
Home Energy Saver Kits	104,400		104,400
One Change CFL Initiative		3,758,400	3,758,400
OPA Fridge Bounty		779,148	779,148
OPA Summer Savings		1,662,914	1,662,914
Conservation Bureau EKC Coupons	837,575	4,168,942	5,006,517
Sub-total	1,126,602	10,598,635	11,725,236
General Service <50kW			
Traffic Light LEDs	224,864	225,900	450,764
General Service >50kW			
Parking Lot Winter Plug In Controls	8,682	46,520	55,201
General Service >1MW			
Commercial Lighting Incentive	54,808		54,808

Result of Thunder Bay Hydro's CDM programs (kWh)	<i>After June 2006</i>	<i>2007</i>	<i>Total</i>
Total	1,414,955	10,871,054	12,286,009
<i>Loss Adjusted @ 1.047</i>			<i>12,863,452</i>

See also response to question #51.

38. Ref: E3 / T2 / S1 /p12

At the above reference, Thunder Bay states, "The geometric mean approach provides the average growth rate on a compounding basis".

- a. Please explain the rationale for using geometric mean for the purposes of estimating the test year use per customer forecast. Please explain why it is appropriate to use this method for forecasting use per customer rather than an arithmetic mean method or a simple linear trend of historical consumption method.

Response

It is Thunder Bay Hydro's view the geometric mean produces more reasonable results that are not impacted by "outlier" growth rates in the review period. The geometric mean approach simply determines the compounding growth rate from the beginning to the end of the period being reviewed. The growth rates within the review period have very little impact on the geometric mean growth rate. The "outliers" growth rates within the review period will have no impact on the geometric mean results. As a result, the geometric mean is superior to the arithmetic mean approach since "outliers" will impact the arithmetic mean results.

With regards to using the linear trend method this has a tendency to produce results that are not reasonable. For example, the linear trend method would suggest usage per customer for Thunder Bay Hydro in the forecast period should be increasing when the actual usage per customer has been declining since 2005. The geometric mean approach suggests usage per customer should decline in the forecast period which appears to be more reasonable.

- b. Please prepare a test year use per customer forecast using the arithmetic mean method based on historical growth in use per customer from 2000 to 2007. Please update (the Billed kWh) load and identify the impact of this alternate method on the proposed load and revenue forecast.

Response

The following table outlines the load forecast (i.e. purchased kWh and billed kWh by rate class) for test year 2009 by using the arithmetic mean method based on historical growth in use per customer from 2000 to 2007 to determine the 2009 use per customer forecast.

The impact of this alternate method on the proposed load and revenue forecast is also provided.

	2009 Weather Normal Alternative b (A)	2009 Weather Normal Application (B)	Impact (B) – (A)
<i>Predicted kWh Purchases</i>	1,099,381,294	1,099,381,294	0
<i>Adjustments not in model</i>	(59,857,541)	(59,857,541)	0
<i>Revised Predicted kWh Purchases</i>	1,039,523,753	1,039,523,753	0
<i>Billed kWh</i>	992,683,783	992,683,783	0
<i>By Class</i>			
<i>Residential</i>			
Customers	44,635	44,635	0
kWh	337,370,144	337,772,229	402,085
<i>General Service < 50 kW</i>			
Customers	4,466	4,466	0
kWh	143,788,436	143,961,424	172,989
<i>General Service > 50 to 999 kW</i>			
Customers	511	511	0
kWh	304,448,903	304,722,102	273,199
kW	716,619	717,262	643
<i>General Service > 1000 to 4999 kW</i>			
Customers	19	19	0
kWh	194,659,183	194,129,052	(530,132)
kW	561,675	560,145	(1,530)
<i>Streetlights</i>			
Connections	13,091	13,091	0
kWh	10,915,648	10,616,947	(298,702)
kW	32,156	31,276	(880)
<i>Sentinel Lights</i>			
Connections	176	176	0
kWh	150,393	146,789	(3,604)
kW	412	402	(10)
<i>Unmetered Loads</i>			
Connections	437	437	0
kWh	1,351,076	1,335,240	(15,836)
<i>Total</i>			
Customer/Connections	63,335	63,335	0
kWh	992,683,783	992,683,783	0
kW from applicable classes	1,310,861	1,309,085	(1,776)

- c. Please prepare a test year use per customer forecast using a simple linear trend applied to historical use per customer data from 2000 to 2007. Please update (the Billed kWh) load and identify the impact of this alternate method on the proposed load and revenue forecast.

Response

The following table outlines the load forecast (i.e. purchased kWh and billed kWh by rate class) for test year 2009 using a simple linear trend applied to historical use per customer data from 2000 to 2007 to determine the 2009 use per customer forecast.

The impact of this alternate method on the proposed load and revenue forecast is also provided.

	2009 Weather Normal Alternative c (A)	2009 Weather Normal Application (B)	Impact (B) – (A)
<i>Predicted kWh Purchases</i>	1,099,381,294	1,099,381,294	0
<i>Adjustments not in model</i>	(59,857,541)	(59,857,541)	0
<i>Revised Predicted kWh Purchases</i>	1,039,523,753	1,039,523,753	0
<i>Billed kWh</i>	992,683,783	992,683,783	0
<i>By Class</i>			
<i>Residential</i>			
Customers	44,635	44,635	0
kWh	331,997,626	337,772,229	5,774,603
<i>General Service < 50 kW</i>			
Customers	4,466	4,466	0
kWh	141,011,982	143,961,424	2,949,443
<i>General Service > 50 to 999 kW</i>			
Customers	511	511	0
kWh	304,091,123	304,722,102	630,979
kW	715,777	717,262	1,485
<i>General Service > 1000 to 4999 kW</i>			
Customers	19	19	0
kWh	203,201,741	194,129,052	(9,072,689)
kW	586,323	560,145	(26,179)
<i>Streetlights</i>			
Connections	13,091	13,091	0
kWh	10,839,123	10,616,947	(222,176)
kW	31,930	31,276	(654)

	2009 Weather Normal Alternative c (A)	2009 Weather Normal Application (B)	Impact (B) – (A)
<i>Sentinel Lights</i>			
Connections	176	176	0
kWh	156,665	146,789	(9,876)
kW	429	402	(27)
<i>Unmetered Loads</i>			
Connections	437	437	0
kWh	1,385,525	1,335,240	(50,285)
<i>Total</i>			
Customer/Connections	63,335	63,335	0
kWh	992,683,783	992,683,783	0
kW from applicable classes	1,334,460	1,309,085	(25,375)

39. Ref: N/A

For the purposes of a sensitivity analysis, please provide the load and revenue impact of the following:

- 1% change in proposed number of customers on the Billed kWh load forecast.

Response

It is unclear from the question whether the sensitivity analysis should be applied to the forecast years 2008 and 2009 or 2009 alone. Thunder Bay Hydro has assumed it is applied to 2008 and 2009. The following table outlines the load forecast (i.e. purchased kWh and billed kWh by rate class) for test year 2009 assuming a 1% change in proposed number of customers for the forecast years 2008 and 2009.

	2009 Weather Normal Sensitivity a (A)	2009 Weather Normal Application (B)	Impact (B) - (A)
<i>Predicted kWh Purchases</i>	1,099,381,294	1,099,381,294	0
<i>Adjustments not in model</i>	(59,857,541)	(59,857,541)	0
<i>Revised Predicted kWh Purchases</i>	1,039,523,753	1,039,523,753	0
<i>Billed kWh</i>	992,683,783	992,683,783	0
<i>By Class</i>			
<i>Residential</i>			
Customers	45,532	44,635	(897)
kWh	336,665,474	337,772,229	1,106,755
<i>General Service < 50 kW</i>			
Customers	4,556	4,466	(90)
kWh	143,505,541	143,961,424	455,883

	2009 Weather Normal Sensitivity a (A)	2009 Weather Normal Application (B)	Impact (B) - (A)
<i>General Service > 50 to 999 kW</i>			
Customers	521	511	(10)
kWh	304,526,390	304,722,102	195,712
kW	716,801	717,262	461
<i>General Service > 1000 to 4999 kW</i>			
Customers	19	19	(0)
kWh	195,635,153	194,129,052	(1,506,101)
kW	564,491	560,145	(4,346)
<i>Streetlights</i>			
Connections	13,355	13,091	(263)
kWh	10,830,348	10,616,947	(213,401)
kW	31,905	31,276	(629)
<i>Sentinel Lights</i>			
Connections	180	176	(4)
kWh	149,740	146,789	(2,950)
kW	410	402	(8)
<i>Unmetered Loads</i>			
Connections	446	437	(9)
kWh	1,371,139	1,335,240	(35,899)
<i>Total</i>			
Customer/Connections	64,608	63,335	(1,273)
kWh	992,683,783	992,683,783	0
kW from applicable classes	1,313,607	1,309,085	(4,522)

b. 1% change in proposed use per customer on the Billed kWh load forecast.

Response

The following table outlines the load forecast (i.e. purchased kWh and billed kWh by rate class) for test year 2009 assuming a 1% change in proposed use per customer for the forecast years 2008 and 2009.

	2009 Weather Normal Sensitivity b (A)	2009 Weather Normal Application (B)	Impact (B) - (A)
<i>Predicted kWh Purchases</i>	1,099,381,294	1,099,381,294	0
<i>Adjustments not in model</i>	(59,857,541)	(59,857,541)	0
<i>Revised Predicted kWh Purchases</i>	1,039,523,753	1,039,523,753	0
<i>Billed kWh</i>	992,683,783	992,683,783	0
<i>By Class</i>			
<i>Residential</i>			
<i>Customers</i>	44,635	44,635	0
<i>kWh</i>	336,665,474	337,772,229	1,106,755
<i>General Service < 50 kW</i>			
<i>Customers</i>	4,466	4,466	0
<i>kWh</i>	143,505,541	143,961,424	455,883
<i>General Service > 50 to 999 kW</i>			
<i>Customers</i>	511	511	0
<i>kWh</i>	304,526,390	304,722,102	195,712
<i>kW</i>	716,801	717,262	461
<i>General Service > 1000 to 4999 kW</i>			
<i>Customers</i>	19	19	0
<i>kWh</i>	195,635,153	194,129,052	(1,506,101)
<i>kW</i>	564,491	560,145	(4,346)
<i>Streetlights</i>			
<i>Connections</i>	13,091	13,091	0
<i>kWh</i>	10,830,348	10,616,947	(213,401)
<i>kW</i>	31,905	31,276	(629)
<i>Sentinel Lights</i>			
<i>Connections</i>	176	176	0
<i>kWh</i>	149,740	146,789	(2,950)
<i>kW</i>	410	402	(8)
<i>Unmetered Loads</i>			
<i>Connections</i>	437	437	0
<i>kWh</i>	1,371,139	1,335,240	(35,899)
<i>Total</i>			
<i>Customer/Connections</i>	63,335	63,335	0
<i>kWh</i>	992,683,783	992,683,783	0
<i>kW from applicable classes</i>	1,313,607	1,309,085	(4,522)

- c. 1% change in the proposed weather normal forecast on the Purchased kWh and Billed kWh load forecast.

Response

The following table outlines the load forecast (i.e. purchased kWh and billed kWh by rate class) for test year 2009 assuming a 1% change in the proposed weather normal forecast for 2008 and 2009.

	2009 Weather Normal Sensitivity c (A)	2009 Weather Normal Application (B)	Impact (B) - (A)
<i>Predicted kWh Purchases</i>	1,101,482,687	1,099,381,294	(2,101,393)
<i>Adjustments not in model</i>	(59,857,541)	(59,857,541)	0
<i>Revised Predicted kWh Purchases</i>	1,041,625,146	1,039,523,753	(2,101,393)
<i>Billed kWh</i>	994,691,495	992,683,783	(2,007,712)
<i>By Class</i>			
<i>Residential</i>			
Customers	44,635	44,635	0
kWh	338,545,518	337,772,229	(773,289)
<i>General Service < 50 kW</i>			
Customers	4,466	4,466	0
kWh	144,279,950	143,961,424	(318,525)
<i>General Service > 50 to 999 kW</i>			
Customers	511	511	0
kWh	305,323,275	304,722,102	(601,173)
kW	718,677	717,262	(1,415)
<i>General Service > 1000 to 4999 kW</i>			
Customers	19	19	0
kWh	194,443,777	194,129,052	(314,725)
kW	561,053	560,145	(908)
<i>Streetlights</i>			
Connections	13,091	13,091	0
kWh	10,616,947	10,616,947	0
kW	31,276	31,276	0
<i>Sentinel Lights</i>			
Connections	176	176	0
kWh	146,789	146,789	0
kW	402	402	0

	2009 Weather Normal Sensitivity c (A)	2009 Weather Normal Application (B)	Impact (B) - (A)
<i>Unmetered Loads</i>			
<i>Connections</i>	437	437	0
<i>kWh</i>	1,335,240	1,335,240	0
<i>Total</i>			
<i>Customer/Connections</i>	63,335	63,335	0
<i>kWh</i>	994,691,495	992,683,783	(2,007,712)
<i>kW from applicable classes</i>	1,311,408	1,309,085	(2,323)

Revenue Offsets

40. Ref: E3 / T3 / S1

- a. Please provide a brief explanation of the nature of “non-utility operations” for which the revenues and expenses are recorded in Accounts 4375 and 4380 respectively. Include a discussion of the apparent contradiction of including the net revenue from non-utility operations in “Other Distribution Revenue”.

Response

Account 4375 – Revenue from Non-Utility Operations includes revenue billed to TBHUSI associated with Meter Server Provider activities and revenues billed to TBHESI associated with Water Heater activities.

Account 4380 – Expenses on Non-Utility Operations includes the incremental costs associated with the above revenues.

Account 4220 – Other Electric Revenue includes the revenue billed net of incremental costs associated with the back office services of TBHUSI as described at E4/T2/S3. Our judgement in the classification of these activities is based on the description of Example #1 of the APH.

- b. Please describe the change in non-utility operations that is forecast to decrease revenue by \$130,000 and expenses by approximately \$65,000 in 2009.

Response

The forecasted decrease of revenue and expenses from non-utility operations is a result of the sale by TBHESI of the Water Heater assets in 2008 and the anticipated decrease in TBHUSI associated with the Meter Service Provider activities.

COST ALLOCATION AND RATE DESIGN

Cost Allocation

41. Ref: Information Filing EB-2007-0001

Please provide for the record of this application an electronic copy of the Informational Filing EB-2007-0001 of Thunder Bay's revised cost allocation study (Run 2).

Response

Provided on the attached disk and saved as 'OEB_Interrogatory_#41_EB-2007-0001_copy of filing'.

42. Ref: E7 / T1 / S2 / p3 and E9 / T1 / S9 / Appendix A

The proposed revenue to cost ratios for the following classes are proposed to remain unchanged from the corrected Informational Filing: GS< 50 kW, Sentinel Lighting, and Unmetered Scattered Load ("USL"). The calculated impacts for the Distribution Cost sub-totals in Exhibit 8 show a range from 9 – 12% for the GS<50 kW class, approximately 9% for Sentinel Lighting, but a range from about 50% - 70% for USL. Please provide an explanation of this apparent inconsistency between the USL impacts and the impacts on the other two classes.

Response

The most significant factor impacting the USL class is the LRAM/SSM Rider. Removing the LRAM/SSM component of the distribution rate (as the other two classes referred to above do not have such a rider) would revise the impacts to approximately 9%, consistent with the other two classes referred to.

Rate Design

43. Ref: E8 / T1 / S1 / Tables 5, 6 and E8 / T1 / S9 / Appendix A / p9

The proportion of revenue derived from the Monthly Service Charge for the GS 1000 – 4999 kW class is intended to stay constant at 44.1% of the class total revenue. However, the proposed Monthly Service Charge is 26.72% higher than the current approved charge, whereas the proposed volumetric rate is 15.67% higher than the current rate. Please explain this apparent inconsistency, or alternatively propose rates that would retain a constant proportion of fixed and variable revenue from this class.

Response

The reason the increases are so significant is due to the requirement to move the Revenue to Cost Ratio to be within 50% of the acceptable ranges. This change causes this class's share of the Distribution Revenue Requirement to increase by approximately \$225,000 of which 44.1% is fixed. The result is an increase of \$436.27 per customer as there are only 19 customers in this class. The resulting increase in the variable rate is 55.9% or approximately \$126,000 which translates to a per kw increase of .225. The distortion is resulting from the transformer allowance

component of the variable portion remaining unchanged at the \$0.60. The percentage increase in total net variable distribution revenue from the 2009 proposed to the existing 2008 is 26.72% (\$126,082 (804,592 - 332,726) which is consistent with the service charge increase.

Specific Service Charges

44. Ref: E1 / T1 / S16 / Appendix A and E8 / T1 / S7

Please confirm that the Service Call – Vacancy Reconnects charges shown in the Conditions of Service should be included in the Proposed Schedule of Rates and Charges.

Response

Confirmed.

45. Ref: E1 / T1 / S5, E3 / T3 / S1, E8 / T1 / S5 / p6 and E8 / T1 / S7 / p3

Thunder Bay is proposing to remove three Temporary Service charges from its Tariff of Rates and Charges. Going forward, it appears that Thunder Bay would be charging for these services on a cost recovery basis as per Thunder Bay's Conditions of Service.

- a. Please explain why Thunder Bay wishes to make this change.

Response

Thunder Bay Hydro wishes to make this change because of the significant variance in cost to provide temporary service to customers on a case by case basis. Costs will vary from between several hundred to several thousand dollars on an individual basis. Thus Thunder Bay Hydro feels it inequitable to apply a fixed cost to its customers and a much more equitable approach is to charge each based on actual costs to provide the service.

- b. Does Thunder Bay have an estimate of the effect on its revenues due to changing these charges from a uniform rate to a cost recovery basis?

Response

Thunder Bay Hydro's 2007 charges for temporary services on a cost recovery basis were approximately \$30,000.

- c. If the change is not negligible, please confirm that the difference ought to be reflected in the forecast of Account 4235 'Miscellaneous Service Revenues' in the referenced table in Exhibit 3.

Response

As per the above response, there would be no impact on the forecast for Account 4235.

Retail Transmission Rates

46. Ref: E8 / T1 / S3 / p9-10 (Tables 6 and 7), E3 / T2 / S1 / p13 (Table 10) and p19 (Table 19)

Thunder Bay has calculated retail transmission service rates (“RTSRs”) that reflect the Uniform Transmission Rates that will come into effect January 1, 2009. The rates also reflect an adjustment to the 2008 retail rates which worsened the variances by continuing to be based on the 2006 approved rates which in turn over-corrected a previous trend.

The information provided in the application appears to meet the requirements of the *Electricity Distribution Retail Transmission Service Rates, Guideline G-2008-0001* issued by the Board on October 22.

However, the following information could aid in confirming that the adjustment proposed by Thunder Bay will have the effect of minimizing future growth in the variance accounts.

- Please provide, for a convenient twelve month period, the wholesale charge determinants that determined the Network and Connection costs from the IESO shown in Table 6, and provide an adjustment to these quantities that would be consistent with Thunder Bay’s load forecast for 2009.

Response

Thunder Bay Hydro does not have the charge determinants that comprise the IESO monthly charges and as such cannot provide such. The variance is calculated on the cash basis and as such, the costs are Thunder Bay Hydro’s applicable charges from the monthly IESO bill compared to the charge Thunder Bay Hydro bills to its customers.

Having said this, in an effort to provide a response and as per discussion with Board Staff, the following is provided:

THUNDER BAY HYDRO DISTRIBUTION INCORPORATED					
IESO Invoices - Consumption & Actual Rates Calculation					
December 2006 - November 2007					
Month	Rural Rate Charge	Rural Rate Cost per kWh	TBH Purchased kWh	Network Billings	Connection Billings
Dec-06	101,663	\$ 0.001	101,663,250	501,470	344,646
Jan-07	106,822	\$ 0.001	106,822,000	487,018	338,924
Feb-07	101,760	\$ 0.001	101,760,390	478,406	360,639
Mar-07	97,185	\$ 0.001	97,184,500	481,960	323,236
Apr-07	86,057	\$ 0.001	86,057,380	424,175	322,112
May-07	81,377	\$ 0.001	81,377,000	374,734	270,384
Jun-07	77,881	\$ 0.001	77,881,300	395,340	301,016
Jul-07	83,572	\$ 0.001	83,572,240	458,488	319,716
Aug-07	81,873	\$ 0.001	81,872,680	456,943	340,652
Sep-07	76,960	\$ 0.001	76,960,030	382,944	274,685
Oct-07	83,984	\$ 0.001	83,984,160	383,601	281,212
Nov-07	90,595	\$ 0.001	90,594,640	382,012	329,480
Total	\$ 1,069,729.57		1,069,729,570	5,207,091	3,806,702
Calculated Consumption Rate:				\$ 0.004868	\$ 0.003559

- b. Please provide a forecast of the wholesale costs of Network and Connection service in 2009 using these adjusted charge determinants and the new Uniform Transmissions Rates.

Response

THUNDER BAY HYDRO DISTRIBUTION INCORPORATED

Cost of Power, Network & Connection Forecast

YEAR	Load	NETWORK		CONNECTION	
		Rate (2)	Total Cost	Rate (2)	Total Cost
Dec 2006-Nov 2007	1,069,729,570	\$ 0.004868	\$ 5,207,091	\$ 0.003559	\$ 3,806,702
2009 (1)	1,039,523,753	\$ 0.004436	\$ 4,611,231	\$ 0.003559	\$ 3,699,213

(1) Per Thunder Bay Hydro Weather Normalization Regression Model predicted purchases with adjustments

(2) 2009 Rate Calculation takes 2007 Rate in the first line and reduces it by 2009 -2007 Rate

2007	2.82	2.32
2008 Rate	2.31	2.20
2009 Rate	2.57	2.32
	8.87%	0.00%

Thunder Bay Hydro does not feel that this calculation produces a meaningful comparison to forecasted revenues. A meaningful estimate would require analysis of the billing determinants from the IESO and a review of the load composition changes in the forecast years.

- c. Please provide a calculation of retail revenues based on the proposed rates in Table 7 times the applicable billing quantities in the referenced Tables 10 and 19.

Response

Thunder Bay Hydro's Proposed Revised Retail Transmission Rates for 2009 Test Year				
NETWORK SERVICE				
Rate Classification	Metric	Loss Adjusted Consumption	Rate	Cost
Residential	kWh	352,904,425	\$ 0.0043	\$ 1,517,489.03
General Service less than 50 kW	kWh	150,410,896	\$ 0.0040	\$ 601,643.58
General Service greater than 50 to 999 kW	kW	749,395	\$ 1.6186	\$ 1,212,971.29
General Service greater than 1,000 to 4,999 kW	kW	579,358	\$ 1.7169	\$ 994,699.70
Street Lights	kW	32,677	\$ 1.2206	\$ 39,885.75
Sentinel Lights	kW	420	\$ 1.2269	\$ 515.31
Unmetered Scattered Load	kWh	1,395,059	\$ 0.0040	\$ 5,580.24
			Total	\$ 4,372,784.90

CONNECTION SERVICE				
Rate Classification	Metric	Loss Adjusted Consumption	Rate	Cost
Residential	kWH	352,904,425	\$ 0.0034	\$ 1,199,875.04
General Service less than 50 kW	kWH	150,410,896	\$ 0.0030	\$ 451,232.69
General Service greater than 50 to 999 kW	kW	749,395	\$ 1.1930	\$ 894,028.64
General Service greater than 1,000 to 4,999 kW	kW	579,358	\$ 1.3185	\$ 763,883.49
Street Lights	kW	32,677	\$ 0.9222	\$ 30,134.88
Sentinel Lights	kW	420	\$ 0.9415	\$ 395.44
Unmetered Scattered Load	kWH	1,395,059	\$ 0.0030	\$ 4,185.18
			Total	\$ 3,343,735.35

- d. The absolute size of the variance account 1584, which is comprised of Network costs and revenues, is forecast to grow from \$853,100 in 2008 to \$895,773 in 2009 (Exhibit 1 / Tab 3 / Schedule 2 / Appendix A and B). Please discuss whether Thunder Bay believes that the proposed network RTSRs should be fine-tuned to eliminate this increase.

Response

Thunder Bay Hydro did not forecast for movement in the Deferral and Variance accounts except to consider the carrying charges. As such, the balances in the Pro-formas do not reflect principal movement nor the impact of any requested changes to deferral or variance rates.

Deferral and Variance Accounts

47. Ref: E1 / T3 / S2 / Appendix A and B

Thunder Bay is not applying for disposition of the balance of any deferral or variance accounts. Thunder Bay has filed projected information on the balances in deferral and variance accounts for 2008 and 2009.

- a. Please provide a continuity schedule for Thunder Bay's deferral and variance accounts using the Excel spreadsheet attached. (Please note that forecasting principal transactions beyond December 31, 2007 and the interest on those transactions in columns AM – AP is optional.)

Response

See workbook included on the disk entitled 'OEB_Interrogatory_#47_RateModel_Thunder Bay_IR_20090101 2005 to 2007'.

- b. The spreadsheet provides a sub-total for the accounts: 1508, 1518, 1525, 1548, 1570, 1571, 1572, 1574, 1582, 1592, 2425. Please calculate a set of rate riders that would dispose of the net balance of these accounts (excluding account 1592), and specify how many years the rate rider is assumed to be in effect. Please identify whether the balances are taken at the end of 2007, or at some

other time such as the projected balances shown in Appendix B. Please also provide details of how the individual balances would be allocated to customer classes, where possible using updated values of the same allocators as were used for the respective accounts in the 2006 model for regulatory asset recovery rate riders.

Response

See workbook on the disk entitled 'OEB_Interrogatory_ #47_regulatoryasset_recoveryworksheet_20090101' which has the calculation of the rate rider over 1, 2 and 3 year options. The workbook also contains a worksheet showing the bill impacts using the recovery over the 1 year option. Given the relatively small impact, the one year rate rider would be requested.

- c. Please list and provide a brief description of all outstanding deferral and variance accounts noted in b. above. For account 1508 and related sub-accounts, please indicate when the recording of the principle amounts started and stopped in these accounts.

Response

COMMODITY ACCOUNTS ARE CLASSIFIED AS FOLLOWS:

1588 Retail Settlement Variance Account – Power

Description: This account is used to recover the net difference between the energy amount billed to customers and the energy charge to Thunder Bay Hydro using the settlement invoice from the Independent Electricity System Operator [IESO], host distributor and embedded generator.

1588 Retail Settlement Variance Account – Power

Description: This account is used to recover the net difference between the provincial benefit amount billed to customers and the global adjustment charge to Thunder Bay Hydro using the settlement invoice from the Independent Electricity System Operator [IESO].

NON-COMMODITY ACCOUNTS ARE CLASSIFIED IN TWO CATEGORIES AS FOLLOWS:

Wholesale and Retail Market Variance Accounts:

1518 Retail Cost Variance Account – Retail

Description: This account is used to record the net of revenues derived from establishing retailer services agreements, distributor-consolidated billing, retailer-consolidated billing and spilt billing and the costs of entering into retailer service agreements and related contract administration, as well as incremental costs to

provide distributor-consolidated and split billing and any avoided costs credit arising from retailer-consolidated billing.

1548 Retail Cost Variance Account – STR

Description: *This account is used to record the net of revenues derived from service transaction requests charged by Thunder Bay Hydro in the form of a request fee, processing fee, information request fee, default fee and other associated costs and the incremental cost of labour, internal information system maintenance costs and delivery costs related to the provision of retail transaction services.*

1580 Retail Settlement Variance Account - Wholesale Market Service Charges

Description: *This account is used to record the net of the amount charged by the IESO based on the settlement invoice for the operation of the IESO-administered markets and the operation of the IESO-controlled grid, the amount charged by a host distributor, and the amount billed to customers using the OEB approved Wholesale Market Service Rate.*

1582 Retail Settlement Variance Account - One-time Wholesale Market Service

Description: *This account is used to record the net of non-recurring amounts not included in the Wholesale Market Service Rate charged by the IESO based on the settlement invoice and the amount charged to customers for the same services using the OEB-approved rate.*

1584 Retail Settlement Variance Account - Retail Transmission Network Charges

Description: *This account is used to record the net of the amount charged by the IESO, based on the settlement invoice, for transmission network services, the amount charged by the host distributor and the amount billed to customers using the Board Approved Transmission Network Charge.*

1586 Retail Settlement Variance Account - Retail Transmission Connection Charges

Description: *This account is used to record the net of the amount charged by the IESO, based on the settlement invoice, for transmission connection services, the amount charged by the host distributor and the amount billed to customers using the OEB-approved Transmission Connection Charge.*

Utility Deferral Accounts:

1508 Other Regulatory Assets

Description: This account includes amounts of regulatory-created assets, not included in other accounts, resulting from the ratemaking actions of the Board

1508 Other Regulatory Assets - Sub-account OEB Cost Assessments

Description: This account includes amounts paid for OEB Cost Assessment for the period January 1, 2004 to April 30, 2006 in excess of amounts previously included in rates (1999 OEB costs).

1508 Other Regulatory Assets - Sub-account OMERS Pension Contributions

Description: This account includes amounts paid for OMERS pension contributions from January 1, 2004 to April 30, 2006.

1525 Miscellaneous Deferred Debits

Description: This account includes all debits not elsewhere provided for which will benefit future periods and are carried forward and charged to expense over the term of the benefit. Specifically, Customer Information System expenses with respect to Ontario Price Credit [OPC] rebate cheques are tracked in this account.

1555 Smart Meter Capital and Recovery Offset Variance

Description: This account records the net of the amounts paid for capitalized direct costs related to the smart meter program and the amounts charged to customers using the OEB approved smart meter rate rider.

1556 Smart Meter OM&A Variance

Description: This account records the incremental operating, maintenance, amortization and administrative expenses directly related to smart meters.

1562 Deferred Payments in Lieu of Taxes

Description: This account records the amount resulting from the OEB-approved PILs methodology for determining the 2001 deferral account allowance and the PILs proxy

1565 Conservation and Demand Management Expenditures and Recoveries

Description: This account records the net of amounts incurred for conservation and demand management (CDM) activities and expenditures, the revenue proxy amount equivalent to the third tranche of market adjusted revenue requirement

(MARR) and the amount charged to customers using the OEB approved CDM rate rider as well as 2006 CDM revenues and costs.

1566 CDM Contra

Description: This account records the offsetting entry for amounts recorded in account 1565, CDM Expenditures and Recoveries, pertaining to third tranche CDM programming for the reversal of entries to the accounts of original entries.

1590 RECOVERY OF REGULATORY ASSET BALANCES

Description: This account records the net of amounts collected from or repaid to customers using the OEB approved regulatory asset recovery rate riders and the account balances of other regulatory assets approved on a final basis for recovery or repayment in rates when directed by the OEB.

In November 2006, LDCs were advised by the OEB to reallocate the 2006 EDR approved regulatory asset balances from their account of origin to the 1590 recovery accounts effective May 1, 2006.

1592 PILS & TAX VARIANCE [DEFERRED PILS]

Description: Effective May 1, 2006 this account will be used to record the tax impact of any of the following differences:

1. any differences that result from a legislative or regulatory change to the tax rates or rules assumed in the 2006 OEB tax model
2. any differences that result from a change in, or a disclosure of, a new assessing or administrative policy that is published in the public tax administration or interpretive bulletins by relevant federal or provincial tax authorities
3. any differences in 2006 PILs that result in changes in a distributor's "opening" 2006 balances for tax accounts due to changes in debits and credits to those accounts arising from a tax re-assessment.

The following Closed Account has been reclassified to 1590:

1571 Pre-Market Opening Energy Variances

Description: This account was used to record the difference between the utility's purchased cost of power based on time-of-use and amounts billed to non-time-of-use customers charged at an average rate for the same period. Amounts recorded in this account started January 1, 2001 and ended on April 30, 2002.

- d. Please provide a table and explanatory notes similar to part b., assuming that all deferral and variance accounts would be cleared, except Accounts 1555, 1556, 1562, 1563, 1565, 1566, 1590 and 1592.

Response

See workbook on the disk entitled:

'OEB_Interrogatory #47(d)_regulatoryasset_recoveryworksheet 20090101'.

As in b., Thunder Bay Hydro would opt for a one year rider.

Loss Factors

48. Ref: E4 / T2 / S6 and E8 / T1 / S7

The calculations on page 2 of the first reference above show that the Distribution Loss Factor is 1.0478, and a Total Loss Factor of 1.0536. The latter includes a Supply Facility Loss Factor of 1.0055. The proposed Total Loss Factor in Exhibit 8 is 1.0478, i.e. it includes no Supply Facility Loss Factor.

