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July 14, 2017

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

VIA E-MAIL

Dear Ms. Walli,

Re: OEB File No. EB-2016-0105
Thunder Bay Hydro Electricity Distribution Inc.
Application for distribution rates beginning May 1, 2017

Please find attached the final submissions of the Vulnerable Energy Consumer Coalition in the above noted proceeding.

Yours truly,

Alysia Lau
Barrister & Solicitor | Counsel for VECC
c/o Public Interest Advocacy Centre

cc: Cindy Speziale, Vice President Finance, Thunder Bay Hydro
Email: cspeziale@tbhydro.on.ca

ONTARIO ENERGY BOARD

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

AND IN THE MATTER OF an application by Thunder Bay Hydro Electric Distribution Inc. for distribution rates beginning May 1, 2017.

EB-2016-0105

FINAL SUBMISSION

ON BEHALF OF THE

VULNERABLE ENERGY CONSUMERS COALITION (VECC)

July 14, 2017

1. Response to Argument-in-Chief

1.1 The Vulnerable Energy Consumers Coalition ("VECC") is pleased to provide the Ontario Energy Board ("Board") with its final submissions regarding EB-2016-0105, an application by Thunder Bay Hydro Electricity Distribution Inc. for distribution rates beginning May 1, 2017.

1.2 In its Argument- in-Chief ("AIC") Thunder Bay Hydro ("TBH") makes a number of assertions related to past rates and rates of return which are, in our submission, outside the scope of the Board's decision in this proceeding. TBH's past financial performance has little relevance to the determination of future rates. By its own admission past rates were set based on a lower rate of equity return than allowed by the Board. Going forward that policy ends. Nor should the Board take much from the fact that TBH has in the past had lower rates than a number of other utilities because of that policy.

1.3 Secondly TBH attempts to bolster is argument for incorporating higher costs into rates by stating that the "[*C]umulative distribution revenue shortfall from 2013 to the end of 2016 has been approximately $1.1M*." However, any past revenue shortfall is outside the scope of the Board's determination of the outstanding issues in this Application. The parties have already agreed, and the Board has accepted, the revenue forecast of the Application. Presumably then Thunder Bay is satisfied with its revenue forecast on a go forward basis. The issues to be remaining to be determined are related to forecast costs, capital expenditure and the cost of capital - and nothing more.

2. Cost of Capital

2.1 It is not evident to us that TBH's request to incorporate the Board allowed return on equity into rates is compliant with its shareholder covenants with respect to a "rate minimization model." However, we take no position on this matter as it is, in our submission, a matter between the shareholder and the management of the Utility.

2.2 Likewise, and as noted above, we believe the application of this rate philosophy both in the past and future has no relevance to the determination of 2017 rates.

That is, provided the Applicant is within the established cost of service guidelines of the Energy Board, which we submit TBH is.

2.3 In response to VECC's request TBH updated its calculation of long-term debt[1].

	Weighted Debt Cost							
Line No.	Description	Debt Holder	Affiliated with LDC?	Date of Issuance	Principal	Term (Years)	Rate%	Interest Cost
1	Promissory Note	The Corporation of the City of Thunder Bay	Y	9-Apr-13	$26,490,500	0	0.00%	$0
2	Credit Facility Agreement	TD Commercial Bank	N	3-Jul-09	$4,822,104	15	5.27%	$254,125
3	Promissory Note	Infrastructure Ontario	N	17-Jun-13	$5,424,319	30	4.04%	$219,142
4	Promissory Note	Infrastructure Ontario	N	15-Oct-14	$5,926,275	30	3.96%	$234,680
5	Promissory Note	Infrastructure Ontario	N	15-Mar-16	$3,963,384	30	3.75%	$148,627
6	Promissory Note	Unknown	N	4-Jul-17	$3,653,000	30	3.38%	$123,4714
8	**2017 Total Long Term Debt**				$50,279,582	**Total Interest Cost**		$ 980,046
9								
10					**Weighted Debt Cost Rate-2017**			**1.95%**
11								

2.4 Thunder Bay Hydro's weighted cost of capital was revised as set out below[2].

	(%)	($)	(%)	($)
Debt				
Long-term Debt	56.00%	61,769,106	1.95%	1,203,999
Short-term Debt	4.00%	4,412,079	1.76%	77,653
Total Debt	**60.00%**	**66,181,185**	**1.94%**	**1,281,652**
Equity				
Common Equity	40.00%	44,120,790	8.78%	3,873,805
Preferred Shares	0.00%	0	0.00%	0
Total Equity	**40.00%**	**44,120,790**	**8.78%**	**3,873,805**
Total	**100.00%**	**110,301,976**	**4.67%**	**5,155,457**

2.5 The Utility is significantly under leveraged ($50m vs. $66m). However, there is no evidence that this impacts negatively the interest of ratepayers. In fact, TBH's low cost of long-term debt provides a favourable rate impact.

