

IN THE MATTER OF the *Ontario Energy Board Act, 1998*, S.O. 1998, c. 15, Sched. B, as amended (the “Act”);

AND IN THE MATTER OF an Application by Thunder Bay Hydro Electricity Distribution Inc. under Section 78 of the Act for an order approving just and reasonable rates and other charges for electricity distribution to be effective May 1, 2017.

**ARGUMENT IN-CHIEF OF
THUNDER BAY HYDRO ELECTRICITY DISTRIBUTION INC.**

July 5, 2017

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INTRODUCTION:

1. Thunder Bay Hydro Electricity Distribution Inc. (“**Thunder Bay Hydro**”) makes this written argument-in-chief in respect of an Application filed by Thunder Bay Hydro on September 9, 2016 under Section 78 of the *Ontario Energy Board Act, 1998* seeking an order of the Ontario Energy Board (the “**OEB**”) approving just and reasonable rates and other charges for electricity distribution to be effective May 1, 2017 (the “**Application**”). The Board assigned file number EB-2016-0105 to the Application.
2. The Application was prepared with a focus on the Report of the Board titled *Renewed Regulatory Framework for Electricity Distributors: A Performance-Based Approach* dated October 18, 2012 (the “**RRFE**”), including a focus on:
 - a. understanding customer feedback and responding to customer preferences;¹
 - b. operational effectiveness and continuous improvement;²
 - c. public policy responsiveness and delivering on obligations mandated by government and the OEB;³ and
 - d. maintaining financial viability and showing sustainable savings from operational effectiveness initiatives.⁴
3. On May 4, 2017, the OEB issued its decision approving the revised settlement proposal filed by Thunder Bay Hydro on April 27, 2017 (the “**Settlement Proposal**”). The Settlement Proposal reflected a partial settlement of the issues in this proceeding. Following approval of the Settlement Proposal the OEB held an oral hearing on June 29 and 30, 2017 to hear evidence on the following key areas of disagreement:
 - a. Capital (Issues 1.1 and 2.1): The Parties are not in agreement that the Applicant’s proposed capital expenditures for the test year are appropriate.

¹ Exhibit 1 at pages 10-36, 37-51; Attachment 1-E; Attachment 1-G; Attachment 1-H; Attachment 1-J; Attachment 1-K; Exhibit 2, Attachment 2-B; Transcript Vol. 2 dated June 29, 2017 at page 12, line 7 to page 17 at line 5.

² Exhibit 1 at pages 10-36, 39-44; Attachment 1-E; Attachment 1-G; Exhibit 2, Attachment 2-B, Exhibit 4 at pages 22, 37; 1-Staff-9, 2-Staff-26; 1.0-SEC-9; Transcript Vol. 2 dated June 29, 2017 at page 13, line 8 to page 16 at line 4.

³ Exhibit 1 at pages 10-36, 53; Attachment 1-E; Transcript Vol. 2 dated June 29, 2017 at page 19, line 19 to page 20 at line 8.

⁴ Exhibit 1 at pages 10-36; Attachment 1-E, Exhibit 2, Attachment 2-B.

- b. OM&A (Issues 1.2 and 2.1): The Parties are not in agreement that the Applicant's proposed OM&A expenditures for the test year are appropriate.
 - c. Cost of Capital (Issue 2.1): The Parties are not in agreement that the Applicant's cost of capital for the test year is appropriate.
- 4. Other issues, such as depreciation and working capital, remain outstanding only because they are dependent on those three main unsettled issues. This Argument-in-Chief will address each of these three areas of disagreement in-turn, beginning with cost of capital.

COST OF CAPITAL (ISSUE 2.1)

The Parties are not in agreement that the Applicant's cost of capital for the test year is appropriate.

- 5. Thunder Bay Hydro's proposed cost of capital for the test year complies strictly with the Report of the Board on the *Cost of Capital for Ontario's Regulated Utilities* issued December 11, 2009 with Board File No. EB-2009-0084 (the "**2009 CoC Report**").
- 6. The Application utilizes the updated cost of capital parameters found in the OEB's letter dated October 27, 2016 titled Cost of Capital Parameter Updates for 2017 Applications. In addition, Thunder Bay Hydro updated its weighted average cost of debt to reflect the lower cost of debt achieved following the issuance of two new promissory notes in 2017 in Undertaking J3.5.
- 7. Thunder Bay Hydro submits that the lower weighted average cost of debt calculated in Undertaking J3.5 should be used to set rates for 2017 – because it reflects the best information available about Thunder Bay Hydro's actual cost of long-term debt.
- 8. The Board determined in its Decision on the Issues List dated February 10, 2017 that the question of whether or not Thunder Bay Hydro is in compliance with its shareholders' declaration is generally outside of the scope of this Application. Even if this question were in scope for the Application, there is a letter from the City of Thunder Bay dated February 7, 2017 (the "**City Letter**") on the evidentiary record in this proceeding confirming the shareholder's view that the Application is in compliance with the shareholder declaration

as it relates to cost of capital.

