

ONTARIO ENERGY BOARD

IN THE MATTER OF the *Ontario Energy Board Act, 1998*, S.O. 1998, c. 15, Sch.B, as amended;

AND IN THE MATTER OF an Application by Toronto Hydro-Electric System Limited pursuant to the *Ontario Energy Board Act* for an Order or Orders approving rates for the distribution of electricity for the years 2015 through 2019

**FINAL ARGUMENT
OF THE
SCHOOL ENERGY COALITION**

April 3, 2015

JAY SHEPHERD P.C.
2300 Yonge Street, Suite 806
Toronto, Ontario M1P 3E5

**Jay Shepherd
Mark Rubenstein**

Tel: 416-483-3300
Fax: 416-483-3305
jay.shepherd@canadianenergylawyers.com
mark.rubenstein@canadianenergylawyers.com

Counsel for the School Energy Coalition

TABLE OF CONTENTS

0	GENERAL COMMENTS.....	3
0.1	<u>INTRODUCTION</u>	3
0.2	<u>OVERRIDING ISSUE – APPLYING THE RRFE</u>	4
0.3	<u>SUMMARY OF SUBMISSIONS</u>	12
1	RENEWED REGULATORY FRAMEWORK	14
1.1	<u>GENERAL</u>	14
	CUSTOMER ENGAGEMENT	14
1.2	<u>INTRODUCTION</u>	14
1.3	<u>BIAS IN THE WORKBOOK, FOCUS GROUPS, INTERVIEWS AND SURVEY</u>	14
1.4	<u>TIMING</u>	21
1.5	<u>WHAT ABOUT THE LETTERS?</u>	22
1.6	<u>WHAT SHOULD THE BOARD CONCLUDE?</u>	23
	BENCHMARKING.....	24
1.7	<u>INTRODUCTION AND PURPOSE OF BENCHMARKING</u>	24
1.8	<u>COST BENCHMARKING EVIDENCE OF POWER SYSTEMS ENGINEERING</u>	27
1.9	<u>COST BENCHMARKING EVIDENCE OF PACIFIC ECONOMICS GROUP</u>	27
1.10	<u>COMMON ELEMENTS</u>	28
1.11	<u>AREAS OF DISAGREEMENT</u>	30
1.12	<u>CONCLUSIONS AND APPLICATION TO TORONTO HYDRO’S RATES</u>	31
2	CAPITAL PLAN.....	32
2.1	<u>INTRODUCTION</u>	32
2.2	<u>OVERVIEW</u>	33
2.3	<u>DISTRIBUTION SYSTEM PLAN</u>	34
2.4	<u>CAPITAL PLANNING APPROACH</u>	38
2.5	<u>NO PRODUCTIVITY HAS BEEN FORECAST</u>	40
2.6	<u>INCREMENTAL CAPITAL MODULE</u>	43
2.7	<u>OPERATIONS AND MAINTENANCE</u>	45
2.8	<u>INAPPROPRIATE INTERPRETATION OF THE USED OR USEFUL PRINCIPLE</u>	46
2.9	<u>RELIABILITY</u>	47
2.10	<u>METRICS</u>	49
2.11	<u>IN-SERVICE ADDITION FORECAST AND RATEPAYER PROTECTION</u>	51
2.12	<u>CONCLUSION</u>	52
3	LOAD AND CUSTOMER FORECASTS	53
3.1	<u>INTRODUCTION</u>	53
3.2	<u>CUSTOMER FORECAST</u>	53
3.3	<u>LOAD FORECAST</u>	53
3.4	<u>REVENUE OFFSETS</u>	53
4	OPERATING COSTS	55
4.1	<u>INTRODUCTION</u>	55
4.2	<u>REBASING BUDGET</u>	55
4.3	<u>HUMAN RESOURCES</u>	58
4.4	<u>FORMULA FOR SUBSEQUENT YEARS</u>	61