Response:

In preparing the response to this interrogatory it has come to Thunder Bay Hydro's attention the information presented in Tables 1,2 and 3 of E4 / T2 / S6 and the loss factor information in E8 / T1 / S7 was incorrect. The following outlines the corrected information

E4 / T2 / S6 – Updated Information

Table 1
Total Loss Factor Calculations

Calculation for distribution loss adjustment factors							
	Description	2003	2004	2005	2006	2007	Total
A	"Wholesale" kWh IESO plus Embedded Generation	1,088,848,581	1,075,796,638	1,095,213,320	1,074,918,308	1,069,209,629	5,403,986,476
B	"Wholesale" kWh for Large Use customer(s)	61,582,912	48,566,752	26,801,264	2,277,520	0	139,228,447
C	Net "Wholesale" kWh (A)-(B)	1,027,265,669	1,027,229,886	1,068,412,056	1,072,640,788	1,069,209,629	5,264,758,029
D	"Retail" kWh (Distributor)	1,051,670,544	1,034,530,471	1,053,058,417	1,042,542,867	1,022,967,701	5,204,770,000
E	"Retail" kWh for Large Use Customer(s)	60,967,083	48,081,084	26,533,251	2,254,745	0	137,836,163
F	Net "Retail" kWh (D)-(E)	990,703,461	986,449,387	1,026,525,166	1,040,288,122	1,022,967,701	5,066,933,837
G	Loss Factor [(C)/(F)]	103.69%	104.13%	104.08%	103.11%	104.52%	103.90%
H	Distribution Loss Adjustment Factor (5 year avg.)						103.90%
	Supply Facility Loss Factor	100.56%	100.61%	100.56%	100.51%	100.51%	100.55%
	Supply Facility Loss Adjustment Factor (5 year avg.)						100.55%
	Total Loss Factor						104.48%
	"Wholesale" kWh IESO No Losses	1,088,127,000	1,073,807,000	1,092,816,000	1,073,499,000	1,067,018,000	5,395,267,000
	Embedded Generation	721,581	1,989,638	2,397,320	1,419,308	2,191,629	8,719,476
	Total included in A above	1,088,848,581	1,075,796,638	1,095,213,320	1,074,918,308	1,069,209,629	5,403,986,476

Table 2
Supply Facility Loss Factor

Description	Full Year 2003	Full Year 2004	Full Year 2005	Full Year 2006	Full Year 2007	Total
"Wholesale" kWh IESO With Losses	1,094,230,750	1,080,356,450	1,098,964,000	1,078,983,080	1,072,448,510	5,424,982,790
"Wholesale" kWh IESO No Losses	1,088,127,000	1,073,807,000	1,092,816,000	1,073,499,000	1,067,018,000	5,395,267,000
Supply Facility Loss Factor	0.00561	0.00610	0.00563	0.00511	0.00509	0.00551

Table 3
Total Loss Factor by Class

Total Utility Loss Adjustment Factor	<u>LAF</u>
Supply Facility Loss Factor	1.0055
Distribution Loss Factor	
Distribution Loss Factor - Secondary Metered Customer < 5,000kW	1.0390
Distribution Loss Factor - Primary Metered Customer < 5,000kW	1.0287
Total Loss Factor	
Total Loss Factor - Secondary Metered Customer < 5,000kW	1.0448
Total Loss Factor - Primary Metered Customer < 5,000kW	1.0343

E8 / T1 / S7 – Loss Factor Updated Information

LOSS FACTOR	
Total Loss Factor - Secondary Metered Customer < 5,000kW	1.0448
Total Loss Factor - Secondary Metered Customer > 5,000kW	1.0155
Total Loss Factor - Primary Metered Customer < 5,000kW	1.0343
Total Loss Factor - Primary Metered Customer > 5,000kW	1.0055

Please see response to Interrogatory #50 summarizing combined impact on cost of power, revenue requirement and bill impacts.

- a. Should the Supply Facility Loss Factor applicable to Thunder Bay differ from the provincial default value of 1.0045? If so, why?

Response

In the original Electricity Distribution Rate Handbook, Chapter 11, Revision 2, page 11-21, dated March 29,2001 it states:

"Supply Facilities Loss Factor (SFLF)"

The applicant shall provide any specific assumptions made in energy supplied by the transmission system, retail embedded generators, or embedded wholesale market generators for Equation 3.2(e) of the RSC.

An applicant should calculate loss factors based on the best available data. However, should such data not be available, as default values, in the site-specific facilities loss component of Equation 3.2(e), a Distributor may use a value of 0.0045⁴

⁴This value is based on data used by Hydro One as part of RP-1999-004."

Based on the above reference, the 1.0045 is a provincial average that was established almost 10 years ago. In Thunder Bay Hydro's view, the SFLF of 1.00551 not only reflects the losses on the supply facilities specifically serving Thunder Bay Hydro but it is also a more up to date number. It is also Thunder Bay Hydro's view, that since the weather conditions in Thunder Bay are generally significantly different than the provincial average this could also impact losses on the supply facilities serving Thunder Bay Hydro.

- b. Do the amounts shown in row A of Table 1 (p1 of the Exhibit 4 reference) include or exclude losses in the Supply Facilities (transformer stations) that serve Thunder Bay?

Response

As per the information in the preamble response, the corrected information shown in row A of Table 1 exclude losses in the Supply Facilities (transformer stations) that serve Thunder Bay.

- c. Which Total Loss Factor is correct: 1.0478 or 1.0536 (or other)?

Response

As per the information in the preamble response, the correct total loss factor for Secondary Metered Customer < 5,000kW is 1.0448.

LRAM / SSM

49. Ref: E8 / T1 / S10 / p6

Please explain why Thunder Bay calculated the LRAM amounts by a multiplier factor rather than load impacts on a year by year basis.

Response

Thunder Bay Hydro calculated the LRAM amounts by a multiplier factor since the loss of load in one year will be lost in that year and all future years until the year prior to the test year. In the test year the forecast is adjusted to reflect the loss of load and resulting rates will also reflect the lower load. For example, a 2005 CDM program that achieves savings of 10,000 kWh in 2005 will continue to achieve those savings in 2006, 2007 and 2008 since it is assumed the customer has changed their usage in perpetuity as a result of the CDM program.

50. Ref: E8 / T1 / S10 / p1-16

Please identify any programs that include measures not Board approved and/or programs where the inputs and assumptions (e.g. energy savings, free rider rates, equipment life, etc.) used by Thunder Bay differ from those that are approved. For any such programs, please provide documentation supporting the inputs and assumptions used by Thunder Bay.

Response

The following programs include measures not Board approved:

- a) Traffic Light LED Replacement Program;*
- b) Parking Lot Winter Plug In Control Program; and*
- c) OPA Summer Savings.*

The documentation that supports the above measures is electronically attached on a disk at this time. It appears that the original submission was missing some of the supporting files.

The files are named as follows:

- kWh and kW and TRC for LED and Parking Lot 2007.xls*
- Summer Savings 2007 data eligible.xls.*

All other programs used inputs and assumptions as approved by the Board.

51. Ref: E8 / T1 / S10 / p1-16

- a. Please provide the calculations, inputs and assumptions that were used to determine the LRAM amount. Please ensure that the free rider rates used for each program are included.

Response

- a) The LRAM calculations, inputs and assumptions are electronically attached on a separate disk at this time.*

In responding to this question, Thunder Bay Hydro noted an error in the original calculation relating to 2007. Please refer to file entitled 'LRAM SSM Application Summary Data 05 06 07 adjusted for EKC 2007 error' for revision, on the disk provided.

Also following are the revised Weather Normal Load Forecast and Revised Table 5.

Weather Normal Load Forecast

	2006 Board Approved	2006 Actual	2007 Actual	2008 Weather Normal	2009 Weather Normal
Actual kWh Purchases		1,080,427,586	1,074,642,764		
Predicted kWh Purchases		1,075,663,016	1,092,300,747	1,096,799,813	1,099,381,294
Adjustments not in model		(1,481,458)	(28,277,111)	(56,686,977)	(56,686,977)
Revised Predicted kWh Purchases		1,074,181,558	1,064,023,636	1,040,112,836	1,042,694,317
% Difference		-0.6%	-1.0%		
Billed kWh		1,042,614,698	1,022,967,701	993,245,623	995,712,020
By Class					
Residential					
Customers	44,167	44,581	44,526	44,580	44,635
kWh	356,604,252	346,450,433	344,539,413	342,711,443	340,800,466
General Service < 50 kW					
Customers	4,495	4,445	4,372	4,419	4,466
kWh	147,826,584	142,460,073	139,426,299	143,471,665	143,961,424
General Service > 50 to 999 kW					
Customers	471	489	496	504	511
kWh		300,562,731	295,796,449	303,587,556	304,722,102
kW	719,611	799,110	793,730	714,591	717,262
General Service > 1000 to 4999 kW					
Customers	19	19	19	19	19
kWh		240,484,511	230,476,516	191,292,326	194,129,052
kW	553,018	650,281	654,850	551,960	560,145
Streetlights					
Connections	12,769	12,962	12,976	13,034	13,091
kWh		10,220,293	10,523,382	10,570,061	10,616,947
kW	30,411	30,584	30,951	31,138	31,276
Sentinel Lights					
Connections	140	164	153	164	176
kWh	130,673	136,481	127,327	136,712	146,789
kW	307	321	299	375	402
Unmetered Loads					
Connections	171	428	435	436	437
kWh	3,033,972	2,300,176	2,078,315	1,475,860	1,335,240
Total					
Customer/Connections	62,232	63,087	62,977	63,155	63,335
kWh	507,595,481	1,042,614,698	1,022,967,701	993,245,623	995,712,020
kW from applicable classes	1,303,347	1,480,296	1,479,830	1,298,064	1,309,085

Revised Table 5

2009 Test Year - LRAM and SSM Rider											
Rate Class	Amounts (2005 to 2007)		Billing Units (2009)		Rate Riders			Two Year Rate Rider	Three Year Rate Rider	Number of Years to Use	Rate Rider to Use
	LRAM	SSM			LRAM	SSM	Total	Total	Total	(2 or 3)	Total
	\$	\$		Metrics	\$/ unit (kWh or kW)	\$/ unit (kWh or kW)	\$/ unit (kWh or kW)	\$/ unit (kWh or kW)	\$/ unit (kWh or kW)	3	(kWh or kW)
Residential	334,272	72,407	340,800,466	kWh	0.0010	0.0002	0.0012	0.0006	0.0004		0.0004
GS <50 kW				kWh							0.0000
GS>50 kW	2,693	1,833	717,262	kW	0.0038	0.0026	0.0063	0.0032	0.0021		0.0021
GS 1,000 to 4,999 kW	1,157	3,328	560,145	kW	0.0021	0.0059	0.0080	0.0040	0.0027		0.0027
Street Light				kW							0.0000
Sentinel				kW							0.0000
Unmetered Scattered Load	44,951	28,455	1,335,240	kWh	0.0337	0.0213	0.0550	0.0275	0.0183		0.0183
Total	383,073	106,024									

The revenue deficiency has reduced by \$41,760 as a result of the revised information as described above.

- b. Please provide the calculations, inputs and assumptions that were used to determine the SSM amount. Please ensure that the free rider rates used for each program are included.

Response

The SSM calculations, inputs and assumptions are electronically attached on a disk at this time.

52. Ref: E8 / T1 / S10 / p1-16

The Board's *Guidelines for Electricity Distributor Conservation and Demand Management* issued on March 28, 2008, outlines in section 9 the information that is required when filing an application for LRAM or SSM. Please explain why the following has not been included in Thunder Bay's application:

- a. For programs funded in 2007 and beyond an Evaluation Report, in accordance with the guidelines set out in section 7.4.
- b. Verification of participation rates.

Response

The individual Evaluation Reports for the 2007 funded programs are detailed below. Thunder Bay Hydro simply missed including these reports at the time of the initial EDR filing. Verification of participation rates will be detailed within the individual program evaluation details to follow.

Evaluation Report

Introduction

Thunder Bay Hydro's main focus of its CDM Plan was targeted at energy efficiency initiatives. In 2007, not only did TBH offer programs through its 3rd tranche spending, it also participated in a number of OPA standard programs. Thunder Bay Hydro is proud to say that customer response was excellent and that all programs were TRC positive. For the purpose of this interrogatory all supporting calculations have been provided electronically on disk.

Evaluation of the CDM Plan

Seasonal LEDs

This program was a continuation of the 2006 offering. The program was aimed at bringing energy conservation to holiday lighting of a home's interior and exterior. Thunder Bay Hydro offered a direct exchange at a local retailer of two

incandescent light sets for one energy saving L.E.D. light set. Each customer was limited to two sets. The program was again well received by our customers with 200 LEDs distributed. This exchange will be discontinued as Thunder Bay Hydro believes that retail locations now have the appropriate capacity and offerings to satisfy customer demand.

Energy Star Appliance Rebates

This program was also a 2006 continuation offering. The program was aimed at customers who were considering upgrading their refrigerator, dishwasher, and clothes washer. The idea was to give them an incentive to upgrade to an Energy Star rated appliance. Thunder Bay Hydro had 64 clothes washer rebates and 96 refrigerator rebates based on customers producing receipt of purchase along with a copy of the Energy Star tag. The program was again well received by our customers. Unless alternative sources of funding come from the OPA, this program will be discontinued in 2008.

CFLs

As part of the Community Outreach Campaign, 2,000 Compact Fluorescent Lamps were purchased. Distribution of the CFL's was through various customer contacts (i.e. shows, home visits, etc.) including counter visits within Thunder Bay Hydro's Customer Service Centre. Installation of the CFL was assumed. Energy savings and long lamp life need to be promoted.

One Change CFL Initiative

In an effort to really transform customer opinion as to the value of CFLs Thunder Bay Hydro partnered with One Change to deliver through a network of volunteers a CFL to 40,000 homes in Thunder Bay under the name of 'Project Porchlight'. Installation of the CFL was assumed. This program was very successful in raising awareness of the inefficiency of incandescent bulbs.

OPA Fridge Bounty

Thunder Bay Hydro participated in the OPA's Great Refrigerator Round Up. Thunder Bay Hydro used the participation data as supplied by the OPA. Thunder Bay Hydro had 603 fridges, 154 freezers and 4 room air conditioners removed from the grid. Thunder Bay Hydro fully intends on participating in this program in 2008.

OPA Summer Savings

Thunder Bay Hydro participated in the OPA's Summer Savings program whereby customers were asked to conserve 10% in the months of July and August. Thunder Bay Hydro had 10,803 customers qualify based on kWh usage reports from its CIS. Thunder Bay Hydro will not participate in this program in 2008 if it is re-run under its current format. The program design was flawed and is full of free-riders with customers being automatically registered. In fact, Thunder Bay Hydro ended up using a free-ridership rate of 70% in its submission based on feedback from the OPA.

OPA Conservation Bureau EKC Coupons

Thunder Bay Hydro participated in the OPA's EKC spring program by marketing the program via a direct mail campaign and through coupon handouts in its Customer Service Centre and at trade shows. Thunder Bay retailers saw, as reported by the OPA, customers redeem 138 ceiling fan coupons, 11,269 CFL coupons, 115 dimmer switch coupons, 242 furnace filter coupons, 359 outdoor motion sensor coupons and 4,418 outdoor solar light coupons.

Traffic Light LEDs

The L.E.D. Traffic Light Conversion Program is a partnership with the City of Thunder Bay. The program is seen as a huge success. The energy savings received from the conversion work is over 80%. Savings were calculated based on actual pre-conversion and post conversion measurements by Thunder Bay Hydro staff. Partnering with the City of Thunder Bay proved to be a positive experience with the benefits going towards the municipal tax base. There were 25 intersections converted from incandescent traffic lights to L.E.D. technology in 2007.

Parking Lot Winter Plug In Controls

This program targeted uncontrolled parking lot vehicle receptacles (engine block heaters). The control devices controlled the electricity usage based on ambient temperature. The control devices were designed to provide power at -5 degrees C for a timed duration. As the ambient temperature decreases, the timed cycles increased. At -25 degrees C, the vehicle block heaters would have full power. Thunder Bay Hydro commercial customers installed 142 of these devices. Customers had to produce receipt of purchase for rebate purposes.

Lessons Learned/Conclusions

There were a number of lessons learned in 2007. First, there seems to be significant customer demand for old appliance removals. Second, customer coupon programs for energy efficiency products are popular and should be continued. Third, considering municipal lighting loads are heavy, Thunder Bay Hydro should investigate a custom program for street lighting conversions. Fourth, a larger winter block heater plug in program should be investigated for 2008 with the aim to move this from commercial acceptance to residential use. Sixth, the OPA's summer savings program needs to have a more stringent design to eliminate the free-ridership issue. Seventh, the OPA Fridge Round Up should be continued. Eighth, and importantly, the OPA needs to make funds available to LDCs for basic community CDM awareness initiatives.

APPENDIX A

DISTRIBUTION PROJECT DETAILS
2009, 2010 and 2011

2009 Distribution Project Details

Distribution Project Details

Project Evaluation (Sheet 4)

Title: Birch TS Wholesale Revenue Metering Upgrad

Prudence on Expense(0-15):

15

Explanation:

This project is driven by the IESO.

Public Safety (0-15):

0

Explanation:

There is no public safety component to this project.

Worker Safety (0-15):

0

Explanation:

The project will not improve worker safety

Environment (0-10):

0

Explanation:

There is no environmental component to this project.

Reliability (0-10):

10

Explanation:

More accurate readings will be possible with the new CTs and PTs.

Power Quality (0-5):

0

Explanation:

There are no power quality issues associated with this project.

Customer Percep (0-10):

0

Explanation:

Customers perception will not be affected.

End of Life (0-10):

0

Explanation:

The equipment is not at the end of life

Maintenance (0-5):

0

Explanation:

No maintenance is required.

Operation (0-5):

0

Explanation:

Does not affect the operations

Distribution Project Details

Project Evaluation (Sheet 4)

Title: Port Arthur TS#1 Wholesale Revenue Meterin

Prudence on Expense(0-15):

15

Explanation:

This project is driven by the IESO.

Public Safety (0-15):

0

Explanation:

There is no public safety component to this project.

Worker Safety (0-15):

0

Explanation:

Environment (0-10):

0

Explanation:

There is no environmental component to this project.

Reliability (0-10):

10

Explanation:

More accurate readings will be possible with the new PTs and CTs.

Power Quality (0-5):

0

Explanation:

There are no power quality issues associated with this project.

Customer Percep (0-10):

0

Explanation:

Customers perception will not be affected

End of Life (0-10):

0

Explanation:

The old CTs and PTs are not at end of life

Maintenance (0-5):

0

Explanation:

The maintainability of the metering unit will not be affected.

Operation (0-5):

0

Explanation:

Operabilityof the equipment will not be improved.

Distribution Project Details

Project Evaluation (Sheet 4)

Title: **Ontario-Banning Conversion**

Prudence on Expense(0-15):

15

Explanation:

John St Substation has almost reached end-of-life and needs to be replaced. Increase of asset value will earn more revenue.

Public Safety (0-15):

15

Explanation:

John St. Substation needs to be removed from service by 2012, and this load needs to be removed.

Worker Safety (0-15):

10

Explanation:

The removal of the poles and restricted conductor will allow for safer maintenance of this area

Environment (0-10):

10

Explanation:

The possibility of transformer rupture at John St. Substation is very possible after 2012.

Reliability (0-10):

10

Explanation:

John St. Substation is very fragile and failure is very possible

Power Quality (0-5):

5

Explanation:

The power quality will improve with this project.

Customer Percep (0-10):

9

Explanation:

The new plant will improve customer perception.

End of Life (0-10):

10

Explanation:

The poles and conductor, as well as the substation transformers, are at end-of-life.

Maintenance (0-5):

5

Explanation:

Removal of restricted conductor and poles will make the area much safer to maintain.

Operation (0-5):

5

Explanation:

The seriousness of retiring John St. Substation has resulted in the awarding of full points to this category.

Distribution Project Details

Project Evaluation (Sheet 4)

Title: County Park Underground Cable Trunking -Ph

Prudence on Expense(0-15):	15	Explanation: Replacement is necessary for reliable operation of the plant. Increased value of asset base would earn more revenue.
Public Safety (0-15):	10	Explanation: Public safety will be improved by completing this project.
Worker Safety (0-15):	15	Explanation: Worker safety will be very significantly improved by completing this project.
Environment (0-10):	5	Explanation: There are environmental issues associated with old transformers in the system.
Reliability (0-10):	10	Explanation: By breaking up the loop sizes and replacing the express feed the length and frequency of outages will be reduced.
Power Quality (0-5):	5	Explanation: Power quality will improve by this project.
Customer Percep (0-10):	10	Explanation: Customer perception will improve after the project is completed.
End of Life (0-10):	10	Explanation: The cables in this area are at end-of-life.
Maintenance (0-5):	5	Explanation: Smaller transformer loops will greatly improve the ability to work within the subdivision.
Operation (0-5):	5	Explanation: The operability of the loops will be greatly improved.

2010 Distribution Project Details

Distribution Project Details

Project Evaluation (Sheet 4)

Title: Decommission/Revamp John St. Substation

Prudence on Expense(0-15):	15
Explanation:	The sub-station is considered serious risk to public and workers due to likelihood of transformer failure. The substation will be offloaded by 2009 and will not be used in future and need to be retired as ESA Reg 22/04
Public Safety (0-15):	0
Explanation:	No public safety issues since the substation will be taken off the system.
Worker Safety (0-15):	0
Explanation:	No worker safety issues since the substation will be taken off the system.
Environment (0-10):	10
Explanation:	The oil spillage from the old transformer will be a serious risk to environment
Reliability (0-10):	0
Explanation:	There will be no effect on the outages
Power Quality (0-5):	0
Explanation:	No effect on power quality
Customer Percep (0-10):	0
Explanation:	Customer perception will not be affected.
End of Life (0-10):	10
Explanation:	The substation transformers are at the end of life and need to be retired ASAP
Maintenance (0-5):	0
Explanation:	No improvement in the maintainability.
Operation (0-5):	0
Explanation:	There is no effect on the operability

Distribution Project Details

Project Evaluation (Sheet 4)

Title: Hyde/Murray Conversion/Rebuild

Prudence on Expense(0-15):

15

Explanation:

The poles are rotten and this area has a lot of restricted conductor. These need to be replaced to sustain the business.

Public Safety (0-15):

15

Explanation:

The old poles and restricted conductor pose a risk to the the public.

Worker Safety (0-15):

15

Explanation:

The old poles and restricted conductor pose a risk to the safety of maintenance workers.

Environment (0-10):

7

Explanation:

There is a risk of a transformer falling from a broken pole.

Reliability (0-10):

10

Explanation:

Outages caused by falling poles and conductors is possible and probable.

Power Quality (0-5):

5

Explanation:

The quality of the power will improve in this area.

Customer Percep (0-10):

10

Explanation:

The refurbishing of the plant in this area will be noticed and appreciated by the many customers that live in the area.

End of Life (0-10):

10

Explanation:

The majority of the poles in the area are at end-of-life, and much of the conductor is restricted.

Maintenance (0-5):

2

Explanation:

With the removal of the restricted conductor and the replacement of the aging poles the plant will be much easier to service.

Operation (0-5):

3

Explanation:

Like maintainability, the operability of the plant will be improved.

Distribution Project Details

Project Evaluation (Sheet 4)

Title: Mary/Mountdale Area Rebuild/Voltage Conver

Prudence on Expense(0-15): 15

Explanation: The replacements of the assets are considered necessary to replace rotten poles and restricted conductors.

Public Safety (0-15): 15

Explanation: The old poles, insulators and conductors are serious risk to public.

Worker Safety (0-15): 15

Explanation: The old poles, insulators and conductors are serious risk to workers.

Environment (0-10): 10

Explanation: Environmental risk is there due to oil spillage from pole mountec transformers due to falling poles.

Reliability (0-10): 8

Explanation: Outage to customers will reduce appreciably

Power Quality (0-5): 4

Explanation: There will be improvement in power quality

Customer Percep (0-10): 8

Explanation: Customer perception will improve with new plant and less outages.

End of Life (0-10): 5

Explanation: Some of the plant is at end of life

Maintenance (0-5): 5

Explanation: There will be improvement in the maintainability of system

Operation (0-5): 4

Explanation: Significant improvement to operability will be there.

Distribution Project Details

Project Evaluation (Sheet 4)

Title:	County Park Underground Cable Trunking -Ph		
Prudence on Expense(0-15):	15		
Explanation:	Replacement is necessary for reliable operation of the plant. Increased value of asset base would earn more revenue.		
Public Safety (0-15):	11		
Explanation:	Public safety will be improved by completing this project.		
Worker Safety (0-15):	15		
Explanation:	Worker safety will be significantly improved by completing this project.		
Environment (0-10):	7		
Explanation:	There are environmental issues associated with old transformers in the system.		
Reliability (0-10):	10		
Explanation:	By breaking up the loop sizes and replacing the express feed the length and frequency of outages will be reduced.		
Power Quality (0-5):	5		
Explanation:	Power quality will be improved by this project.		
Customer Percep (0-10):	10		
Explanation:	Customer perception might change after the project is completed.		
End of Life (0-10):	10		
Explanation:	The cables in this area are at end-of-life.		
Maintenance (0-5):	5		
Explanation:	Smaller transformer loops will greatly improve the ability to work within the subdivision.		
Operation (0-5):	5		
Explanation:	The operability of the loops will be greatly improved.		

Distribution Project Details

Project Evaluation (Sheet 4)

Title: Mary/Ford Area Conversion/Rebuild

Prudence on Expense(0-15):

15

Explanation:

Many poles in this area are rotten and have almost reached end-of-life; this area also has restricted conductor. They need to be replaced.

Public Safety (0-15):

15

Explanation:

Removal of rotten poles would improve public safety.

Worker Safety (0-15):

15

Explanation:

Since some of the conductor is restricted, and some of the poles are old, rebuilding this area will result in an improvement to worker safety.

Environment (0-10):

8

Explanation:

Replacing old transformers and conductors will reduce environmental concern.

Reliability (0-10):

5

Explanation:

Rebuilding this area will reduce the risk of outages.

Power Quality (0-5):

5

Explanation:

This power quality in this area will improve.

Customer Percep (0-10):

8

Explanation:

The customer perception will be affected for reconstruction.

End of Life (0-10):

8

Explanation:

The plant is nearing or at end-of-life

Maintenance (0-5):

5

Explanation:

Removal of the restricted conductor will improve the maintainability of the plant.

Operation (0-5):

5

Explanation:

Reducing the load on Brock substation helps the operation because Brock substation is approaching end-of-life.

Distribution Project Details

Project Evaluation (Sheet 4)

Title: Port Arthur TS#1 Wholesale Revenue Meterin

Prudence on Expense(0-15): 15

Explanation:

This project is driven by the IESO.

Public Safety (0-15):

0

Explanation:

There is no public safety component to this project.

Worker Safety (0-15):

0

Explanation:

There is no worker safety component to this project.

Environment (0-10):

0

Explanation:

The is no environmental component to this project.

Reliability (0-10):

10

Explanation:

New ITs will provide more accurate and reliable readings.

Power Quality (0-5):

0

Explanation:

There are no power quality issues associated with this project.

Customer Percep (0-10):

0

Explanation:

Customers will not notice any improvements.

End of Life (0-10):

0

Explanation:

These items are not at end-of-life.

Maintenance (0-5):

0

Explanation:

The maintainability of the metering unit will not be affected.

Operation (0-5):

0

Explanation:

The operability will not be affected.

Distribution Project Details

Project Evaluation (Sheet 4)

Title: College Park Underground Cable Trunking -Ph

Prudence on Expense(0-15):

15

Explanation:

New express feed is necessary for reliable operation of the plant. Increased value of asset base would earn more revenue.

Public Safety (0-15):

9

Explanation:

Public safety will be improved by completing this project.

Worker Safety (0-15):

14

Explanation:

Worker safety will be improved by completing this project.

Environment (0-10):

5

Explanation:

There are environmental issues associated due to old transformers.

Reliability (0-10):

10

Explanation:

The cables in this area are at end of life .

Power Quality (0-5):

5

Explanation:

Power quality will improve by this project.

Customer Percep (0-10):

10

Explanation:

Customer perception will be affected after the project is completed.

End of Life (0-10):

10

Explanation:

The old cables in the loop are at end of their life.

Maintenance (0-5):

5

Explanation:

Smaller transformer loops will greatly improve the ability to work within the subdivision.

Operation (0-5):

5

Explanation:

The operability of the loops will be greatly improved.

Distribution Project Details

Project Evaluation (Sheet 4)

Title: Lillie/Donald Area Rebuild/Voltage Conversion

Prudence on Expense(0-15): 15

Explanation: There is risk of failure of the old plant and new assets are necessary to supply customers.

Public Safety (0-15): 15

Explanation: The poor condition of the poles is considered serious risk to public.

Worker Safety (0-15): 15

Explanation: There is serious risk to the workers safety during maintenance work due to falling poles.

Environment (0-10): 8

Explanation: The spillage from pole mounted transformers is environmental risk

Reliability (0-10): 10

Explanation: The new plant will reduce the outages

Power Quality (0-5): 5

Explanation: Supply from 25kV system will improve the power quality

Customer Percep (0-10): 5

Explanation: New plant will improve the customer perception

End of Life (0-10): 10

Explanation: The plant is at end of life and needs immediate replacement.

Maintenance (0-5): 4

Explanation: Maintainability of the system will improve considerably.

Operation (0-5): 3

Explanation: There will be improvement in carrying out the system operation

2011 Distribution Project Details

Distribution Project Details

Project Evaluation (Sheet 4)

Title: **Brock/Ford Area Conversion/Rebuild**

Prudence on Expense(0-15):

15

Explanation:

The poles have reached end-of-life and need to be replaced. Increase of asset value would earn more revenue.

Public Safety (0-15):

12

Explanation:

With much of the conductor being restricted and the poles at end-of-life, rebuilding this area will result in a considerable improvement to public safety.

Worker Safety (0-15):

15

Explanation:

Since most of the conductor is restricted, and since most of the poles are at end-of-life, rebuilding this area will result in an improvement to worker safety.

Environment (0-10):

7

Explanation:

The risk of a falling transformer and the spilling of oil is imminent as the age and state of the poles is very poor.

Reliability (0-10):

5

Explanation:

Rebuilding this area will greatly reduce the risk of outages.

Power Quality (0-5):

2

Explanation:

The power quality in this areawill improve.

Customer Percep (0-10):

10

Explanation:

The poles in this area are in a very advanced stage of decay, and replacing the poles and conductors will improve the esthetics of the area.

End of Life (0-10):

10

Explanation:

The poles in this area have been at the end-of-life for some time.

Maintenance (0-5):

5

Explanation:

Removal of the restricted conductor will improve the maintainability of the plant.

Operation (0-5):

5

Explanation:

Reduce the load on Brock substation and helps the operation because Brock substation is approaching its end-of-life.

Distribution Project Details

Project Evaluation (Sheet 4)

Title: Darcom Radio system

Prudence on Expense(0-15):	15
Explanation:	Radio communication system is an integral requirement for distribution business operation and the existing system has become old.
Public Safety (0-15):	0
Explanation:	No public safety issues.
Worker Safety (0-15):	15
Explanation:	Worker safety depends on a communication channel with System Control and other associated parties related to the job.
Environment (0-10):	0
Explanation:	No environmental issues.
Reliability (0-10):	10
Explanation:	Better communication is critical to system reliability.
Power Quality (0-5):	0
Explanation:	No effect on power quality
Customer Percep (0-10):	0
Explanation:	Customer perception not affected.
End of Life (0-10):	10
Explanation:	The existing radio system has become old and is at end of life
Maintenance (0-5):	5
Explanation:	Radio communication would help the maintenance crews because if required, they can pass necessary information to others or others can reach them easily whenever necessary.
Operation (0-5):	5
Explanation:	Operation is much easier safer and reliable with radio communication system

Distribution Project Details

Project Evaluation (Sheet 4)

Title: **Communications Equipment**

Prudence on Expense(0-15):	15
Explanation:	Existing SCADA system has become old and obsolete. We could revamp the existing SCADA system piggy-backing the smart metering infrastructure.
Public Safety (0-15):	0
Explanation:	No public safety issues.
Worker Safety (0-15):	15
Explanation:	Reliable communication is very critical for workers safety
Environment (0-10):	0
Explanation:	No enviortmental issues
Reliability (0-10):	10
Explanation:	Better communication will certainly help to improve the system security and operatonal reliability.
Power Quality (0-5):	0
Explanation:	No effect on power quality
Customer Percep (0-10):	0
Explanation:	Customer perception not affected.
End of Life (0-10):	10
Explanation:	The existing radio system has almost approached end-of-life
Maintenance (0-5):	5
Explanation:	There will be considerable impact in carrying out maintenance work
Operation (0-5):	5
Explanation:	Operation is much easier, safer and reliable with a good radio communication system

Distribution Project Details

Project Evaluation (Sheet 4)

Title: **Brock/Syndicate Ave. Area Conversion/Rebuild**

Prudence on Expense(0-15):

15

Explanation:

The poles have reached end-of-life and need to be replaced. Increase of asset value would earn more revenue.

Public Safety (0-15):

12

Explanation:

With much of the conductor being restricted and the poles at end-of-life, rebuilding this area will result in an improvement to public safety.

Worker Safety (0-15):

15

Explanation:

Since most of the conductor is restricted, and since most of the poles are at end-of-life, rebuilding this area will result in an improvement to worker safety.

Environment (0-10):

8

Explanation:

The risk of a falling transformer and the spilling of oil is imminent as the age and state of the poles is very poor.

Reliability (0-10):

7

Explanation:

Rebuilding this area will reduce the risk of outages.

Power Quality (0-5):

2

Explanation:

The power quality in this area will improve.

Customer Percep (0-10):

7

Explanation:

The poles in this area are in a very advanced stage of decay, and replacing the poles and conductors will improve the esthetics of the area.

End of Life (0-10):

10

Explanation:

The poles in this area are reaching end-of-life.

Maintenance (0-5):

5

Explanation:

Removal of the restricted conductor will improve the maintainability of the plant

Operation (0-5):

5

Explanation:

The system will improve the operability.

Distribution Project Details

Project Evaluation (Sheet 4)

Title: Substation Transformer

Prudence on Expense(0-15):

15

Explanation:

Three substation transformers have almost reached end-of-life and could potentially fail in the near future. A transformer should be kept as a spare to deal with an emergency situation should any substation transformer would fail.

Public Safety (0-15):

0

Explanation:

No public safety concern.

Worker Safety (0-15):

5

Explanation:

New transformer will provide better worker safety.

Environment (0-10):

0

Explanation:

No environment affects.

Reliability (0-10):

10

Explanation:

The new spare transformer will increase the reliability of the distribution system.

Power Quality (0-5):

0

Explanation:

The power quality will not be affected.