9. The City Letter explained the “**Rate Minimization Model**” governing Thunder Bay Hydro. The Rate Minimization Model is a shareholder philosophy of minimizing electricity rates for customers of Thunder Bay Hydro by having these rates reflect the shareholder foregoing its right to receive dividends, and to be paid for interest or principle on its long-term debt.⁵
10. The Rate Minimization Model makes Thunder Bay Hydro unique. Unlike the majority of other regulated utilities in the Province of Ontario, for Thunder Bay Hydro the interests of its shareholder and its customers are aligned – they both want lower rates.
11. By foregoing an entitlement to earn interest at the Board’s deemed long-term debt rate on its \$26,490,500 promissory note, approximately half of Thunder Bay Hydro’s total long-term debt is ascribed a 0% interest which significantly reduces Thunder Bay Hydro’s weighted average cost of debt and overall cost of capital.⁶ Thunder Bay Hydro’s deemed interest expense is \$1,213,660 lower than it otherwise would be if the City accepted the Board’s deemed long-term debt rate (3.72%). Ratepayers save \$1.2M per year, every year, as a result.
12. During the oral hearing, you heard from both Mr. Tim Wilson⁷ and Mr. Robert Mace⁸ about the important role the Rate Minimization Model plays in the organizational culture at Thunder Bay Hydro. Thunder Bay Hydro’s management takes rate minimization, achieving cost efficiencies and demonstrating sustainable cost savings seriously. This is not surprising – management is running the company in a way that is responsive to the aligned interests of its shareholder, its customers, and the OEB.
13. For these reasons, and as illustrated in Figure 1 below, in 2016 Thunder Bay Hydro had the 4th lowest monthly bill of any distributor in the Province of Ontario as calculated using the

⁵ Letter from the City of Thunder Bay dated February 7, 2017 Re: *Clarification concerning the Rate Minimization Model in the Shareholder Declaration governing Thunder Bay Hydro Corporation and its subsidiaries made as of May 18, 2011.*

⁶ Undertaking J3.5.

⁷⁷ Transcript Vol. 2 dated June 29, 2017 at page 13, line 8 to page 16 at line 4.

⁸ Transcript Vol. 2 dated June 29, 2017 at page 18, line 2 to line 26.

OEB's web based bill calculator for a typical residential customer.⁹ Even if the bill increase proposed in the Application is approved in full, Thunder Bay Hydro will still remain within the lowest quartile (25%) of monthly bills in the Province of Ontario.

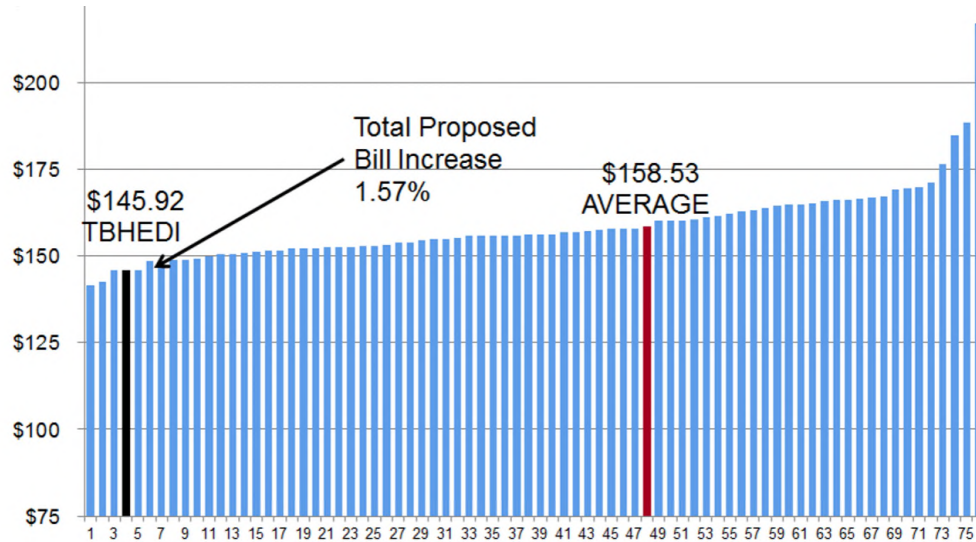


Figure 1: 2016 Thunder Bay Hydro Residential Bill Comparison Chart (1-Staff-3)

14. This is also reflected in Thunder Bay Hydro's historical Return on Equity performance, which is summarized in Table 1 below. ROE performance of each utility is carefully monitored by the OEB in its RRR reporting and is published by the OEB in its annual utility scorecard. It is a fundamental measure of the financial viability of utilities under the RRFE. ROE is derived from utility net income, which is a key measure of liquidity imposed by third party lenders as covenants in their debt instruments.
15. As shown in Table 1 below, since 2012 Thunder Bay Hydro has earned less than the OEB's maximum permitted ROE established using the 2009 CoC Report methodology. In addition, since 2013 Thunder Bay Hydro has earned less than the ROE included in rates. For each year since 2014, Thunder Bay Hydro has earned more than 300 basis points less than the OEB's maximum permitted ROE. Finally, in 2016 Thunder Bay Hydro has earned more than 700 basis points less than the OEB's maximum permitted ROE and more than 500

⁹ Response to 1-Staff-3 at pg. 14.

basis points less than the ROE that is currently included in rates.