5	CAPITAL STRUCTURE AND COST OF CAPITAL.....	62
5.1	<u>GENERAL</u>	62
6	REVENUE REQUIREMENT	63
6.1	<u>GENERAL</u>	63
7	COST ALLOCATION	64
7.1	<u>INTRODUCTION</u>	64
7.2	<u>REVENUE TO COST RATIOS</u>	64
8	RATE DESIGN	65
8.1	<u>FIXED VARIABLE SPLITS</u>	65
8.2	<u>OTHER CHARGES</u>	65
9	DEFERRAL AND VARIANCE ACCOUNTS.....	66
9.1	<u>GENERAL</u>	66
10	REPORTING REQUIREMENTS	67
10.1	<u>GENERAL</u>	67
11	EFFECTIVE DATE AND SYNCHRONIZATION.....	68
11.1	<u>GENERAL</u>	68
11.2	<u>2015 EFFECTIVE DATE</u>	68
11.3	<u>2016 RATE AND FISCAL YEAR SYNCHRONIZATION</u>	69
12	IRM COMPONENTS.....	71
12.1	<u>ANNUAL ADJUSTMENTS</u>	71
12.2	<u>Z-FACTORS</u>	71
12.3	<u>OFF-RAMPS</u>	72
12.4	<u>HALF-YEAR RULE</u>	72
13	OTHER MATTERS	76
13.1	<u>COSTS</u>	76
	APPENDIX A	77

0 GENERAL COMMENTS

0.1 Introduction

- 0.1.1** On July 31, 2014 the Applicant Toronto Hydro-Electric System Limited filed an Application to set just and reasonable rates for the distribution of electricity for the period commencing May 1, 2015. The Application seeks increases totaling almost \$1 billion in its revenue requirement over five years, and an expanded five-year capital program totaling more than \$2.5 billion¹.
- 0.1.2** The essence of this Application is Toronto Hydro's claim that it needs an expanded capital program, continuing for a further 20+ years, to renew, modernize and expand its distribution system. As a result, the Applicant seeks rate increases that, for many customers, will total around 50% over a period of four years and eight months.
- 0.1.3** Toronto Hydro's Argument-in-Chief was presented orally on March 19, 2015. This is the Final Argument of the School Energy Coalition.
- 0.1.4** The ratepayer groups who intervened in this proceeding have worked together throughout the hearing to avoid duplication, in some cases also exchanging partial drafts of their final arguments. We have been assisted in preparing this Final Argument by that co-operation amongst parties. Where we are in agreement with the submissions of other parties, we have not repeated their arguments here, but have adopted their reasoning to the extent possible.
- 0.1.5** The complexity of this proceeding necessarily required prioritization by intervenors. As a result, we have not made submissions on every issue on the Issues List. In a number of cases, we have elected to focus our resources on other areas, and not develop positions on issues, including some that have material impacts. Where SEC indicates that it does not have submissions on any issue, that should not be interpreted as agreement with the Application or any aspect of it, nor agreement with the position of any other party to this proceeding. Where we agree, we say so explicitly. Silence is just silence.
- 0.1.6** The numbering of Sections and Subsections in this Final Argument is not consistent with the numbering in the Board-approved Issues List. Because of the way in which the issues unfolded during the proceeding, the areas of major emphasis have been different. As a result, this Final Argument in Sections 1-9 follows the Application and the Filing Requirements. Sections 0, and 10-13, deal with other matters necessary to cover all of the issues.

¹ Interrogatory 1B-SEC-5.

0.2 Overriding Issue – Applying the RRFE

0.2.1 RRFE and Benchmarking. This is a seminal case, because for the first time, a utility has filed a Custom IR application that includes detailed benchmarking evidence. Since that evidence has been challenged – in our submission successfully - by an independent expert retained by Board Staff, the Board is faced with an important issue. ***What should the Board do when the proposed spending by a utility is inconsistent with the benchmarking evidence?***

0.2.2 This is a test of whether the Custom IR component of RRFE can work at all. As envisioned by the RRFE, Custom IR is not “Tell us what you want to spend for the next five years, and we’ll give you rates to cover that”. It is much more comprehensive and sophisticated than that.