Customer Percep (0-10):

0

Explanation:

The customer perception will not be affected.

End of Life (0-10):

10

Explanation:

The transformers at John, Algoma, Brock and Hardisty substations are at end-of-life.

Maintenance (0-5):

5

Explanation:

The new transformer will not require immediate maintenance

Operation (0-5):

5

Explanation:

New transformer will be better in operation

Distribution Project Details

Project Evaluation (Sheet 4)

Title: Francis St./Centre Av. Area Conversion/Rebuild

Prudence on Expense(0-15):

15

Explanation:

The poles reach the end of life and need to be replaced. Increase of Asset value would earn more revenue.

Public Safety (0-15):

15

Explanation:

With much of the conductor being restricted and the poles at the end of life, rebuilding this area will result in a considerable improvement to public safety.

Worker Safety (0-15):

15

Explanation:

Since most of the conductor is restricted, and since most of the poles are at end of life, rebuilding this area will result in an improvement to worker safety.

Environment (0-10):

7

Explanation:

The risk of a falling transformer and the spilling of oil is imminent as the age and state of the poles is very poor.

Reliability (0-10):

5

Explanation:

Rebuilding this area will greatly reduce the risk of outages.

Power Quality (0-5):

0

Explanation:

This power quality in this area is presently adequate.

Customer Percep (0-10):

10

Explanation:

The poles in this area are in a very advanced stage of decay, and replacing the poles and conductors will improve the aesthetics of the area.

End of Life (0-10):

10

Explanation:

The poles in this area have been at the end of life for some time.

Maintenance (0-5):

5

Explanation:

Removal of the restricted conductor will improve the maintainability of the plant.

Operation (0-5):

5

Explanation:

Reduce the load on Brock substation and helps the operation because Brock substation is approaching its end of life.

Distribution Project Details

Project Evaluation (Sheet 4)

Title: College Park Underground Cable Trunking -Ph

Prudence on Expense(0-15):

15

Explanation:

Cables have almost reached end-of-life; any cable failure could cause long duration outages affecting a large number of customers. A new express feed is necessary for reliable operation of the distribution network in this subdivision.

Public Safety (0-15):

9

Explanation:

Public safety will be improved by completing this project.

Worker Safety (0-15):

14

Explanation:

Workers could work more safely because PMH6 could isolate a loop having small number customers.

Environment (0-10):

5

Explanation:

There are environmental issues associated with this system due to old transformers.

Reliability (0-10):

10

Explanation:

The reduction in the length of the loops will improve the reliability.

Power Quality (0-5):

5

Explanation:

Power quality will improve.

Customer Percep (0-10):

10

Explanation:

Customer perception will improve after the project is completed.

End of Life (0-10):

10

Explanation:

The most of the cables and lugs are at end-of-life

Maintenance (0-5):

5

Explanation:

Smaller transformer loops will greatly improve the ability to work within the subdivision.

Operation (0-5):

5

Explanation:

The operability of the loops will be greatly improved.

Distribution Project Details

Project Evaluation (Sheet 4)

Title: Georgina/Francis Area Rebuild/Voltage Conve

Prudence on Expense(0-15):	15
Explanation:	The poles are at end-of-life; replacement is necessary for further operation of the plant. Increased value of asset base would earn more revenue.
Public Safety (0-15):	12
Explanation:	The old poles and restricted conductor pose a risk to the the public.
Worker Safety (0-15):	15
Explanation:	The old poles and restricted conductor pose a risk to the safety of maintenance workers.
Environment (0-10):	9
Explanation:	There is a risk of a transformer falling from a broken pole.
Reliability (0-10):	10
Explanation:	Outages caused by falling poles and conductors is possible and probable.
Power Quality (0-5):	3
Explanation:	The quality of the power wil improve in this area.
Customer Percep (0-10):	5
Explanation:	The replacement of the poles and conductor will provide a fresh look to the area.
End of Life (0-10):	10
Explanation:	The plant in this area has been at end-of-life for some time.
Maintenance (0-5):	3
Explanation:	The removal of the old poles and the restricted conductor will make the plant safe to work on.
Operation (0-5):	3
Explanation:	The system will improve the operability.

Distribution Project Details

Project Evaluation (Sheet 4)

Title: Replace 8 rotten poles

Prudence on Expense(0-15):

15

Explanation:

The poles have reached end-of-life and need to be replaced. Increase of asset value would earn more revenue.

Public Safety (0-15):

12

Explanation:

The old poles and restricted conductor pose a risk to the the public.

Worker Safety (0-15):

15

Explanation:

The removal of the old poles and restricted conductor will make a system that is safer to maintain.

Environment (0-10):

8

Explanation:

There is a risk of a transformer falling from a broken pole.

Reliability (0-10):

10

Explanation:

Outages caused by falling poles and conductors is possible and probable.

Power Quality (0-5):

2

Explanation:

The quality of the power wil improve in this area.

Customer Percep (0-10):

5

Explanation:

The new plant will look much nicer than the old clutter and rotten plant.

End of Life (0-10):

10

Explanation:

The plant in this area has been at end-of-life for some time.

Maintenance (0-5):

4

Explanation:

The removal of the old poles and insulators will make the plant safe to work on.

Operation (0-5):

4

Explanation:

Like maintainability, the operability of the plant will be improved.

APPENDIX B

Server Rationalization Plan

THUNDER BAY HYDRO



SERVER RATIONALISATION PROPOSAL

ADDRESSING CURRENT AND PROJECTED DEFICIENCIES AND
COSTS

CURRENT SERVER CONFIGURATION AND STATUS

Thunder Bay Hydro's enterprise computing systems consist of an single partitioned IBM midrange system (iSeries 9406/520) running a proprietary O/S as well as a farm of 18 Intel based servers running a variety of Microsoft O/S under a Server 2003 active directory. The midrange system hosts the programming and data for our corporate software system (Sunguard H.T.E.) and the server farm provides PC based file serving as well as a wide range of application services. Connectivity between the two environments is enabled via an Intel based server (IXS) residing within the midrange system running Server 2003. Connectivity between the domain active directory and the midrange O/S ensures harmonized user profiles and authorities for single level system authentication.

The current server farm is mission critical in the storage, filing and archiving of a wide range of corporate PC based data as well as hosting enterprise applications. Enterprise software hosting provides centralized access, archiving and unique authentication. There are a number of applications in the category i.e. MV/90, USO, EBT, Oracle, Virus and Web access controls, and several others. Not all machines in the farm are server class, this level being reserved for those providing file server and/or domain control services. There is no growth potential within this environment without the addition of new freestanding machines.

Machines within the server farm are all currently beyond normal functional life expectations ranging from 4 to 7 years old. The primary domain server is 5 years old and storage is currently 80% allocated. Server based data archiving has overwhelmed our current tape library and can no longer be completed unattended.

SERVER RATIONALISATION PROPOSAL

SERVER DIFICIENCIES AND CHALLENGES

- Only one server is currently under a maintenance agreement or warranty
 - Secondary application servers have been historically been replaced from a pool of obsolete machines.
- Primary domain control server is at end of life and storage capabilities
 - Nine active servers are > 5 years old.
- Currently we are maintaining an additional domain server as an internal iSeries card solely for domain profile/authentication harmonization.
 - Internal iSeries card is premium valued
- Archiving/backup strategies require manual intervention and sourced/targeted to a wide range of environments
- Limited or no growth potential within the existing server environment
 - Current machines are slow and limited in capability
- Servers are a mix of operating systems complicating support and, in some cases, limiting application and O/S capabilities.
- Centralized control is limited to a KVM switch
 - Specific server or application status requires monitoring on an individual server basis
 - KVM switch environment is nearing capacity
- Applications requiring specific and limiting user authorizations must reside on discrete physical machines.
 - Wide range of access, machines and authorizations create a very complex and volatile environment
- Disaster recovery strategy is complicated by individual server requirements such as O/S, disk size.
 - Currently there is no redundancy on individual power supplies and backup power is not centralized but spread over several UPS appliances
 - Recovery from power outages is complicated and extended if there is not effective power backup.
 - Large physical number of servers requires additional effort to physically locate and validate when there are critical events.
- Large footprint required to house large number of individual servers.
 - Current servers are individual floor mounted CPU's
- Power consumption is increased due to the number of physical CPU's
- Cabling is very complex for the support of such a large number of CPU's

SERVER RATIONALISATION PROPOSAL

BLADE CENTRE CONCEPTS FOR RATIONALIZATION

Blade centre technology has been identified as a good fit for our rationalization project. There are several blade center variations from several manufacturers but only IBM's will provide a direct connection and awareness of user profiles and security between our enterprise iSeries O/S and the windows server O/S.

Blade centers consist of a chassis, which provides global power, network connectivity, and control functions. Individual blades, which are each a processing equivalent to a stand-alone server, are plugged into the chassis. The identified chassis model will accommodate up to 14 individual cards providing exceptional growth potential. Blade technology will allow for centralized control, backup and power redundancy. Utilizing the IBM iSCSI (HBA) technology for iSeries connectivity we will be able to leverage the exceptional data management capabilities of the iSeries under "hot swap" RAID 5 protection. The procurement and maintenance of the disks will now be consistent across both platforms. With remote disk access there will be a "hot swap" capability for individual blades resulting in near zero downtime on failure.



<http://www.youtube.com/watch?v=AQvgMDoMsEg>

SERVER RATIONALISATION PROPOSAL

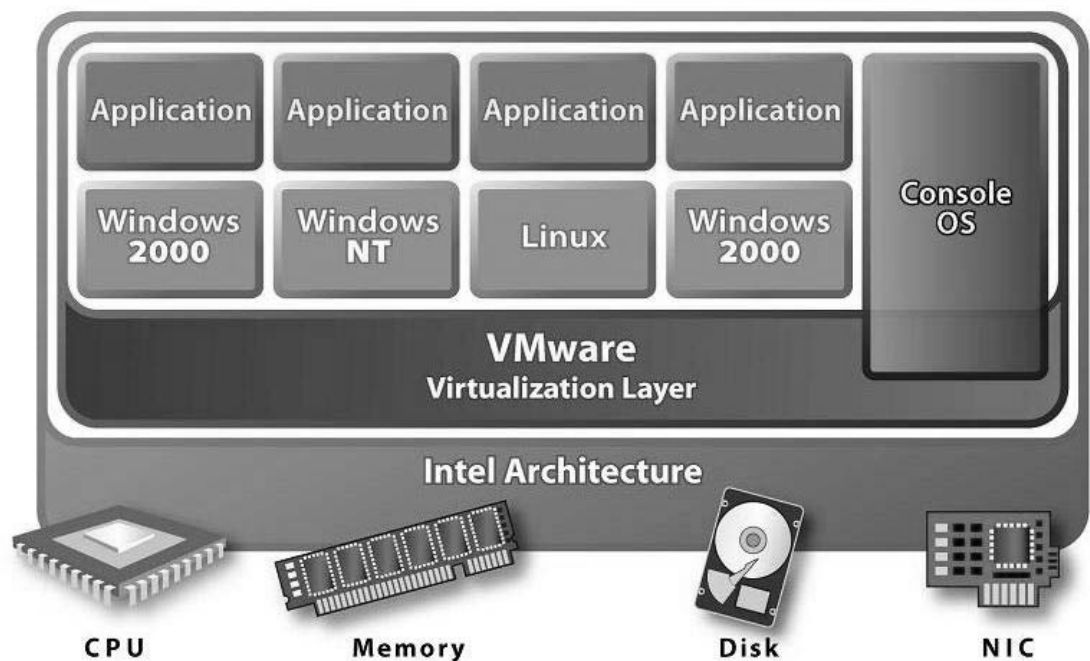
BLADE CENTRE CONCEPTS FOR RATIONALIZATION

- Single hardware maintenance agreement on fewer components
 - Eliminate costs for new maintenance on existing servers
 - 8 machines that are under 5 years and eligible for extended warranty @ approx. \$50. /yr = \$400.00.
- Eliminate requirement for replacing end of life servers
 - iSeries domain harmonization server (IXS) at approx. \$4500.
 - 1 domain server class machine (network file server) at approx. \$6400.00
 - 2 additional server class (archiving/license management and Oracle) at approx. \$3500. per machine
 - 6 application servers at approx. \$1500. per machine
- Current processor technology
 - Individual CPU's or groups can be upgraded within a chassis
 - Chassis can be linked as required providing additional blade capacity
- Single connectivity for all servers (blades) to backup media for secure, consistent data archiving.
 - Disaster recovery procedures will be simplified
- Blades will configured to a consistent O/S, Server 2003 for domain controllers and XP professional for application servers.
 - Current support issues for backdated O/S's will be resolved.
- Remotely accessible centralized control software replacing current, limited function, KVM switch.
 - Control will provide overall health and monitoring. Current system requires server-by-server discrete monitoring.
 - Administration and oversight will be reduced
 - Network security will be centralized and enhanced
- Overall floor space utilized by replaced servers will be reduced in year one from Approx. 20 sq. ft. to 4 sq. ft
- Power costs will be incrementally reduced as free standing servers are replaced with fewer blades. Power cost per server is approx. \$13.44. per month. Removing 6 servers will reduce overall cost by approx. \$80.66 per month. Year 2 consolidation of remaining 8 servers to 2 with reduce monthly power costs \$161. per month from current.
 - Based on actual data averaged over 22 Intel based servers: Average consumption per server calculations: .4098 KVA/hr X 0.85 KW/KVA X 720 hr/month X \$.0536 /KW = **\$13.442 /month/server**

SERVER RATIONALISATION PROPOSAL

BLADE CENTRE CONCEPTS FOR RATIONALIZATION

- VM Ware system software will allow individual blades to be consolidated into many virtual machines, each with all the security/authorization functionality of a standalone server.
 - Our current count of servers can be reduced by a minimum 75% with a full implementation. First year implementation will be limited to 4 blades consolidating 10 servers to 4 for an overall 60% reduction.
 - VM Ware will balance blade resources between virtual machines providing dynamic allocation of resources as required improving overall performance and reducing processor requirements from current levels.
 - Additional application server requirements can be easily addressed without the addition (subject to existing resource utilization) of additional hardware.



SERVER RATIONALISATION PROPOSAL

RATIONALIZATION PROPOSAL SUMMARY

Overall cost breakdown for 2008* for maintaining our existing standalone server farm;

- Approx. replacement costs for end of life servers
\$26900.
 - Additional warranty requirements on retained servers (approx.) \$
500.
- \$31,400.

- * 2009 will require replacement of remaining 8 servers eliminating short-term warranty costs but incurring approx. \$12,000. in new capital expenditure.

This is a status quo solution in terms of our current challenges in managing the server farm. The current deficiencies in our archiving and disaster recovery will also be perpetuated without additional custom development and capital expenditure. Our overall power protection and lack of redundancy within the server environment is also not addressed. The physical security of servers, difficulty of access and potential injury hazards presented by free standing, floor mounted servers will continue to be a significant concern.

The complexity of the physical environment in addition to 18 discrete server configurations adds a significant premium to our on-going labour requirements. On average .5 man hours per server/per week are expended on general management and control functions for an average of 9 hours per week. This manpower does not reflect normal archiving and updates.

SERVER RATIONALISATION PROPOSAL

RATIONALIZATION PROPOSAL SUMMARY

Blade centre proposal 2008 (stage one) for replacing 10 existing servers, including our primary domain;

Description	Qty	List Price	List Price
		(per unit)	(quantity x unit price)
		Canadian Dollar	Canadian Dollar
BladeCenter-H			
IBM eServer BladeCenter(tm) H Chassis with 2x2900W PSU	1	C\$ 5,139.00	C\$ 5,139.00
IBM BladeCenter(tm) H 2900W AC Power Supply Modules	1	C\$ 1,344.00	C\$ 1,344.00
3 Year Onsite Repair 24x7 4 Hour Response	1	C\$ 625.00	C\$ 625.00
Nortel Networks Layer 2/3 Copper GbE Switch Module for BladeCenter	2	C\$ 2,929.00	C\$ 5,858.00
BladeCenter Redundant KVM/Advanced Management Module	1	C\$ 1,089.00	C\$ 1,089.00
2.8m, 200-240V, Triple 16A IEC 320-C20	2	C\$ 114.00	C\$ 228.00
7995 Blade			
Added 7/12/2007 12:48:36 PM			
HS21, Xeon Quad Core E5345 2.33GHz/1333MHz/8MB L2, 2x512MB, O/Bay SAS	4	C\$ 4,429.00	C\$ 17,716.00
Intel Xeon Quad Core Processor Model E5345 80w 2.33GHz/1333MHz/8MB L2	2	C\$ 2,234.00	C\$ 4,468.00
1GB (2x512MB) PC2-5300 CL5 ECC DDR2 Chipkill FBDIMM Memory Kit	2	C\$ 559.00	C\$ 1,118.00
2GB (2x1GB) PC2-5300 CL5 ECC DDR2 Chipkill FBDIMM Memory Kit	2	C\$ 694.00	C\$ 1,388.00
QLogic(TM) iSCSI Expansion Card for IBM BladeCenter(R)	4	C\$ 899.00	C\$ 3,596.00
cKVM Feature Card for IBM BladeCenter	4	C\$ 194.00	C\$ 776.00
3 Year Onsite Repair 24x7 4 Hour Response	4	C\$ 490.00	C\$ 1,960.00
1 Year Software Support for xSeries Virtualization 24x7	4	C\$ 2,200.00	C\$ 8,800.00
VMware VI3 Standard - 2 Sockets (License Only, Must Order Sub)	2	C\$ 4,574.00	C\$ 9,148.00
Subscription Only VMware VI3 Standard - 2 sockets - 1 Year Full	2	C\$ 644.00	C\$ 1,288.00
	Total		C\$ 69,079.00

These prices are list only and are anticipated to be 25 to 30 % lower. This pricing is for a complete system including the VM Ware as well as memory /processor upgrades for the high service blades.

SERVER RATIONALISATION PROPOSAL

RATIONALIZATION PROPOSAL SUMMARY

The blade configuration will;

- Reduce our server count by 60% (year one) **
- Reduce maint. and control functions by approx. 3.0 man hrs per week
- Centralize control of our server environment
- Establish a universal archiving system that will be effective and consistent
- Enable unattended archiving
- Reduce our overall UPS requirements
- Eliminate the need for the iSeries hosted IXS server
- Allow dynamic control of all applications in a single homogeneous environment with pooled resource allocation.
- Upgrade servers to current technology and capability
- Consolidate multiple hardware maintenance agreements
- Have power supply redundancy
- Provide Server redundancy capabilities
- Provide hot swap capability
- Be capable of expandability with existing uncommitted chassis resources
- Provide a single maintenance strategy over multiple servers
- Reduce overall power consumption
- Free up computer room space for other tasks or equipment

Although there would premium in the 2008 capital expenditures for transitioning to the blade technology it will provide current and future enhancements to our server capabilities as well as freeing limited I.S. resources for other tasks. This move will also provide the base for future computing requirements such as enhanced data storage requirements and third party data sharing. It is inevitable that our current server environment will need to be upgraded and our allocation of resources in server support rationalized, deferring this requirement will also defer the benefits from increased capabilities, security and reduced manpower allocation.

APPENDIX C

The MEARIE Group – 2006/2007 Management Salary Survey
The MEARIE Group – 2007/2008 Management Salary Survey
Cyr & Associates – Custom Compensation Report



2006/2007 Management Salary Survey

Survey of Ontario's Local Distribution Companies

Survey Overview

We are pleased to provide you with a copy of The MEARIE Group's 2006/2007 Management Salary Survey of Ontario's Local Distribution Companies. A total of 44 utilities participated in the survey this year, which represents an increase in the overall number of participating utilities.

Once again, we have provided the survey in a web-based format which was available to all LDCs. We also made a number of changes to improve the quality and consistency of the data. The survey was compiled by a third party provider to ensure confidentiality of information. The consolidated results were compiled and provided to The MEARIE Group for distribution and printing.

Changes to the survey include the addition of several new position levels including:

- Director or Vice President, Customer Service
- Manager, Customer Service
- Director or Vice President, Regulatory Affairs
- Manager, Regulatory Affairs
- Information Systems Director or Vice President
- Information Systems Manager

A new question regarding changes to the 2006 formal pay structure or planned changes to the 2007 formal pay structure was also added.

The report has been divided into the following sections:

- All LDCs consolidated
- By Customer Size (electrical metered customers only)
- Revenue Grouping – all gross revenues
- By District (Two districts had insufficient data to report)
- By Employee Size

Reporting in this manner will allow a more complete representation of data to better assist you with your compensation planning. In the interests of continually striving to serve you better, please forward any suggestions or comments on this survey to Andrea Greto - Manager, H.R. Solutions at agreto@mearie.ca or by contacting her directly at The MEARIE Group's offices (905) 265-5327.

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Participant List (Alphabetical Order)

Local Distribution Company	District	Customer Size	Employee Base
Barrie Hydro Distribution	GB	66,300	112
Bluewater Power Distribution Corporation	WE	35,031	88
Brant County Power Inc.	NG	9,200	28
Burlington Hydro Inc.	NG	60,098	89
Centre Wellington Hydro	NG	6,132	12
Chatham-Kent Energy Inc.	WE	39,000	80
City of Brantford (Brantford Power Inc.)	NG	36,000	67
Collingwood Utility Services	GB	14,027	40
E.L.K. Energy Inc	WE	10,710	20
Erie Thames Services	WE	14,000	62
Essex Power Corporation	WE	27,000	57
Festival Hydro Inc.	NG	18,500	45
Greater Sudbury Utilities	NE	44,000	97
Grimsby Power	NG	9,500	15
Guelph Hydro Electric Systems Inc.	NG	41,400	92
HALDIMAND COUNTY HYDRO INC.	NG	20,372	44
Halton Hills Hydro Inc.	CE	19,500	44
Hydro Ottawa Limited	CE	275,000	480
Kenora Hydro Electric Corporation Ltd.	NW	6,000	11
Kitchener-Wilmot Hydro Inc.	NG	80,258	169
Lakefront Utilities Inc.	EA	8,600	30
Lakeland Power Distribution Ltd	GB	9,002	20
London Hydro	NW	135,000	246
Milton Hydro Distribution inc	CE	20,290	36
Niagara Falls Hydro Inc.	WE	33,000	76
Norfolk Power Distribution Inc.	NG	18,171	51
North Bay Hydro	NE	23,000	41
Northern Ontario Wires Inc.	NE	6,500	16
Orangeville Hydro Limited	GB	9,876	16
Orillia Power Distribution Corporation	GB	12,502	28
Oshawa PUC Networks Inc.	EA	50,000	80
Parry Sound Power Corporation	GB	3,154	11
Peterborough Utilities	EA	35,000	156
PowerStream Inc.	CE	218,511	347
PUC Services Inc.	NE	32,500	141
St. Thomas Energy Services Inc.	WE	15,390	29
Thunder Bay Hydro	NW	49,724	122
Veridian Corporation	CE	105,891	159
Wasaga Distribution Inc.	GB	10,725	18
Waterloo North Hydro Inc.	NG	48,100	107
Welland Hydro-Electric System Corp.	NG	21,236	36
Westario Power Services Inc.	GB	20,699	39
Whitby Hydro Electric Corporation	EA	36,933	60
Woodstock Hydro Services Inc.	WE	14,000	32

Using the Survey Results

The 2006/2007 Management Salary Survey for Ontario LDCs represents data submitted by 44 organizations covering approximately 660 incumbents in 38 executive, managerial, professional and administrative positions. All salary data is based on rates paid effective July 1st, 2006. We reserve the right to exclude data which is considered statistically invalid or incorrect and have contacted individual participants for clarification in some instances. Where job matches were clearly incorrect or single incumbent jobs were reported in several positions, data may have been modified to correct the entry.

Salary surveys can be a tremendously valuable tool to assist you in your workforce planning, salary administration and budgeting. However, results can vary from year to year depending upon the number of participants in the survey and the data provided. Keep in mind that compensation surveys can only reflect 'benchmark' positions. Benchmark positions are those jobs that are commonly found across the industry, where primary responsibilities and incumbent requirements are consistent for approximately 80% of the primary responsibilities. You should also be sensitive to variables in jobs that are affected by the scope of the role, location or size of organization.

Generally, if you can match 40% to 50% of your key jobs to external data – such as this report, you will have a strong basis on which to plan your compensation program. When using the data, match your jobs to the survey based on job content and not the job title. Other unique positions do not have significant enough representation to provide accurate compensation data. Please note the following:

To preserve the confidentiality of data supplied by participating organizations, compensation data is reported only where a minimum of three organizations and three incumbents are included in the sample. Compensation medians, P25 and P75 for actual salaries are reported only where there is a minimum of four organizations and four incumbents included in the data. Where there was insufficient data, information was not reported.

Survey Definitions

# of Companies	The actual number of companies reporting information for the position.
# of Incumbents	The actual number of incumbents in the role .
Average Range Maximum	The average maximum rate of the <u>salary ranges</u> for all respondents.
Average Range Minimum	The average minimum rate of the <u>salary ranges</u> for all respondents.
Bonus	An after-the-fact reward or payment based on the performance of an individual, a group of workers operating as a unit, a division or an entire work force.
Executive	The group of individuals who head major operating functions of the organization and typically report to the President/CEO.
Gainsharing	A bonus plan aimed at improving productivity or costs through improved work methods.
Gross Revenues	Total revenues from inflow of assets, including revenues from sales of products or services.
Average Incentive Maximum%	The maximum annual cash incentive for the job as a percentage of base salary.
Average Incentive Target %	The target annual cash incentive for the job as a percentage of base salary.
Individual Incentive	Any form of variable payment tied to performance. The payment is a monetary award. Incentives are contrasted with bonuses in that performance goals for incentives are predetermined.
Mean (Average Actual)	The sum of the <u>actual average salary</u> reported divided by the number of respondents.
Median (Median of the actual salaries reported).	Median is the middle rate when data are arranged in order and there is an odd number of observations (i.e. 3, 5, 7 etc.). It is the mean of the two middle observations when the data is arranged in order for even number observations (2, 10 etc.); most compensation professionals prefer to make comparisons on this basis since it is less easily influenced by extreme values.
Middle Management	The group of managers and/or professionals directly reporting to the Executive.
P25 (25 th percentile of actual salaries reported)	25 th Percentile (1 st Quartile) – The rate within the sample of <u>actual reported base salaries</u> which is higher than 25% of all rates reported.
P75 (75 th percentile of actual salaries reported)	75 th Percentile (3 rd Quartile) – The rate within the sample of <u>actual reported base salaries</u> which is higher than 75% of all rates reported.
Profit Sharing	An automatic fixed percentage of total profits or of profits above a certain threshold awarded to employees strictly on the performance of the entire organization.
Team Based Incentive	A specified project or operational team may receive an incentive based upon results, deliverables or an increase in productivity.
Variable Pay	Compensation that is contingent on discretion, performance or results achieved. It may be referred to as pay at risk.

Compensation Analysis: All Local Distribution Companies

Table 1: Annual Salaries – All LDCs

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
President/CEO/GM	40	40	113,919	148,232	132,788	113,558	148,835	129,360	16	21
V.P. Operations & Engineering/COO	23	23	92,364	120,173	116,623	99,656	122,685	110,222	14	18
Director/V.P. Operations	12	12	81,723	108,915	95,991	85,374	100,750	97,625	8	11
Director/V.P. Engineering	10	10	82,905	104,516	96,134	85,000	98,353	94,016	7	9
Engineering Manager	17	17	76,022	94,665	90,185	83,938	97,857	90,221	9	11
Distribution Engineer	11	11	69,891	92,677	82,626	79,066	87,524	85,446	6	6
Project Engineer	5	6	63,760	80,739	73,122	65,080	80,856	72,000	6	7
Engineering Supervisor	15	19	65,125	83,087	76,748	73,399	77,890	75,654	6	9
Operations Manager or Superintendent	29	33	69,790	88,584	81,454	75,865	86,939	82,111	10	14
Control Centre Supervisor	11	12	67,600	86,124	80,132	75,442	84,473	77,683	11	14
Meter Shop Supervisor	18	19	66,264	83,655	76,412	73,216	78,647	75,705	8	11
Line Supervisor	34	77	63,836	79,992	75,081	73,212	77,000	74,968	6	8
Fleet Maintenance Supervisor	5	5	61,839	78,830	75,140	71,200	73,460	72,114		
Purchasing/Procurement Manager	18	18	61,826	79,910	75,425	71,412	79,688	73,546	8	11
Stores/Inventory Control Supervisor	7	8	58,202	74,592	68,314	65,877	69,682	66,277	8	13
Executive Assistant (to President)	34	34	46,529	60,327	54,986	51,369	59,248	56,499	5	7
Administrative Assistant	16	26	42,691	53,368	50,520	48,170	53,257	51,134	5	6
Director/VP Finance/CFO	36	36	87,840	112,409	103,327	84,500	118,907	95,024	13	17
Controller/Manager Finance	13	13	72,868	97,891	86,462	79,578	92,326	87,742	8	12
General Accounting Manager	15	15	62,055	80,307	74,477	69,622	80,904	73,138	6	9

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
Accounting Supervisor	14	16	59,397	74,295	64,268	67,004	73,066	68,856	9	11
Director/VP Customer Service	13	13	87,201	110,276	96,241	84,155	99,506	85,830	15	19
Manager Customer Service	15	25	65,756	84,252	75,489	66,084	86,006	76,488	6	9
Customer Service Supervisor	32	32	56,621	70,269	65,598	60,031	70,682	65,090	8	10
Payroll Supervisor/Manager	7	7	51,318	65,896	66,561	56,243	73,029	59,987	7	10
Financial/Business Analyst	14	15	51,429	66,842	62,089	55,375	68,627	64,825	4	7
Director/VP Regulatory Affairs	7	7	78,682	99,695	93,409	80,355	103,224	93,218	10	14
Manager, Regulatory Affairs	11	11	59,332	75,453	71,922	63,578	81,753	69,570	8	9
Settlement/Rate Analyst	10	11	54,878	72,089	65,580	60,940	69,748	65,523	7	9
I.S. Director/VP	11	11	87,044	115,693	104,062	94,950	108,860	99,862	13	17
I.S. Manager	6	7	72,406	94,557	84,912	79,313	91,193	82,632		
I.S. Supervisor/Computer Operations	44	11	57,868	72,904	69,219	63,201	76,112	72,085	7	11
Systems Administrator/Apps Support	44	11	56,121	73,630	64,822	59,945	67,417	65,317	8	11
Human Resources Director/VP	44	10	80,857	107,408	96,043	80,867	112,233	96,012	12	15
Human Resources Manager	44	7	70,305	91,084	86,302	81,734	92,537	88,006	13	18
Human Resources Generalist/Officer	44	8	55,057	66,690	63,472	60,098	69,075	60,746		
Human Resources Assistant/Coord.	6	8	44,712	58,421	53,488	51,870	57,049	53,218		
Manager Health & Safety/Loss Control	15	16	66,618	84,639	78,102	75,282	81,254	77,710	9	13

Compensation Analysis: By Customer Size

Table 2: Customer Size – LDCs (1 to 10,000 Customers)

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
President/CEO/GM	9	9	92,524	116,395	99,237	97,665	110,352	105,078		
V.P. Operations & Engineering/COO										
Director/V.P. Operations										
Director/V.P. Engineering										
Engineering Manager										
Distribution Engineer										
Project Engineer										
Engineering Supervisor										
Operations Manager or Superintendent	6	6	67,519	83,844	76,688	75,293	77,438	77,033		
Control Centre Supervisor										
Meter Shop Supervisor										
Line Supervisor	4	4	60,009	75,011	72,376	70,600	75,397	73,622		
Fleet Maintenance Supervisor										
Purchasing/Procurement Manager										
Stores/Inventory Control Supervisor										
Executive Assistant (to President)	7	7	45,582	58,648	46,085	45,952	50,562	48,041		
Administrative Assistant										
Director/VP Finance/CFO	6	6	73,269	91,800	75,958	73,488	83,487	81,015		
Controller/Manager Finance										
General Accounting Manager										

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
Accounting Supervisor										
Director/VP Customer Service										
Manager Customer Service										
Customer Service Supervisor										
Payroll Supervisor/Manager										
Financial/Business Analyst										
Director/VP Regulatory Affairs										
Manager, Regulatory Affairs										
Settlement/Rate Analyst										
I.S. Director/VP										
I.S. Manager										
I.S. Supervisor/Computer Operations										
Systems Administrator/Apps Support										
Human Resources Director/VP										
Human Resources Manager										
Human Resources Generalist/Officer										
Human Resources Assistant/Coord.										
Manager Health & Safety/Loss Control										

Compensation Analysis: By Customer Size

Table 3: Customer Size – LDCs (10,001 to 20,000 Customers)

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
President/CEO/GM	9	9	109,234	141,217	127,428	117,000	141,617	120,000		
V.P. Operations & Engineering/COO	5	5	83,778	115,083	103,919	98,623	106,932	100,000		
Director/V.P. Operations										
Director/V.P. Engineering										
Engineering Manager										
Distribution Engineer	3	3	72,000	100,816	86,484					
Project Engineer										
Engineering Supervisor	3	3	59,958	79,841	74,980					
Operations Manager or Superintendent	7	7	67,770	84,585	77,315	71,389	82,630	76,062		
Control Centre Supervisor										
Meter Shop Supervisor										
Line Supervisor	7	7	66,155	83,130	76,022	74,775	79,476	76,800		
Fleet Maintenance Supervisor										
Purchasing/Procurement Manager										
Stores/Inventory Control Supervisor										
Executive Assistant (to President)	4	4	42,888	59,755	54,911	52,815	55,718	53,622		
Administrative Assistant										
Director/VP Finance/CFO	9	9	82,786	105,783	94,154	86,000	93,390	90,000		
Controller/Manager Finance										
General Accounting Manager										
Accounting Supervisor	4	4	59,853	75,237	69,383	64,254	74,990	69,861		