[1] 5-VECC-39 updated at Undertaking J3.5 July 4, 2017
[2] Undertaking J3.4

2.6 Nonetheless, Thunder Bay Hydro has been less than forthcoming in communicating its capital structure financing to its ratepayers. It has also, in our view, implied to customers a direct causal link between capital expenditures and system reliability when the evidence in this proceeding is that the relationship between capital expenditures and reliability is much more tenuous. In the past few years the Board has put significant effort into a "customer focused" strategy with the objective of engaging ratepayers. It seems to us that the added costs of these surveys, customer meetings and other outreach exercises are of little value if the customers are not adequately informed of all the facts.

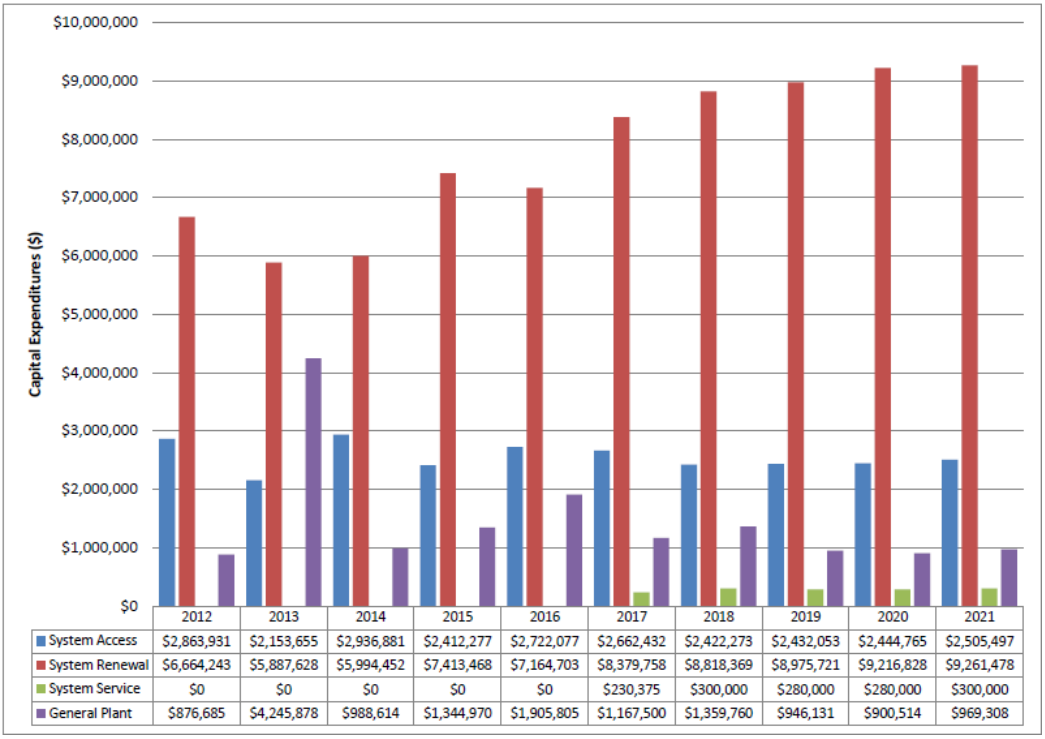
3. Capital Expenditures

Is the large capital expenditures increase justified based on the current assessment/modelling?

3.1 Thunder Bay is proposing a significant increase in its system renewal capital spending. The increase is on average about $2 million per year, or a near 35% more than the annual average spending in this category over the prior 5 years. In VECC's view, such an increase is not warranted based on the state of TBH's current understanding of the condition of its assets.

3.2 The shift in expenditures from historical levels of replacement will begin in 2017 and, as shown in the table below, results in an increase in system renewal expenditures from an average of $6.6 million during the 2012-2016 period to $8.9 million over the next 5 years.

Figure 5.4.4-1 Investment by Category for 2012 to 2021[3]



	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
System Access	$2,863,931	$2,153,655	$2,936,881	$2,412,277	$2,722,077	$2,662,432	$2,422,273	$2,432,053	$2,444,765	$2,505,497
System Renewal	$6,664,243	$5,887,628	$5,994,452	$7,413,468	$7,164,703	$8,379,758	$8,818,369	$8,975,721	$9,216,828	$9,261,478
System Service	$0	$0	$0	$0	$0	$230,375	$300,000	$280,000	$280,000	$300,000
General Plant	$876,685	$4,245,878	$988,614	$1,344,970	$1,905,805	$1,167,500	$1,359,760	$946,131	$900,514	$969,308

3.3 The Utility is moving away from an age based asset replacement strategy to an asset condition based strategy. However TBH is only in the early years of applying this new philosophy. As opposed to a "run to failure" approach, a "predicative proactive" approach relies heavily upon a robust understanding of a utility's underlying assets. Yet, the "data gap" that currently exists in this regard argues against making dramatic changes to the system renewal budgets, at least until such gaps are filled in. At this point, TBH has ultimately proposed significant changes to its capital plan based only on a preliminary and fairly underdeveloped understanding of the conditions of its assets.