0.2.3 As the Board has tried to make clear, both in the RRFE and in subsequent interpretations during rate cases, Custom IR is a method of assessing the reasonableness of a utility’s future revenue requirement and rates using metrics specific to the utility. However, it is still, in its essence, incentive regulation, and it is still intended to decouple rates from costs. It seeks to do so in a more sophisticated, utility-specific way, but “utility-specific” is not intended to be a synonym for “five year cost of service”².

0.2.4 Just recently the Board went to some length, in the Hydro One Distribution decision, to set out in clear terms the relationship between benchmarking and cost forecasts, when it said, referring specifically to Custom IR:

“Cost of service rate-setting has an important role in performance-based regulation regimes to periodically examine in detail the costs and activities underpinning rates. However, the OEB continues to believe that multi-year incentive rate-setting, with its emphasis on results, is the most effective way to incent behaviour similar to that seen in commercially-oriented, consumer market-driven companies. Incentive rate-setting differs from cost of service rate-setting in that it relies less on a utility’s internal cost, output, and service quality to establish rates, and more on benchmarks of cost, output, and service quality that are external to the utility revealing superior performance and encouraging best practice. The decoupling of rates from the utility’s own costs simulates a competitive market environment and is more compatible with an outcomes-based approach to regulation.”³ [emphasis added]

0.2.5 The Board reinforced the emphasis on benchmarking, and de-emphasis of cost of service, by saying:

² EB-2013-0416, Decision with Reasons, p. 13-14.

³ Ibid, p. 14.

“[T]raditional cost of service review will continue to entail detailed input cost assessments. However, Custom IR proceedings are intended to be framed more like performance inquiries resulting in multi-year outcome commitments and measures that facilitate year-over-year performance assessment. The productivity and efficiency elements allow the OEB to move away from detailed input cost assessment and focus more on utility performance.” [emphasis added]

“The RRFE policy articulates the importance the OEB places on benchmarking. Benchmarking evidence, whether it compares a utility’s performance to itself year-over-year, or to other utilities, is a critical input to the OEB’s assessment of utility performance.”⁴

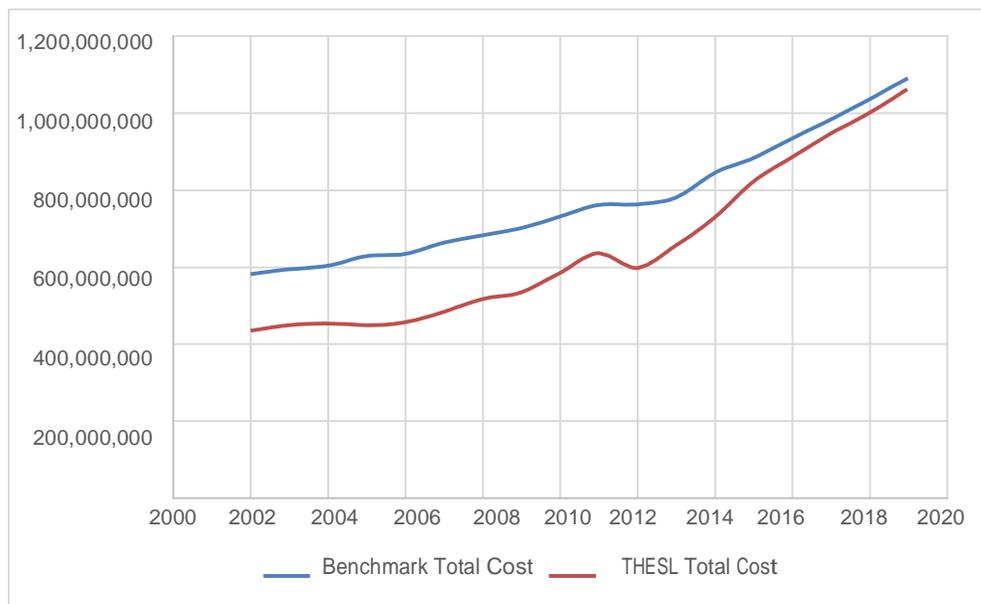
- 0.2.6** The Hydro One situation was one in which the utility failed to provide appropriate benchmarking evidence, and failed to recognize productivity and efficiency explicitly in its plan. It simply filed five years of cost of service forecasts. The Board, quite rightly, refused to set rates on the basis of Custom IR, because the application was not compliant with the RRFE’s expectations for Custom IR.
- 0.2.7** That is not the case here. To their credit, the Applicant has sought to implement the spirit, as well as the letter, of the RRFE. We may disagree with them on some of the specifics, which will be dealt with later in this Final Argument, but they have clearly attempted to achieve a result that is based on the concept of incentive regulation.
- 0.2.8** **Conflicting Evidence.** Toronto Hydro has a different problem. They have filed both cost of service and benchmarking evidence. The cost of service evidence, on which they base their proposed rates, says one thing. The benchmarking evidence, on the other hand, says something completely different.
- 0.2.9** What does the Board do with this conundrum? Does it implement the detailed cost of service information, in the face of its own outcomes-driven policy? Or, does it implement the benchmarking information, in the face of the Applicant’s pleas for more money?
- 0.2.10** SEC submits that the answer lies in the nature of the Application itself. The Applicant Toronto Hydro admits that their Application is not driven by any desire to achieve externally-benchmarked performance levels. They admit, in fact, that their Application is driven by their bottom-up assessment of how much money they should be given to spend. In effect, faced with the disjunct between their cost forecasts and the benchmarking results, Toronto Hydro says follow the cost forecasts, and ignore the benchmarking results.