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
Director/VP Customer Service										
Manager Customer Service	3	3			66,720					
Customer Service Supervisor	5	5	56,292	73,209	65,386	59,956	71,836	64,800		
Payroll Supervisor/Manager										
Financial/Business Analyst	3	3			56,386					
Director/VP Regulatory Affairs										
Manager, Regulatory Affairs										
Settlement/Rate Analyst										
I.S. Director/VP										
I.S. Manager										
I.S. Supervisor/Computer Operations	3	3	51,374	63,328	61,250					
Systems Administrator/Apps Support										
Human Resources Director/VP										
Human Resources Manager										
Human Resources Generalist/Officer										
Human Resources Assistant/Coord.										
Manager Health & Safety/Loss Control										

Compensation Analysis: By Customer Size

Table 4: Customer Size – LDCs (20,001 to 30,000 Customers)

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
President/CEO/GM	5	5	109,812	138,047	131,374	121,540	135,960	129,360		
V.P. Operations & Engineering/COO	3	3	89,058	116,203	100,548					
Director/V.P. Operations	3	3	83,202	108,321	95,359					
Director/V.P. Engineering										
Engineering Manager										
Distribution Engineer										
Project Engineer										
Engineering Supervisor										
Operations Manager or Superintendent										
Control Centre Supervisor										
Meter Shop Supervisor	3	3	64,679	81,740	75,790					
Line Supervisor	11	11	64,837	80,694	74,974	71,769	75,958	74,581		
Fleet Maintenance Supervisor										
Purchasing/Procurement Manager										
Stores/Inventory Control Supervisor										
Executive Assistant (to President)	5	5	48,063	63,375	57,020	56,650	58,800	57,220		
Administrative Assistant										
Director/VP Finance/CFO	5	5	82,907	106,325	97,972	84,836	105,060	90,000		
Controller/Manager Finance										
General Accounting Manager	3	3	54,961	72,022	68,249					
Accounting Supervisor										

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
Director/VP Customer Service										
Manager Customer Service										
Customer Service Supervisor										
Payroll Supervisor/Manager										
Financial/Business Analyst										
Director/VP Regulatory Affairs										
Manager, Regulatory Affairs										
Settlement/Rate Analyst										
I.S. Director/VP										
I.S. Manager										
I.S. Supervisor/Computer Operations										
Systems Administrator/Apps Support										
Human Resources Director/VP										
Human Resources Manager										
Human Resources Generalist/Officer										
Human Resources Assistant/Coord.										
Manager Health & Safety/Loss Control										

Compensation Analysis: By Customer Size

Table 5: Customer Size – LDCs (30,001 to 40,000 Customers)

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
President/CEO/GM	6	6	119,031	154,899	137,656	129,900	146,695	136,189	17	20
V.P. Operations & Engineering/COO	5	5	93,375	117,412	114,194	106,294	120,241	112,342		
Director/V.P. Operations	3	3	76,859	103,242	93,563					
Director/V.P. Engineering										
Engineering Manager	4	4	74,172	93,124	91,495	86,417	94,948	89,871		
Distribution Engineer										
Project Engineer										
Engineering Supervisor	3	3	69,319	90,485						
Operations Manager or Superintendent	4	5	69,731	84,692	83,212	81,845	85,098	83,731		
Control Centre Supervisor										
Meter Shop Supervisor	3	3	58,252	77,066	72,465					
Line Supervisor	6	12	58,209	74,921	73,680	72,308	75,492	74,258	4	5
Fleet Maintenance Supervisor										
Purchasing/Procurement Manager	5	5	59,494	76,613	71,411	64,445	78,351	72,835		
Stores/Inventory Control Supervisor										
Executive Assistant (to President)	6	6	45,544	58,246	55,546	51,903	57,093	55,667		
Administrative Assistant	3	4	38,162	49,413	49,413	47,822	52,284	51,971		
Director/VP Finance/CFO	6	6	90,506	113,693	112,627	104,100	113,118	105,398		
Controller/Manager Finance	3	3	68,334	93,393	86,475					
General Accounting Manager	4	4	55,775	70,147	70,147	68,652	72,917	71,422		
Accounting Supervisor										

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
Director/VP Customer Service	3	3	76,316	100,892	94,887					
Manager Customer Service	7	7	63,899	81,997	76,844	71,569	82,814	78,727	4	5
Customer Service Supervisor	3	3	56,296	68,024	64,719					
Payroll Supervisor/Manager										
Financial/Business Analyst	4	4	51,467	67,462	65,435	61,047	71,362	66,975		
Director/VP Regulatory Affairs										
Manager, Regulatory Affairs	3	3	63,082	79,694	77,844					
Settlement/Rate Analyst	4	4	53,219	65,114	65,113	62,670	67,399	64,797		
I.S. Director/VP										
I.S. Manager										
I.S. Supervisor/Computer Operations										
Systems Administrator/Apps Support										
Human Resources Director/VP										
Human Resources Manager										
Human Resources Generalist/Officer										
Human Resources Assistant/Coord.	3	3	43,264	57,434	52,734					
Manager Health & Safety/Loss Control	3	3	62,811	76,345	73,332					

Compensation Analysis: By Customer Size

Table 6: Customer Size – LDCs (40,001-80,000 Customers)

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
President/CEO/GM	7	7	111,177	150,177	143,585	133,000	150,759	145,418	12	15
V.P. Operations & Engineering/COO	5	5	91,994	122,659	118,055	113,618	122,685	118,247		
Director/V.P. Operations	4	4	82,958	114,435	102,247	99,695	103,943	101,391	6	9
Director/V.P. Engineering										
Engineering Manager	5	5	71,945	91,341	84,766	79,776	88,186	83,196		
Distribution Engineer										
Project Engineer	5	5	61,645	78,978	69,456	63,782	74,214	68,540		
Engineering Supervisor	5	5	64,306	78,172	74,416	73,460	76,651	75,088		
Operations Manager or Superintendent	6	6	70,300	93,908	85,818	84,940	86,882	85,213		
Control Centre Supervisor	5	5	63,741	84,016	76,161	75,227	77,177	76,243		
Meter Shop Supervisor	5	5	63,777	81,483	74,422	73,460	75,190	74,968	5	7
Line Supervisor	7	20	64,495	81,154	75,557	74,512	76,446	75,372	5	7
Fleet Maintenance Supervisor	6	6	60,176	78,610	74,589	73,327	74,634	73,546	5	7
Purchasing/Procurement Manager										
Stores/Inventory Control Supervisor										
Executive Assistant (to President)	7	7	46,610	59,981	58,344	56,997	59,000	58,423	5	5
Administrative Assistant	5	9	43,447	55,571	50,558	48,877	52,150	50,469		
Director/VP Finance/CFO	7	7	91,334	118,556	117,969	115,527	124,046	121,010	9	12
Controller/Manager Finance	5	5	69,533	89,629	89,223	85,720	92,326	88,823		
General Accounting Manager	3	3	66,259	90,016	76,964					
Accounting Supervisor	4	4	56,851	71,879	65,190	64,162	69,654	68,626		

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
Director/VP Customer Service										
Manager Customer Service	5	5	66,634	82,323	75,396	69,413	80,392	74,409		
Customer Service Supervisor	3	6	58,358	69,173	67,119					
Payroll Supervisor/Manager										
Financial/Business Analyst	4	4	51,736	64,556	59,295	54,382	62,730	57,818		
Director/VP Regulatory Affairs										
Manager, Regulatory Affairs	3	3		70,536						
Settlement/Rate Analyst										
I.S. Director/VP	4	4	81,801	113,137	99,514					
I.S. Manager										
I.S. Supervisor/Computer Operations										
Systems Administrator/Apps Support	3	3	56,341	75,913	64,135					
Human Resources Director/VP	3	3	81,393	115,404	100,097					
Human Resources Manager										
Human Resources Generalist/Officer	4	4	52,711	66,253	59,796	56,694	62,617	59,515		
Human Resources Assistant/Coord.										
Manager Health & Safety/Loss Control	7	7	64,119	83,251	77,201	75,394	78,491	76,795	5	7

Compensation Analysis: By Customer Size

Table 7: Customer Size – LDCs (80,001 plus Customers)

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
President/CEO/GM	3	3			209,362					
V.P. Operations & Engineering/COO	3	3			165,234				30	35
Director/V.P. Operations										
Director/V.P. Engineering										
Engineering Manager	4	4	85,010	107,112	99,576	96,839	100,775	98,038	13	18
Distribution Engineer										
Project Engineer										
Engineering Supervisor										
Operations Manager or Superintendent	5	7	75,985	95,263	89,213	87,110	95,000	91,125	13	18
Control Centre Supervisor	5	6	74,479	91,016	86,816	81,682	94,000	85,404	13	18
Meter Shop Supervisor	5	6	70,534	86,427	79,917	76,535	83,606	78,499	13	18
Line Supervisor	5	23	66,913	81,469	77,354	73,212	78,499	77,000	8	13
Fleet Maintenance Supervisor	4	4	61,897	80,173	75,560	69,876	77,341	71,657		
Purchasing/Procurement Manager	5	5	71,383	90,051	85,991	78,499	93,000	82,273	13	18
Stores/Inventory Control Supervisor	4	5	57,040	74,329	67,291	65,890	67,491	66,090		
Executive Assistant (to President)	5	5	49,748	61,993	58,993	56,347	60,711	59,987	8	12
Administrative Assistant	3	8	46,995	54,641	54,641	53,454	56,682	56,347		
Director/VP Finance/CFO										
Controller/Manager Finance										
General Accounting Manager	3	3	69,814	91,750	82,785					
Accounting Supervisor	5	7	61,439	77,589	72,279	68,614	73,212	73,071	12	16

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
Director/VP Customer Service	3	3	119,206	150,173					23	30
Manager Customer Service	4	6	71,900	91,865	87,328	83,992	90,729	87,393		
Customer Service Supervisor	5	12	60,708	76,689	71,733	65,853	78,902	65,902	12	16
Payroll Supervisor/Manager	3	3	61,078	74,258	79,531					
Financial/Business Analyst										
Director/VP Regulatory Affairs	3	3	96,691	122,623	111,510					
Manager, Regulatory Affairs										
Settlement/Rate Analyst	3	3	56,605	74,660	67,320					
I.S. Director/VP	4	4	92,723	117,968	105,712	96,291	108,622	99,200	15	20
I.S. Manager										
I.S. Supervisor/Computer Operations										
Systems Administrator/Apps Support										
Human Resources Director/VP										
Human Resources Manager	3	3	77,679	101,186	92,469				13	18
Human Resources Generalist/Officer										
Human Resources Assistant/Coord.										
Manager Health & Safety/Loss Control	5	6	71,900	91,282	82,046	78,499	83,606	78,903	13	18

Compensation Analysis: By Gross Revenue Grouping

Table 8: LDCs Gross Revenue Under \$20 Million

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
President/CEO/GM	6	6	91,702	112,912	96,688	6	91,702	112,912		
V.P. Operations & Engineering/COO										
Director/V.P. Operations										
Director/V.P. Engineering										
Engineering Manager										
Distribution Engineer										
Project Engineer										
Engineering Supervisor										
Operations Manager or Superintendent	5	5	63,896	75,730	69,718	65,070	73,827	69,179		
Control Centre Supervisor										
Meter Shop Supervisor										
Line Supervisor	3	3			70,748					
Fleet Maintenance Supervisor										
Purchasing/Procurement Manager										
Stores/Inventory Control Supervisor										
Executive Assistant (to President)	6	6	41,547	53,847	44,966	45,751	49,525	46,556		
Administrative Assistant										
Director/VP Finance/CFO	3	3			70,544					
Controller/Manager Finance										
General Accounting Manager										

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
Accounting Supervisor										
Director/VP Customer Service										
Manager Customer Service	3	3			58,095					
Customer Service Supervisor										
Payroll Supervisor/Manager										
Financial/Business Analyst										
Director/VP Regulatory Affairs										
Manager, Regulatory Affairs										
Settlement/Rate Analyst										
I.S. Director/VP										
I.S. Manager										
I.S. Supervisor/Computer Operations										
Systems Administrator/Apps Support										
Human Resources Director/VP										
Human Resources Manager										
Human Resources Generalist/Officer										
Human Resources Assistant/Coord.										
Manager Health & Safety/Loss Control										

Compensation Analysis: By Gross Revenue Grouping

Table 9: LDCs Gross Revenue \$20,000,001 to \$50,000,000 Million

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
President/CEO/GM	15	15	109,224	143,107	125,289	114,136	137,980	120,508	11	16
V.P. Operations & Engineering/COO	6	6	87,670	123,604	98,794	95,175	99,300	96,450	8	12
Director/V.P. Operations	4	4	80,918	98,709	86,155	83,118	87,275	84,238		
Director/V.P. Engineering										
Engineering Manager	3	3	77,825	91,490	89,252					
Distribution Engineer	3	6	72,002	91,352	83,875					
Project Engineer										
Engineering Supervisor	3	4	63,072	81,423	74,286					
Operations Manager or Superintendent	10	10	70,398	91,565	81,493	76,057	89,144	78,354		
Control Centre Supervisor										
Meter Shop Supervisor	5	5	67,662	81,944	76,574	76,220	78,499	77,000		
Line Supervisor	12	18	64,713	82,196	76,048	18	64,713	82,196		
Fleet Maintenance Supervisor										
Purchasing/Procurement Manager										
Stores/Inventory Control Supervisor										
Executive Assistant (to President)	10	10	46,861	61,990	55,186	52,047	57,078	54,986	4	6
Administrative Assistant										
Director/VP Finance/CFO	14	14	82,628	105,002	91,509	84,026	93,052	87,250	7	12
Controller/Manager Finance										
General Accounting Manager	3	3	61,440	79,648	73,053					

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
Accounting Supervisor	4	5	62,321	78,361	74,758	71,455	79,077	75,775		
Director/VP Customer Service	4	4	72,988	94,976	82,000	81,168	84,446	83,614		
Manager Customer Service	4	4	70,368	91,163	79,428	71,600	88,079	80,251		
Customer Service Supervisor	9	9	53,728	68,388	62,551	55,000	65,853	59,956	5	6
Payroll Supervisor/Manager										
Financial/Business Analyst	3	4			56,753					
Director/VP Regulatory Affairs										
Manager, Regulatory Affairs										
Settlement/Rate Analyst	3	3	55,897	68,368	66,372					
I.S. Director/VP										
I.S. Manager										
I.S. Supervisor/Computer Operations	3	3	52,625	69,440	64,573					
Systems Administrator/Apps Support	4	4	57,403	68,195	60,218	59,259	62,918	61,959		
Human Resources Director/VP										
Human Resources Manager										
Human Resources Generalist/Officer										
Human Resources Assistant/Coord.										
Manager Health & Safety/Loss Control										

Compensation Analysis: By Gross Revenue Grouping

Table 10: LDCs Gross Revenue \$50,000,001 to \$100,000,000 Million

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
President/CEO/GM	9	9	111,234	139,184	129,429	119,545	135,895	126,328	16	19
V.P. Operations & Engineering/COO	8	8	90,704	110,869	109,625	105,697	110,611	108,019		
Director/V.P. Operations	4	4	81,093	111,050	99,573	92,672	104,400	97,500		
Director/V.P. Engineering										
Engineering Manager	7	7	72,430	88,789	86,859	82,976	89,016	86,175		
Distribution Engineer										
Project Engineer										
Engineering Supervisor	4	4	65,655	82,802	74,308					
Operations Manager or Superintendent	5	7	68,128	81,835	79,925	78,727	82,884	81,337		
Control Centre Supervisor										
Meter Shop Supervisor										
Line Supervisor	9	19	61,431	75,449	74,014	72,937	75,876	74,258	4	5
Fleet Maintenance Supervisor										
Purchasing/Procurement Manager	5	5	58,216	73,833	69,582	64,445	72,835	70,938		
Stores/Inventory Control Supervisor										
Executive Assistant (to President)	8	8	45,207	57,415	55,230	52,935	57,029	56,334		
Administrative Assistant	7	10	39,508	49,550	48,688	46,743	51,400	48,751		
Director/VP Finance/CFO	9	9	83,888	105,422	102,393	93,735	107,328	102,682		
Controller/Manager Finance	4	4	68,836	90,351	86,873					
General Accounting Manager	5	5	55,341	72,166	69,902	68,922	72,843	70,000		

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
Accounting Supervisor										
Director/VP Customer Service	3	3	76,316	100,892	94,887					
Manager Customer Service	9	9	63,491	80,314	75,051	68,695	80,645	75,046	4	5
Customer Service Supervisor	6	6	55,547	65,901	64,426	60,580	66,892	63,732		
Payroll Supervisor/Manager										
Financial/Business Analyst	5	5	52,313	67,277	63,688	60,685	66,235	63,730		
Director/VP Regulatory Affairs										
Manager, Regulatory Affairs	3	3	58,007	73,272						
Settlement/Rate Analyst	4	5	53,316	68,896	65,397	63,734	67,186	65,523		
I.S. Director/VP										
I.S. Manager	3	3	68,822	90,490	83,840					
I.S. Supervisor/Computer Operations										
Systems Administrator/Apps Support	3	3	52,398	70,420	67,892					
Human Resources Director/VP	4	4	71,012	89,111	80,689	70,785	95,518	85,614		
Human Resources Manager										
Human Resources Generalist/Officer										
Human Resources Assistant/Coord.	3	3	45,422	58,693	54,913					
Manager Health & Safety/Loss Control	4	4	65,238	78,827	77,105					

Compensation Analysis: By Gross Revenue Grouping

Table 11: LDCs Gross Revenue \$100,000,001 to \$200,000,000 Million

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
President/CEO/GM	6	6	115,959	160,789	147,809	143,709	151,050	149,418	11	15
V.P. Operations & Engineering/COO	4	4	95,277	132,779	119,828	117,191	122,685	120,048		
Director/V.P. Operations	4	4	82,958	114,435	102,247	99,695	103,943	101,391	6	9
Director/V.P. Engineering	3	3	85,235	112,103	99,713					
Engineering Manager	4	4	73,065	94,799	87,518	81,463	94,756	88,701		
Distribution Engineer	3	3	67,940	90,185	75,276					
Project Engineer	3	3	63,733	83,838	72,645					
Engineering Supervisor	5	5	65,831	81,155	76,213	73,460	76,651	75,088		
Operations Manager or Superintendent	7	7	70,564	94,380	86,574	85,008	87,053	86,048	6	8
Control Centre Supervisor	4	4	63,972	83,685	75,822	74,853	76,536	75,567	6	8
Meter Shop Supervisor	7	7	64,147	79,810	73,919	72,663	75,079	73,460	5	7
Line Supervisor	7	25	64,260	79,952	74,917	73,910	75,788	74,968	5	7
Fleet Maintenance Supervisor										
Purchasing/Procurement Manager	7	7	62,196	81,588	76,993	73,546	80,668	74,968	5	7
Stores/Inventory Control Supervisor										
Executive Assistant (to President)	7	7	48,050	62,570	59,661	58,423	61,429	59,001	5	5
Administrative Assistant	4	8	43,518	56,061	51,244	50,228	52,150	51,134		
Director/VP Finance/CFO	6	6	97,963	129,601	125,341	120,513	130,193	123,365	9	12
Controller/Manager Finance	4	4	69,264	92,430	88,924	85,421	92,326	88,823		
General Accounting Manager	4	4	66,200	87,535	76,305	73,768	78,702	76,165		

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
Accounting Supervisor	4	4	57,959	74,375	69,296	68,499	69,654	68,856		
Director/VP Customer Service										
Manager Customer Service	5	5	67,960	84,913	78,765	71,864	89,963	79,228		
Customer Service Supervisor	8	8	57,097	69,892	66,683	64,532	67,792	65,641		
Payroll Supervisor/Manager	3	3			59,533					
Financial/Business Analyst	4	4	51,213	67,983	61,679	54,382	69,204	61,908		
Director/VP Regulatory Affairs										
Manager, Regulatory Affairs	4	4	60,977	78,362	74,926	69,754	80,112	74,939		
Settlement/Rate Analyst										
I.S. Director/VP	5	5	82,497	112,245	101,319	93,800	105,019	99,724		
I.S. Manager										
I.S. Supervisor/Computer Operations	3	3	60,632	74,935	72,666					
Systems Administrator/Apps Support	3	3			64,135					
Human Resources Director/VP										
Human Resources Manager										
Human Resources Generalist/Officer	3	3	52,972	68,109	60,308					
Human Resources Assistant/Coord.										
Manager Health & Safety/Loss Control	7	7	62,194	81,576	75,444	74,300	77,968	76,222	5	7

Compensation Analysis: By Gross Revenue Grouping

Table 12: LDCs Gross Revenue Over \$200,000,001 Million

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
President/CEO/GM	3	3			209,362					
V.P. Operations & Engineering/COO	3	3			165,234				30	35
Director/V.P. Operations										
Director/V.P. Engineering										
Engineering Manager	3	3	86,543	111,373	101,325				13	18
Distribution Engineer										
Project Engineer										
Engineering Supervisor										
Operations Manager or Superintendent	3	4	77,505	99,360	89,277				13	18
Control Centre Supervisor	3	4	77,505	99,360	92,360				13	18
Meter Shop Supervisor	3	4	72,885	93,896	83,047				13	18
Line Supervisor	3	12	66,850	85,633	78,775				10	13
Fleet Maintenance Supervisor										
Purchasing/Procurement Manager	3	3	74,714	96,395	89,728				13	18
Stores/Inventory Control Supervisor										
Executive Assistant (to President)	3	3	50,886	64,544	59,544				8	12
Administrative Assistant										
Director/VP Finance/CFO										
Controller/Manager Finance										
General Accounting Manager										

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
Accounting Supervisor	3	4	61,235	79,591	71,428				12	16
Director/VP Customer Service	3	3	119,206	150,173					23	40
Manager Customer Service	3	9	64,885	83,896	75,636				12	16
Customer Service Supervisor										
Payroll Supervisor/Manager										
Financial/Business Analyst										
Director/VP Regulatory Affairs										
Manager, Regulatory Affairs										
Settlement/Rate Analyst										
I.S. Director/VP	3	3	99,643	127,303	110,962				15	20
I.S. Manager										
I.S. Supervisor/Computer Operations										
Systems Administrator/Apps Support										
Human Resources Director/VP										
Human Resources Manager	3	3	79,031	101,186	92,469				13	18
Human Resources Generalist/Officer										
Human Resources Assistant/Coord.										
Manager Health & Safety/Loss Control	3	4	77,219	100,563	85,170				13	18

Compensation Analysis: By District

Table 13: LDCs in District 'EA'

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
President/CEO/GM	4	4	111,993	149,533	144,250	138,900	150,350	145,000		
V.P. Operations & Engineering/COO										
Director/V.P. Operations										
Director/V.P. Engineering										
Engineering Manager										
Distribution Engineer										
Project Engineer										
Engineering Supervisor										
Operations Manager or Superintendent										
Control Centre Supervisor										
Meter Shop Supervisor										
Line Supervisor	3	7	64,994	76,625	74,637					
Fleet Maintenance Supervisor										
Purchasing/Procurement Manager										
Stores/Inventory Control Supervisor										
Executive Assistant (to President)	4	4	51,777	67,882	60,263	58,001	63,147	60,885		
Administrative Assistant										
Director/VP Finance/CFO	4	4	89,965	117,351	111,947	98,682	126,317	113,052		
Controller/Manager Finance										
General Accounting Manager	3	3			78,048					

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
Accounting Supervisor										
Director/VP Customer Service										
Manager Customer Service	3	3	61,339	74,315	70,429					
Customer Service Supervisor										
Payroll Supervisor/Manager										
Financial/Business Analyst										
Director/VP Regulatory Affairs										
Manager, Regulatory Affairs										
Settlement/Rate Analyst										
I.S. Director/VP										
I.S. Manager										
I.S. Supervisor/Computer Operations										
Systems Administrator/Apps Support										
Human Resources Director/VP										
Human Resources Manager										
Human Resources Generalist/Officer										
Human Resources Assistant/Coord.										
Manager Health & Safety/Loss Control										

Compensation Analysis: By District

Table 14: LDCs in District 'GB'

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
President/CEO/GM	7	7	122,377	160,861	123,259	107,097	148,553	123,340	10	10
V.P. Operations & Engineering/COO	3	3			102,085					
Director/V.P. Operations	3	3			91,975					
Director/V.P. Engineering										
Engineering Manager										
Distribution Engineer										
Project Engineer										
Engineering Supervisor										
Operations Manager or Superintendent	6	6	68,257	82,902	74,621	72,190	77,094	74,410		
Control Centre Supervisor										
Meter Shop Supervisor										
Line Supervisor	5	5	62,407	78,810	71,589	69,272	74,467	72,150		
Fleet Maintenance Supervisor										
Purchasing/Procurement Manager										
Stores/Inventory Control Supervisor										
Executive Assistant (to President)	4	4	44,192	56,736	53,608	52,596	55,141	54,129		
Administrative Assistant										
Director/VP Finance/CFO	6	6	91,726	110,736	90,813	80,763	104,894	88,819		
Controller/Manager Finance										
General Accounting Manager										

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
Accounting Supervisor	4	4	59,051	69,775	66,219	64,254	69,377	67,412		
Director/VP Customer Service										
Manager Customer Service										
Customer Service Supervisor										
Payroll Supervisor/Manager										
Financial/Business Analyst										
Director/VP Regulatory Affairs										
Manager, Regulatory Affairs										
Settlement/Rate Analyst										
I.S. Director/VP										
I.S. Manager										
I.S. Supervisor/Computer Operations										
Systems Administrator/Apps Support										
Human Resources Director/VP										
Human Resources Manager										
Human Resources Generalist/Officer										
Human Resources Assistant/Coord.										
Manager Health & Safety/Loss Control										

Compensation Analysis: By District

Table 15: LDCs in District 'NG'

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
President/CEO/GM	11	11	98,897	129,687	124,586	113,365	129,840	118,754	15	20
V.P. Operations & Engineering/COO	7	7	82,751	111,005	102,521	97,200	106,593	98,623		
Director/V.P. Operations	5	5	78,465	105,615	95,864	85,689	103,000	99,435		
Director/V.P. Engineering	5	5	81,867	105,184	92,159	84,428	98,353	94,016		
Engineering Manager	4	4	66,380	86,269	79,821	75,511	84,663	80,353		
Distribution Engineer										
Project Engineer										
Engineering Supervisor										
Operations Manager or Superintendent	9	10	69,010	88,850	82,393	78,059	86,939	85,077		
Control Centre Supervisor	5	5	61,678	81,388	73,178	73,460	75,816	75,317		
Meter Shop Supervisor	7	7	63,486	81,793	73,700	71,052	76,078	71,947		
Line Supervisor	11	28	61,605	79,727	73,435	71,854	75,888	74,360		
Fleet Maintenance Supervisor										
Purchasing/Procurement Manager	6	6	60,726	81,268	73,964	72,947	73,589	73,372		
Stores/Inventory Control Supervisor										
Executive Assistant (to President)	11	11	44,892	58,188	54,876	50,880	58,946	54,687		
Administrative Assistant	4	7	41,743	54,414	50,738	49,572	51,289	50,123		
Director/VP Finance/CFO	11	11	80,484	104,132	97,141	84,446	110,838	89,934		
Controller/Manager Finance										
General Accounting Manager	3	3	60,220	80,010	68,241					

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
Accounting Supervisor	3	3	58,347	76,449	69,677					
Director/VP Customer Service	4	4	74,411	94,682	86,382	84,021	86,825	84,464		
Manager Customer Service	5	5	63,261	82,868	70,378	64,778	78,727	71,864		
Customer Service Supervisor	7	10	51,121	64,377	61,864	53,950	68,869	61,558		
Payroll Supervisor/Manager	3	3	46,767	61,338	56,180					
Financial/Business Analyst	4	4	48,930	64,725	56,755	50,659	59,910	53,815		
Director/VP Regulatory Affairs										
Manager, Regulatory Affairs	4	4	59,196	76,085	74,467	66,029	83,352	74,914		
Settlement/Rate Analyst	5	5	51,144	67,473	59,449	56,200	62,797	59,548		
I.S. Director/VP	5	5	79,620	109,990	95,901	91,000	99,724	93,800		
I.S. Manager										
I.S. Supervisor/Computer Operations	3	3	49,881	66,001	61,134					
Systems Administrator/Apps Support	3	3	53,816	69,733	61,983					
Human Resources Director/VP										
Human Resources Manager										
Human Resources Generalist/Officer										
Human Resources Assistant/Coord.										
Manager Health & Safety/Loss Control	5	5	61,505	82,372	76,107	73,632	76,920	76,222		

Compensation Analysis: By District

Table 16: LDCs in District 'NW'

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
President/CEO/GM										
V.P. Operations & Engineering/COO										
Director/V.P. Operations										
Director/V.P. Engineering										
Engineering Manager										
Distribution Engineer										
Project Engineer										
Engineering Supervisor										
Operations Manager or Superintendent	3	4	69,402	83,165	83,165					
Control Centre Supervisor										
Meter Shop Supervisor										
Line Supervisor										
Fleet Maintenance Supervisor										
Purchasing/Procurement Manager										
Stores/Inventory Control Supervisor										
Executive Assistant (to President)	3	3	45,727	54,800	52,937					
Administrative Assistant										
Director/VP Finance/CFO										
Controller/Manager Finance										
General Accounting Manager										

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
Accounting Supervisor										
Director/VP Customer Service										
Manager Customer Service										
Customer Service Supervisor										
Payroll Supervisor/Manager										
Financial/Business Analyst										
Director/VP Regulatory Affairs										
Manager, Regulatory Affairs										
Settlement/Rate Analyst										
I.S. Director/VP										
I.S. Manager										
I.S. Supervisor/Computer Operations										
Systems Administrator/Apps Support										
Human Resources Director/VP										
Human Resources Manager										
Human Resources Generalist/Officer										
Human Resources Assistant/Coord.										
Manager Health & Safety/Loss Control										

Compensation Analysis: By District

Table 17: LDCs in District 'WE'

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
President/CEO/GM	7	7	119,419	155,197	134,008	118,750	145,664	135,960	10	14
V.P. Operations & Engineering/COO	3	3			104,110					
Director/V.P. Operations										
Director/V.P. Engineering										
Engineering Manager	3	3	75,555	88,933	86,696					
Distribution Engineer										
Project Engineer										
Engineering Supervisor	3	5	64,391	84,960	80,958					
Operations Manager or Superintendent	4	5	66,331	82,625	78,603	75,852	83,828	81,077		
Control Centre Supervisor										
Meter Shop Supervisor	4	4	65,538	84,800	77,084	75,455	78,239	76,610		
Line Supervisor	5	8	64,358	79,635	78,476	76,004	80,978	77,400		
Fleet Maintenance Supervisor										
Purchasing/Procurement Manager	3	3	48,676	64,693	60,199					
Stores/Inventory Control Supervisor										
Executive Assistant (to President)	4	4	47,893	62,849	56,502	55,275	58,510	57,283		
Administrative Assistant	4	6	41,062	52,929	48,115	43,208	52,728	47,822		
Director/VP Finance/CFO	7	7	84,529	104,223	93,741	87,000	101,805	91,019		
Controller/Manager Finance										
General Accounting Manager	4	4	58,461	73,505	73,505	70,784	75,711	72,991		

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
Accounting Supervisor										
Director/VP Customer Service	3	3	78,649	108,203	98,223					
Manager Customer Service	6	6	65,028	84,419	75,773	64,685	83,806	74,580		
Customer Service Supervisor	4	4	61,862	71,813	67,049	63,589	69,470	66,010		
Payroll Supervisor/Manager										
Financial/Business Analyst	5	6	50,804	64,986	62,060	56,650	67,909	63,730	4	4
Director/VP Regulatory Affairs										
Manager, Regulatory Affairs										
Settlement/Rate Analyst										
I.S. Director/VP										
I.S. Manager										
I.S. Supervisor/Computer Operations	3	3	54,877	68,783	67,572					
Systems Administrator/Apps Support	3	3	51,795	67,713	69,608					
Human Resources Director/VP	4	4	71,564	94,537	83,965	71,682	99,483	87,200		
Human Resources Manager										
Human Resources Generalist/Officer										
Human Resources Assistant/Coord.										
Manager Health & Safety/Loss Control										

Compensation Analysis: By District

Table 18: LDCs in District 'CE'

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
President/CEO/GM	4	4	163,415	219,487	192,426	177,904	206,252	191,731	28	38
V.P. Operations & Engineering/COO	4	4	115,045	154,051	153,510	142,199	163,888	152,577	25	31
Director/V.P. Operations										
Director/V.P. Engineering										
Engineering Manager	4	4	84,708	106,518	98,444	95,707	100,775	98,038	13	18
Distribution Engineer										
Project Engineer										
Engineering Supervisor	4	7	67,886	90,810	78,272	72,735	80,481	74,943	8	13
Operations Manager or Superintendent	5	5	76,879	101,270	89,834	87,418	95,669	93,253	12	18
Control Centre Supervisor	3	4	77,505	99,360	92,360				13	18
Meter Shop Supervisor	3	4	72,885	93,896	83,047				13	18
Line Supervisor	5	15	66,957	85,546	78,465	75,833	80,168	77,000	10	13
Fleet Maintenance Supervisor										
Purchasing/Procurement Manager	3	3	74,714	96,395	89,728				13	18
Stores/Inventory Control Supervisor										
Executive Assistant (to President)	5	5	48,335	64,804	58,632	53,624	60,906	60,711	7	10
Administrative Assistant										
Director/VP Finance/CFO	5	5	110,425	150,153	147,574	123,880	161,540	137,846	25	31
Controller/Manager Finance										
General Accounting Manager	3	3	65,654	90,973	80,982					