Table 1: Thunder Bay Hydro's Historical Return on Equity ("ROE") Performance

	2012	2013	2014	2015	2016
Max. ROE Allowed by OEB	9.12%	8.98%	9.36%	9.30%	9.19%
ROE included in Rates	3.75%	7.00%	7.00%	7.00%	7.00%
ROE Achieved	7.74%	6.34%	5.99%	5.69%	1.4%
Difference	(1.38%)	(2.64%)	(3.37%)	(3.61%)	(7.79%)

16. This ROE performance is bottom-line, outcome based evidence that supports two concerns identified by Mr. Mace during the oral hearing.
17. First, to maintain the financial viability of Thunder Bay Hydro (i.e. to avoid being in breach of key financial covenants with third party lenders in the later years of the 4GIRM plan)¹⁰, the Board should approve the requested ROE in rates in the test year. Customers have benefited for years of reduced rates from a lower ROE. However, this is no longer financially sustainable for Thunder Bay Hydro going forward. EBITDA, which is linked to net income, is commonly used by third party lenders to as an important measure of liquidity for LDCs. Mandatory debt covenants such as a minimum interest coverage ratio and a minimum debt service coverage ratio are both commonly calculated based on EBITDA, which in turn is based on net income and ROE performance.
18. Second, the evidence supports the concern expressed by Mr. Mace that the IRM formula has not been keeping pace with certain incremental cost drivers being faced by Thunder Bay Hydro.¹¹ Despite Thunder Bay Hydro's focus on rate minimization, efficiencies and cost controls - the downloading of new and incremental responsibilities and new cost pressures are outpacing inflation in some areas of the business. Compounding the cost pressures is the

¹⁰ Transcript Vol. 3 dated June 30, 2017 at page 180, line 23 to page 181, line 15.

¹¹ Transcript Vol 2 dated June 29, 2017 at page 157, line 1 to page 157, line 27.

shortfall in distribution revenues that Thunder Bay Hydro has experienced. Cumulative distribution revenue shortfall from 2013 to the end of 2016 has been approximately \$1.1M. This mismatch between theory (formula) and reality has come to the detriment of Thunder Bay Hydro's bottom line performance. This, in-turn, puts the ongoing financial viability of the utility at risk. In this context, this Application represents an opportunity for the OEB to assess the evidence of costs and to properly re-align rates with costs. Thunder Bay Hydro will then, once again, have to manage within the confines of the IRM formula. But at least it will be doing so with a solid footing, that will not threaten the ongoing financial viability of Thunder Bay Hydro into the future.

CAPITAL (ISSUES 1.1 AND 2.1)

The Parties are not in agreement that the Applicant's proposed capital expenditures for the test year are appropriate.

19. Thunder Bay Hydro has proposed a 2017 capital expenditures of approximately \$12,526,000,¹² an increase of \$1,287,000 over actual total expenditures of \$11,239,000.¹³
20. Thunder Bay Hydro's proposed capital expenditures in the test year are supported by a comprehensive five (5) year Distribution System Plan (the "**DSP**")¹⁴ and a detailed Asset Condition Assessment prepared by Kinectrics, Inc. (the "**ACA**").¹⁵
21. Thunder Bay Hydro also retained Mr. Yury Tsimberg to review and opine on the Thunder Bay Hydro Distribution System Plan. Mr. Tsimberg's opinion evidence is set out in his Report titled *Independent Assessment Of Thunder Bay Hydro Electricity Distribution Inc. System Renewal Capital Requirements: Review Based on the Asset Condition Assessment Report by Kinectrics and Thunder Bay Hydro's Distribution System Plan* and dated May 11, 2017 (the "**Tsimberg Expert Report**"), his interrogatory responses on the Tsimberg Expert Report, and his testimony given during the oral hearing on June 29 and 30, 2017.

¹² 2-VECC-8.

¹³ Undertaking J2.1.

¹⁴ Exhibit 2 at Attachment 2-B.

¹⁵ Exhibit 2 at Attachment 2-B at Appendix C.