3.4 The increase in expenditures is a direct result of the Asset Condition Assessment which was performed in 2016 by Kinectrics and provided a Health Index ("HI") of the entire asset base. The Health Index seemingly shows a comprehensive view into the condition of assets, and resulted in a suggested level of annual asset renewal in the form of a "Flagged for Action Plan". TBH incorporated most, though not all of these projects, into its 2017-2022 Distribution Plan. However, the fact that it chose to move forward with a subset of the projects suggested does not mean that it has not taken an overly aggressive approach to applying its

[3] Distribution System Plan, page 135

new strategy. Rather, in VECC's view, the Kinectrics "Flagged for Action Plan" was overly aggressive given the significant uncertainties with the model and its outcomes.

3.5 The health index was calculated using age and an "overall risk" determined from largely visual inspections. For underground cables, the index was based solely on age. For poles, a sample was subject to physical (hammer) testing. Pole age also could not be determined with certainty in all cases in which case it was estimated. [4] Below is a summary of the major asset condition methods[5].

Table 5.3.1-2 Thunder Bay Hydro Asset Inspection Frequency

ASSET	INSPECTION FREQUENCY	INSPECTION METHOD
Substations	Monthly	Visual
Substation Transformers	Annual	DGA
Pole Mounted Transformers	Triannual	Visual
Pad Mounted Transformers	Triannual	Visual
Pad Mounted Transformers	9 Years	Detailed
Vault Transformers	Triannual	Detailed
Switches	Triannual	Detailed
Reclosers	Triannual	Visual
Poles	Triannual	Visual

3.6 It is noteworthy that Thunder Bay Hydro has not specifically calculated useful life for each asset class. This value is instead based on the findings in the Asset Depreciation Study with consideration given to the service factors identified in the report to determine useful life range.

3.7 The Kinectrics study does not provide an independent assessment of the asset condition of Thunder Bay Hydro's distribution system. Nor was the asset condition data of TBH confirmed by Kinectrics.

> MS. GRICE: Okay, thank you. If we can turn to page 58, please, of AMPCO's compendium. And in this interrogatory VECC was asking about the specific roles on the Kinectrics team in terms of who did what. And I am not interested in that per se, but I am interested in just what the inputs were to the asset condition assessment that was done.
>
> And my understanding is that the asset data was provided by Thunder Bay Hydro as an input and then Kinectrics calculated the health index of each asset based on

[4] 2-VECC-15
[5] DSP, page 60

that input data, but Kinectrics did not verify or validate any of the asset condition information; is that correct?

MR. TSIMBERG: That is correct. We assumed the data as provided by Thunder Bay Hydro were correct.

MS. GRICE: So just to confirm, you did not go out and do any asset inspections or anything of that nature.

MR. TSIMBERG: No.

MS. GRICE: So you're not able to verify if Thunder Bay's records reflect the conditions of the assets in service. That's not part of what you did.

MR. TSIMBERG: Well, the results of asset condition assessment were based on input data as provided by Thunder Bay Hydro. So we did not verify the data and we assumed the data provided are correct. So there is no data validation[6].

3.8 Even without independent verification, Kinectrics itself found significant data gaps in the assessments made by Thunder Bay as shown in the table below.

Asset Category		Average DAI	Data Gap
Station Transformers	All	93%	Low-Medium
	4 kV	92%	
	12 kV	93%	
Breakers	Breakers	61%	Low-Medium
Wood Poles	All	100%	Medium-High
	4 kV	100%	
	25 kV	100%	
Distribution Transformers	Pad Mounted Transformers	85%	Low-Medium
	Pole Mounted Transformers	100%	Medium-High
	Vault Transformers	100%	Medium-High
OH Switches	All	42%	High
	4kV In-Line	46%	
	4kV Manual Air Break	29%	
	12 and 25kV In-Line	37%	
	12 and 25kV Manual Air Break	40%	

[6] Transcript Vol. 2, page 111-112

	12 and 25kV Motorized Load Break	26%	
Underground Switches	25kV Underground Load Break Switches	38%	High
Underground Cables	All	48%	High
	4kV	65%	
	12 and 25kV	47%	

3.9 Outside of transformers and breakers, Kinectrics found high data gaps in all other asset categories. The significance of that finding was discussed in the following exchange between VECC and the Applicant.