⁴ Ibid, p. 15.

- 0.2.11** It is instructive in this respect to look at the Applicant’s Argument In Chief. In the oral submissions⁵, counsel for the Applicant establishes, and then hammers again and again, the theme of the Application: NEED. The word “need” is used to describe the Applicant’s spending requirements 37 times in those oral submissions, and hundreds of times in the written compendium tabled along with them. It is an old debating trick. Keep repeating your theme until it becomes the “truth”. If you use the term “need” often enough, the Board will come to believe that they have to give you the money, because you “need” it. Nothing else matters. Need is need. (At least, that’s the theory.)
- 0.2.12** This is not how Custom IR is supposed to work. Custom IR is not driven by need. That would be cost of service. Custom IR is a new, more comprehensive approach. Done properly, the utility starts with a benchmarking study, which provides the utility with detailed information on reasonable performance levels, whether in terms of costs, rates, reliability, safety, or any other relevant outcomes. Armed with that information, the utility should then develop plans that achieve those reasonable performance levels. Or, if those levels are not achievable in the rate period, the utility should develop plans to get as close as they can. Certainly, the minimum is that they should be moving in the direction of the benchmark performance.
- 0.2.13** Toronto Hydro has not attempted to do that. Instead, they established cost forecasts based on what they want, rather than achievement of reasonable outcomes. Those cost forecasts, based on an erroneous foundation, are the entirety of the Toronto Hydro case. However, in our submission they should be ignored. They are driven by spending outcomes, not outcomes for the customers. They are not helpful to the Board.
- 0.2.14** In our submission, the Board should not do what Toronto Hydro is requesting – follow the cost forecasts. It should do the opposite. The Board should follow the benchmarking results, and set rates accordingly.
- 0.2.15** *Just and Reasonable Rate Levels.* In their Argument in Chief, the Applicant points to a benchmarking graph filed July 31, 2014 by Power Systems Engineering. This is a graph comparing Toronto Hydro over time to a combined dataset of Ontario and US distributors. That graph⁶ looks like this:

⁵ Tr. 10, throughout.

⁶



0.2.16 This is one of a number of comparisons of Toronto Hydro to benchmark costs, and is by far the most favourable. But, it is completely misleading.