22. Mr. Tsimberg is the director of asset management with Kinectrics Inc. (“**Kinectrics**”), where he leads the asset management line of business. He is a widely recognized expert in asset management, with a bachelors and masters degree in electrical engineering from the University of Toronto from 1978 and 1987 respectively. His publication list includes an industry wide Asset Depreciation Study completed for the OEB in July of 2010, two CIGRE¹⁶ Technical Brochures covering asset management decision making and asset risk management published in 2013 and 2014, an IEEE paper on asset condition and remaining life published in 2014, and a CEATI¹⁷ report on integrating new technologies in asset management practices in 2016. In his role at Kinectrics, Mr. Tsimberg has successfully completed asset management projects for numerous clients, including several major utilities from across Canada and the United States. Prior to joining Kinectrics, Mr. Tsimberg worked in various engineering, asset management and regulatory functions at Hydro One. Mr. Tsimberg has taught asset management courses all over the world. Mr. Tsimberg is also a frequent speaker and presenter at various industry forums, such as IEEE, CIGRE, CEATI and EUCI. Mr. Tsimberg was a member of the international advisory panel revising Asset Management PAS 55 specifications developed by the British Institute of Asset Management and a member of the NERC committee developing North American planning standards. Finally, Mr. Tsimberg is the Canadian representative on CIGRE Study Committee SC1 “System Development and Economics” and a member of the committee’s asset management team as Asset Management Group Convener.
23. At the outset of the oral hearing on June 29, 2017, the OEB accepted Mr. Tsimberg as an independent expert in asset management and distribution system planning.¹⁸
24. As shown in Figure 2 below (taken from Table 5.4.5-5 of the DSP), Thunder Bay Hydro’s proposed test year capital expenditures are broken down into a prioritized list of material capital projects that fall within four categories – System Access, System Service, System Renewal and General Plant - in accordance with the OEB’s Ch. 5 Filing Requirements.

¹⁶ Founded in 1921, CIGRE is the Council on Large Electric Systems. It is an international non-profit association for promoting collaboration with experts from all around the world by sharing knowledge and joining forces to improve electric power systems of today and tomorrow.

¹⁷ CEATI, the Centre for Energy Advancement through Technological Innovation, is an organization driven by over 120 participating electric & gas utilities, government agencies, provincial and state research bodies.

¹⁸ Transcript Vol. 2 dated July 29, 2017 at page 10, line 15 to page 11, line 28.

Each of these material capital projects are supported by very detailed project summaries in Appendix J of the DSP. These project summaries, in turn, link back to Thunder Bay Hydro's asset management process detailed in Section 5.3 of the DSP and Thunder Bay Hydro's project prioritization methodology detailed at Section 5.4.2.3 of the DSP.

25. Thunder Bay Hydro witnesses confirmed during the oral hearing that if the OEB approved a lower capital expenditure than requested in the Application, Thunder Bay Hydro would cut projects starting with the lowest overall priority (Grid Modernization) and working up the priority list.¹⁹

¹⁹ Transcript Vol. 2 dated July 29, 2017 at page 33, line 11 to line 21.

OEB Category	Thunder Bay Hydro Project	Project Description	Total Expenditure	Driver	Priority Level	Overall Priority
System Access	A 01	PCB Transformer Replacements	\$118,655	Mandated Obligations	P3	8
	A 02	Customer Recoverable System Modifications	\$281,092	Customer Requests	P3	10
	A 11	Customer Driven System Expansions	\$209,034	Customer Requests	P3	5
	A 12	Residential Service Connections	\$445,213	Customer Requests	P3	6
	A 13	General Service Connections	\$926,898	Customer Requests	P3	7
	A 14	Expansions for Residential Subdivisions	\$230,530	Customer Requests	P3	4
	A 15	System Relocations	\$164,881	Third Party Requests	P3	9
	A 21	Meter Installations	\$286,129	Mandated Obligations	P3	11
System Renewal	A 16	Small Pole Replacements	\$342,512	OH Renewal	P2	3
	A 17	Lines Safety Reports	\$761,834	Safety	P2	1
	A 18	Transformer and Switch Replacements	\$756,484	Asset Failure Renewal	P2	2
	B11140	25kV Pole Replacements	\$584,384	OH Renewal	P4	12
	B12111	Black Bay-Dewe Voltage Conversion	\$1,174,112	OH Renewal	P4	14
	B12112	Dewe-Rita Voltage Conversion	\$1,489,302	OH Renewal	P4	15
	B1270	Cumming-Brodie Voltage Conversion	\$580,677	OH Renewal	P4	16
	B1277	Donald-Mountdale Voltage Conversion	\$310,256	OH Renewal	P4	13
	B1298	McDougall-Court Voltage Conversion	\$789,716	OH Renewal	P4	19
	B12135	Finlayson - Brodie Voltage Conversion	\$893,725	OH Renewal	P4	17
	B14129	Underground Replacements	\$376,868	UG Renewal	P4	18
System Service	A	Grid Modernization	\$230,375	Reliability	P5	21
General Plant	C	Fleet - Double Bucket Replacement	\$450,000	System Maintenance Support	P5	20

Table 5.4.5-5 2017 Material Capital Projects and Programs

Figure 2: Material Capital Projects and Programs (Table 5.4.5-5 of the DSP)

26. Starting with the lowest priority project first, Thunder Bay Hydro is seeking approval for a modest investment of \$230k for System Service expenditures in the test year and going forward.
27. This expenditure is more fully detailed in the Grid Modernization Plan found at Appendix D of the DSP (the “**Grid Modernization Plan**”). The money will be utilized to install smart reclosers on the distribution system, as one example, to reduce outages and increase

reliability for affected customers.