> MS. LAU: Okay, yes, I see, thank you. Would you be able to tell me, Mr. Tsimberg, what a medium to high data gap means?
>
> MR. TSIMBERG: I think we define it at one of the responses. I can't remember which one, but... Generally speaking, the prioritization of data gaps is based on weighting of the parameters associated with those data gaps.
>
> So when with you have general formula and you are missing certain programs -- when I say missing, all assets don't have this input information -- the higher the weighting, this general formula, the higher it is in a priority as a data gap…….
>
> MS. LAU: How does this impact the reliability of your final results?
>
> MR. TSIMBERG: Well the reliability of final results, I am not going to say reliability. I am not sure it's the right technical terms when it comes to --
>
> MS. LAU: Whichever you prefer, yeah.
>
> MR. TSIMBERG: I would say credibility of results --
>
> MS. LAU: Okay.
>
> MR. TSIMBERG: -- the lower the data gaps the higher the credibility of results, so I would say in this particular example for station transformers credibility is pretty high, you know, so was data availability. As you go down the list, if you look at underground cables, underground switches, overhead switches, there are some data gaps. In some cases overhead was age, so we married age with degradation curves based on probability of failure and that was the only thing we had.

The nub of the issue was succinctly summarized by Member Duff:

> MS. DUFF: And you are confident in then providing an assessment as a result of that data --
>
> MR. TSIMBERG: Well, the low data availability indicator the less confidence --

> MR. TSIMBERG: The lower the data availability indicator and higher the data gaps the less confidence we have in the results.[7]
>
> The evidence is clear – there are significant issues with the quality of the asset condition assessment of Thunder Bay Hydro[8].

3.10 However, deficiencies with the Kinectrics modelling and the "flagged for action" projects are not limited to data gaps in asset assessments; it is also inherent in the other model inputs. The lifecycle, or "Weibull curve", is based on the subjective analysis of TBH staff as highlighted in this exchange:

> MR. SHEPHERD: All right. So then the other category on page 49 is asset degradation curves. And that's lifecycle curves. It's what are they called, not Weibull.
>
> MR. TSIMBERG: Weibull, yeah, the rate of failure or failure rate, or other function or failure density, whichever one you prefer.
>
> MR. SHEPHERD: Okay. And those were generated by Thunder Bay Hydro.
>
> MR. TSIMBERG: Those were not generated by anybody.
>
> We had discussion with Thunder Bay Hydro experts and we asked them two questions: what is the typical useful life and what is extreme useful life for each asset category based on their experience, based on what they know, and based on typically when they go and are forced to replace some of the assets.
>
> And based on those two points, we generated those two curves.
>
> There are two options to generate those two curves. One is by this discussion, and second to actually look at the removal statistics…….
>
> MR. SHEPHERD: And they have no removal statistics.
>
> MR. TSIMBERG: They had some we couldn't use.
>
> MR. SHEPHERD: Okay. So basically, they decided what the curve should look like[9].

3.11 The salient point is that "removal statistics" are inherently the more reliable input data to derive the failure rate curves. In the absence of removal statistics the input to the Kinectrics model is the subjective conclusions of the Utility's employees. VECC is not, in any way, attempting to dismiss the knowledge and experience of TBH staff; however, the ultimate objective of an asset condition assessment exercise is to replace subjective assessment with objective data. In this case, that has not been accomplished.

[7] Transcript Vol. 2, pages 142-144
[8] Transcript Vol. 2, pages 143-145
[9] Volume 3, pages 13-14

Impact on reliability

3.12 Capital expenditures made to the distribution system are to one single purpose: to maintain or improve the system's reliability. This Applicant has suggested there are other factors to be considered, but these factors appear much less persuasive when attempting to square them with other key customer priorities such as keeping rates as low as possible. Customers care about reliability, power quality and billing and connection/repair services. For instance, if a reactive pole replacement strategy has the same reliability outcome as a proactive one, but at a lower cost, what value is there for the customer in the latter strategy?

3.13 Historical trends, as shown in the table below do not show any evidence of declining distribution system reliability. When one considers weather variation TBH's SAIDI and SAIFI statistics are indicative of a utility on a steady course.

Index	Including outages caused by loss of supply					Excluding outages caused by loss of supply					
	2011	2012	2013	2014	2015	2011	2012	2013	2014	2015	2016*
SAIDI	2.797	1.290	1.038	2.156	2.228	2.783	1.285	1.031	1.922	2.021	1.69
SAIFI	3.805	3.126	2.137	2.944	2.887	3.659	3.124	2.018	2.684	2.390	2.70

*2016 provided at J2.2

3.14 As VECC has argued in a number of proceedings, outages due to defective equipment is a critical metric when assessing the efficacy of a utility's distribution system plan. Again, in this case, and as shown below, there is no evidence of a systemic declining trend in outages due to defective equipment[10].