0.2.17 The above graph combines two separate datasets: Ontario and U.S. The Ontario comparison has already been done, by the Board, in its 2014 update of its own econometric benchmarking⁷. That study shows that Toronto Hydro had the following comparative costs relative to its Ontario peers:

- (a) 2010 – 41.7% higher than benchmark
- (b) 2011 – 47.7% higher than benchmark
- (c) 2012 – 45.1% higher than benchmark
- (d) 2013 – 48.4% higher than benchmark

Only two distributors, Hydro One, and Algoma Power, had worse benchmarking results. This is not surprising, given that those were also the only two distributors with higher costs per customer in 2013. Toronto Hydro's cost per customer, \$924, was in fact 45.89% higher than the provincial average⁸.

0.2.18 PSE has not provided a comparison of Toronto Hydro to its Ontario peers, using its own methodology. When asked why its combined dataset was so much different from the Board's econometric benchmarking, Mr. Fenrick of PSE said⁹ that the

⁷ Empirical Research in Support of Incentive Rate-Setting 2013 Benchmarking Update, Pacific Economics Group, July 2014.

⁸ In this Application, the Applicant proposes to increase its cost per customer to \$1123 by 2019, with its continuing expanded capital plan driving that even higher in subsequent years. :

main reason was the inclusion by PSE of the US data set. That turned out not to be the case, as can be seen below¹⁰. Toronto Hydro fares badly against the US benchmark as well. Yet, when asked by SEC to do a straight up comparison of Toronto to the Ontario benchmark, PSE, through Toronto Hydro's counsel, refused to do so¹¹.

- 0.2.19** PSE's reason for refusing to compare Toronto Hydro to its Ontario peers is that, notwithstanding the Board's own policy, the other Ontario LDCs are not in their view an appropriate peer group for Toronto Hydro.
- 0.2.20** PEG correctly points out¹² that the use of a combined dataset, as PSE did, is methodologically unsound, and therefore of little value.
- 0.2.21** PEG therefore focused on the US-only peer group proposed by PSE. The two experts disagree on the results from that comparison as well, but directionally they are similar. PEG shows a cost comparison as follows¹³:

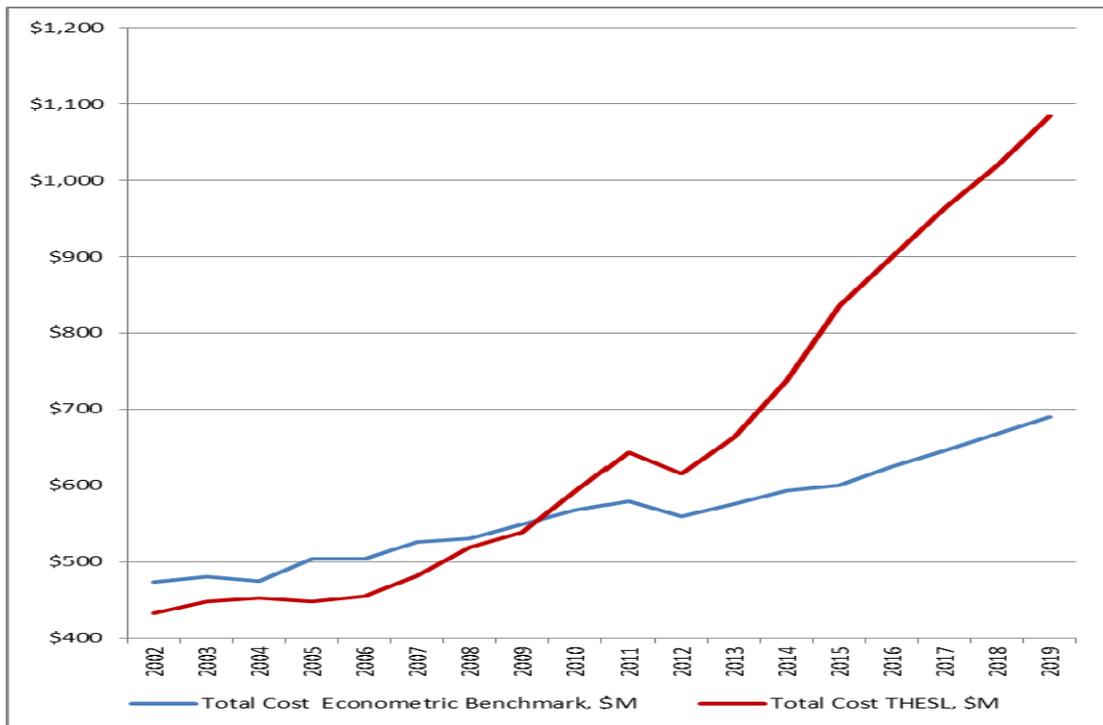
⁹ Tr. TC2:144.