28. As was detailed by Mr. Wilson, the Grid Modernization Plan was tailored in direct response to customer feedback and preferences.²⁰ Specifically, during its one-on-one phone interviews with residential, small business and large commercial and industrial customers, Thunder Bay Hydro learned that reliability was a bigger concern for larger commercial and industrial customers and it was less of a concern for residential customers. Thunder Bay Hydro took this feedback, and proposed a scaled back proposal for grid modernization. Rather than installing smart reclosers across the entire Thunder Bay Hydro service area, the Grid Modernization Plan targets only those areas of its system where large commercial and industrial customers are located – those customers who demonstrated their preferences for more reliable service.
29. The second lowest priority program identified in Figure 2 is the Fleet - Double Bucket Truck replacement of \$450k in the test year, which is broken down into two distinct projects in Appendix J of the DSP. The first is a \$325k expenditure for the completion of the purchase of a boom and body for a double bucket truck whose cab and chassis were expensed in 2016 (as a replacement for truck #5, a 2002 double bucket) and the second is a \$125k expenditure for the initial purchase of the cab and chassis portion of a new double bucket truck (a replacement for truck #3, a 2001 double bucket). The boom and body of the second double bucket truck will be expensed in 2018. The replacement of both of these double bucket trucks is required pursuant to Thunder Bay Hydro's *Fleet Plan* found at Appendix E of the DSP.
30. These are the only two projects that met the materiality threshold within Thunder Bay Hydro's proposed General Plant expenditures of \$1.253M in the test year. Thunder Bay Hydro's proposed General Plant expenditures in the test year are less than was actually spent in both 2015 and 2016.²¹ The amount is generally consistent with other years, reflecting a levelized approach to making general plant investments including fleet replacements, IT equipment and software, and tools and equipment.
31. The next eight (8) projects from lowest to higher priority fall into the System Renewal

²⁰ Transcript Vol. 2 dated June 29, 2017 at page 12, lines 13-28.

²¹ 2-VECC-8 and Undertaking J2.1.

category of expenditures. Thunder Bay Hydro is seeking approval for a 2017 System Renewal budget of \$8.380M, which represents a measured increase of \$1.2M over 2016 system renewal spending. This increase in System Renewal spending is partially offset by the \$283k reduction in expenditures in the General Plant category from 2016 levels, as described above. In addition, Thunder Bay Hydro's prioritization process reflects the importance the utility places on achieving a sustainable level of System Renewal spending. If required by the OEB, Thunder Bay Hydro will defer needed General Plant spending rather than sacrifice System Renewal that is needed for the long-term health and sustainability of the system.

32. As Mr. Mace explained during examination-in-chief, the proposed increase in System Renewal spending is the most recent installment in a long-term, measured and paced plan to increase System Renewal spending gradually to achieve an appropriate and sustainable level for Thunder Bay Hydro which began back in 2008.²² At this time, Thunder Bay Hydro identified that System Renewal spending was far too low. Every year, the average age of the assets in the system were getting older and the average condition of the asset base was getting worse. Thunder Bay Hydro has been gradually increasing its System Renewal expenditures since this date. The increase trend has not been linear, there have been some bumps along the way. For example, in 2013 when General Plant expenditures were increased to address certain one-off needs, System Renewal spending was scaled back for that year. However, the pacing of System Renewal increases resumed again in 2014.
33. Thunder Bay Hydro has historically spent at these increasing System Renewal levels despite the fact that the OEB's IRM formula only funds capital expenditures up-to the level of depreciation. Because of this, Thunder Bay Hydro forgoes any return on the rate base it installs during the IRM period if spending exceeds depreciation.
34. Prior to preparing the Application, Thunder Bay Hydro retained Kinectrics to perform a detailed asset condition assessment. The purpose was to "check-in" with the facts – to see what the health of the distribution system was. To determine whether System Renewal

²² Transcript Vol. 2 dated June 29, 2017 at page 25, lines 15-28.

spending had reached a sustainable level yet or if more spending was required.