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
Accounting Supervisor	4	5	60,926	82,193	73,773	71,803	75,112	73,142	10	13
Director/VP Customer Service	3	3	119,206	150,173					23	30
Manager Customer Service										
Customer Service Supervisor	5	11	61,652	81,416	72,825	64,400	78,902	77,436	10	13
Payroll Supervisor/Manager										
Financial/Business Analyst										
Director/VP Regulatory Affairs										
Manager, Regulatory Affairs										
Settlement/Rate Analyst										
I.S. Director/VP	3	3	99,643	127,303	110,962				15	20
I.S. Manager										
I.S. Supervisor/Computer Operations										
Systems Administrator/Apps Support										
Human Resources Director/VP										
Human Resources Manager	3	3	79,031	101,186	92,469				13	18
Human Resources Generalist/Officer										
Human Resources Assistant/Coord.										
Manager Health & Safety/Loss Control	3	4	77,219	100,563	85,170				13	18

Compensation Analysis: By District

Table 19: LDCs in District 'NE'

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
President/CEO/GM	4	4			96,534					
V.P. Operations & Engineering/COO	3	3	92,195	112,954						
Director/V.P. Operations										
Director/V.P. Engineering										
Engineering Manager										
Distribution Engineer										
Project Engineer										
Engineering Supervisor										
Operations Manager or Superintendent										
Control Centre Supervisor										
Meter Shop Supervisor										
Line Supervisor	4	8	63,849	78,557	73,249					
Fleet Maintenance Supervisor										
Purchasing/Procurement Manager										
Stores/Inventory Control Supervisor										
Executive Assistant (to President)										
Administrative Assistant	3	4	40,145	50,059						
Director/VP Finance/CFO	3	3	82,687	103,119						
Controller/Manager Finance										
General Accounting Manager										

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
Accounting Supervisor										
Director/VP Customer Service										
Manager Customer Service										
Customer Service Supervisor										
Payroll Supervisor/Manager										
Financial/Business Analyst										
Director/VP Regulatory Affairs										
Manager, Regulatory Affairs										
Settlement/Rate Analyst										
I.S. Director/VP										
I.S. Manager										
I.S. Supervisor/Computer Operations										
Systems Administrator/Apps Support										
Human Resources Director/VP										
Human Resources Manager										
Human Resources Generalist/Officer										
Human Resources Assistant/Coord.										
Manager Health & Safety/Loss Control										

Compensation Analysis: By Employee Size

Table 20: LDCs 1 to 20 Employees

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
President/CEO/GM	6	6	83,936	97,487	87,818	78,676	105,455	104,700		
V.P. Operations & Engineering/COO										
Director/V.P. Operations										
Director/V.P. Engineering										
Engineering Manager										
Distribution Engineer										
Project Engineer										
Engineering Supervisor										
Operations Manager or Superintendent	4	4	66,882	74,864	71,090					
Control Centre Supervisor										
Meter Shop Supervisor										
Line Supervisor	3	3			70,748					
Fleet Maintenance Supervisor										
Purchasing/Procurement Manager										
Stores/Inventory Control Supervisor										
Executive Assistant (to President)	5	5	39,420	48,121	40,708	39,563	47,298	46,154		
Administrative Assistant										
Director/VP Finance/CFO										
Controller/Manager Finance										
General Accounting Manager										

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
Accounting Supervisor										
Director/VP Customer Service										
Manager Customer Service										
Customer Service Supervisor										
Payroll Supervisor/Manager										
Financial/Business Analyst										
Director/VP Regulatory Affairs										
Manager, Regulatory Affairs										
Settlement/Rate Analyst										
I.S. Director/VP										
I.S. Manager										
I.S. Supervisor/Computer Operations										
Systems Administrator/Apps Support										
Human Resources Director/VP										
Human Resources Manager										
Human Resources Generalist/Officer										
Human Resources Assistant/Coord.										
Manager Health & Safety/Loss Control										

Compensation Analysis: By Employee Size

Table 21: LDCs 21 to 40 Employees

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
President/CEO/GM	10	10	111,643	146,738	125,405	112,828	137,340	121,670		
V.P. Operations & Engineering/COO	4	4			94,682	92,882	97,900	96,100		
Director/V.P. Operations										
Director/V.P. Engineering										
Engineering Manager										
Distribution Engineer										
Project Engineer										
Engineering Supervisor										
Operations Manager or Superintendent	8	8	68,409	89,066	79,038	75,865	80,949	76,750		
Control Centre Supervisor										
Meter Shop Supervisor										
Line Supervisor	8	11	65,971	81,302	74,858	73,225	77,296	75,917		
Fleet Maintenance Supervisor										
Purchasing/Procurement Manager										
Stores/Inventory Control Supervisor										
Executive Assistant (to President)	6	6	48,425	64,719	57,275	54,378	60,380	57,725		
Administrative Assistant										
Director/VP Finance/CFO	10	10	85,433	108,899	93,416	84,026	93,052	90,000		
Controller/Manager Finance										
General Accounting Manager										

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
Accounting Supervisor										
Director/VP Customer Service										
Manager Customer Service										
Customer Service Supervisor	5	5	55,052	66,880	59,588	58,404	59,956	59,779		
Payroll Supervisor/Manager										
Financial/Business Analyst										
Director/VP Regulatory Affairs										
Manager, Regulatory Affairs										
Settlement/Rate Analyst										
I.S. Director/VP										
I.S. Manager										
I.S. Supervisor/Computer Operations										
Systems Administrator/Apps Support	3	3			60,189					
Human Resources Director/VP										
Human Resources Manager										
Human Resources Generalist/Officer										
Human Resources Assistant/Coord.										
Manager Health & Safety/Loss Control										

Compensation Analysis: By Employee Size

Table 22: LDCs 41 to 70 Employees

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
President/CEO/GM	9	9	105,175	133,831	128,181	117,000	135,960	121,540	16	25
V.P. Operations & Engineering/COO	7	7	87,652	113,374	105,938	100,616	108,816	106,763		
Director/V.P. Operations	4	4	75,091	92,794	87,291	84,333	88,017	85,059		
Director/V.P. Engineering	3	4	70,759	86,689	86,689					
Engineering Manager	3	3	68,239	85,299	84,238					
Distribution Engineer										
Project Engineer										
Engineering Supervisor	3	4	59,203	80,898	76,037					
Operations Manager or Superintendent	4	4	64,143	85,906	76,463	68,914	81,922	74,373		
Control Centre Supervisor										
Meter Shop Supervisor	4	4	64,879	82,504	75,070	71,151	77,654	73,735		
Line Supervisor	7	12	61,630	78,210	75,162	71,505	78,184	73,329		
Fleet Maintenance Supervisor										
Purchasing/Procurement Manager	3	3	54,773	72,594	65,315					
Stores/Inventory Control Supervisor										
Executive Assistant (to President)	7	7	44,214	58,829	54,377	51,197	56,110	53,624		
Administrative Assistant	4	5	41,914	52,627	48,222	45,243	51,015	48,036		
Director/VP Finance/CFO	9	9	79,566	102,484	95,440	84,836	104,100	89,867	8	15
Controller/Manager Finance										
General Accounting Manager	3	3	55,759	68,608	68,608					

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
Accounting Supervisor										
Director/VP Customer Service	4	4	70,941	92,765	87,234	84,482	87,502	84,750		
Manager Customer Service	5	5	61,273	77,977	77,475	70,000	78,727	76,022		
Customer Service Supervisor	7	7	53,086	67,786	64,657	56,577	74,028	61,558		
Payroll Supervisor/Manager										
Financial/Business Analyst	4	5	52,726	68,361	64,077	62,082	70,455	68,460		
Director/VP Regulatory Affairs										
Manager, Regulatory Affairs	4	4	53,913	70,242	63,140	52,880	68,187	57,927		
Settlement/Rate Analyst	3	4	56,271	70,339	70,339					
I.S. Director/VP										
I.S. Manager										
I.S. Supervisor/Computer Operations	3	3	48,659	64,482	62,404					
Systems Administrator/Apps Support										
Human Resources Director/VP										
Human Resources Manager										
Human Resources Generalist/Officer										
Human Resources Assistant/Coord.										
Manager Health & Safety/Loss Control										

Compensation Analysis: By Employee Size

Table 23: LDCs 71 to 100 Employees

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
President/CEO/GM	7	7	116,871	168,367	148,959	136,778	162,000	151,400	12	16
V.P. Operations & Engineering/COO	4	4	87,418	120,103	113,964					
Director/V.P. Operations	3	3	82,828	126,742	100,812				8	10
Director/V.P. Engineering										
Engineering Manager	3	3	72,478	94,478						
Distribution Engineer										
Project Engineer										
Engineering Supervisor	4	4	70,194	90,666	80,030					
Operations Manager or Superintendent	5	6	70,481	94,087	86,472	85,213	86,882	86,660		
Control Centre Supervisor	3	3	63,720	89,984						
Meter Shop Supervisor	4	4	60,894	83,037	74,210	72,319	76,067	74,176	5	7
Line Supervisor	6	13	62,546	82,014	75,763	74,566	76,004	75,775		
Fleet Maintenance Supervisor										
Purchasing/Procurement Manager	5	5	54,638	76,968	70,791	64,445	73,632	73,283		
Stores/Inventory Control Supervisor										
Executive Assistant (to President)	6	6	44,639	60,551	56,526	57,346	58,995	57,850		
Administrative Assistant	4	6	40,390	53,793	49,707					
Director/VP Finance/CFO	5	5	90,095	120,739	119,858	116,362	124,507	121,010		
Controller/Manager Finance	4	4	68,726	97,508	91,370					
General Accounting Manager	5	5	59,286	78,913	73,879	72,843	78,000	73,138		

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
Accounting Supervisor										
Director/VP Customer Service	3	3		100,712	94,332					
Manager Customer Service	6	6	64,603	82,787	71,065	62,058	73,138	71,864		
Customer Service Supervisor										
Payroll Supervisor/Manager	3	3			58,312					
Financial/Business Analyst	4	4	50,364	64,830	59,569	52,919	65,014	58,365		
Director/VP Regulatory Affairs										
Manager, Regulatory Affairs	4	4	51,540	70,040	68,798					
Settlement/Rate Analyst										
I.S. Director/VP	3	3	82,842	119,583						
I.S. Manager										
I.S. Supervisor/Computer Operations										
Systems Administrator/Apps Support	4	4	53,467	73,547	68,205	64,870	70,752	67,417		
Human Resources Director/VP	4	4	74,078	109,101	89,198	82,081	101,250	94,133	10	11
Human Resources Manager										
Human Resources Generalist/Officer										
Human Resources Assistant/Coord.										
Manager Health & Safety/Loss Control	5	5	65,561	88,458	79,383	77,669	82,221	80,508		

Compensation Analysis: By Employee Size

Table 24: LDCs 101 to 170 Employees

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
President/CEO/GM	6	6	129,756	155,605	147,825	131,500	149,709	145,418	18	18
V.P. Operations & Engineering/COO	5	5	104,356	127,769	126,132	118,091	126,692	124,726	13	13
Director/V.P. Operations										
Director/V.P. Engineering										
Engineering Manager	6	6	76,616	93,587	91,129	84,824	99,436	95,741	8	8
Distribution Engineer	3	3	69,866	89,386	83,792					
Project Engineer										
Engineering Supervisor	4	4	62,178	74,913	73,430	71,134	75,716	73,420		
Operations Manager or Superintendent	5	7	72,011	86,368	82,624	81,337	84,940	84,577		
Control Centre Supervisor	4	4	68,252	77,713	77,713	74,853	78,854	75,994		
Meter Shop Supervisor	5	5	64,732	75,717	74,058	73,379	74,968	73,460		
Line Supervisor	7	28	63,372	75,559	74,287	73,336	75,384	73,950	8	8
Fleet Maintenance Supervisor										
Purchasing/Procurement Manager	7	7	63,082	76,906	76,184	73,336	79,218	74,968	8	8
Stores/Inventory Control Supervisor										
Executive Assistant (to President)	7	7	49,496	60,206	59,362	56,523	61,791	59,987	7	7
Administrative Assistant	6	13	43,846	53,084	51,488	49,563	52,374	51,134	7	7
Director/VP Finance/CFO	6	6	100,619	122,718	122,718	113,346	135,624	119,378	13	13
Controller/Manager Finance	4	4	69,239	86,543	85,552	81,773	89,089	85,310		
General Accounting Manager										

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
Accounting Supervisor	5	6	58,328	69,236	66,698	68,153	71,320	68,614		
Director/VP Customer Service										
Manager Customer Service	5	5	68,760	86,022	85,080	79,228	89,963	88,548		
Customer Service Supervisor	6	10	59,082	70,730	68,590	65,510	71,572	65,904		
Payroll Supervisor/Manager										
Financial/Business Analyst	3	3	49,458	63,342	61,951					
Director/VP Regulatory Affairs										
Manager, Regulatory Affairs	3	3	74,350	89,619	86,755					
Settlement/Rate Analyst										
I.S. Director/VP	4	4	84,824	102,871	100,064	92,841	103,323	96,100		
I.S. Manager										
I.S. Supervisor/Computer Operations	4	4	60,726	73,936	72,234	69,679	74,067	71,512		
Systems Administrator/Apps Support										
Human Resources Director/VP										
Human Resources Manager										
Human Resources Generalist/Officer	3	3	54,136	63,183	62,374					
Human Resources Assistant/Coord.										
Manager Health & Safety/Loss Control	6	6	63,983	76,346	74,839	75,282	76,858	76,446		

Compensation Analysis: By Employee Size

Table 25: LDCs OVER 170 Employees

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
President/CEO/GM										
V.P. Operations & Engineering/COO										
Director/V.P. Operations										
Director/V.P. Engineering										
Engineering Manager	3	3	83,590	109,002	99,968					
Distribution Engineer										
Project Engineer										
Engineering Supervisor	3	5	72,129	96,788	84,663				10	16
Operations Manager or Superintendent	3	4	78,363	101,267	94,600					
Control Centre Supervisor	3	4	75,645	98,119	91,119					
Meter Shop Supervisor	3	4	72,031	93,762	83,702					
Line Supervisor	3	10	67,665	87,395	80,538					
Fleet Maintenance Supervisor	3	3	64,948	84,930	78,780					
Purchasing/Procurement Manager	3	3	75,529	98,157	91,491					
Stores/Inventory Control Supervisor	3	4	58,472	77,138	67,754					
Executive Assistant (to President)	3	3	49,100	63,089	58,089					
Administrative Assistant										
Director/VP Finance/CFO										
Controller/Manager Finance										
General Accounting Manager										

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
Accounting Supervisor	3	4	62,050	81,353	73,190				10	16
Director/VP Customer Service										
Manager Customer Service	3	5	71,879	92,499	86,449				10	16
Customer Service Supervisor	3	9	60,454	79,546	71,286					
Payroll Supervisor/Manager										
Financial/Business Analyst										
Director/VP Regulatory Affairs	3	3	96,691	122,623	111,510					
Manager, Regulatory Affairs										
Settlement/Rate Analyst										
I.S. Director/VP										
I.S. Manager										
I.S. Supervisor/Computer Operations										
Systems Administrator/Apps Support										
Human Resources Director/VP										
Human Resources Manager										
Human Resources Generalist/Officer										
Human Resources Assistant/Coord.	3	4	46,459	62,623	54,873					
Manager Health & Safety/Loss Control	3	4	76,365	100,428	85,035					

Perquisites – All LDCs

Table 26: Perquisites by Position Level

Perquisite:	CEO/President	Executive	Middle Management	Not Applicable
Company car for business or personal use	15	14	16	14
Association or professional membership dues	36	37	33	5
Supplemental Group Life Insurance	26	26	26	14
Executive training programs or coaching	29	31	24	8
Personal computer for home use	15	13	7	24
Cellular phone for business or personal use	42	40	35	0
Employee Assistance Programs (EAPs)	36	36	36	7
Educational reimbursement	41	41	41	2
Extended vacation allowance	9	5	7	30
Outplacement counselling	12	10	10	28
Flex time	9	11	12	27
Fitness or recreational club memberships or access	11	10	11	29
Financial or legal counselling	9	8	8	29

No. of companies reporting = 44

- *Actual prevalence response - multiple responses accepted*

Table 27: Other Perquisites Noted

Other Perqs
7 weeks vacation after 23 years
6 weeks vacation for all employees after 26 yrs
2 floaters
3 personal paid days
Management Overtime, Personal Time Off
Employee computer purchase program, Off Friday (every third), 2 Float days per year, last work day before Christmas and New Years day paid day off
One extra weeks vacation in lieu of OT
Payment of basic phone for home
Computer acquisition, 5000 discretionary allowance, Executive only
After 25 years you get an additional 3 days vacation.
Safety celebrations
7 weeks vacation after 23 years

Table 28: Mileage & Auto

CEO Average Monthly car allowance (24 respondents)	\$494.00
Executive Average Monthly car allowance (13 respondents)	\$415.00
Average Mileage Reimbursement (respondents)	.43

Table 29: Service Periods for Vacation Entitlement

Years of Service:	Eligible for 2 weeks	Eligible for 3 weeks	Eligible for 4 weeks	Eligible for 5 weeks	Eligible for 6 or more weeks
CEO/Pres - 3 years service	11	19	9	2	6
CEO/Pres - 5 years service	0	26	10	4	2
CEO/Pres - 10 years service	0	1	30	9	2
CEO/Pres - 15 years service	0	0	18	18	5
CEO/Pres - 20 years service	0	0	1	28	12
CEO/Pres - 25 years service	0	0	0	14	27
Executive- 3 years service	13	18	12	0	0
Executive- 5 years service	0	28	12	1	0
Executive- 10 years service	0	1	35	6	0
Executive- 15 years service	0	0	20	19	1
Executive- 20 years service	0	0	1	30	11
Executive- 25 years service	0	0	0	16	25
Middle Management- 3 years service	17	20	6	0	0
Middle Management- 5 years service	0	32	9	0	1
Middle Management- 10 years service	0	2	36	4	0
Middle Management- 15 years service	0	0	21	19	1
Middle Management- 20 years service	0	0	1	31	9
Middle Management- 25 years service	0	0	0	16	25
Professionals - 3 years service	15	20	4	0	0
Professional - 5 years service	0	31	6	0	0
Professional - 10 years service	0	2	33	4	0
Professional - 15 years service	0	0	19	18	1
Professional - 20 years service	0	0	1	29	8
Professional - 25 years service	0	0	0	13	25
Admin - 3 years service	14	20	4	0	0
Admin - 5 years service	0	31	6	0	0
Admin - 10 years service	0	2	33	4	0
Admin - 15 years service	0	0	19	18	1
Admin - 20 years service	0	0	1	29	8
Admin - 25 years service	0	0	0	13	25

Incentive Programs & Base Pay Planning

[2006/2007 Actual and Projected Base Pay Increase](#)

Survey respondents indicated that the actual average base pay increase for 2006 was 3.09%. LDCs reported average base salary increase projections for management for 2007 to be 3.00%. The median projected increase for 2007 is estimated to be 3%.

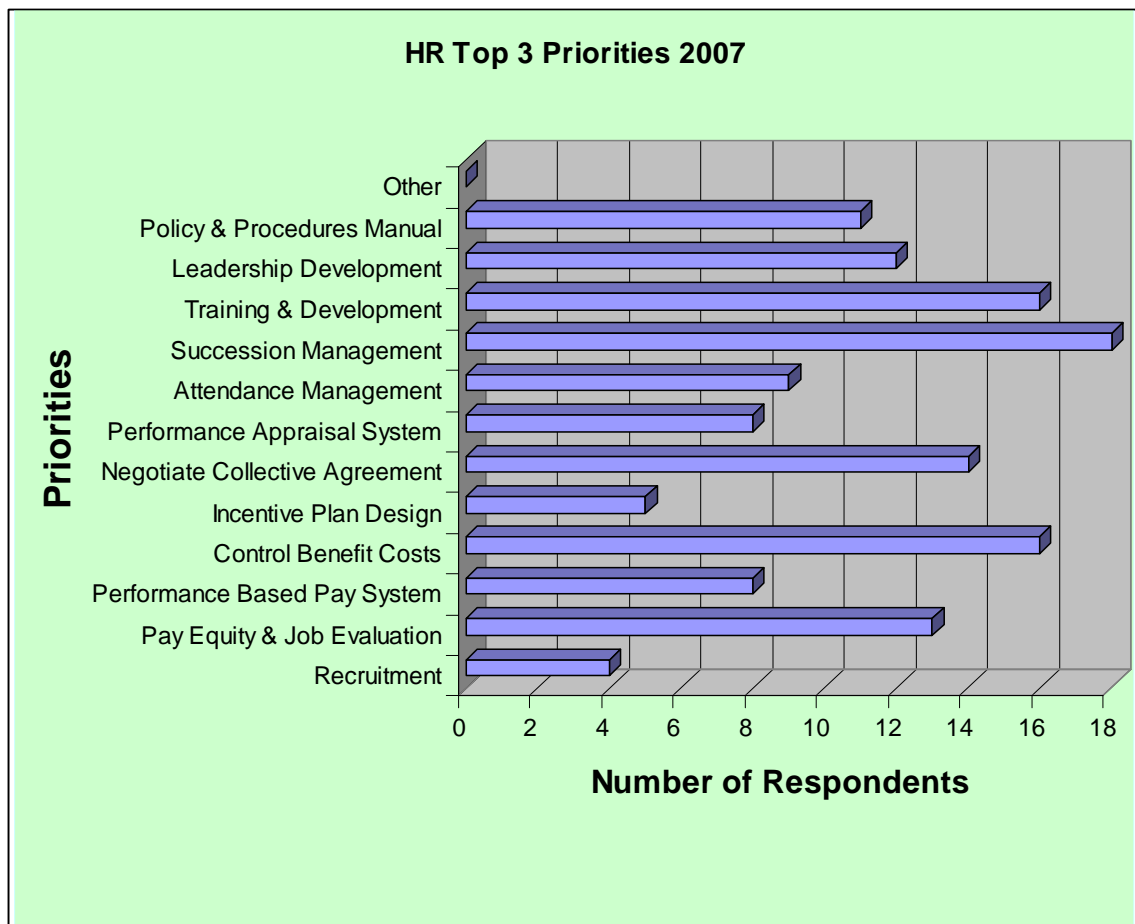
[2006/2007 Actual and Projected Salary Structure Increase](#)

31 survey respondents indicated that they have adjusted their 2006 salary structure upwards by 3.03%. 33 LDCs indicated that they plan on adjusting their 2007 salary structure by an average increase of 3.12%. The median projected increase for 2007 is estimated to be 3%.

Table 30: Type of Variable Pay Plan by Employee Category:

	Bonus	Individual Incentive	Team-based Incentive	Profit Sharing	Gainsharing	Other	N/A
CEO/Pres	10	13	3	1	0	1	0
Executive	8	11	4	1	0	1	0
MM	7	10	3	1	0	0	0
Prof.	6	9	1	1	0	0	0
Admin	5	8	2	1	0	0	0

Top 3 HR Priorities - 2007



Appendix:

MEARIE Management Salary Survey – Position Profiles 2006/2007

President/CEO or General Manager

Directs the development of short and long term operational objectives, policies, budgets and operating plans for the organization, as approved by the Board of Directors. Establishes an organization hierarchy and delegates limits of authority to subordinate executives regarding policies, contractual commitments, expenditures and human resource matters. Represents the organization to the financial community, industry groups, government and regulatory agencies and the general public.

Vice President Operations & Engineering or Chief Operating Officer

Generally reporting to the President/CEO, directs both the operations and engineering functions. Formulates and implements plans, budgets, policies and procedures to facilitate and improve processes. Establishes clear controls, objectives and measures to ensure safe and appropriate delivery of power and power related services. Evaluates the feasibility of new or revised systems or procedures and oversees operations and engineering to ensure compliance with established standards.

Director or Vice President Operations

Reporting to the President/CEO, plans and directs all operations functions (no engineering responsibility), of the utility. Formulates and implements plans, policies and procedures to facilitate and improve processes and establishes clear controls, objectives and measures to ensure safe and appropriate delivery of services and clarity of roles and responsibilities. Evaluates the feasibility of new or revised systems or procedures and oversees operations to ensure compliance with established standards.

Director or Vice President Engineering

Plans and directs the overall engineering activities and engineering staff of the organization. Coordinates the creation, development, design and improvement of the organization's projects and products in conformance with established programs and objectives. Oversees plans, resources and budgets of the department aligned with business strategy.

Engineering Manager

Supervises and directs the work of an engineering division such as distribution, line design, transmission planning, distribution planning and/or civil engineering. Responsible for engineering work involving a wide scope of assignments. Handles personnel coordination and issues of the division, prepares estimates, specifications and designs, including the supervision, planning and scheduling of work within the division – Requires a P.Eng.

Distribution Engineer

Supervises engineering technicians or service technicians. Directs and coordinates the activities, schedules and projects of the construction and maintenance group of those involved with the distribution of electrical power from transformer substations, construction and maintenance of distribution systems. Consults with other department management on plant design, construction and maintenance. Prepares monthly operating reports, budget estimates, and work and materials specifications. Reviews and approves material requisitions, work authorizations and drawings for facilities. Requires a P.Eng. Typically reports to the Engineering Manager.

Project Engineer

Supervises, directs and resolves issues of the work of the engineering design group consisting of technicians and draftsmen. Responsible for the design of individual electrical engineering and civil engineering projects within the utility in accordance with established criteria. May also be assigned the development of new standards or research of new equipment for implementation in the utility subject to approval by higher authority. Prepares estimates, specifications and designs. Requires a P.Eng. May exist in organizations without a Distribution Engineer. Typically reports to an Engineering Manager.

Engineering Supervisor

Supervises a small technical work group which may include draftspersons and/or engineering technicians. Coordinates the development and maintenance of engineering and construction standards and systems (GIS, AM/FM, CAD). Organizes, stores and maintains the integrity of hard copy file records, digital formats and mapping standards. Normally requires a C.E.T. or A.Sc. T. Typically reports to a professional engineer.

Operations Manager or Superintendent

Supervises, co-ordinates, directs, schedules and controls the construction, maintenance and personnel of the division, including budgets, transportation, equipment and material requirements and fleet management. Division responsibilities include construction, maintenance and repair of all overhead transmission, overhead and underground distribution and may include coordination of tree trimming for geographical area assigned to the division. In smaller utilities, a professional engineer may fill this role. In larger utilities, this function may be split into separate sections, each with a non-professional superintendent reporting to a Professional Engineer. Typical reports to VP Engineering and/or VP Operations.

Control Centre Supervisor

Directs and supervises control centre technical staff. Provides planning and coordination of control centre scheduling and maintenance required for the safe, reliable operation and control of the distribution system, including the authorization of the operation of system devices, equipment and control access to electrical plant and substations. Approves and coordinates system outages and switching as required for maintenance and system reliability. Oversees power interruptions and

emergencies with dispatch staff to affect corrective measures for isolation, emergency repairs and restoration purposes. Monitors feeder load profiles.

Meter Shop Supervisor

Responsible for overall operation of the Meter department, including operations, budgeting and direction and supervision of meter technicians or other operations staff. Assigns, monitors and inspects the daily work and productivity of the staff in metering operations to ensure timely delivery of services, maintenance of equipment and identification of issues. Develops work plans for the department that include supervising meter re-verification, new meter installs, record maintenance and monitoring of meter maintenance, damage, reporting and theft issues. Ensures compliance with technical standards for equipment. . Responsible for electronic meter programming and interaction with/operation of an MV90 or similar data collection system.

Line Supervisor

Coordinates and directs the Field Supervisor/s or lead journey person in the construction and maintenance of transmission and distribution lines and equipment. Works with Field Supervisors or lead journey person to develop plans and schedules required in directing and assigning a crew or crews of skilled trade staff in performing construction, maintenance and operation of the power transmission and distribution system lines in a safe and efficient manner. Supervises and coordinates subcontractors engaged in planning and executing work procedures, interpreting specifications and managing construction.

Fleet Maintenance Supervisor

Plans, recommends and prepares specifications for vehicle replacement purchases. Supervises and coordinates garage equipment and vehicle maintenance, approves vehicles for road use and hydraulic equipment for line construction use, approves unplanned vehicle maintenance. Responsible for obtaining vehicle permits and insurance cards, maintenance of data input to costing systems, maintenance of garage inventory and gasoline supply. Processes accident reports.

Purchasing or Procurement Manager

Responsible for all purchasing for all areas of the utility. Negotiates vendor agreements and manages the tender process. May also be responsible for stores and inventory control in the warehouse. Supervises and directs the work of the purchasing or buyers and stores personnel.

Stores/Inventory Control Supervisor

Supervises inventory control, records and stores operation. Orders material to maintain on-hand quantities with purchasing manager/buyer approval. Responsible for testing safety equipment, i.e., hoses, blankets, gloves, etc., small tool and equipment repair and reconditioning. Assists purchasing department in the sale of obsolete equipment and material.

Executive Assistant to President/CEO

Performs advanced, diversified and confidential administrative duties requiring broad knowledge of organizational policies and practices. Initiates and prepares correspondence, reports, either routine or non-routine. Screens telephone calls and visitors and resolves routine and complex inquiries. Schedules appointments, meetings and travel itineraries. In some cases, may have responsibility for routine HR and administrative services. Records, prepares and distributes minutes of meetings, including Board of Director minutes. Reports to the President/CEO/General Manager and may provide support to other executives.

Administrative Assistant

Performs advanced, diversified and confidential administrative duties for executives and/ or senior management, requiring broad and comprehensive experience and knowledge of organizational policies and practices. Prepares correspondence, reports, either routine or non-routine. Screens telephone calls and visitors and resolves routine and complex inquiries. Schedules appointments, meetings and travel itineraries. This is a non-union position and reports to a senior executive or executive team.

Director or VP Finance or CFO

Highest ranking financially-oriented position within the company. Reporting to the President/CEO, this strategic role plans directs and controls the organization's overall financial plans, policies and accounting practices and relationships with lending institutions, shareholders and the financial community in mid to large organizations. Provides advice and guidance for the Board of Directors on financial matters. May direct such functions as finance, general accounting, tax, payroll, customer billing, regulatory affairs, and information systems and may be responsible for Administration functions. Normally possesses a CA, CMA or CGA designation.

Controller or Manager, Finance

Responsible for all financial reporting and record keeping functions. Directs the establishment and maintenance of the organization's accounting and finance principles, practices and procedures for the maintenance of its fiscal records and the preparation of its financial reports. Directs general and property accounting, cost accounting and budgetary control. Appraises operating results in terms of costs, budgets, operating policies, trends and increased profit opportunities. May be the most senior financial position in a small to mid-size corporation or reporting to a Director/VP Finance in a mid to large corporation.

General Accounting Manager

Manages the general accounting functions and the preparation of reports and statistics reflecting earnings, profits, cash balances and other financial results. Formulates and administers approved accounting practices throughout the organization to ensure that financial and operating reports accurately reflect the condition of the business and provide reliable information. Generally reports to the Controller or CFO.

Accounting (A/R, A/P) Supervisor

Coordinates activities of the payable/receivable clerks. Supervises accounts payable and receivable transactions, entries and trial balances; responsible for the accuracy of all journal entries and reconciliation of invoices; updates credit department on account status.

Director/VP Customer Service

Provides direction for all departmental activities, services and practices, including customer care/call centre, billing, credit and collections. Accountable for the development, implementation and integration of all customer service related activities to achieve a competitive advantage through customer driven initiatives and strategies. Directs and oversees the implementation of customer service standards, policies and procedures; manages and coordinates budgets; manages activities of CS managers and/or supervisory staff for mid to large size organizations.

Manager Customer Service

Manages a team of customer service representatives in providing information, receiving and responding to customer inquiries, complaint or requests. Develops and maintains customer information systems, processes and procedures including billing, credit, deposits and collections. Liaises with representatives of other organizations and customer groups to share information and resolve administrative, organizational and technical problems. Responds to elevated customer complaints. This function may also be responsible for coordinating meter installation/maintenance, residential electric service connections, and service calls in a medium size organization.

Customer Service Supervisor

Supervises customer service representatives and coordinates customer service programs within the framework of established customer service policies. Schedules and organizes staff to accommodate anticipated work-flow from bill enquiries, delinquent accounts, re-connections and disconnections, customer deposits, etc. Recommends corrective steps to address customer issues and refers unique issues to manager for response.

Payroll Supervisor or Manager

Prepares or coordinates the payroll preparation and input of wage and deduction calculations; responsible for reviewing payroll and tax reports, maintaining benefit accruals and preparing pertinent journal entries. May perform Human Resources and benefits administration related duties. May supervise activities of payroll clerks.

Financial or Business Analyst

Conducts analysis of information for budgeting, investment and financial forecasts; applies principles of accounting to analyze past and present financial operations; estimates future revenues and expenditures; prepares budgets; develops and maintains budgeting systems;

Process and prepares business transactions and reports, reconciles ledgers and sub-ledgers, cash flow projections, entry of source documents.

Director or V.P., Regulatory Affairs

Represents the organization on quality and regulatory matters before government agencies and conformity assessment bodies including providing of evidence, regulatory filings, supporting analyses, position papers, interrogatory responses, etc. Keeps abreast of on-going developments in regulatory practices affecting electrical distribution utilities. Ensures that regulatory information is disseminated throughout the organization in a timely and effective manner. Is responsible for the filing of written communications and regulatory submissions to government agencies (OEB) and conformity assessment bodies (IMO). Generally reports to President or Sr. Executive in large organization.