Reliability Statistics
2-AMPCO-6

%	2012-2015	2012	2013	2014	2015	2016
Tree Contact	7	2	17	48	48	35
Adverse Weather	0	0	1	0	0	1
Defective Equip	24	38	45	12	28	24
Major Event		0	0	0	0	0
Lightning	7	8	2	2	2	1
Unknown	25	3	2	2	0	8

[10] Exhibit K2.2 AMPCO Compendium, page 43

3.15 Indeed, by their own admission TBH does not believe its capital expenditure program is focused on system reliability.

> MS. BAILEY: Subject to check, I did state that asset condition assessment is the primary driver of our replacement strategy and our distribution system plan that we have proposed for the 2017 test year and beyond.[11]

3.16 It is equally concerning that the exchange cited below also appears to indicate that the overall capital spending amount may not have been informed by either the ACA or reliability issues at all.

> MR. SHEPHERD: Okay. The reason I ask that is because it sounds like the spending level was determined even before you had the preliminary ACA several months later, isn't that right?
>
> MR. MACE: I wouldn't say that, no.
>
> MR. SHEPHERD: Well, you went out to engage your customers at time you were starting your DSP process, and you gave them numbers that were consistent with the final result. Was that an accident? A coincidence?
>
> MS. BAILEY: To answer your question, what we provided to the customers in those engagements was again a percentage that we believed each of those categories would increase by. So to continue, as I said, we provided customers with an expected potential increase in each of the categories.
>
> What changed between when we went out for the engagement and the initial DSP plan strategy and once we received it was the asset quantities, and the mix of how it changed.
>
> MR. SHEPHERD: So the total would be similar, but what you spent it on -- so for example, the 4 kV, after you got the ACA you said, no, wait a second, we are spending too much on that; we have to shift that over somewhere else, right?
>
> MS. BAILEY: Yes, you are right in that assumption that we shifted that strategy of how we were managing the assets that we had[12].

3.17 Put more simply, the level of spending appears to have been largely pre-determined. The proposed increase in capital expenditures is therefore not necessarily a result of the of the ACA and DSP per se. It therefore cannot be said now that a modest reduction in the amount of capital spending would have a material impact on the future reliability of the Thunder Bay distribution system.

[11] Transcript Volume 2, page 193
[12] Transcript Vol.3, page 39

Capital Underspending

3.18 In some ways the capital budget presented in this proceeding is very similar to that of other small and mid-size utilities. There are, for instance, the inevitable bucket trucks (535k) conveniently required in the bridge or test year. And there is the usual outstanding question as to why a dramatic increase in the system renewal capital budget is accompanied by a similar dramatic increase in the maintenance OM&A budget – rather than the opposite.

3.19 The "looseness" of these capital budgets is further demonstrated by Thunder Bay Hydro's consistent record of underspending its capital budget. This alone suggests a 5-6% reduction in the forecast capital costs[13].

CATEGORY	Historical Period (previous plan1 & actual)																Forecast Period (planned)				
	2012			2013			2014			2015			2016 (Bridge Year)								
	Plan	Actual	Var	Plan	Actual	Var	Plan	Actual	Var	Plan	Actual	Var	Plan	Actual (2)		Var	2017	2018	2019	2020	2021
	$ '000		%	$ '000		%	$ '000		%	$ '000		%	$ '000		J2.1	%	$ '000				
System Access	2,032	2,864	40.90%	1,963	2,154	9.70%	3,556	2,937	-17.40%	3,812	2,412	-36.70%	2,795	2,722	2,516	-9.98%	2,662	2,422	2,432	2,445	2,505
System Renewal	7,118	6,664	-6.40%	6,596	5,888	-10.70%		5,994	-6.40%	6,770	7,413	9.50%	7,090	7,165	7,184	0.27%	8,380	8,818	8,976	9,217	9,261
System Service	-	-	--	-	-	--	-	-	--	-	-	--	-	-	1	--	230	300	280	280	300
General Plant	1,097	877	-20.00%	4,443	4,246	-4.40%	1,199	989	-17.50%	1,357	1,345	-0.90%	2,059	1,906	1,538	-25.30%	1,168	1,360	946	901	969
TOTAL EXPENDITURE	10,247	10,405	1.50%	13,003	12,287	-5.50%	11,157	9,920	-11.10%	11,938	11,171	-6.40%	11,944	11,793	11,239	-5.90%	12,440	12,900	12,634	12,842	13,036

3.20 In this Application Thunder Bay Hydro proposes to add significant long-run rate base costs to customers based on its preliminary application of a new policy. In VECC's view, TBH has not shown this is prudent. Kinectrics has provided areas in which it believes Thunder Bay can work to improve the information on its asset conditions. Thunder Bay has similarly admitted that the information it collects with respect to reliability should be and will be improved.