35. The response from Kinectrics can be found in the ACA, which is attached to the DSP. Thunder Bay Hydro took three key conclusions from the ACA and adjusted their plans accordingly.
36. First, the ACA demonstrated that there was still a large backlog of poor and very poor condition assets that were in need of renewal in the next five years, as shown in the Levelized Flagged for Action Plan in the ACA.²³
37. While Thunder Bay Hydro management believes that an increase in System Renewal spending is justified in light of these ACA results, Thunder Bay Hydro is proposing a test year capital budget that is estimated to be approximately \$3M less than if they targeted achieving the asset replacements set out in the Kinectrics' levelized flagged for action plan.²⁴ Specifically, in 2017 Thunder Bay Hydro will still be underspending on the renewal of 25kV wood poles, vault transformers, in-line OH switches, motorized load break OH switches, underground switches, and underground cables.²⁵ This approach reflects a continuation of Thunder Bay Hydro's measured, long-term, steadily paced approach to increasing System Renewal spending to achieve sustainable renewal levels while managing spending in a manner consistent with the Rate Minimization Model.
38. Second, the Health Index evidence in the ACA showed that Thunder Bay Hydro needed to lessen the emphasis on its 4kV voltage conversion program and focus more attention on its 25kV system. It is important to note that the ACA did not indicate that Thunder Bay Hydro should completely stop its 4kV voltage conversion. Rather, it recommended a lowering of emphasis and a slowing of pace of 4kV asset renewal and an increase of pace of 25kV asset renewal in its place.
39. By way of background, like other LDCs in Ontario with legacy 4kV distribution assets, Thunder Bay Hydro has a voltage conversion program that is focused on the removal of 4kV and the replacement with 25kV assets. This program made sense, because when done

²³ This backlog is most clearly illustrated in ER-Staff-48.

²⁴ Transcript Vol. 2 dated June 29, 2017 at page 26, line 2 to page 27, line 15.

²⁵ ER-VECC-6.

properly, Thunder Bay Hydro would achieve major efficiencies in the future by avoiding costs associated with maintaining and eventually replacing or upgrading old 4kV substations.

40. The Application reflects a measured plan to shift focus from the 4kV voltage conversion to 25kV renewal over a 3-year period, as shown in response to 2-VECC-13 (corrected June 21, 2017). As was explained during the oral hearing, it is very difficult to change the direction of a large System Renewal program immediately. System renewal projects have long-lead times, some of which are completed over several years. In addition, the change from 4kV to 25kV renewal is a fundamental shift in philosophies, and requires changes in construction practices, scheduling and labor allocations. Allowing 3-years to become aligned with the ACA will allow Thunder Bay Hydro the chance to implement these changes in the most cost-effective manner.²⁶
41. Third, the Health Index evidence in the ACA showed that Thunder Bay Hydro needed to increase its focus on its underground cable replacement program. The Levelized Flag for Action Plan in the ACA indicated that Thunder Bay Hydro should target approximately 7km of renewal in the test year. However, in view of the uncertainty surrounding the underground cable input data that fed into the ACA (Table III-4 of the ACA shows a “High” data gap and a DAI between 47% and 65%) and the very high costs associated with underground renewal (approximately \$200,000 per km) – Thunder Bay Hydro is proposing a modest 2.4km of underground cable replacement in the test year. In addition, Thunder Bay Hydro is conducting more testing and analysis to improve its underground cable input data.
42. In this context, Thunder Bay Hydro retained Mr. Tsimberg to analyze and opine on their DSP and test year capital expenditures. Mr. Tsimberg summarizes his opinion as follows:

“Based on my review of TBHEDI’s System Renewal expenditure requirements as presented in the DSP, I have concluded that the ACA study findings were properly incorporated in the development of System Renewal Capital investments portfolio while striking a balance between addressing the backlog of assets identified in the ACA report as being in “poor” and “very poor” condition and avoiding an

²⁶ 2-Staff-45.

undesired significant increase in System Renewal investment level.”²⁷

43. Finally, Thunder Bay Hydro is seeking approval of \$2.662M for System Access projects. As explained by Mr. Mace at the outset of the oral hearing, this amount is consistent with prior year expenditures for System Access, it reflects Thunder Bay Hydro’s near flat growth rate, and it reflects a conservative approach to estimating predicted new developments in the test year.²⁸ System Access spending represents projects that Thunder Bay Hydro must do in the test year to comply with its mandatory obligation to connect, to respond to third party asset relocate requests, to comply with PCB replacement obligations, and to meet ongoing metering requirements. Thunder Bay Hydro’s project prioritization reflects the mandatory nature of these projects. It is unlikely that Thunder Bay Hydro will be required to cut System Access projects from its test year capital spending.

OM&A (Issues 1.2 and 2.1)

The Parties are not in agreement that the Applicant’s proposed OM&A expenditures for the test year are appropriate.

44. Thunder Bay Hydro is seeking approval of \$15,729,872 test year OM&A budget, an amount that represents a 9.9% increase over the 2013 OEB approved OM&A budget (a 2.41% CAGR). This can be compared to an actual OM&A cost in 2016 of \$15,430,638.
45. This increase is required despite Thunder Bay Hydro’s ongoing best efforts to achieve cost efficiencies and sustainable savings for ratepayers, including but not limited to:
- Attaining collective bargaining settlements below Thunder Bay Hydro’s cohort average from 2013 to 2017, reducing wage schedules for new non-trades/technical positions, and the elimination of post retirement employer paid life insurance and eligible employee sick leave payout have resulted in a test year OM&A budget that is **\$570,000 lower** than it would have been had management settled for industry average wage increases. This has been achieved without resorting to other non-wage improvements that have been seen in the industry. This is a good outcome for

²⁷ Tsimberg Report at page 3.