Manager, Regulatory Affairs

Manages the organization's regulatory programs and activities to ensure compliance. Assists the President on quality and regulatory matters before government agencies, providing research and analyses. Ensures that regulatory information is disseminated throughout the organization in a timely and effective manner. Co-ordinates the filing of written communications and regulatory submissions to government agencies (OEB) and conformity assessment bodies (IMO). Generally reports to the President in a small to mid-size organization.

Settlement/Rate Analyst

Responsible for recording, creating, analyzing, processing and reconciling metering data. Operates and administers an MV-90 or similar data collection system, downloading, validating, editing, estimating and processing interval meter-related information. Has in-depth understanding of commercial billing practices, the IMO and the OEB's Retail Settlement Code. Analyses rates using rate sensitivity models and develops appropriate rate structures, using the specific models. Participates in the development of policies.

Information Systems Director or V.P.

Accountable for operations and alignment of the Information and Telecommunication Systems with the business in terms of mission, vision and the strategic imperatives. Ensures that existing needs and future demands of internal and external customers are met through a cost effective and efficient information and telecommunication infrastructure. Oversees IS management in areas of computer operations, systems planning, design, programming and telecommunications. Reviews and evaluates project feasibility and needs based upon management's and business requirements and priorities. Develops departmental plans, strategy, budgets and resource requirements. Typically reports to President or CFO in a mid to large size organization.

Information Systems Manager

Manages and directs staff in areas of computer operations, systems planning, design, programming and telecommunications. Develops and maintains systems standards and procedures and assigns work to department staff. Reviews and evaluates project feasibility and needs based upon management's and business requirements and priorities. Develops departmental plans, project plans, budgets and resource requirements. Typically reports to Director of Finance in a small to mid-sized organization.

Information Systems Supervisor/Computer Operations Supervisor

Supervises employees who monitor and control computer equipment and data processing. Schedules all production runs including processing of bills, updating inventory system, meter record and all other data processing applications. Maintains hardware and troubleshoots when necessary. May report to a Director/VP, Information Systems.

Systems Administrator or Applications/Systems Support Professional

Responsible for maintenance of software systems including system analysis, programming and design, updates and changes. Makes preliminary study of new applications and recommendations to implement them, including hardware and software. Troubleshoots and corrects problems in existing programs, other than normal problems, usually caused by changes of software or hardware. Typically reports to the Director or V.P. Information Systems or V.P. Finance.

Human Resources Director or VP

Provides support and alignment of organization-wide Human Resources practices and systems with the business in terms of mission, vision and the strategic imperatives. Ensures that existing needs and future demands of internal customers are met through a cost effective and efficient HR services. Directs HR management and staff in the development and implementation of Human Resources strategy, policies and programs covering employment, negotiations & labour relations, training, compensation, organization development, performance management, benefits and may include health & safety. Provides coaching and counsel to the executive and Board of Directors. Generally reports to the President of a mid to large size organization.

Human Resources Manager

Develops and implements human resources programs, including compensation, benefits, recruitment, performance management, labour relations/negotiations, training and development, assists in policy development, HR planning, record keeping or payroll etc. May supervise a team of HR professionals or support staff. May be the most senior HR professional in a small to mid-size organization or report to the top HR professional in a large organization.

Human Resources Generalist/Officer

Assists in the development and implementation of human resources policies and programs by providing support and guidance to managers and employees in the areas of compensation, labour relations, employee relations, performance management, benefits, recruitment, training and HRIS systems. May assist in the preparation of negotiations. Reports to HR Manager or Senior Executive.

Human Resources Assistant/Coordinator

Provides administrative support to one or more functional areas of HR. Processes, coordinates and enters into a HRIS or other system, a variety of documents including employment applications, benefits, compensation and payroll changes and confidential employee information. Responds to routine employment questions and distributes and maintains manuals and employee program communications. Reports to HR Manager/Director/V.P.

Manager, Health & Safety/Loss Control

Accountable for the development and implementation of occupational health, safety and environmental programs, including training, maintenance of safe working conditions, investigation and reporting of workplace accidents. Also identifies areas of potential risk and makes recommendations to reduce or eliminate potential accident or health hazards in compliance with government regulations.

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2007/2008 Management Salary Survey

Survey of Ontario's Local Distribution Companies

Survey Overview

We are pleased to provide you with a copy of The MEARIE Group's 2007/2008 Management Salary Survey of Ontario's Local Distribution Companies. A total of 42 utilities participated in the survey this year.

We provided the survey in a web-based format which was available to all LDCs. The survey was compiled by a third party provider to ensure confidentiality and consistency of the information. The consolidated results were compiled and provided to The MEARIE Group for distribution and printing.

Changes to this year's survey include a re-alignment of the LDC Districts, to reflect the reorganization of Districts by the E.D.A.

The report has been divided into the following sections:

- All LDCs consolidated
- By Customer Size (electrical metered customers only)
- Revenue Grouping – all gross revenues
- By District
- By Employee Size

Reporting in this manner allows a complete representation of data to better assist you with your compensation and organisational planning. In the interests of continually striving to serve you better, please forward any suggestions or comments on this survey to Andrea Greto - Manager, H.R. Solutions at agreto@mearie.ca or by contacting her directly at The MEARIE Group's offices (905) 265-5327.

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Participant List (Alphabetical Order)

Local Distribution Company	District	Customer Size	Employee Base
Barrie Hydro Distribution Inc.	Georgian Bay	67,700	110
Bluewater Power Distribution Corporation	Western	36,205	91
Brant County Power Inc.	Niagara Grand	9,231	27
Burlington Hydro Inc.	Central/Eastern	61,033	92
Chatham-Kent Energy Inc.	Western	39,174	86
City of Brantford (Brantford Power Inc.)	Niagara Grand	36,700	72
Collingwood Utility Services	Georgian Bay	14,300	42
E.L.K. Energy Inc.	Niagara Grand	10,744	20
Erie Thames Services Corporation	Central/Eastern	14,000	67
Essex Power Corporation	Western	27,499	59
Festival Hydro Inc.	Niagara Grand	19,025	44
Greater Sudbury Utilities	North Eastern	46,029	100
Guelph Hydro Electric Systems Inc.	Niagara Grand	44,000	100
Haldimand County Hydro Inc..	Niagara Grand	20,516	46
Halton Hills Hydro Inc.	Central/Eastern	20,382	42
Hydro Ottawa Limited	Central/Eastern	280,000	531
Innisfil Hydro Distribution Systems Ltd	Georgian Bay	13,929	22
Kenora Hydro Electric Corporation Ltd.	North Western	5,828	12
Kitchener-Wilmot Hydro Inc.	Niagara Grand	80,258	170
Lakefront Utilities Inc.	Central/Eastern	9,076	30
Lakeland Power Distribution Ltd	Georgian Bay	9,050	26
London Hydro Inc.	Western	160,000	246
Milton Hydro Distribution Inc	Central/Eastern	21,693	37
Niagara Falls Hydro	Niagara Grand	33,276	78
Niagara-on-the-Lake Hydro Inc.	Niagara Grand	7,600	17
Norfolk Power	Niagara Grand	18,500	51
North Bay Hydro Distribution Limited	North Eastern	23,000	43
Orillia Power Distribution Corporation	Georgian Bay	12,595	26
Oshawa PUC Networks Inc.	Central/Eastern	50,000	83
Peterborough Utilities Services	Central/Eastern	135,000	160
PowerStream Inc.	Central/Eastern	225,914	359
PUC Services Inc.	North Eastern	34,800	145
Sioux Lookout Hydro Inc.	North Western	2,730	7
St. Thomas Energy Services	Western	15,710	30
Thunder Bay Hydro	North Western	49,602	122
Utilities Kingston	Central/Eastern	26,526	182
Wasaga Distribution Inc.	Georgian Bay	11,200	20
Waterloo North Hydro Inc.	Niagara Grand	48,777	109
Welland Hydro-Electric System Corp.	Niagara Grand	21,500	39
Westario Power Inc.	Georgian Bay	20,699	38
Whitby Hydro Electric Corporation	Central/Eastern	37,644	63
Woodstock Hydro Services Inc.	Western	14,383	35

Using the Survey Results

The 2007/2008 Management Salary Survey for Ontario LDCs represents data submitted by 42 organizations covering approximately 699 incumbents in 38 executive, managerial, professional and administrative positions. All salary data is based on rates effective July 1st, 2007. We reserve the right to exclude data which is considered statistically invalid or incorrect and have contacted individual participants for clarification in some instances. Where job matches were clearly incorrect or single incumbent jobs were reported in several positions, data may have been modified to correct the entry.

Salary surveys can be a tremendously valuable tool to assist you in your workforce planning, salary administration and budgeting. However, results can vary from year to year depending upon the number of participants in the survey and the data provided. Keep in mind that compensation surveys can only reflect 'benchmark' positions. **Benchmark positions are those jobs that are commonly found across the industry, where primary responsibilities and incumbent requirements are consistent for approximately 80% of the primary responsibilities. You should also be sensitive to variables in jobs that are affected by the scope of the role, location or size of organization.**

Generally, if you can match 40% to 50% of your key jobs to external data – such as this report, you will have a strong basis on which to plan your compensation program. When using the data, match your jobs to the survey based on job content and not the job title. Other unique positions do not have significant enough representation to provide accurate compensation data. Please note the following:

To preserve the confidentiality of data supplied by participating organizations, compensation data is reported only where a minimum of three organizations and three incumbents are included in the sample. Compensation medians, P25 and P75 for actual salaries are reported only where there is a minimum of four organizations and four incumbents included in the data. Where there was insufficient data, information was not reported.

Survey Definitions

# of Companies	The actual number of companies reporting information for the position.
# of Incumbents	The actual number of incumbents in the role .
Average Range Maximum	The average maximum rate of the <u>salary ranges</u> for all respondents.
Average Range Minimum	The average minimum rate of the <u>salary ranges</u> for all respondents.
Bonus	An after-the-fact reward or payment based on the performance of an individual, a group of workers operating as a unit, a division or an entire work force.
Executive	The group of individuals who head major operating functions of the organization and typically report to the President/CEO.
Gainsharing	A bonus plan aimed at improving productivity or costs through improved work methods.
Gross Revenues	Total revenues from inflow of assets, including revenues from sales of products or services.
Average Incentive Maximum%	The maximum annual cash incentive for the job as a percentage of base salary.
Average Incentive Target %	The target annual cash incentive for the job as a percentage of base salary.
Individual Incentive	Any form of variable payment tied to performance. The payment is a monetary award. Incentives are contrasted with bonuses in that performance goals for incentives are predetermined.
Mean (Average Actual)	The sum of the <u>actual average salary</u> reported divided by the number of respondents.
Median (Median of the actual salaries reported).	Median is the middle rate when data are arranged in order and there is an odd number of observations (i.e. 3, 5, 7 etc.). It is the mean of the two middle observations when the data is arranged in order for even number observations (2, 10 etc.); most compensation professionals prefer to make comparisons on this basis since it is less easily influenced by extreme values.
Middle Management	The group of managers and/or professionals directly reporting to the Executive.
P25 (25 th percentile of actual salaries reported)	25 th Percentile (1 st Quartile) – The rate within the sample of <u>actual reported base salaries</u> which is higher than 25% of all rates reported.
P75 (75 th percentile of actual salaries reported)	75 th Percentile (3 rd Quartile) – The rate within the sample of <u>actual reported base salaries</u> which is higher than 75% of all rates reported.
Profit Sharing	An automatic fixed percentage of total profits or of profits above a certain threshold awarded to employees strictly on the performance of the entire organization.
Team Based Incentive	A specified project or operational team may receive an incentive based upon results, deliverables or an increase in productivity.
Variable Pay	Compensation that is contingent on discretion, performance or results achieved. It may be referred to as pay at risk.

Compensation Analysis: All Local Distribution Companies

Table 1: Annual Salaries – All LDCs

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
President/CEO/GM	40	40	119,070	154,241	137,431	122,004	146,574	138,502	16	22
V.P. Operations & Engineering/COO	27	27	93,200	123,115	111,613	98,825	120,700	110,000	13	17
Director/V.P. Operations	13	13	83,577	107,951	99,235	93,758	106,206	101,228	10	15
Director/V.P. Engineering	12	12	88,636	110,485	104,283	96,058	108,632	102,589	9	12
Engineering Manager	18	18	78,462	99,896	91,657	87,154	97,318	89,260	7	9
Distribution Engineer	26	26	70,233	88,751	82,772	76,518	89,602	85,989	5	8
Project Engineer	9	9	64,832	89,564	76,997	70,060	82,821	75,000	4	9
Engineering Supervisor	19	19	64,344	81,457	77,117	73,297	80,364	76,030	6	8
Operations Manager or Superintendent	31	31	70,434	90,192	85,674	79,193	90,550	85,000	7	10
Control Centre Supervisor	12	12	66,482	84,446	79,795	75,792	81,709	80,427	7	12
Meter Shop Supervisor	24	24	68,330	85,238	80,988	76,252	83,176	79,130	5	8
Line Supervisor	79	79	66,523	83,110	78,678	75,778	80,813	78,196	4	7
Fleet Maintenance Supervisor	4	4	63,880	82,588	80,187	72,374	85,046	74,277		
Purchasing/Procurement Manager	15	15	61,437	81,601	74,925	71,060	78,884	75,936	8	11
Stores/Inventory Control Supervisor	8	8	59,837	76,537	71,580	68,816	71,638	70,510	8	13
Executive Assistant (to President)	35	35	48,261	62,144	59,415	55,125	64,055	59,066	4	7
Administrative Assistant	25	25	42,903	54,131	50,944	48,494	53,923	52,883	3	5
Director/VP Finance/CFO	35	35	90,423	115,174	110,248	92,564	124,258	108,100	10	13
Controller/Manager Finance	15	15	73,319	97,410	87,241	83,714	95,219	90,700	9	13
General Accounting Manager	15	15	63,297	80,328	76,388	71,213	83,403	75,651	7	11

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
Accounting Supervisor	14	14	57,055	73,333	65,823	61,000	70,198	67,371	7	11
Director/VP Customer Service	11	11	87,766	110,807	98,023	88,857	98,259	91,459	10	14
Manager Customer Service	21	21	66,684	85,605	81,057	73,512	90,471	79,011	6	10
Customer Service Supervisor	33	33	57,513	72,462	66,654	61,431	70,563	65,906	6	8
Payroll Supervisor/Manager	7	7	44,227	55,617	64,607	58,039	64,096	62,729	6	10
Financial/Business Analyst	13	13	54,459	71,340	64,776	55,062	72,009	67,493	5	8
Director/VP Regulatory Affairs	7	7	91,564	118,766	110,727	97,704	120,910	105,707	15	16
Manager, Regulatory Affairs	17	17	64,708	83,225	74,623	68,877	82,725	76,610	5	8
Settlement/Rate Analyst	12	12	55,662	72,528	66,765	60,690	70,576	66,849		
I.S. Director/VP	12	12	85,872	113,894	106,286	98,480	114,801	100,000	11	16
I.S. Manager	11	11	70,314	90,295	80,035	68,195	86,719	81,478	13	20
I.S. Supervisor/Computer Operations	5	5	59,034	85,470	75,347	67,487	81,469	73,609		
Systems Administrator/Apps Support	18	18	56,459	71,581	68,039	60,039	71,982	69,214		
Human Resources Director/VP	10	10	89,792	115,586	99,306	83,666	105,750	94,512	10	15
Human Resources Manager	7	7	69,812	89,705	82,272	78,582	86,187	82,653	9	16
Human Resources Generalist/Officer	11	11	57,022	72,717	63,104	54,463	71,214	60,243		
Human Resources Assistant/Coord.	13	13	42,154	55,823	52,764	48,346	60,022	52,978		
Manager Health & Safety/Loss Control	15	15	66,381	83,874	80,936	77,217	85,000	80,850		

Compensation Analysis: By Customer Size

Table 2: Customer Size – LDCs (1 to 10,000 Customers)

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
President/CEO/GM	6	6	102,282	135,375	109,468	94,571	113,187	110,141		
V.P. Operations & Engineering/COO										
Director/V.P. Operations										
Director/V.P. Engineering										
Engineering Manager										
Distribution Engineer										
Project Engineer										
Engineering Supervisor										
Operations Manager or Superintendent	3	3	61,936	79,140	78,426					
Control Centre Supervisor										
Meter Shop Supervisor										
Line Supervisor										
Fleet Maintenance Supervisor										
Purchasing/Procurement Manager										
Stores/Inventory Control Supervisor										
Executive Assistant (to President)										
Administrative Assistant										
Director/VP Finance/CFO	3	3	70,339	87,034	83,369					
Controller/Manager Finance	3	3			71,889					
General Accounting Manager										

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
Accounting Supervisor										
Director/VP Customer Service										
Manager Customer Service										
Customer Service Supervisor										
Payroll Supervisor/Manager										
Financial/Business Analyst										
Director/VP Regulatory Affairs										
Manager, Regulatory Affairs										
Settlement/Rate Analyst										
I.S. Director/VP										
I.S. Manager										
I.S. Supervisor/Computer Operations										
Systems Administrator/Apps Support										
Human Resources Director/VP										
Human Resources Manager										
Human Resources Generalist/Officer										
Human Resources Assistant/Coord.										
Manager Health & Safety/Loss Control										

Compensation Analysis: By Customer Size

Table 3: Customer Size – LDCs (10,001 to 20,000 Customers)

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
President/CEO/GM	9	9	108,588	132,423	128,570	115,702	132,500	122,004		
V.P. Operations & Engineering/COO	5	5	81,053	105,035	101,329	99,400	106,090	103,000		
Director/V.P. Operations										
Director/V.P. Engineering										
Engineering Manager	3	3			83,516					
Distribution Engineer										
Project Engineer										
Engineering Supervisor										
Operations Manager or Superintendent	5	5	67,931	86,144	81,755	76,045	87,048	80,854		
Control Centre Supervisor										
Meter Shop Supervisor	3	3			78,617					
Line Supervisor	5	5	70,007	84,424	80,480	77,240	80,608	78,343		
Fleet Maintenance Supervisor										
Purchasing/Procurement Manager										
Stores/Inventory Control Supervisor										
Executive Assistant (to President)	5	5	44,021	54,819	57,720	52,400	63,000	55,770		
Administrative Assistant										
Director/VP Finance/CFO	8	8	87,722	100,417	96,154	91,548	99,083	92,981		
Controller/Manager Finance										
General Accounting Manager	4	4	64,480	77,386	73,065	69,185	77,380	73,499		
Accounting Supervisor	3	3	57,255		65,076					

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
Director/VP Customer Service										
Manager Customer Service	3	3	60,242	85,046	79,071					
Customer Service Supervisor	4	4			60,971	60,468	62,026	61,523		
Payroll Supervisor/Manager										
Financial/Business Analyst										
Director/VP Regulatory Affairs										
Manager, Regulatory Affairs										
Settlement/Rate Analyst										
I.S. Director/VP										
I.S. Manager	4	4	67,047	84,461	78,618	68,971	86,139	76,492		
I.S. Supervisor/Computer Operations										
Systems Administrator/Apps Support										
Human Resources Director/VP										
Human Resources Manager										
Human Resources Generalist/Officer										
Human Resources Assistant/Coord.										
Manager Health & Safety/Loss Control										

Compensation Analysis: By Customer Size

Table 4: Customer Size – LDCs (20,001 to 30,000 Customers)

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
President/CEO/GM	7	7	114,059	147,708	138,910	131,692	144,394	139,306	9	19
V.P. Operations & Engineering/COO	4	4	89,298	120,810	106,359	97,207	111,011	101,859		
Director/V.P. Operations	3	3	84,112	104,663	103,386					
Director/V.P. Engineering	3	3	78,103	97,054	94,879					
Engineering Manager										
Distribution Engineer	3	3	73,419	89,291	78,674					
Project Engineer										
Engineering Supervisor	3	4	63,377	82,708	77,219					
Operations Manager or Superintendent	3	3	73,697	100,969	90,375					
Control Centre Supervisor										
Meter Shop Supervisor	3	3	70,335	87,631	83,174					
Line Supervisor	8	11	66,278	84,629	77,608	75,498	79,737	78,293	5	7
Fleet Maintenance Supervisor										
Purchasing/Procurement Manager										
Stores/Inventory Control Supervisor										
Executive Assistant (to President)	7	7	48,365	65,330	60,450	56,513	63,353	62,418	4	6
Administrative Assistant										
Director/VP Finance/CFO	7	7	87,503	114,458	105,868	91,695	116,746	99,910	7	14
Controller/Manager Finance										
General Accounting Manager	3	3	56,248	73,708	71,305					
Accounting Supervisor										

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
Director/VP Customer Service										
Manager Customer Service										
Customer Service Supervisor	7	7	56,038	71,534	66,235	58,828	74,099	62,212	4	6
Payroll Supervisor/Manager										
Financial/Business Analyst	3	3	56,782	76,400	62,484					
Director/VP Regulatory Affairs										
Manager, Regulatory Affairs	5	5	58,017	75,702	62,200	55,000	65,508	61,131	3	5
Settlement/Rate Analyst	3	3	58,704	77,533	66,713					
I.S. Director/VP										
I.S. Manager										
I.S. Supervisor/Computer Operations										
Systems Administrator/Apps Support	4	7	56,838	73,037	64,976	60,078	69,779	64,882		
Human Resources Director/VP										
Human Resources Manager										
Human Resources Generalist/Officer										
Human Resources Assistant/Coord.										
Manager Health & Safety/Loss Control										

Compensation Analysis: By Customer Size

Table 5: Customer Size – LDCs (30,001 to 40,000 Customers)

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
President/CEO/GM	6	6	128,034	160,737	147,055	140,911	146,500	143,000	20	
V.P. Operations & Engineering/COO	5	5	93,319	121,838	117,256	110,000	120,000	117,229		
Director/V.P. Operations										
Director/V.P. Engineering	4	4	80,630	99,567	99,567	96,586	102,833	99,852		
Engineering Manager										
Distribution Engineer	3	3	63,856	83,831	85,926					
Project Engineer										
Engineering Supervisor										
Operations Manager or Superintendent	5	6	66,785	82,512	83,211	81,636	88,195	83,716		
Control Centre Supervisor										
Meter Shop Supervisor	4	4	67,371	84,756	83,621	79,054	86,150	81,582		
Line Supervisor	4	7	62,142	75,812	75,812	73,197	78,889	76,274		
Fleet Maintenance Supervisor										
Purchasing/Procurement Manager	3	3	58,819	75,492	72,550					
Stores/Inventory Control Supervisor										
Executive Assistant (to President)	6	6	44,859	56,371	55,370	53,534	57,559	55,581		
Administrative Assistant	3	5	40,297	52,381	51,393					
Director/VP Finance/CFO	3	6	90,340	115,899	113,233	108,215	117,050	112,536	8	
Controller/Manager Finance										
General Accounting Manager	3	3	57,371	72,302	72,302					
Accounting Supervisor										

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
Director/VP Customer Service	4	4	82,559	100,667	94,899	90,000	96,917	92,018		
Manager Customer Service	4	5	67,682	81,201	81,201	73,999	89,002	81,800		
Customer Service Supervisor										
Payroll Supervisor/Manager										
Financial/Business Analyst	3	3	51,662	64,831	65,007					
Director/VP Regulatory Affairs										
Manager, Regulatory Affairs	3	3	61,057	78,506	78,506					
Settlement/Rate Analyst	3	4	57,344	73,617	71,217					
I.S. Director/VP										
I.S. Manager										
I.S. Supervisor/Computer Operations										
Systems Administrator/Apps Support	3	3	55,293	68,377	72,167					
Human Resources Director/VP										
Human Resources Manager										
Human Resources Generalist/Officer										
Human Resources Assistant/Coord.										
Manager Health & Safety/Loss Control										

Compensation Analysis: By Customer Size

Table 6: Customer Size – LDCs (40,001-80,000 Customers)

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
President/CEO/GM	7	7	117,323	152,264	145,953	138,001	147,500	144,840	14	15
V.P. Operations & Engineering/COO	5	5	95,638	124,878	114,130	111,000	121,400	118,000		
Director/V.P. Operations	3	3	90,952	120,357	107,477					
Director/V.P. Engineering	3	3	95,182	117,193	107,177					
Engineering Manager	5	6	75,260	97,501	90,905	88,115	95,024	88,982		
Distribution Engineer										
Project Engineer	3	3	63,282	81,859	70,581					
Engineering Supervisor	4	4	63,096	75,857	76,424	73,122	81,482	78,180		
Operations Manager or Superintendent	5	6	72,222	91,596	89,333	88,408	92,941	90,550		
Control Centre Supervisor	4	4	63,643	81,231	77,166	74,402	81,405	78,641		
Meter Shop Supervisor	7	7	68,333	84,321	81,056	76,624	83,151	77,872		
Line Supervisor	7	22	64,760	81,461	78,931	75,909	80,874	76,670		
Fleet Maintenance Supervisor										
Purchasing/Procurement Manager	6	6	61,983	78,321	76,655	75,888	76,966	76,122		
Stores/Inventory Control Supervisor										
Executive Assistant (to President)	7	7	49,270	61,825	60,431	57,901	63,385	60,766		
Administrative Assistant	5	10	44,688	54,113	53,788	50,950	54,190	52,725		
Director/VP Finance/CFO	6	6	96,119	125,566	121,415	119,000	127,601	123,500		
Controller/Manager Finance	5	5	74,345	96,000	91,754	90,195	97,900	93,431		
General Accounting Manager										
Accounting Supervisor	4	4	58,322	73,111	65,457	62,101	70,955	67,599		

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
Director/VP Customer Service										
Manager Customer Service	4	4	65,178	86,950	77,607	72,386	78,978	73,756		
Customer Service Supervisor	4	5	61,088	73,527	71,352	66,162	71,689	66,499		
Payroll Supervisor/Manager										
Financial/Business Analyst										
Director/VP Regulatory Affairs										
Manager, Regulatory Affairs	3	3	64,177	80,659	75,430					
Settlement/Rate Analyst										
I.S. Director/VP	3	3	83,837	110,227	104,715					
I.S. Manager										
I.S. Supervisor/Computer Operations										
Systems Administrator/Apps Support	3	3	58,172	71,042	67,066					
Human Resources Director/VP	3	3	83,934	109,209	101,008					
Human Resources Manager										
Human Resources Generalist/Officer	4	5	54,216	69,383	60,711	54,389	65,793	59,471		
Human Resources Assistant/Coord.										
Manager Health & Safety/Loss Control	7	7	64,604	81,237	80,318	76,944	83,193	79,610		

Compensation Analysis: By Customer Size
Table 7: Customer Size – LDCs (80,001 plus Customers)

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
President/CEO/GM	5	5	160,053	217,844						
V.P. Operations & Engineering/COO	4	6	118,041	159,660						
Director/V.P. Operations										
Director/V.P. Engineering										
Engineering Manager	5	5	84,347	108,185	100,974					
Distribution Engineer	4	17	71,221	91,729	85,504					
Project Engineer										
Engineering Supervisor	4	8	67,606	87,976	78,421					
Operations Manager or Superintendent	4	8	77,064	100,437	93,583					
Control Centre Supervisor	4	5	74,889	92,815	88,420					
Meter Shop Supervisor	5	6	68,808	85,238	79,996	76,689	82,192	78,884		
Line Supervisor	5	32	70,008	86,238	82,797	79,867	84,855	81,925		
Fleet Maintenance Supervisor	4	4	63,880	82,588	80,187					
Purchasing/Procurement Manager	3	3	71,551	96,096						
Stores/Inventory Control Supervisor	5	6	59,695	77,055	69,641	68,156	70,853	69,368		
Executive Assistant (to President)	5	8	51,733	65,809	63,742	62,606	66,205	65,069		
Administrative Assistant										
Director/VP Finance/CFO	5	5	106,675	141,427	156,629					
Controller/Manager Finance	4	4	77,399	99,441	91,991					
General Accounting Manager	3	3	72,140	94,631						
Accounting Supervisor	4	4	59,906	77,843	72,047					

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
Director/VP Customer Service	3	3	110,091	143,697						
Manager Customer Service	5	7	73,229	93,031	90,759	86,020	96,512	91,774		
Customer Service Supervisor	5	13	58,895	76,055	70,047	66,372	72,825	69,150		
Payroll Supervisor/Manager	3	3	41,922	51,547	75,126					
Financial/Business Analyst	3	3	60,755	81,659	72,339					
Director/VP Regulatory Affairs										
Manager, Regulatory Affairs	4	4	71,355	92,724	86,763					
Settlement/Rate Analyst										
I.S. Director/VP	4	4	99,847	129,993	124,594					
I.S. Manager	3	3	75,590	99,869	90,803					
I.S. Supervisor/Computer Operations										
Systems Administrator/Apps Support										
Human Resources Director/VP	4	4	101,068	131,273	112,838					
Human Resources Manager										
Human Resources Generalist/Officer	4	4	60,363	78,385	65,782					
Human Resources Assistant/Coord.	3	8	45,785	60,331	55,497					
Manager Health & Safety/Loss Control	4	5	70,857	91,443	84,257					

Compensation Analysis: By Gross Revenue Grouping

Table 8: LDCs Gross Revenue Under \$20 Million

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
President/CEO/GM	6	5			102,480			108,282		
V.P. Operations & Engineering/COO										
Director/V.P. Operations										
Director/V.P. Engineering										
Engineering Manager										
Distribution Engineer										
Project Engineer										
Engineering Supervisor										
Operations Manager or Superintendent	4	4			80,997			79,970		
Control Centre Supervisor										
Meter Shop Supervisor										
Line Supervisor										
Fleet Maintenance Supervisor										
Purchasing/Procurement Manager										
Stores/Inventory Control Supervisor										
Executive Assistant (to President)										
Administrative Assistant										
Director/VP Finance/CFO	3	3			82,633					
Controller/Manager Finance										
General Accounting Manager										

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
Accounting Supervisor										
Director/VP Customer Service										
Manager Customer Service										
Customer Service Supervisor										
Payroll Supervisor/Manager										
Financial/Business Analyst										
Director/VP Regulatory Affairs										
Manager, Regulatory Affairs										
Settlement/Rate Analyst										
I.S. Director/VP										
I.S. Manager										
I.S. Supervisor/Computer Operations										
Systems Administrator/Apps Support										
Human Resources Director/VP										
Human Resources Manager										
Human Resources Generalist/Officer										
Human Resources Assistant/Coord.										
Manager Health & Safety/Loss Control										

Compensation Analysis: By Gross Revenue Grouping

Table 9: LDCs Gross Revenue \$20,000,001 to \$50,000,000 Million

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
President/CEO/GM	13	13	112,604	146,224	134,073	121,400	146,574	132,500		
V.P. Operations & Engineering/COO	7	7	82,183	113,313	99,854	96,374	104,339	99,400	6.75	8.08
Director/V.P. Operations	4	4	71,789	86,255	87,526	84,283	93,851	90,608		
Director/V.P. Engineering										
Engineering Manager										
Distribution Engineer										
Project Engineer										
Engineering Supervisor										
Operations Manager or Superintendent	4	4			80,997			79,970		
Control Centre Supervisor										
Meter Shop Supervisor										
Line Supervisor										
Fleet Maintenance Supervisor										
Purchasing/Procurement Manager										
Stores/Inventory Control Supervisor										
Executive Assistant (to President)										
Administrative Assistant										
Director/VP Finance/CFO	3	3			82,633					
Controller/Manager Finance										
General Accounting Manager										

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
Accounting Supervisor										
Director/VP Customer Service										
Manager Customer Service										
Customer Service Supervisor										
Payroll Supervisor/Manager										
Financial/Business Analyst										
Director/VP Regulatory Affairs										
Manager, Regulatory Affairs										
Settlement/Rate Analyst										
I.S. Director/VP										
I.S. Manager										
I.S. Supervisor/Computer Operations										
Systems Administrator/Apps Support										
Human Resources Director/VP										
Human Resources Manager										
Human Resources Generalist/Officer										
Human Resources Assistant/Coord.										
Manager Health & Safety/Loss Control										

Compensation Analysis: By Gross Revenue Grouping

Table 10: LDCs Gross Revenue \$50,000,001 to \$100,000,000 Million

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
President/CEO/GM	13	12	117,785	149,410	141,274	138,475	144,607	140,881	14.10	19.40
V.P. Operations & Engineering/COO	10	10	93,734	121,421	117,338	110,250	122,750	117,615		
Director/V.P. Operations	4	4	86,337	105,720	104,762	99,671	106,999	101,909	6.83	14.00
Director/V.P. Engineering	5	5	79,665	100,723	99,418	95,000	103,565	102,589	4.33	7.33
Engineering Manager	8	8	77,055	96,707	91,678	89,193	96,252	91,000		
Distribution Engineer	7	7	71,582	89,854	84,500	79,157	90,233	87,092		
Project Engineer										
Engineering Supervisor	4	5	61,378	74,880	73,437	70,838	77,091	74,493		
Operations Manager or Superintendent	9	9	69,660	86,424	85,536	81,337	89,260	82,432	3.67	5.67
Control Centre Supervisor										
Meter Shop Supervisor	9	9	68,796	85,386	82,337	78,284	83,854	79,310	3.67	6.00
Line Supervisor	11	23	66,236	79,972	79,055	77,389	81,799	78,478	3.00	6.00
Fleet Maintenance Supervisor										
Purchasing/Procurement Manager	7	7	61,065	76,993	75,243	71,183	81,220	75,028		
Stores/Inventory Control Supervisor	3	3	61,129	76,494	74,305					
Executive Assistant (to President)	13	13	47,680	60,229	58,167	54,590	62,733	56,712	2.75	4.75
Administrative Assistant	5	9	40,861	53,677	51,342	50,297	53,040	52,725		
Director/VP Finance/CFO	13	13	88,946	114,040	111,895	97,000	118,000	109,235	5.13	9.25
Controller/Manager Finance	5	5	71,576	89,544	89,870	83,000	97,900	91,205		
General Accounting Manager	5	5	57,511	76,913	76,735	71,769	83,231	75,028		