¹⁰ As we note later, the likely reason why this dataset produces better numbers for Toronto Hydro is the urban core dummy variable, which in PSE's view only applies to Toronto Hydro in Ontario. This would result in Toronto Hydro having much "better" performance, due to a company-specific variable "adjusting" the results.

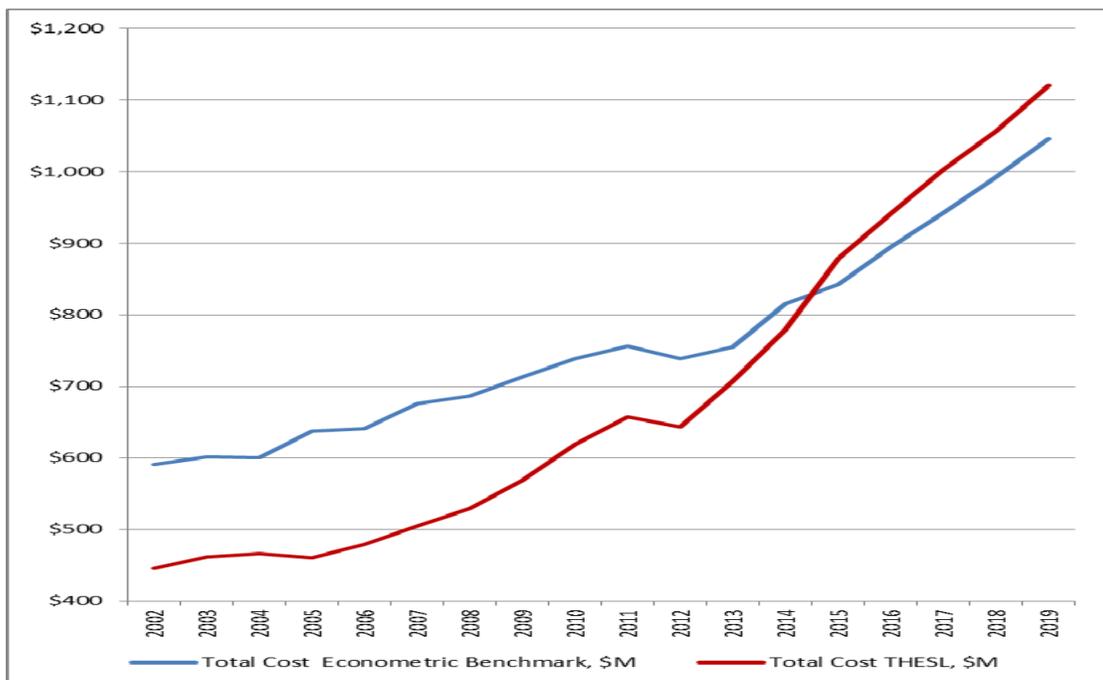
¹¹ Tr. TC2:148. No surprise. If the combined dataset shows Toronto Hydro doing well, and the US dataset shows poor performance, the Ontario-only dataset would have to show stellar performance. The contrast with the PEG results would be stark, and would show clearly how heavily the results are biased by the urban core dummy variable.

¹² Ex. 1-THESL-60.

¹³ Undertaking J3.7.1



0.2.22 That can be contrasted with the results from PSE, which show a cost comparison as follows:



0.2.23 Both PSE and PEG agree that Toronto Hydro, compared to its US peers, is getting

costlier. As we note later¹⁴, this is because the Toronto Hydro rate of increase of its costs is significantly faster than the US rate of increase, starting in 2007 and continuing until the end of the current Test Period, 2019. Both experts agree that Toronto Hydro's costs are growing at a faster rate than the US peer group¹⁵.