²⁸ Transcript Vol. 2 dated June 29, 2017 at page 24, lines 15-27.

- ratepayers, given the important role of wages and benefits as an OM&A cost driver year-over-year.
- In regards to workforce planning and compensation, the following efficiencies have been gained since Thunder Bay Hydro's last Cost of Service Application:
 - Continued use of government internship-funding programs, and student-funding programs to subsidize labour costs;
 - Awarded wage increases that were below the industry average for the years 2013 (2.0%); 2014 (2.25%); 2015 (1.5%);
 - Maintenance of new salary schedules in designated wage bands for unionized employees hired after May 1, 2010;
 - Elimination of temporary labourer positions which can be filled by external resources as requirements dictate;
 - Elimination of post-retirement, employer-paid, Life Insurance (between ages 55 to 65) for unionized employees - effective January 1, 2017; and
 - Elimination of eligible sick leave payout entitlement for qualifying unionized employees hired after August 16, 2016.²⁹
 - In the 2009 collective agreement, Thunder Bay Hydro negotiated lower wage schedules. This was also applied to some management positions and continues to produce savings.³⁰
 - Thunder Bay Hydro has strategically moved some Customer Service positions from a full time complement to a mix of full time and part time complement that allows for scheduling flexibility and improved customer service while lowering staffing costs.³¹
 - Bill printing costs decreased in 2015 by 43% as result of Thunder Bay Hydro's procurement process. Considering that the organization currently issues customer bills on a bimonthly basis for residential customers, this is significant in that the utility moved to monthly billing at the end of 2016. Having not secured this new pricing, monthly bill printing costs for 2017 would otherwise be \$197,184, versus the new anticipated cost of \$85,000, a savings for ratepayers of **\$112,184 annually**.³²

²⁹ Exhibit 4 at page 37.

³⁰ Exhibit 1 at page 31.

³¹ Exhibit 1 at page 31.

³² Exhibit 1 at pages 30-31.

- Thunder Bay Hydro has procured a population of remote disconnect meters which are being used to eliminate a field visit during the disconnect/reconnect process. Overall meter reading costs have decreased; the 2007 spend on meter reading was \$490,449 compared to \$289,576 in 2015, a savings of approximately **\$200,000 annually**. Savings were mostly from reductions in full time equivalents and trucking costs.³³
- In 2014, Thunder Bay Hydro implemented a new phone system with proper failover redundancy for disaster recovery and full recording of calls for quality assurance purposes. This system resulted with a first year operating savings in 2015 of approximately \$56,000 and incremental operating savings of \$14,000 for 2016 for a total savings of **\$70,000 annually**. This system now allows supervisory monitoring of customer conversations, improved outage call diversions to automated messaging and call playback for staff training purposes.³⁴
- Standardized designs have minimized engineering and installation requirements of capital projects by limiting material diversity and by utilizing Utilities Standards Forum standards to standardize installation drawings for use in the projects proposed in the DSP. This reduction has resulted in design savings of approximately 2 hours/pole realized between 2012 and 2016, quantified at **\$54,000** in 2016. This efficiency has allowed Thunder Bay Hydro to complete more design internally verses outsourcing to a design contractor, thus mitigating cost increases.³⁵
- The GIS System is projected to reduce the costs of printing paper-based system conditions for the crews and allow crews to provide feedback to the office remotely, resulting in approximately 100 hours of man-hour savings per year or savings of approximately **\$12,800**.³⁶
- The implementation of a Windows based SCADA system in 2016 is expected to result in efficiencies in obtaining outage statistics for OEB reporting purposes. Currently the supervisor in this area manually obtains this data and on a quarterly basis spends 3 days to complete. By utilizing the new SCADA automated system the task is expected

³³ Exhibit 1 at page 23.

³⁴ Exhibit 1 at page 22.

³⁵ 1-Staff-9.

³⁶ 1-Staff-9.