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
Accounting Supervisor										
Director/VP Customer Service	3	3	82,418	100,145	93,971					
Manager Customer Service	6	6	69,098	84,552	82,484	74,076	89,736	82,000		
Customer Service Supervisor	8	8	60,820	75,013	71,193	64,930	75,657	70,497		
Payroll Supervisor/Manager										
Financial/Business Analyst	7	7	54,525	72,509	65,823	60,346	71,966	68,884	2.67	4.67
Director/VP Regulatory Affairs										
Manager, Regulatory Affairs	8	8	62,053	77,255	73,361	67,783	81,775	75,864	3.25	5.25
Settlement/Rate Analyst	7	7	56,859	74,749	68,176	62,333	70,576	69,949		
I.S. Director/VP	3	3	82,474	108,893	100,761					
I.S. Manager	4	4	66,418	82,682	78,069	77,563	81,984	81,478		
I.S. Supervisor/Computer Operations										
Systems Administrator/Apps Support	9	9	56,562	74,272	69,463	62,247	73,935	70,072		
Human Resources Director/VP	3	3	81,301	107,099	93,675					
Human Resources Manager	3	3	64,563	83,482	80,949					
Human Resources Generalist/Officer	5	6	53,822	65,362	60,673	54,617	64,324	56,162		
Human Resources Assistant/Coord.	4	4	39,936	51,491	50,741	47,984	54,746	51,989		
Manager Health & Safety/Loss Control	5	5	63,618	78,745	79,273	76,670	81,386	77,542		

Compensation Analysis: By Gross Revenue Grouping

Table 11: LDCs Gross Revenue \$100,000,001 to \$200,000,000 Million

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
President/CEO/GM	6	6	122,191	160,085	150,586	144,880	148,753	145,000	15.83	15.00
V.P. Operations & Engineering/COO	3	3	95,897	130,170	113,217					
Director/V.P. Operations	3	3	90,952	120,357	107,477					
Director/V.P. Engineering	4	4	91,922	112,174	104,661	100,029	110,143	105,510		
Engineering Manager	5	5	75,099	99,935	91,691	87,213	93,027	88,549		
Distribution Engineer										
Project Engineer										
Engineering Supervisor	5	5	65,206	78,369	74,650	73,297	80,330	76,030		
Operations Manager or Superintendent	6	8	73,035	92,526	90,579	88,944	93,092	91,746		
Control Centre Supervisor	4	4	67,179	83,631	79,920	79,411	81,405	80,895		
Meter Shop Supervisor	6	6	68,802	84,625	81,404	76,993	84,982	77,545		
Line Supervisor	5	23	65,040	80,501	76,859	75,787	76,918	76,030		
Fleet Maintenance Supervisor										
Purchasing/Procurement Manager	5	5	63,912	81,791	78,718	76,030	77,217	76,214		
Stores/Inventory Control Supervisor										
Executive Assistant (to President)	6	6	50,178	62,624	62,203	59,508	64,837	62,451		
Administrative Assistant	5	10	45,543	54,827	54,700	53,530	54,190	54,054		
Director/VP Finance/CFO	5	5	102,369	137,452	131,331	128,468	132,000	131,186		
Controller/Manager Finance										
General Accounting Manager	3	3	68,942	84,600	80,880					

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
Accounting Supervisor	4	4	59,991	76,087	70,047	68,899	72,129	70,981		
Director/VP Customer Service										
Manager Customer Service	6	6	67,299	86,474	81,558	73,353	93,431	75,332		
Customer Service Supervisor	3	5	58,284	70,723	67,822	66,499	68,610	66,750		
Payroll Supervisor/Manager										
Financial/Business Analyst										
Director/VP Regulatory Affairs										
Manager, Regulatory Affairs										
Settlement/Rate Analyst	3	3	56,340	67,641	66,756					
I.S. Director/VP	4	4	83,913	108,961	103,530	99,500	105,748	101,718		
I.S. Manager										
I.S. Supervisor/Computer Operations										
Systems Administrator/Apps Support	4	4	57,978	69,549	67,754	66,501	70,959	69,705		
Human Resources Director/VP										
Human Resources Manager										
Human Resources Generalist/Officer										
Human Resources Assistant/Coord.										
Manager Health & Safety/Loss Control	6	6	65,036	81,853	80,757	77,815	84,125	80,555		

Compensation Analysis: By Gross Revenue Grouping

Table 12: LDCs Gross Revenue Over \$200,000,001 Million

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
President/CEO/GM	4	4	153,503	202,652						
V.P. Operations & Engineering/COO	4	5	116,902	152,324						
Director/V.P. Operations										
Director/V.P. Engineering										
Engineering Manager	3	3	85,198	110,921						
Distribution Engineer	3	16	69,653	87,446	80,508					
Project Engineer										
Engineering Supervisor										
Operations Manager or Superintendent										
Control Centre Supervisor	4	5	73,034	91,608	86,811					
Meter Shop Supervisor	3	4	69,086	89,090	83,534					
Line Supervisor	4	21	68,747	85,746	82,327					
Fleet Maintenance Supervisor	3	3	66,378	86,628						
Purchasing/Procurement Manager										
Stores/Inventory Control Supervisor	3	4	59,696	78,602						
Executive Assistant (to President)	3	6	50,114	64,303	62,416					
Administrative Assistant										
Director/VP Finance/CFO	4	4	95,562	124,279						
Controller/Manager Finance	3	3	80,198	103,588						
General Accounting Manager										

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
Accounting Supervisor	3	3	59,696	78,602						
Director/VP Customer Service	3	3	110,091	143,697						
Manager Customer Service	3	5	73,404	94,322						
Customer Service Supervisor	4	11	58,682	74,504	69,977					
Payroll Supervisor/Manager										
Financial/Business Analyst										
Director/VP Regulatory Affairs										
Manager, Regulatory Affairs										
Settlement/Rate Analyst										
I.S. Director/VP										
I.S. Manager										
I.S. Supervisor/Computer Operations										
Systems Administrator/Apps Support										
Human Resources Director/VP	4	4	100,243	127,443						
Human Resources Manager										
Human Resources Generalist/Officer	3	3	62,484	81,846						
Human Resources Assistant/Coord.										
Manager Health & Safety/Loss Control	4	4	72,753	94,757						

Compensation Analysis: By District

Table 13: LDCs in District 'Central/Eastern'

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
President/CEO/GM	11	10	130,102	182,440	163,804	144,835	164,645	148,287	18	29
V.P. Operations & Engineering/COO	8	10	101,741	147,642	126,973	115,770	125,005	122,000	18	27
Director/V.P. Operations	5	5	84,473	117,557	104,125	97,144	107,617	100,635	9	16
Director/V.P. Engineering	4	4	99,884	122,908	114,973				10	16
Engineering Manager	5	5	82,016	109,337	95,400	92,797	99,043	97,479	10	17
Distribution Engineer	5	16	74,701	94,697	83,431	79,283	88,194	84,046		
Project Engineer	4	7	67,544	101,573	82,747	78,911	86,621	82,821	4	9
Engineering Supervisor	6	10	65,426	90,102	81,708	76,000	80,642	78,309	7	10
Operations Manager or Superintendent	6	9	74,180	98,818	88,980	78,784	97,557	87,704	7	12
Control Centre Supervisor	3	4	71,873	100,294					8	14
Meter Shop Supervisor	8	9	70,683	93,058	82,629	77,475	86,785	81,143	6	11
Line Supervisor	10	32	67,552	87,694	80,311	78,108	82,974	79,786	5	9
Fleet Maintenance Supervisor										
Purchasing/Procurement Manager	6	6	61,894	92,955	74,497	71,427	83,000	76,214	9	16
Stores/Inventory Control Supervisor		4	61,422	82,325						
Executive Assistant (to President)	12	13	49,847	67,798	61,899	56,441	66,615	63,692	4	8
Administrative Assistant										
Director/VP Finance/CFO	10	10	99,124	134,791	129,497	108,100	140,000	124,258	11	20
Controller/Manager Finance	6	6	75,147	103,484	90,992	85,856	95,815	90,195	10	17
General Accounting Manager	4	4	66,994	92,752	83,605					

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
Accounting Supervisor	5	5	57,885	80,869	70,349	66,778	72,256	68,685	7	12
Director/VP Customer Service	4	4	96,083	123,937					11	17
Manager Customer Service	6	8	65,736	89,176	78,837	73,555	80,505	75,091	7	12
Customer Service Supervisor	7	14	58,268	78,614	69,176	61,679	79,303	69,771	7	11
Payroll Supervisor/Manager										
Financial/Business Analyst	7	7	58,770	81,033	70,800	69,396	72,670	71,305	6	11
Director/VP Regulatory Affairs	9	9	67,021	86,809	73,453	67,783	82,725	72,295	6	10
Manager, Regulatory Affairs										
Settlement/Rate Analyst	3	3	56,046	81,730						
I.S. Director/VP	5	5	94,050	133,703	123,568	113,616	130,453	120,500	13	20
I.S. Manager	4	4	77,533	104,324	89,958					
I.S. Supervisor/Computer Operations	3	3	59,430							
Systems Administrator/Apps Support	4	8	53,502		62,191	59,746	62,342	59,896		
Human Resources Director/VP	4	4	91,812	124,703	106,559				13	20
Human Resources Manager	3	3	72,564	97,049					9	16
Human Resources Generalist/Officer	5	6	56,694	78,310	57,343					
Human Resources Assistant/Coord.	4	9	42,839	60,331	52,229					
Manager Health & Safety/Loss Control	5	6	68,041	93,810	83,587	80,425	86,355	83,193	8	14

Compensation Analysis: By District

Table 14: LDCs in District 'Georgian Bay'

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
President/CEO/GM	6	6	118,805	154,348	134,241	119,902	149,471	135,000		
V.P. Operations & Engineering/COO	3	3			91,797					
Director/V.P. Operations										
Director/V.P. Engineering										
Engineering Manager										
Distribution Engineer										
Project Engineer										
Engineering Supervisor										
Operations Manager or Superintendent	5	5	71,147	90,078	84,258	77,000	89,430	87,048		
Control Centre Supervisor										
Meter Shop Supervisor										
Line Supervisor	4	7	65,681	82,809	75,343	74,340	77,516	76,514		
Fleet Maintenance Supervisor										
Purchasing/Procurement Manager										
Stores/Inventory Control Supervisor										
Executive Assistant (to President)	3	3	46,407	59,427	57,774					
Administrative Assistant										
Director/VP Finance/CFO	5	5	89,800	108,877	102,345	88,104	111,990	97,110		
Controller/Manager Finance										
General Accounting Manager	3	3	64,480	77,386	76,202					

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
Accounting Supervisor		4	57,657	72,675	64,764	60,547	69,053	64,836		
Director/VP Customer Service										
Manager Customer Service										
Customer Service Supervisor										
Payroll Supervisor/Manager										
Financial/Business Analyst										
Director/VP Regulatory Affairs										
Manager, Regulatory Affairs										
Settlement/Rate Analyst										
I.S. Director/VP										
I.S. Manager										
I.S. Supervisor/Computer Operations										
Systems Administrator/Apps Support										
Human Resources Director/VP										
Human Resources Manager										
Human Resources Generalist/Officer										
Human Resources Assistant/Coord.										
Manager Health & Safety/Loss Control										

Compensation Analysis: By District

Table 15: LDCs in District 'Niagara Grand'

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
President/CEO/GM	12	12	111,580	139,412	128,404	119,772	141,871	131,283		
V.P. Operations & Engineering/COO	7	7	86,553	109,357	101,486	98,825	107,325	105,678		
Director/V.P. Operations	4	4	80,984	99,844	98,201	91,562	104,192	97,552		
Director/V.P. Engineering	4	4	85,060	103,601	100,700	97,925	104,569	101,795		
Engineering Manager	4	5	73,324	91,731	90,220	83,868	93,235	86,883		
Distribution Engineer	4	4	69,704	87,928	82,500	80,828	87,715	86,043		
Project Engineer										
Engineering Supervisor	3	3	61,625	75,797	71,672					
Operations Manager or Superintendent	9	10	70,959	88,425	85,410	80,854	90,550	84,924		
Control Centre Supervisor	4	4	65,441	79,237	76,607	74,023	80,869	78,284		
Meter Shop Supervisor	7	7	65,419	79,131	77,416	75,442	78,078	76,918		
Line Supervisor	9	26	64,530	79,695	75,809	74,854	76,918	75,775		
Fleet Maintenance Supervisor										
Purchasing/Procurement Manager	6	6	63,862	79,609	77,521	75,231	78,588	75,936		
Stores/Inventory Control Supervisor										
Executive Assistant (to President)	10	10	47,673	59,662	57,814	53,316	63,707	55,706		
Administrative Assistant	5	7	44,506	54,777	50,227	46,994	55,735	52,502		
Director/VP Finance/CFO	10	10	82,998	103,239	101,571	89,203	115,062	96,237		
Controller/Manager Finance										
General Accounting Manager	4	4	63,327	77,136	74,345	70,032	83,557	79,244		

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
Accounting Supervisor	3	3	56,648	70,991	65,496					
Director/VP Customer Service	3	3	82,715	102,078	96,393					
Manager Customer Service	7	7	63,579	80,605	77,273	70,380	87,734	73,991		
Customer Service Supervisor	8	9	54,370	67,904	64,126	57,521	70,371	64,020		
Payroll Supervisor/Manager	3	3	48,861	59,924	60,223					
Financial/Business Analyst	3	3	50,037	63,444	59,937					
Director/VP Regulatory Affairs										
Manager, Regulatory Affairs	4	4	66,747	84,206	79,841	74,352	88,272	82,784		
Settlement/Rate Analyst	4	5	53,805	67,252	66,484	62,683	71,039	67,238		
I.S. Director/VP	5	5	81,938	102,515	97,564	98,080	99,973	98,880		
I.S. Manager										
I.S. Supervisor/Computer Operations										
Systems Administrator/Apps Support	5	5	57,537	69,571	69,428	68,940	72,424	70,470		
Human Resources Director/VP										
Human Resources Manager										
Human Resources Generalist/Officer										
Human Resources Assistant/Coord.										
Manager Health & Safety/Loss Control	4	4	62,466	77,129	77,804	75,447	80,083	77,726		

Compensation Analysis: By District

Table 16: LDCs in District 'North Eastern'

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
President/CEO/GM	6	6	104,299	124,716	122,644	112,376	135,732	126,040		
V.P. Operations & Engineering/COO	3	3	96,361	116,871	119,831					
Director/V.P. Operations										
Director/V.P. Engineering										
Engineering Manager										
Distribution Engineer										
Project Engineer										
Engineering Supervisor										
Operations Manager or Superintendent	4	4	66,291	83,876	83,876					
Control Centre Supervisor										
Meter Shop Supervisor										
Line Supervisor	5	9	65,849	79,898	79,898	76,431	82,153	78,686		
Fleet Maintenance Supervisor										
Purchasing/Procurement Manager										
Stores/Inventory Control Supervisor										
Executive Assistant (to President)	3	3	47,216	58,812	58,812					
Administrative Assistant	5	8	42,701	53,047	50,329	47,893	52,725	50,297		
Director/VP Finance/CFO	4	4	85,792	105,273	105,273	94,158	116,883	105,768		
Controller/Manager Finance	5	5	69,456	87,050	79,213	69,811	91,205	77,147		
General Accounting Manager										

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
Accounting Supervisor										
Director/VP Customer Service										
Manager Customer Service										
Customer Service Supervisor	3	3	60,507	71,541	71,541					
Payroll Supervisor/Manager										
Financial/Business Analyst										
Director/VP Regulatory Affairs										
Manager, Regulatory Affairs										
Settlement/Rate Analyst										
I.S. Director/VP										
I.S. Manager										
I.S. Supervisor/Computer Operations										
Systems Administrator/Apps Support										
Human Resources Director/VP										
Human Resources Manager										
Human Resources Generalist/Officer										
Human Resources Assistant/Coord.										
Manager Health & Safety/Loss Control										

Compensation Analysis: By District

Table 17: LDCs in District 'Western'

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
President/CEO/GM	6	6	129,137	164,990	138,469	123,600	145,000	139,306	15	17
V.P. Operations & Engineering/COO	4	4	100,210	133,063	111,000				10	
Director/V.P. Operations										
Director/V.P. Engineering										
Engineering Manager	5	5	79,309	99,595	89,175	86,193	91,000	89,125	5	5
Distribution Engineer										
Project Engineer										
Engineering Supervisor										
Operations Manager or Superintendent										
Control Centre Supervisor										
Meter Shop Supervisor	5	5	68,389	83,624	82,846	80,425	80,850	80,608	4	5
Line Supervisor	4	5	71,779	84,287	83,576	80,790	84,030	81,244		
Fleet Maintenance Supervisor										
Purchasing/Procurement Manager										
Stores/Inventory Control Supervisor										
Executive Assistant (to President)	5	6	48,336	60,169	58,994	58,011	63,000	59,066		
Administrative Assistant										
Director/VP Finance/CFO	6	6	94,328	119,764	104,839	93,261	109,235	97,000	7	7
Controller/Manager Finance										
General Accounting Manager	4	4	58,378	75,102	73,158	65,822	78,274	70,939		

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
Accounting Supervisor										
Director/VP Customer Service	3	3	90,832	117,796	92,018					
Manager Customer Service	3	4	72,250	86,847	86,818					
Customer Service Supervisor	4	4	59,762	70,419	65,770	62,568	68,536	65,334	4	5
Payroll Supervisor/Manager										
Financial/Business Analyst	3	3	50,261	63,080	57,566					
Director/VP Regulatory Affairs										
Manager, Regulatory Affairs										
Settlement/Rate Analyst	3	3	58,913	74,308	71,322					
I.S. Director/VP										
I.S. Manager										
I.S. Supervisor/Computer Operations										
Systems Administrator/Apps Support	5	5	57,330	70,971	71,329	66,950	77,563	70,656		
Human Resources Director/VP	3	3	96,058	123,579						
Human Resources Manager										
Human Resources Generalist/Officer										
Human Resources Assistant/Coord.										
Manager Health & Safety/Loss Control										

Compensation Analysis: By Employee Size

Table 18: LDCs 1 to 20 Employees

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
President/CEO/GM	4	4			100,100			99,141		
V.P. Operations & Engineering/COO										
Director/V.P. Operations										
Director/V.P. Engineering										
Engineering Manager										
Distribution Engineer										
Project Engineer										
Engineering Supervisor										
Operations Manager or Superintendent	3	3			82,329					
Control Centre Supervisor										
Meter Shop Supervisor										
Line Supervisor										
Fleet Maintenance Supervisor										
Purchasing/Procurement Manager										
Stores/Inventory Control Supervisor										
Executive Assistant (to President)										
Administrative Assistant										
Director/VP Finance/CFO										
Controller/Manager Finance										
General Accounting Manager										

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
Accounting Supervisor										
Director/VP Customer Service										
Manager Customer Service										
Customer Service Supervisor										
Payroll Supervisor/Manager										
Financial/Business Analyst										
Director/VP Regulatory Affairs										
Manager, Regulatory Affairs										
Settlement/Rate Analyst										
I.S. Director/VP										
I.S. Manager										
I.S. Supervisor/Computer Operations										
Systems Administrator/Apps Support										
Human Resources Director/VP										
Human Resources Manager										
Human Resources Generalist/Officer										
Human Resources Assistant/Coord.										
Manager Health & Safety/Loss Control										

Compensation Analysis: By Employee Size

Table 19: LDCs 21 to 40 Employees

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
President/CEO/GM	9	9	110,729	145,505	127,531	114,439	135,960	123,600		
V.P. Operations & Engineering/COO	6	6	86,931	120,368	101,846	91,512	105,009	100,520		
Director/V.P. Operations										
Director/V.P. Engineering										
Engineering Manager	3	3			88,691					
Distribution Engineer										
Project Engineer										
Engineering Supervisor										
Operations Manager or Superintendent	5	5	69,006	89,928	80,985	77,000	84,924	79,193		
Control Centre Supervisor										
Meter Shop Supervisor										
Line Supervisor	7	9	69,121	87,130	79,192	77,656	79,856	78,108		
Fleet Maintenance Supervisor										
Purchasing/Procurement Manager										
Stores/Inventory Control Supervisor										
Executive Assistant (to President)	7	7	49,892	66,636	60,326	57,117	62,867	62,418		
Administrative Assistant										
Director/VP Finance/CFO	8	8	85,891	108,093	97,929	90,059	97,810	92,981		
Controller/Manager Finance										
General Accounting Manager	4	4	60,486	77,733	70,605	69,185	72,819	71,399		

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
Accounting Supervisor										
Director/VP Customer Service										
Manager Customer Service										
Customer Service Supervisor	6	6	52,688	66,479	59,466	57,319	61,709	61,299		
Payroll Supervisor/Manager										
Financial/Business Analyst										
Director/VP Regulatory Affairs										
Manager, Regulatory Affairs	3	3	71,737	94,229	79,390					
Settlement/Rate Analyst										
I.S. Director/VP										
I.S. Manager										
I.S. Supervisor/Computer Operations										
Systems Administrator/Apps Support										
Human Resources Director/VP										
Human Resources Manager										
Human Resources Generalist/Officer										
Human Resources Assistant/Coord.										
Manager Health & Safety/Loss Control										

Compensation Analysis: By Employee Size

Table 20: LDCs 41 to 70 Employees

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
President/CEO/GM	9	9	112,532	139,959	137,434	126,606	146,574	139,306	15.00	26.67
V.P. Operations & Engineering/COO	4	4	85,482	109,420	102,585	98,227	107,103	102,745		
Director/V.P. Operations	4	4	78,148	96,254	95,697	93,425	98,701	96,429		
Director/V.P. Engineering	3	3		91,447	90,797					
Engineering Manager										
Distribution Engineer										
Project Engineer										
Engineering Supervisor	3	4	59,203		79,771					
Operations Manager or Superintendent	3	3			73,814					
Control Centre Supervisor										
Meter Shop Supervisor	4	4	61,267	77,525	77,630	74,666	80,604	77,640		
Line Supervisor	7	8	66,065	81,553	76,931	74,927	79,990	75,712	3.67	5.33
Fleet Maintenance Supervisor										
Purchasing/Procurement Manager										
Stores/Inventory Control Supervisor										
Executive Assistant (to President)	7	7	44,934	58,638	56,785	53,265	59,486	54,563	2.67	4.00
Administrative Assistant										
Director/VP Finance/CFO	8	8	87,642	106,642	103,926	92,313	109,924	106,550	7.50	15.00
Controller/Manager Finance										
General Accounting Manager										

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
Accounting Supervisor	3	3			68,681					
Director/VP Customer Service	3	3	75,198	87,851	91,900					
Manager Customer Service	4	4	64,752	84,485	80,995	73,991	87,200	76,021		
Customer Service Supervisor	5	5	54,540	70,255	65,289	58,000	70,655	62,212		
Payroll Supervisor/Manager										
Financial/Business Analyst	3	3	51,141	64,105	58,825					
Director/VP Regulatory Affairs										
Manager, Regulatory Affairs	4	4	53,374	69,052	60,642	54,265	66,631	60,254	2.67	4.00
Settlement/Rate Analyst										
I.S. Director/VP										
I.S. Manager	3	3	69,271	87,755	81,148					
I.S. Supervisor/Computer Operations										
Systems Administrator/Apps Support	3	4	52,527	68,248	63,631					
Human Resources Director/VP										
Human Resources Manager										
Human Resources Generalist/Officer										
Human Resources Assistant/Coord.										
Manager Health & Safety/Loss Control										

Compensation Analysis: By Employee Size

Table 21: LDCs 71 to 100 Employees

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
President/CEO/GM	8	8	122,703	163,741	151,126	140,286	155,000	145,000	17	
V.P. Operations & Engineering/COO	7	7	93,999	126,116	116,741	113,615	120,700	118,000	12	
Director/V.P. Operations	3	3	84,051	111,730	105,000				10	
Director/V.P. Engineering	3	3	84,765	104,102	100,235					
Engineering Manager	4	4	76,699	104,039	91,569	88,974	92,725	90,130		
Distribution Engineer	4	4	67,397	82,919	80,580	75,149	87,634	82,203		
Project Engineer										
Engineering Supervisor										
Operations Manager or Superintendent	6	7	67,665	87,755	86,569	83,074	89,047	86,704	5	
Control Centre Supervisor	3	3	61,113	86,091	81,143				5	
Meter Shop Supervisor	8	8	69,221	87,419	84,570	78,784	88,773	81,582	5	
Line Supervisor	6	14	64,081	82,279	79,429	76,402	81,417	79,035		
Fleet Maintenance Supervisor										
Purchasing/Procurement Manager	6	6	59,450	78,779	75,566	75,231	78,634	76,028	5	
Stores/Inventory Control Supervisor										
Executive Assistant (to President)	8	8	46,257	59,326	57,668	54,204	60,999	57,614		
Administrative Assistant	4	8	42,170	53,373	53,376	51,162	55,342	53,128		
Director/VP Finance/CFO	8	8	94,346	125,018	119,974	115,062	126,750	120,000	11	
Controller/Manager Finance	3	3			96,064					
General Accounting Manager	5	5	61,065	76,772	76,719	75,028	83,231	75,332		

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
Accounting Supervisor										
Director/VP Customer Service	3	3	82,559	105,223	97,532					
Manager Customer Service	5	6	63,858	82,755	76,120	73,353	75,332	74,160		
Customer Service Supervisor	3	3	63,065	77,290	77,290					
Payroll Supervisor/Manager										
Financial/Business Analyst	4	4	51,662	64,831	66,488	62,879	71,897	68,287		
Director/VP Regulatory Affairs										
Manager, Regulatory Affairs	5	5	62,929	81,499	78,361	74,477	81,700	77,250		
Settlement/Rate Analyst	5	5	57,637	73,499	71,698	68,501	74,938	71,741		
I.S. Director/VP	4	4	78,876	107,321	98,587	94,571	105,748	101,732	8	10
I.S. Manager										
I.S. Supervisor/Computer Operations										
Systems Administrator/Apps Support	5	5	56,098	69,568	69,752	59,833	75,028	72,424		
Human Resources Director/VP	3	3	86,088	121,625	103,667				10	13
Human Resources Manager										
Human Resources Generalist/Officer	4	5	53,536	70,010	62,113	55,548	66,809	60,243		
Human Resources Assistant/Coord.										
Manager Health & Safety/Loss Control	6	6	64,508	82,711	81,394	77,227	85,278	83,193		

Compensation Analysis: By Employee Size

Table 22: LDCs 101 to 170 Employees

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
President/CEO/GM	6	6	123,289	150,770	140,800	137,500	147,000	144,840		
V.P. Operations & Engineering/COO	4	4	96,788	120,501	115,686	107,813	124,873	117,000		
Director/V.P. Operations										
Director/V.P. Engineering	3	3	91,046	114,181	108,032					
Engineering Manager	5	6	78,077	97,433	93,418	87,863	97,558	92,003		
Distribution Engineer	3	3	70,685	90,498	85,697					
Project Engineer										
Engineering Supervisor	5	5	62,718	76,133	72,004	64,397	76,030	76,000		
Operations Manager or Superintendent	6	8	72,922	90,444	89,444	87,888	92,658	90,878		
Control Centre Supervisor	3	3	66,642	75,835	75,362					
Meter Shop Supervisor	5	5	66,167	77,767	75,647	76,000	76,918	76,030		
Line Supervisor	6	26	66,227	79,090	78,185	76,190	79,756	76,794		
Fleet Maintenance Supervisor										
Purchasing/Procurement Manager	5	5	65,755	79,895	79,095	76,030	83,000	77,217		
Stores/Inventory Control Supervisor										
Executive Assistant (to President)	6	6	50,739	62,505	61,505	58,290	64,837	61,613		
Administrative Assistant	5	10	43,783	53,654	52,733	50,950	54,174	54,054		
Director/VP Finance/CFO	5	5	96,219	120,751	122,838	116,511	131,186	128,468		
Controller/Manager Finance	4	4	70,683	88,427	86,196	81,537	91,762	87,103		
General Accounting Manager										

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
Accounting Supervisor	3	3	58,748	70,620	65,121					
Director/VP Customer Service										
Manager Customer Service	4	4	72,270	91,706	90,706	88,904	94,120	92,318		
Customer Service Supervisor	5	7	58,106	70,415	66,275	65,906	66,750	66,247		
Payroll Supervisor/Manager										
Financial/Business Analyst										
Director/VP Regulatory Affairs										
Manager, Regulatory Affairs										
Settlement/Rate Analyst										
I.S. Director/VP	3	3	89,190	111,080	107,351					
I.S. Manager	3	3	66,702	82,924	76,774					
I.S. Supervisor/Computer Operations										
Systems Administrator/Apps Support										
Human Resources Director/VP										
Human Resources Manager										
Human Resources Generalist/Officer	3	3	55,046	66,294	59,605					
Human Resources Assistant/Coord.										
Manager Health & Safety/Loss Control	4	4	65,556	78,749	78,749	77,080	80,083	78,414		

Compensation Analysis: By Employee Size

Table 23: LDCs OVER 170 Employees

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
President/CEO/GM	4	4	151,156	207,582						
V.P. Operations & Engineering/COO										
Director/V.P. Operations	3	3	92,266	124,311						
Director/V.P. Engineering	3	3	99,884	132,210					11	17
Engineering Manager	3	3	85,198	110,921						
Distribution Engineer	3	16	70,726	93,769						
Project Engineer										
Engineering Supervisor										
Operations Manager or Superintendent	3	6	82,057	109,142					9	16
Control Centre Supervisor	3	4	74,801	96,907						
Meter Shop Supervisor	4	5	73,415	94,773	87,104				6	11
Line Supervisor	4	21	68,190	88,008	83,249				6	11
Fleet Maintenance Supervisor	3	3	66,378	86,628						
Purchasing/Procurement Manager										
Stores/Inventory Control Supervisor	3	4	59,696	78,602	68,047					
Executive Assistant (to President)	4	7	50,596	65,059	63,901				6	11
Administrative Assistant										
Director/VP Finance/CFO	4	4	97,809	131,033					14	22
Controller/Manager Finance	3	3	80,198	103,588						
General Accounting Manager										

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
Accounting Supervisor	3	3	59,696	78,602						
Director/VP Customer Service	3	3	110,091	143,697						
Manager Customer Service	3	5	73,404	94,322						
Customer Service Supervisor	4	11	61,147	80,141	75,087				8	13
Payroll Supervisor/Manager										
Financial/Business Analyst	3	3	60,396	81,839					6	11
Director/VP Regulatory Affairs										
Manager, Regulatory Affairs	3	3	68,564	91,049					8	13
Settlement/Rate Analyst										
I.S. Director/VP										
I.S. Manager										
I.S. Supervisor/Computer Operations										
Systems Administrator/Apps Support										
Human Resources Director/VP	3	3	110,091	143,697						
Human Resources Manager	3	3	72,564	97,049					9	16
Human Resources Generalist/Officer	3	3	62,484	81,846						
Human Resources Assistant/Coord.										
Manager Health & Safety/Loss Control	4	5	69,546	90,453	82,937				9	16

Perquisites – All LDCs

Table 24: Perquisites by Position Level

Perquisite:	CEO/President	Executive	Middle Management	Not Applicable
Company car for business or personal use	10	8	11	20
Association or professional membership dues	36	38	35	3
Supplemental Group Life Insurance	27	28	28	12
Executive training programs or coaching	31	32	27	7
Personal computer for home use	16	14	10	20
Cellular phone for business or personal use	40	40	33	0
Employee Assistance Programs (EAPs)	35	35	36	4
Educational reimbursement	37	40	39	1
Extended vacation allowance	9	8	5	29
Outplacement counselling	11	11	11	28
Flex time	12	14	16	24
Fitness or recreational club memberships or access	12	12	10	27
Financial or legal counselling	9	9	8	28

No. of companies reporting = 42

- *Actual prevalence response - multiple responses accepted*

Table 25: Other Perquisites Noted

Other Perqs
every 3rd Friday off,
\$200 towards fitness club membership
3 personal paid days
7 weeks vacation after 23 years
6 weeks vacation after 26 years service
Computer Acquisition Program
5 wks at 17 yrs, 6 wks at 26 yrs. of service
Vacation allowance for past utility service
Vacation is also increased at other increments, 6 yrs, 3 weeks plus one day, 7 yrs, plus 2 days, etc...
payment of basic home phone & interest free home computer purchase
one extra week vacation in lieu of OT
Health Care Spending Account
management overtime, personal time off
25 yrs = 5 weeks plus 4 days 26yrs=6wks

Table 26: Mileage & Auto

CEO Average Monthly car allowance (24 respondents)	554.00
Executive Average Monthly car allowance (12 respondents)	490.00
Average Mileage Reimbursement (42 respondents)	44.6 cents

Table 27: Service Periods for Vacation Entitlement

Years of Service:	Eligible for 2 weeks	Eligible for 3 weeks	Eligible for 4 weeks	Eligible for 5 weeks	Eligible for 6 or more weeks
CEO/Pres - 3 years service	11	15	9	3	2
CEO/Pres - 5 years service	0	23	11	5	3
CEO/Pres - 10 years service	0	0	27	10	3
CEO/Pres - 15 years service	0	0	14	22	4
CEO/Pres - 20 years service	0	0	1	27	12
CEO/Pres - 25 years service	0	0	0	9	31
Executive- 3 years service	12	18	9	1	1
Executive- 5 years service	0	26	13	1	1
Executive- 10 years service	0	0	31	7	2
Executive- 15 years service	0	0	17	20	3
Executive- 20 years service	0	0	1	29	11
Executive- 25 years service	0	0	0	11	29
Middle Management- 3 years service	12	22	7	0	0
Middle Management- 5 years service	0	30	10	0	0
Middle Management- 10 years service	0	0	32	7	1
Middle Management- 15 years service	0	0	18	21	1
Middle Management- 20 years service	0	0	1	30	11
Middle Management- 25 years service	0	0	0	11	30
Professionals - 3 years service	13	19	4	0	0
Professional - 5 years service	0	28	7	0	0
Professional - 10 years service	0	0	30	5	0
Professional - 15 years service	0	0	17	18	0
Professional - 20 years service	0	0	1	28	6
Professional - 25 years service	0	0	0	10	25
Admin - 3 years service	13	21	4	0	0
Admin - 5 years service	0	32	5	0	0
Admin - 10 years service	0	0	34	3	0
Admin - 15 years service	0	0	18	19	0
Admin - 20 years service	0	0	1	30	6
Admin - 25 years service	0	0	0	11	25

Incentive Programs & Base Pay Planning

2007 Actual Base Pay Increase:

37 survey respondents. The actual average base pay increase for 2007 was 3.29%, up from 3.09% in 2006. The median response was 3%.