3.21 So, why the rush? Why is TBH not first improving its understanding of the underlying asset condition of its system and using outage, asset failure and other reliability data to design a better-informed capital program? In the absence of sufficient and reliable data, customers may fear a utility may be "gold platting" – in other words, replacing assets that need not be remediated, but for which customers will pay. For these ratepayers, many faced with mounting Ontario electricity bills, gold plating costs are not a trivial matter.

[13] Updated for 2016 at Undertaking J2.1

3.22 VECC's submission is straight forward. We are not opposed to the general direction in capital planning being taken by TBH. In fact, we agree that a distribution system plan based on remedial and proactive addressing of assets might be desirable. However, such a change, if it is to be accompanied by a significant increase in spending (and thus customer rates), requires robust and accurate asset information. Otherwise, there is no basis for changing long-standing practice.

3.23 Based on these facts, we see no compelling reason for the Board to consider adding more than 10% increase to the past five year trend capital budget. This would have the effect of reducing the 2017 capital budget by around $500k.

3.24 We are cognizant of the fact that the Board does not approve the 5 year distribution system plan in this proceeding. However, we are equally aware that in the absence of the Board's comment to the contrary the Utility can take comfort that if it follows the Distribution System Plan filed, and if the Board has made no comment to the contrary, that it might rely upon that in its next rebasing. For this reason we submit that the Board should, in this decision, caution the Utility as to the prudence of capital investments which exceed an average of 10% above the past 5 year trend, particularly in the absence of improved asset condition information.

Distribution System Plan Metrics and Reliability Statistics

3.25 VECC has consistently argued in these proceedings that there needs to be better metrics which align capital spending with outcomes. In the Board's generic proceeding on system reliability and performance targets VECC made this submission:[14]

> The reasons for outages are paramount to pursuing the important objective of maintaining reliable service. Fundamentally, not all interruptions are alike and the difference as to why an interruption occurs is not ancillary to the issue – it is the issue. For example, if all interruptions are due to say the failure of transformers then a utility would be ill advised to embark on a major vegetation program in pursuit of improving service reliability. If the utility and the regulator do not know the root cause of interruptions then what is the basis for the (sometimes very costly) capital and maintenance proposals funded in rates to address the issue? Service reliability metrics should serve the purpose of informing the utility and the regulator as to the efficacy of its capital and maintenance programs.

[14] EB-2014-0189, Submission of VECC, August 20, 2014, pages 3-4

3.26 VECC stands by those arguments and encourages the Board to have TBH undertake more research over the next five years to better understand the underlying issues affecting system reliability. We do so because Thunder Bay Hydro continues to have challenges in understanding the root cause of its outages, as shown by the exchange reproduced below:

> MS. GRICE: Okay. That's great, thank you. If we can please turn to page 37 of the AMPCO compendium……..
>
> …….So for instance, a weather event could be under tree contact or under defective equipment. Have I characterized that correctly?
>
> MR. MACE: Yes, you have.
>
> MS. GRICE: Okay. So there's a couple places in the evidence where Thunder Bay Hydro is relying on these outage statistics in connection to its distribution system plan
>
> And so I guess what I am asking is how are you going to be able to do that when your weather statistics are showing up at zero percent? Are you planning on changing the way that you record your outage data? ……
>
> MR. MACE: Yes. I am planning on trying to get the weather -- the outage data in a more structured consistent method. One of the outcomes of this cost of service was seeing the inconsistencies year to year in data. And I see that as a gap.[15]
>
> …….
>
> MS. GRICE: Okay, thank you. And then this is just another important one, which is 2-VECC-11, part (c). And in this one, in part (c), in the response, you say:
>
> "Thunder Bay Hydro plans to use the OEB reported outage statistics as a metric to determine the duration and number of outages caused by defective equipment."
>
> So again, in order to be able to have that metric effective over the rate period, that's another area similar to what you were talking about, where you are going to have to make some adjustments; is that correct?
>
> MR. MACE: Yes, exactly. We do have defective equipment data. I would call it inconsistent and potentially incomplete, and we need to work on that.[16]

3.27 TBH has argued 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*."[17] The facts are that TBH appears to have less understanding of the condition of its assets than is desirable for the

[15] Transcript Vol.2, pages. 109-110
[16] Transcript Vol.2, page 111
[17] Argument-in-Chief, page 12

plan of action it proposes. Therefore, the proposal for system renewal capital investment in this proceeding is, in VECC's, based on an unreasonably confident reliance on the weak data which underlines its capital budgeting decisions.