- to take 2 days, resulting in yearly savings of approximately **\$2,800**.³⁷
- The implementation of website redesign and online portal for customers has resulted in efficiencies of approximately **\$57,700 per year**.³⁸
46. Adding up each of these initiatives results in **\$1,079,484** in annual savings for ratepayers. The balance of the \$1.2M in savings identified by Mr. Wilson during evidence in-chief are one-time savings.
47. At the start of the oral hearing, Mr. Mace acknowledged that Thunder Bay Hydro's OM&A costs have increased both in the bridge year and in the test year.³⁹ In the bridge year, some of the increase was driven by a series of one-time non-recurring costs totaling approximately \$258k⁴⁰ combined with a series of new and unexpected costs which are expected to flow forward into the test year totaling approximately \$441k.⁴¹ The amount which flows from the bridge year to the test year is then combined with an increase of approximately \$118k in the test year arising from the new, higher OEB fee assessment⁴² and additional postage, courier and other costs associated with the move to monthly billing for residential customers of \$65k in the bridge year and an additional \$156k in the test year, totaling \$221k.
48. Most of these incremental OM&A cost pressures identified by Mr. Mace are attributable to Thunder Bay Hydro taking steps to meet the RRFE outcome known as "public policy responsiveness and delivering on obligations mandated by government and the OEB." This includes:
- a. \$168k in cost of service and customer engagement activities;
 - b. \$156k associated with the transition to monthly billing;
 - c. \$60k for the start of smart meter sampling;
 - d. \$20k for an ESA public safety survey; and
 - e. \$118k increased OEB fee assessment.

³⁷ 1-Staff-9.

³⁸ 1.0-SEC-9.

³⁹ Transcript Vol. 2 dated June 29, 2017 at page 18, line 20 to page 19, line 6.

⁴⁰ Ibid. at page 19, line 7 to line 12.

⁴¹ Ibid. at page 19, line 19 to page 20, line 2.

⁴² Ibid. at page 20, line 3 to line 8.

49. Each year, Thunder Bay Hydro undergoes a rigorous business planning and risk review process, which in-turn informs the strategic and operational plans for the utility.⁴³ This process happens at the board, executive and management levels of the organization. Following this process, the Application was prepared. The Application addresses four specific risks that were identified in the strategic planning process.
50. First, Thunder Bay Hydro identified a succession risk with their stations/protection and system control room: two (2) of the seven (7) journeyman are due to retire in the next two years.⁴⁴ Because of the difficulties associated with hiring qualified system control operators in Thunder Bay, Thunder Bay Hydro has hired an apprentice that will be trained over the next three to four years before taking over responsibilities as an operator. For this training period, Thunder Bay Hydro will be over complement by this apprentice at an annual cost of \$80,493.
51. Second, Thunder Bay Hydro identified an unsustainable workload within their regulatory and accounting departments. This workload has a human cost - since 2013, Thunder Bay Hydro has witnessed 114% turn-over in management staff in the finance and regulatory department. This, in-turn, has limited Thunder Bay Hydro's ability to attract and retain qualified staff. The introduction of the numerous changes associated with Ontario's Fair Hydro Plan is only the latest of changes that must be addressed by the finance and regulatory department. To address this risk, Thunder Bay Hydro has hired a new corporate financial analyst at a cost of \$106,256.
52. Third, Thunder Bay Hydro has proposed an incremental \$100,000 proactive replacement program to phase-out porcelain insulators that have known manufacturing defects and are prone to fail, sometimes catastrophically. It is more cost effective (on a per-unit basis) to replace insulators that are known to be prone to defects on a proactive basis, rather than on a reactive basis. Waiting until the insulator fails (reactive replacements) will result in additional costs associated with potential overtime (depending on when the insulator fails) and resolving the consequences of the failure (conductors or other electrical components

⁴³ Ibid. at page 20, lines 9-16.

⁴⁴ Exhibit 4 at Section 4.4.2 and Transcript Vol. 2 dated June 29, 2017 at page 20, line 17 to page 21, line 3.

damaged by the failure may need to be replaced). This is confirmed in the Tsimberg Expert Report at page 14 where Mr. Tsimberg states: “*It is worth noting that these planned replacements represent a much more efficient use of capital funds since planned replacement unit cost is always lower than forced replacement unit cost.*”

53. Fourth, Thunder Bay Hydro is proposing to increase its tree-trimming budget by \$150,000 per year so as to achieve a planned 7-year tree trimming and vegetation management cycle in Thunder Bay Hydro’s service territory. In 2016, 35% of outages were attributed directly to tree contacts. In each of 2015 and 2014, 48% of outages were attributed directly to tree contacts.⁴⁵ In the industry tree-trimming cycles range between 5-7 years. Thunder Bay Hydro is proposing to meet the lower end of this range.
54. Thunder Bay Hydro has demonstrated an emphasis on operational effectiveness and achieving sustainable cost savings for ratepayers. Despite these best efforts, costs are still increasing and ROE has been steadily decreasing. Thunder Bay Hydro submits the OEB should approve the requested OM&A expenditures in the test year which reflect a measured and balanced approach to minimizing rates in accordance with the Rate Minimization Model, while doing what is needed to respond to new obligations mandated by government and the OEB and to address specific operational risks facing the utility in the near-term.

ALL OF WHICH IS RESPECTFULLY SUBMITTED THIS 5TH DAY OF JULY, 2017

BORDEN LADNER GERVAIS LLP

Per:

*Original signed by Jessica-Ann Buchta per
John A.D. Vellone*

John A.D. Vellone

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⁴⁵ 2-AMPCO-6.