2008 Projected Salary Increase:

34 survey respondents. The average response indicates that the projected 2008 average base pay increase will be 3.16%. The median is 3%.

2007 & 2008 Salary Structure Increase:

25 survey respondents. The average actual adjustment (increase) to the 2007 salary structure was 3.08%. The median was 3%.

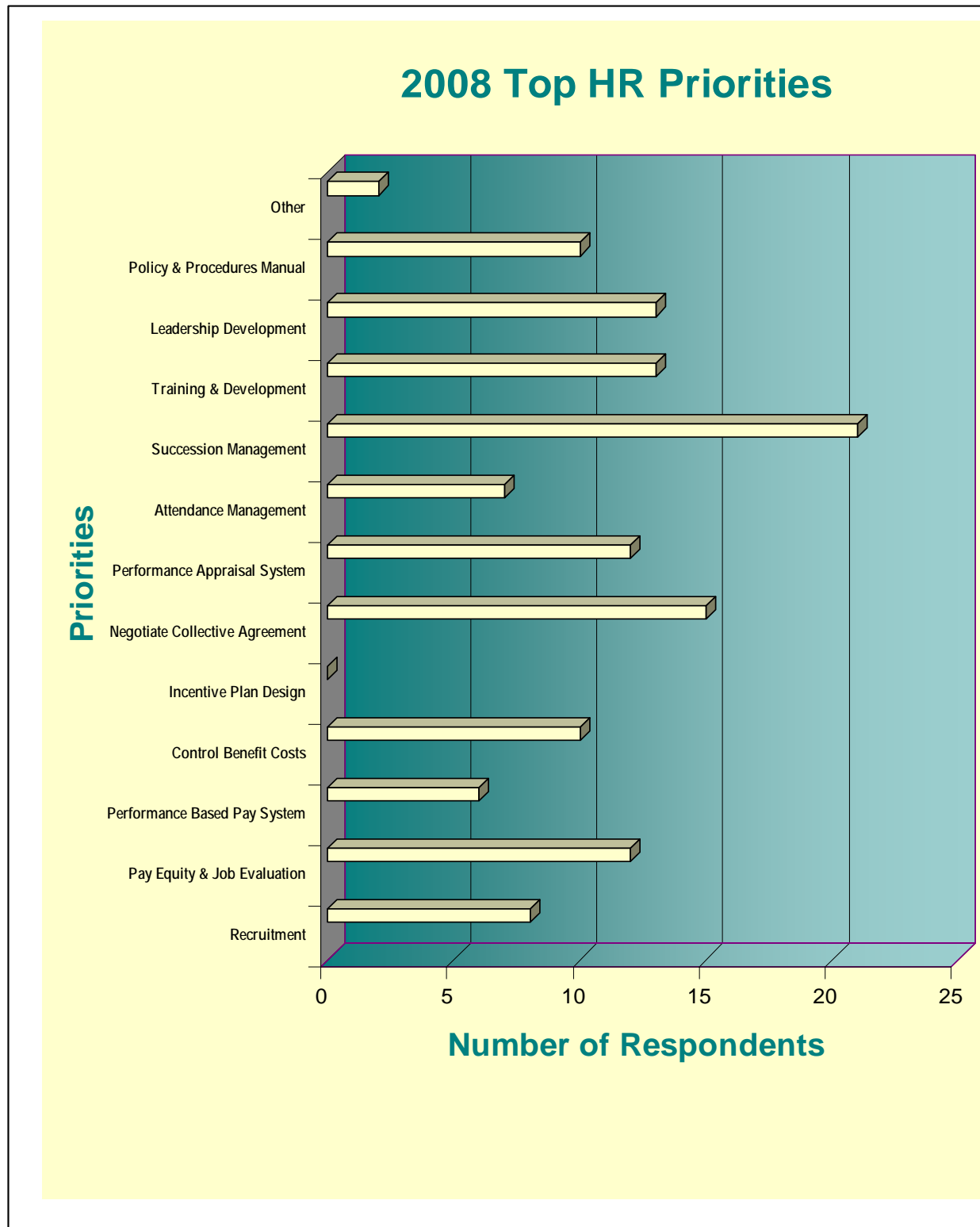
23 LDCs indicated that they plan on adjusting their 2008 salary structure by an average increase of 3%. The median projected increase for 2008 is estimated to be 3%.

Table 28: Type of Variable Pay Plan by Employee Category:

	Bonus	Individual Incentive	Team-based Incentive	Profit Sharing	Gainsharing	Other	N/A
CEO/Pres	12	12	1				
Executive	9	11	2				
MM	9	9	1	1			
Prof.	8	8		1			
Admin	7	9		1			

Top HR Priorities – 2008

The top 3 priorities indicated for 2008 are 1) Succession Management; 2) Negotiations; 3) Leadership Development.



Appendix:

MEARIE Management Salary Survey – Position Profiles 2007/2008

The following is the 2007-2008 listing of benchmark positions for the survey. Please use them to guide you in identifying job matches.

Please note:

- ❖ Match your jobs to the survey jobs based on content, rather than job title
- ❖ Recognize that your incumbent need not perform all of the functions described in the survey job profile in order to have a valid job match. If 80% of job responsibilities are the same, then you likely have a good match. If not, another job match may be more appropriate or there may not be a good match in this survey.
- ❖ The survey has not been designed to cover every possible job in your organization - the selected jobs are intended to be benchmarks, so please treat them accordingly. Generally, if you match between 40 to 50 percent of your key jobs to external data, you will be able to compare your salary structure based on the information.

President/CEO or General Manager

Directs the development of short and long term strategic plans, operational objectives, policies, budgets and operating plans for the organization, as approved by the Board of Directors. Establishes an organization hierarchy and delegates limits of authority to subordinate executives regarding policies, contractual commitments, expenditures and human resource matters. Represents the organization to the financial community, industry groups, government and regulatory agencies and the general public.

Vice President Operations & Engineering or Chief Operating Officer

Reporting to the President/CEO, directs both the operations and engineering functions. Formulates and implements plans, budgets, policies and procedures to facilitate and improve processes. Establishes clear controls, objectives and measures to ensure safe and appropriate delivery of power and power related services. Evaluates the feasibility of new or revised systems or procedures and oversees operations and engineering to ensure compliance with established standards.

Director or Vice President Operations

Reporting to the President/CEO, plans and directs all operations functions (no engineering responsibility), of the utility. Formulates and implements plans, policies and procedures to facilitate and improve processes and establishes clear controls, objectives and measures to ensure safe and appropriate delivery of services and clarity of roles and responsibilities. Evaluates the feasibility of new or revised systems or procedures and oversees operations to ensure compliance with established standards.

Director or Vice President Engineering

Plans and directs the overall engineering activities and engineering staff of the organization. Coordinates the creation, development, design and improvement of the organization's projects and products in conformance with established programs and objectives. Oversees plans, resources and budgets of the department aligned with business strategy.

Engineering Manager

Supervises and directs the work of an engineering division such as distribution, line design, transmission planning, distribution planning and/or civil engineering. Responsible for engineering work involving a wide scope of assignments. Handles personnel coordination and issues of the division, prepares estimates, specifications and designs, including the supervision, planning and scheduling of work within the division – Requires a P.Eng.

Distribution Engineer

Supervises engineering technicians or service technicians. Directs and coordinates the activities, schedules and projects of the construction and maintenance group of those involved with the distribution of electrical power from transformer substations, construction and maintenance of distribution systems. Consults with other department management on plant design, construction and maintenance. Prepares monthly operating reports, budget estimates, and work and materials specifications. Reviews and approves material requisitions, work authorizations and drawings for facilities. Requires a P.Eng. Typically reports to the Engineering Manager.

Project Engineer

Supervises, directs and resolves issues of the work of the engineering design group consisting of technicians and draftsmen. Responsible for the design of individual electrical engineering and civil engineering projects within the utility in accordance with established criteria. May also be assigned the development of new standards or research of new equipment for implementation in the utility subject to approval by higher authority. Prepares estimates, specifications and designs. Requires a P.Eng. May exist in organizations without a Distribution Engineer. Typically reports to an Engineering Manager.

Engineering Supervisor

Supervises a small technical work group which may include draftspersons and/or engineering technicians. Coordinates the development and maintenance of engineering and construction standards and systems (GIS, AM/FM, CAD). Organizes, stores and maintains the integrity of hard copy file records, digital formats and mapping standards. Normally requires a C.E.T. or A.Sc. T. Typically reports to a professional engineer.

Operations Manager or Superintendent

Supervises, co-ordinates, directs, schedules and controls the construction, maintenance and personnel of the division, including budgets, transportation, equipment and material requirements and fleet management. Division responsibilities include construction, maintenance and repair of all overhead transmission, overhead and underground distribution and may include coordination of tree trimming for geographical area assigned to the division. In smaller utilities, a professional

engineer may fill this role. In larger utilities, this function may be split into separate sections, each with a non-professional superintendent reporting to a Professional Engineer. Typical reports to VP Engineering and/or VP Operations.

Control Centre Supervisor

Directs and supervises control centre technical staff. Provides planning and coordination of control centre scheduling and maintenance required for the safe, reliable operation and control of the distribution system, including the authorization of the operation of system devices, equipment and control access to electrical plant and substations. Approves and coordinates system outages and switching as required for maintenance and system reliability. Oversees power interruptions and emergencies with dispatch staff to affect corrective measures for isolation, emergency repairs and restoration purposes. Monitors feeder load profiles.

Meter Shop Supervisor

Responsible for overall operation of the Meter department, including operations, budgeting and direction and supervision of meter technicians or other operations staff. Assigns, monitors and inspects the daily work and productivity of the staff in metering operations to ensure timely delivery of services, maintenance of equipment and identification of issues. Develops work plans for the department that include supervising meter re-verification, new meter installs, record maintenance and monitoring of meter maintenance, damage, reporting and theft issues. Ensures compliance with technical standards for equipment. . Responsible for electronic meter programming and interaction with/operation of an MV90 or similar data collection system.

Line Supervisor

Coordinates and directs the Field Supervisor/s or lead journey person in the construction and maintenance of transmission and distribution lines and equipment. Works with Field Supervisors or lead journey person to develop plans and schedules required in directing and assigning a crew or crews of skilled trade staff in performing construction, maintenance and operation of the power transmission and distribution system lines in a safe and efficient manner. Supervises and coordinates subcontractors engaged in planning and executing work procedures, interpreting specifications and managing construction.

Fleet Maintenance Supervisor

Plans, recommends and prepares specifications for vehicle replacement purchases. Supervises and coordinates garage equipment and vehicle maintenance, approves vehicles for road use and hydraulic equipment for line construction use, approves unplanned vehicle maintenance. Responsible for obtaining vehicle permits and insurance cards, maintenance of data input to costing systems, maintenance of garage inventory and gasoline supply. Processes accident reports.

Purchasing or Procurement Manager

Responsible for all purchasing for all areas of the utility. Negotiates vendor agreements and manages the tender process. May also be responsible for stores and inventory control in the warehouse. Supervises and directs the work of the purchasing or buyers and stores personnel.

Stores/Inventory Control Supervisor

Supervises inventory control, records and stores operation. Orders material to maintain on-hand quantities with purchasing manager/buyer approval. Responsible for testing safety equipment, i.e., hoses, blankets, gloves, etc., small tool and equipment repair and reconditioning. Assists purchasing department in the sale of obsolete equipment and material.

Executive Assistant to President/CEO

Performs advanced, diversified and confidential administrative duties requiring broad knowledge of organizational policies and practices. Initiates and prepares correspondence, reports, either routine or non-routine. Screens telephone calls and visitors and resolves routine and complex inquiries. Schedules appointments, meetings and travel itineraries. In some cases, may have responsibility for routine HR and administrative services. Records, prepares and distributes minutes of meetings, including Board of Director minutes. Reports to the President/CEO/General Manager and may provide support to other executives.

Administrative Assistant

Performs advanced, diversified and confidential administrative duties for executives and/ or senior management, requiring broad and comprehensive experience and knowledge of organizational policies and practices. Prepares correspondence, reports, either routine or non-routine. Screens telephone calls and visitors and resolves routine and complex inquiries. Schedules appointments, meetings and travel itineraries. This is a non-union position and reports to a senior executive or executive team.

Director or VP Finance or CFO

Highest ranking financially-oriented position within the company. Reporting to the President/CEO, this strategic role plans directs and controls the organization's overall financial plans, policies and accounting practices and relationships with lending institutions, shareholders and the financial community in mid to large organizations. Provides advice and guidance for the Board of Directors on financial matters. May direct such functions as finance, general accounting, tax, payroll, customer billing, regulatory affairs, and information systems and may be responsible for Administration functions. Normally possesses a CA, CMA or CGA designation.

Controller or Manager, Finance

Responsible for all financial reporting and record keeping functions. Directs the establishment and maintenance of the organization's accounting and finance principles, practices and procedures for the maintenance of its fiscal records and the preparation of its financial reports. Directs general and property accounting, cost accounting and budgetary control. Appraises operating results in terms of costs, budgets, operating policies, trends and increased profit opportunities. May be the most senior financial position in a small to mid-size corporation or reporting to a Director/VP Finance in a mid to large corporation.

General Accounting Manager

Manages the general accounting functions and the preparation of reports and statistics reflecting earnings, profits, cash balances and other financial results. Formulates and administers approved

accounting practices throughout the organization to ensure that financial and operating reports accurately reflect the condition of the business and provide reliable information. Generally reports to the Controller or CFO.

Accounting (A/R, A/P) Supervisor

Coordinates activities of the payable/receivable clerks. Supervises accounts payable and receivable transactions, entries and trial balances; responsible for the accuracy of all journal entries and reconciliation of invoices; updates credit department on account status.

Director/VP Customer Service

Provides direction for all departmental activities, services and practices, including customer care/call centre, billing, credit and collections. Accountable for the development, implementation and integration of all customer service related activities to achieve a competitive advantage through customer driven initiatives and strategies. Directs and oversees the implementation of customer service standards, policies and procedures; manages and coordinates budgets; manages activities of CS managers and/or supervisory staff for mid to large size organizations.

Manager Customer Service

Manages a team of customer service representatives in providing information, receiving and responding to customer inquiries, complaint or requests. Develops and maintains customer information systems, processes and procedures including billing, credit, deposits and collections. Liaises with representatives of other organizations and customer groups to share information and resolve administrative, organizational and technical problems. Responds to elevated customer complaints. This function may also be responsible for coordinating meter installation/maintenance, residential electric service connections, and service calls in a medium size organization.

Customer Service Supervisor

Supervises customer service representatives and coordinates customer service programs within the framework of established customer service policies. Schedules and organizes staff to accommodate anticipated work-flow from bill enquiries, delinquent accounts, re-connections and disconnections, customer deposits, etc. Recommends corrective steps to address customer issues and refers unique issues to manager for response.

Payroll Supervisor or Manager

Prepares or coordinates the payroll preparation and input of wage and deduction calculations; responsible for reviewing payroll and tax reports, maintaining benefit accruals and preparing pertinent journal entries. May perform Human Resources and benefits administration related duties. May supervise activities of payroll clerks.

Financial or Business Analyst

Conducts analysis of information for budgeting, investment and financial forecasts; applies principles of accounting to analyze past and present financial operations; estimates future revenues and expenditures; prepares budgets; develops and maintains budgeting systems;

Process and prepares business transactions and reports, reconciles ledgers and sub-ledgers, cash flow projections, entry of source documents.

Director or V.P., Regulatory Affairs

Represents the organization on quality and regulatory matters before government agencies and conformity assessment bodies including providing of evidence, regulatory filings, supporting analyses, position papers, interrogatory responses, etc. Keeps abreast of on-going developments in regulatory practices affecting electrical distribution utilities. Ensures that regulatory information is disseminated throughout the organization in a timely and effective manner. Is responsible for the filing of written communications and regulatory submissions to government agencies (OEB) and conformity assessment bodies (IMO). Generally reports to President or Sr. Executive in large organization.

Manager, Regulatory Affairs

Manages the organization's regulatory programs and activities to ensure compliance. Assists the President on quality and regulatory matters before government agencies, providing research and analyses. Ensures that regulatory information is disseminated throughout the organization in a timely and effective manner. Co-ordinates the filing of written communications and regulatory submissions to government agencies (OEB) and conformity assessment bodies (IMO). Generally reports to the President in a small to mid-size organization.

Settlement/Rate Analyst

Responsible for recording, creating, analyzing, processing and reconciling metering data. Operates and administers an MV-90 or similar data collection system, downloading, validating, editing, estimating and processing interval meter-related information. Has in-depth understanding of commercial billing practices, the IMO and the OEB's Retail Settlement Code. Analyses rates using rate sensitivity models and develops appropriate rate structures, using the specific models. Participates in the development of policies.

Information Systems Director or V.P.

Accountable for operations and alignment of the Information and Telecommunication Systems with the business in terms of mission, vision and the strategic imperatives. Ensures that existing needs and future demands of internal and external customers are met through a cost effective and efficient information and telecommunication infrastructure. Oversees IS management in areas of computer operations, systems planning, design, programming and telecommunications. Reviews and evaluates project feasibility and needs based upon management's and business requirements and priorities. Develops departmental plans, strategy, budgets and resource requirements. Typically reports to President or CFO in a mid to large size organization.

Information Systems Manager

Manages and directs staff in areas of computer operations, systems planning, design, programming and telecommunications. Develops and maintains systems standards and procedures and assigns work to department staff. Reviews and evaluates project feasibility and needs based upon management's and business requirements and priorities. Develops departmental

plans, project plans, budgets and resource requirements. Typically reports to Director of Finance in a small to mid-sized organization.

Information Systems Supervisor/Computer Operations Supervisor

Supervises employees who monitor and control computer equipment and data processing. Schedules all production runs including processing of bills, updating inventory system, meter record and all other data processing applications. Maintains hardware and troubleshoots when necessary. May report to a Director/VP, Information Systems.

Systems Administrator or Applications/Systems Support Professional

Responsible for maintenance of software systems including system analysis, programming and design, updates and changes. Makes preliminary study of new applications and recommendations to implement them, including hardware and software. Troubleshoots and corrects problems in existing programs, other than normal problems, usually caused by changes of software or hardware. Typically reports to the Director or V.P. Information Systems or V.P Finance.

Human Resources Director or VP

Provides support and alignment of organization-wide Human Resources practices and systems with the business in terms of mission, vision and the strategic imperatives. Ensures that existing needs and future demands of internal customers are met through a cost effective and efficient HR services. Directs HR management and staff in the development and implementation of Human Resources strategy, policies and programs covering employment, negotiations & labour relations, training, compensation, organization development, performance management, benefits and may include health & safety. Provides coaching and counsel to the executive and Board of Directors. Generally reports to the President of a mid to large size organization.

Human Resources Manager

Develops and implements human resources programs, including compensation, benefits, recruitment, performance management, labour relations/negotiations, training and development, assists in policy development, HR planning, record keeping or payroll etc. May supervise a team of HR professionals or support staff. May be the most senior HR professional in a small to mid-size organization or report to the top HR professional in a large organization.

Human Resources Generalist/Officer

Assists in the development and implementation of human resources policies and programs by providing support and guidance to managers and employees in the areas of compensation, labour relations, employee relations, performance management, benefits, recruitment, training and HRIS systems. May assist in the preparation of negotiations. Reports to HR Manager or Senior Executive.

Human Resources Assistant/Coordinator

Provides administrative support to one or more functional areas of HR. Processes, coordinates and enters into a HRIS or other system, a variety of documents including employment applications, benefits, compensation and payroll changes and confidential employee information. Responds to

routine employment questions and distributes and maintains manuals and employee program communications. Reports to HR Manager/Director/V.P.

Manager, Health & Safety/Loss Control

Accountable for the development and implementation of occupational health, safety and environmental programs, including training, maintenance of safe working conditions, investigation and reporting of workplace accidents. Also identifies areas of potential risk and makes recommendations to reduce or eliminate potential accident or health hazards in compliance with government regulations.

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The MEARIE Group
3700 Steeles Ave West
Suite 1100
Vaughan, Ontario
L4L 8K8



March 12, 2007

Robert Mace
President
Thunder Bay Hydro

Dear Robert,

As requested, we have provided a consolidated analysis of the base salary and incentive data for the following compensation groupings:

- Customer Size 40,001 – 80,000 excluding Thunder Bay
- Gross Revenue \$50,000,001 - \$100,000,000 excluding Thunder Bay, and
- Employee size 101 to 170 excluding Thunder Bay

The data was gathered from the 2006/2007 MEARIE Management Salary Survey, which our company was responsible for producing.

While this year's report indicates a number of utilities have added incentive programs for some management, in general, the number of reporting utilities remains quite low. Where asterisks have been added indicates that there is insufficient data or certain programs or positions do not exist. Please feel free to contact me should you have any questions regarding the data provided.

Sincerely,
Cyr & Associates Inc.

Annette Cyr
Principal

Participant List (Alphabetical Order)

Local Distribution Company	Customer Size	Employee Base
Barrie Hydro Distribution	66,300	112
Bluewater Power Distribution Corporation	35,031	88
Burlington Hydro Inc.	60,098	89
Chatham-Kent Energy Inc.	39,000	80
City of Brantford (Brantford Power Inc.)	36,000	67
Festival Hydro Inc.	18,500	45
Greater Sudbury Utilities	44,000	97
Guelph Hydro Electric Systems Inc	41,400	92
Kitchener-Wilmot Hydro Inc.	80,258	169
Milton Hydro Distribution inc	20,259	36
Niagara Falls Hydro Inc.	33,000	76
North Bay Hydro	23,000	41
Oshawa PUC Networks Inc.	50,000	80
Peterborough Utilities	35,000	156
PUC Services Inc.	32,500	141
Veridian Corporation	105,891	159
Waterloo North Hydro Inc.	48,100	107
Whitby Hydro Electric Corporation	36,933	60

The above-noted utilities have been used in the preparation of this custom report. Different utilities fall into different categories or may fall into all categories depending on revenue, customer base or employee base

To preserve the confidentiality of data supplied by participating organizations, compensation data is reported only where a minimum of three organizations and three incumbents are included in the sample. Compensation medians, P25 and P75 for actual salaries are reported only where there is a minimum of four organizations and four incumbents included in the data.

# of Companies	The actual number of companies reporting information for the position.
# of Incumbents	The actual number of incumbents in the role .
Average Range Maximum	The average maximum rate of the <u>salary ranges</u> for all respondents.
Average Range Minimum	The average minimum rate of the <u>salary ranges</u> for all respondents.
Bonus	An after-the-fact reward or payment based on the performance of an individual, a group of workers operating as a unit, a division or an entire work force.
Executive	The group of individuals who head major operating functions of the organization and typically report to the President/CEO.
Gainsharing	A bonus plan aimed at improving productivity or costs through improved work methods.
Gross Revenues	Total revenues from inflow of assets, including revenues from sales of products or services.
Average Incentive Maximum%	The maximum annual cash incentive for the job as a percentage of base salary.
Average Incentive Target %	The target annual cash incentive for the job as a percentage of base salary.
Individual Incentive	Any form of variable payment tied to performance. The payment is a monetary award. Incentives are contrasted with bonuses in that performance goals for incentives are predetermined.
Mean (Average Actual)	The sum of the <u>actual average salary</u> reported divided by the number of respondents.
Median (Median of the actual salaries reported).	Median is the middle rate when data are arranged in order and there is an odd number of observations (i.e. 3, 5, 7 etc.). It is the mean of the two middle observations when the data is arranged in order for even number observations (2, 10 etc.); most compensation professionals prefer to make comparisons on this basis since it is less easily influenced by extreme values.
Middle Management	The group of managers and/or professionals directly reporting to the Executive.
P25 (25th percentile of actual salaries reported)	25 th Percentile (1 st Quartile) – The rate within the sample of <u>actual reported base salaries</u> which is higher than 25% of all rates reported.
P75 (75th percentile of actual salaries reported)	75 th Percentile (3 rd Quartile) – The rate within the sample of <u>actual reported base salaries</u> which is higher than 75% of all rates reported.
Profit Sharing	An automatic fixed percentage of total profits or of profits above a certain threshold awarded to employees strictly on the performance of the entire organization.
Team Based Incentive	A specified project or operational team may receive an incentive based upon results, deliverables or an increase in productivity.
Variable Pay	Compensation that is contingent on discretion, performance or results achieved. It may be referred to as pay at risk.

Table 1: Customer Size 40,001 – 80,000 Excluding Thunder Bay

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
President/CEO/GM	6	6	111,971	155,281	147,370	142,000	151,400	148,835	11	15
V.P. Operations & Engineering/COO	4	4	90,839	126,546	120,407	118,247	123,365	122,004		
Director/V.P. Operations	4	4	82,958	114,435	102,247	99,695	103,943	101,391	6	9
Director/V.P. Engineering										
Engineering Manager	4	4	72,286	93,659	85,664	78,606	92,051	84,321		
Distribution Engineer										
Project Engineer	3	3	63,733	83,838	72,645	68,540	76,428	72,000		
Engineering Supervisor	4	4	66,538	81,616	76,921	74,681	78,110	75,870		
Operations Manager or Superintendent	4	4	70,416	98,098	86,939	85,145	87,841	86,048		
Control Centre Supervisor	4	4	63,192	85,853	75,991	74,638	77,256	75,816		
Meter Shop Supervisor	5	5	63,777	81,483	74,422	73,460	75,190	74,968	5	7
Line Supervisor	6	17	64,345	81,901	75,335	74,360	75,775	74,968	5	7
Fleet Maintenance Supervisor										
Purchasing/Procurement Manager	5	5	59,969	80,528	75,319	73,460	74,968	73,632	5	7
Stores/Inventory Control Supervisor										
Executive Assistant (to President)	6	6	46,178	60,635	58,671	57,850	59,001	58,995	5	5
Administrative Assistant	4	7	43,645	56,220	51,472	50,469	52,593	51,708		
Director/VP Finance/CFO	6	6	93,257	123,262	122,558	120,016	124,726	122,004	9	12
Controller/Manager Finance	4	4	69,184	92,148	91,607	88,823	93,942	90,710		
General Accounting Manager	3	3	66,259	90,016	76,964					
Accounting Supervisor	3	3	58,405	75,610	69,524					
Director/VP Customer Service										
Manager Customer Service	4	4	66,786	83,665	74,877	66,961	81,287	71,864		
Customer Service Supervisor										

Table 1: Customer Size 40,001 – 80,000 Excluding Thunder Bay

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
Payroll Supervisor/Manager										
Financial/Business Analyst	3	3	51,585	65,847	58,832					
Director/VP Regulatory Affairs										
Manager, Regulatory Affairs										
Settlement/Rate Analyst										
I.S. Director/VP	4	4	81,801	113,137	99,514					
I.S. Manager										
I.S. Supervisor/Computer Operations										
Systems Administrator/Apps Support	3	3	56,341	75,913	64,135					
Human Resources Director/VP										
Human Resources Manager										
Human Resources Generalist/Officer	3	3	52,972	68,109	60,308					
Human Resources Assistant/Coord.										
Manager Health & Safety/Loss Control	6	7	63,756	84,567	77,307	74,968	79,015	76,920	5	7

Table 2: Gross Revenue Grouping \$50,000,001 - \$100,000,000 Excluding Thunder Bay

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
President/CEO/GM	8	8	111,809	141,260	130,111	117,549	136,189	128,000	17	20
V.P. Operations & Engineering/COO	7	7	90,024	110,850	109,350	105,398	109,444	106,593		
Director/V.P. Operations	4	4	81,093	111,050	99,573	92,672	104,400	97,500		
Director/V.P. Engineering										
Engineering Manager	6	6	72,738	89,909	87,817	85,689	89,801	86,660		
Distribution Engineer										
Project Engineer										
Engineering Supervisor	3	3	69,080	88,936	79,264					
Operations Manager or Superintendent	4	5	67,672	81,960	79,573	76,550	83,828	80,806		
Control Centre Supervisor										
Meter Shop Supervisor										
Line Supervisor	8	16	60,935	75,297	73,635	72,545	75,200	73,950	4	5
Fleet Maintenance Supervisor										
Purchasing/Procurement Manager	4	4	57,518	74,556	69,243	63,669	74,214	68,640		
Stores/Inventory Control Supervisor										
Executive Assistant (to President)	7	7	44,697	57,516	54,983	51,903	57,093	55,667		
Administrative Assistant	6	8	38,984	48,978	48,862	46,385	51,971	49,686		
Director/VP Finance/CFO	8	8	84,159	106,722	103,446	95,565	109,258	104,100		
Controller/Manager Finance	3	3	68,254	93,110	89,274					
General Accounting Manager	5	5	55,341	72,166	69,902	68,922	72,843	70,000		
Accounting Supervisor										
Director/VP Customer Service	3	3	76,316	100,892	94,887					

Table 2: Gross Revenue Grouping \$50,000,001 - \$100,000,000 Excluding Thunder Bay

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
Manager Customer Service	8	8	63,155	80,734	74,780	67,389	82,564	73,138	4	5
Customer Service Supervisor	5	5	55,322	65,900	64,129	60,254	67,220	61,558		
Payroll Supervisor/Manager										
Financial/Business Analyst	4	4	52,344	68,925	64,439	61,047	68,374	64,983		
Director/VP Regulatory Affairs										
Manager, Regulatory Affairs	3	3	58,007	73,272						
Settlement/Rate Analyst	4	5	53,316	68,896	65,397	63,734	67,186	65,523		
I.S. Director/VP										
I.S. Manager										
I.S. Supervisor/Computer Operations										
Systems Administrator/Apps Support	3	3	52,398	70,420	67,892					
Human Resources Director/VP	3	3	67,443	87,140	75,910					
Human Resources Manager										
Human Resources Generalist/Officer										
Human Resources Assistant/Coord.		3	45,353	61,550	55,880					
Manager Health & Safety/Loss Control	4	4	65,006	79,546	77,323					

Table 3: Employee Base 101 to 170 Employees Excluding Thunder Bay

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
President/CEO/GM	5	5	135,394	163,342	152,459	142,000	150,000	148,835	20	20
V.P. Operations & Engineering/COO	4	4	106,580	131,962	129,916	123,067	132,557	125,709	13	13
Director/V.P. Operations										
Director/V.P. Engineering										
Engineering Manager	5	5	77,823	95,890	92,940	93,081	99,781	98,400	8	8
Distribution Engineer	3	3	69,866	89,386	83,792					
Project Engineer										
Engineering Supervisor	3	3	64,444	78,418	76,441					
Operations Manager or Superintendent	4	5	72,527	87,626	82,946	82,222	85,483	84,759		
Control Centre Supervisor	3	3	69,023	78,060	78,060					
Meter Shop Supervisor	5	5	64,732	75,717	74,058	73,379	74,968	73,460		
Line Supervisor	6	25	63,035	75,374	73,890	73,274	74,714	73,705	8	8
Fleet Maintenance Supervisor										
Purchasing/Procurement Manager	6	6	63,428	77,901	77,058	73,837	79,651	76,660	8	8
Stores/Inventory Control Supervisor										
Executive Assistant (to President)	6	6	49,617	60,788	59,804	57,247	62,330	60,349	7	7
Administrative Assistant	5	11	44,084	53,105	52,222	50,560	52,596	51,708	7	7
Director/VP Finance/CFO	5	5	104,399	128,257	128,257	114,030	139,257	124,726	13	13
Controller/Manager Finance	3	3	68,792	88,033	86,712					
General Accounting Manager										
Accounting Supervisor	4	5	59,863	71,374	70,325	68,499	71,793	69,967		
Director/VP Customer Service										
Manager Customer Service	4	4	69,405	88,289	87,112	86,218	90,150	89,256		

Table 3: Employee Base 101 to 170 Employees Excluding Thunder Bay

Position	# of Companies	# of Incumbents	Average Range Minimum	Average Range Maximum	Mean (Average Actual)	P25	P75	Median	Average Incentive Target%	Average Incentive Maximum%
Customer Service Supervisor	5	9	59,564	71,694	69,127	65,379	73,460	65,902		
Payroll Supervisor/Manager										
Financial/Business Analyst										
Director/VP Regulatory Affairs										
Manager, Regulatory Affairs	3	3	74,350	89,619	86,755					
Settlement/Rate Analyst										
I.S. Director/VP	4	4	84,824	102,871	100,064	92,841	103,323	96,100		
I.S. Manager										
I.S. Supervisor/Computer Operations	3	3	60,632	74,935	72,666					
Systems Administrator/Apps Support										
Human Resources Director/VP										
Human Resources Manager										
Human Resources Generalist/Officer										
Human Resources Assistant/Coord.										
Manager Health & Safety/Loss Control	5	5	63,593	76,281	74,473	74,968	76,920	76,222		