3.28 VECC has argued in a number of cases that the Board should link any proposals for extraordinary capital expenditures (as compared to the prior rate plan period average) with metrics which attempt to measure the efficacy of the distribution system plan[18].

> MS. LAU: My question is whether that would be a good metric for measuring kind of the impact of the DSP –
>
> MR. TSIMBERG: Yes, it would. Yes --
>
> MS. LAU: -- as opposed to merely relying on SAIDI and SAIFI.
>
> MR. TSIMBERG: Yes, it would.
>
> MS. LAU: Are there any other metrics you can think of that would also be helpful in assessing the impact of the DSP?
>
> MR. TSIMBERG: Sure, there are many metrics that could be; for example, amounts of corrective maintenance over time. And ideally if investments are made correctly the amount should not go up each year.
>
> MS. LAU: And would Thunder Bay Hydro then commit to reporting on these types of metrics to be able to measure the impact of the DSP in the future?
>
> MS. BAILEY: Yes, I think we would like to develop a way to track that metric……

3.29 VECC is encouraged by TBH's willingness to explore metrics which might provide meaningful feedback its capital expenditure. Our submission is that these metrics must be in place in the methodology for better measuring the efficacy of capital expenditures before the Utility embarks on a significant increase in its capital programs.

4. OM&A

4.1 Thunder Bay is seeking an increase in OM&A which is significantly in excess of inflation for the period since the last rebasing. For a utility with almost no customer growth, this proposal requires serious scrutiny.

[18] Transcript, Vol. 2, pages 133-143

4.2 In its argument in chief, TBH listed a number of incremental costs.[19] However, in our submission the only truly incremental costs – in the sense of financing incremental responsibilities acquired since the last cost of service application are:

- $168k in cost of service and customer engagement activities;
- $156k associated with the transition to monthly billing;
- $60k for the start of smart meter sampling;
- $20k for an ESA public safety survey; and
- $118k increased OEB fee assessment.

4.3 However, if we were to add the $522k of incremental OM&A costs to an inflated 2013 actual costs we would fall far short of the $15.7 million being sought in this Application.

Table 4-6 Exhibit 4, page 13	Last Rebasing Year (2013 Board-Approved) Approved	2013 Actuals	2014 Actuals	2015 Actuals	2016 Original	2016 Bridge Year Updated J3.3	2017 Test Year
Operations	3,495,297	3,356,496	3,166,762	3,167,155	3,400,584	3,475,223	3,322,661
Maintenance	3,780,833	3,446,710	4,149,144	4,274,077	4,633,065	4,896,385	4,703,516
Billing and Collecting	2,116,128	1,900,983	1,883,864	2,032,711	2,000,585	2,027,351	2,251,439
Community Relations	253,133	189,349	205,756	205,161	209,547	229,471	222,078
Administrative and General	4,654,608	4,339,346	4,416,991	4,564,900	5,170,603	4,827,434	5,230,177
Total	**$ 14,300,000**	**$ 13,232,884**	**$ 13,822,518**	**$ 14,244,004**	**15,414,383**	**$ 15,455,874**	**$ 15,729,872**

4.4 It is worth considering that in 2013 THB actually requested an OM&A amount which was 387k higher than was ultimately approved. That is, had TBH been successful in its original request, it would have baked into rates an OM&A total of $14.687 million – an amount which it would not reach in actual spending until 2016. The leadership of the Utility has not changed since that time and, based on the historical accuracy of the Utility's budgeting, we believe the Board should act cautiously in accepting the Utility's current OM&A spending projections.

[19] Argument-in-Chief, page 18

4.5 Consider also that in its Argument-in-Chief TBH outlined $1,079,484 in annual savings since it last cost of service application. It might be suggested, therefore, that in the absence of these "extraordinary" managerial measures Thunder Bay ratepayers would be facing a bill for ongoing expenses of $17.2 million (15.73+ 1.079+.387 million) in 2017 rather than $15.7 million. This would have been, in VECC's view, almost ridiculous for a utility with a very low growth rate. This prompts the question, therefore: what does this say about the veracity of the Utility's current OM&A projections?

4.6 In the table below VECC has taken both the 2013 Board approved and the 2013 actual Utility OM&A spending and adjusted it for inflation and what we submit are the actual incremental responsibilities of the Utility. We have then made adjustments for the actual union wage increase (lower than projected) and the productivity offsets assumed in the Board's IRM plan. The result is shown below.

	Adjustment Factor	2013 BA	2013 Actual
Starting Point* adjusted for 351k		**14,300,000**	**13,232,884**
CPI Inflation	BofC Infl Calculator	664,303	614,730
Monthly Billing costs	4-Staff-59	221,300	221,300
OEB Assessment costs		118,000	118,000
Customer growth -1.3% @.20 per 100 basis points	0.26000%	37,180	34,405
Total Increase in costs		**15,340,783**	**14,221,319**
Adjustment for Wage settlement	4-Staff-51	74,000	74,000
Stretch factor 0.30 x3	0.90%	128,700	119,096
Total adjustment		15,138,083	14,102,224
Possible Range		**-838,083**	**-869,340**
Average		**-853,711**	

4.7 For the purpose of our analysis we have also allowed an increase in costs due to customer growth based on 20% of the actual growth during the period.[20]

4.8 What this analysis shows is that TBH has unnecessarily inflated its 2017 costs in a range between $838k and $869k. This means, taking the average reduction, that the 2017 OM&A should realistically be around $14.9 million. While this would be approximately 556k below the 2016 actual costs we would point out that TBH also indicated that 2016 included a number of one-time costs including:

- $168,000 related to cost of service application and customer engagement costs which are amortized in 2017 and forward;
- $168,000 for building renovations;
- $60,000 in meter sampling costs,
- $40,000 in SCADA training costs; and
- $116,000 in fire retardant clothing.[21]

4.9 The amount of one-time costs shown in 2016 is 552k. That is that, taking into account the 2016 one-time costs, a reduction of TBH's 2017 OM&A costs by approximately 851k would provide it with its 2016 actual ongoing costs. In our submission, therefore, a reduction in OM&A costs to a level of $14.9 million in 2017 would be appropriate and in keeping with the cost pressures that have been identified.

4.10 The Board might also note that in our calculation we have made a larger accommodation for TBH's move to monthly billing than stated in their Argument-in-Chief ($221k vs $118k). We believe this is because TBH has adjusted the incremental costs of monthly billing for the reduction in costs due to lower working capital requirements. However, since the discussion is simply with respect to incremental costs we have incorporated the entire $221k of costs, which are largely due to postage and related increased frequency of billing costs.

4.11 VECC has taken an envelope approach to the argument on OM&A costs. We do not think it would be helpful at this time to do a line-by-line discussion of where or how the Utility might lower its projected costs. Suffice it to say, VECC is of the view that some costs are unrealistically projected, whereas others such as those related to tree trimming ($150k increment) have a confused and unsubstantiated

[20] Customer growth between 2013 and 2017 can be found in Exhibit 3, Table 3-3, page 7 of 33
[21] Transcript Vol. 3 pages 120-121

rationale for the increase. Other costs, such as those for EDA membership are clearly outside of those costs which might be recovered from ratepayers.

4.12 Finally, it is clear to us that Thunder Bay Hydro has little time for the Board's views as to its rate setting methodologies[22].

> MR. SHEPHERD: Well, in fact your pattern has been to fund cost of service, you ask for a lot and then you limp along and then you ask for a lot again, right?
>
> MR. MACE: Yes. …….
>
> MR. MACE: I think the formula does not necessarily take into account all costs that are faced by utilities.
>
> MR. SHEPHERD: And as a result, when you do your budgeting every year, you make no effort to live within the Board envelope; do you? None.
>
> MR. MACE: I don't think that's accurate.
>
> MR. SHEPHERD: Well, so when was the last time that your budget presented to your board of directors was within the OEB's formula? The answer is "never", but I would like you to say it.
>
> MR. MACE: I don't recall. I can say "never."
>
> MR. SHEPHERD: You don't recall any time?
>
> MR. MACE: I do not recall any time, no.

4.13 In our submission, Thunder Bay Hydro has attempted to inflate both OM&A and Capital costs in this application. This clearly demonstrated by its ability to operate during the last rate period substantially below its allowed OM&A. It is just as clear from the exchange with counsel to SEC that the Utility puts little value in the Board's role as a proxy for competition. This is a matter we think important for ratepayers to see that the Board understands and is willing to address.

5. Effective Date

5.1 TBH is seeking a May 1, 2017 implementation date. It is clearly not possible for this to occur at this late juncture. In VECC's view, the delayed timeline in this proceeding was due to three matters, all of which were under the control of Thunder Bay Hydro. First, it filed the application approximately one month late

[22] Transcript Volume 2, pages 159 and 161

(September as opposed to August for May 1 rate years). The Application was further delayed by issues at the Utility which delayed both the filing of interrogatory responses (1 week) and the completion of the settlement agreement (2 weeks). Finally, the late introduction of additional evidence by TBH also delayed the proceeding by a further month.

5.2 In light of the fact that all these matters were within the control of the Applicant, it is our submission that the Utility should have rates become effective at the implementation date after the Board's rate order decision.

6. Cost Incurred

6.1 VECC respectfully submits that it has acted responsibly and efficiently during the course of this proceeding and requests that it be allowed to recover 100% of its reasonably incurred costs.

All of which is respectfully submitted.

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