0.2.24 The experts disagree on how much Toronto Hydro is getting worse, with the primary difference between the models being the so-called "urban core dummy variable". We will discuss this later, but the essence of this disagreement is that PSE picked four high cost US "urban" utilities to test its variable. PEG looked at all 27 US urban utilities, and did a proper test of the variable¹⁶. That test showed that it was not statistically significant. PEG therefore correctly concluded that the effects of a dense urban core were already included in the PEG model, through four variables that model those effects specifically¹⁷.

0.2.25 *What Does This Mean?* SEC submits that the evidence before the Board shows:

- (a) Compared to an Ontario-only peer group, Toronto Hydro is significantly (47%) worse on costs already, before the increases proposed in this Application. This is the Board's own data, and Toronto Hydro has declined to supply an Ontario comparison that is inconsistent with that data.
- (b) Compared to a U.S. peer group, Toronto Hydro is already increasing its costs faster than the benchmark, and proposes to accelerate (in a negative way) that differential going forward. Both experts agree with this.
- (c) Unless the Board rejects the evidence of Dr. Kaufmann, and agrees that a theoretical urban core based on New York, Chicago, San Diego and part of Phoenix represents a useful variable applicable to Toronto Hydro, the better model results¹⁸ show that
 - (i) Toronto Hydro's costs are currently about 36% above the US benchmark level, and
 - (ii) By the end of the proposed Test Period, Toronto Hydro's costs will be about 72% above the costs of the U.S. benchmark level.

0.2.26 There are two ways of looking at this. First, you can measure the difference between the costs of the US benchmark over the 2015-2019 period, and the Toronto Hydro forecast costs on the same basis, to get a calculation of Toronto Hydro's

¹⁴ See Section 1.7.

¹⁵ See Section 1.10 below for the graphs that show the comparative annual increases, as set out by PEG and PSE.

¹⁶ See PEG's discussion in 1-THESL-43.

¹⁷ See 1-THESL-33(b).

¹⁸ Undertaking J3.7.1, p. 3.

“excess costs” for the period. Second, you can assume an equal starting point for Toronto Hydro and the US benchmark as of the beginning of the period, and compare the increases from the starting point as a measure of the “excess increases” for the period.

0.2.27 Those two calculations are set out in the following table¹⁹:

Year	Toronto Hydro Proposed	Excess Costs			Excess Increase		
		U.S. Benchmark Lower by	Revised Toronto Hydro Forecast	Excess Cost Forecast by Toronto Hydro	U.S. Benchmark Increased by	Revised Toronto Hydro Forecast	Excess Increase Forecast by Toronto Hydro
2015	\$701.1	28.14%	\$503.8	\$197.3	1.18%	\$603.2	\$97.9
2016	\$734.3	30.56%	\$509.9	\$224.4	4.17%	\$628.4	\$105.9
2017	\$794.8	32.92%	\$533.2	\$261.6	3.36%	\$649.5	\$145.3
2018	\$848.5	34.45%	\$556.2	\$292.3	3.41%	\$671.7	\$176.8
2019	\$892.5	36.41%	\$567.6	\$324.9	3.29%	\$693.7	\$198.8
Total	\$3,971.2		\$2,670.7	\$1,300.5		\$3,246.5	\$724.7

0.2.28 Toronto Hydro revenue at current rates, for five years, would be \$2,981.0, not accounting for growth. Not surprisingly, since Toronto Hydro already has costs higher than the U.S. benchmark, the total revenue requirement for 2015-2019, if tied directly to the U.S. benchmark, would be less than current revenues by about \$310 million. While this may be a reasonable goal to achieve at some time in the future, SEC agrees that a cutback of this severity should not be ordered abruptly. It may take decades to get back to this reasonable level.

0.2.29 However, if Toronto Hydro’s costs were only allowed to increase at the same rate as the U.S. benchmark - i.e. tying the revenue requirement to the U.S. benchmark increases - that would allow \$265.5 million of increases over those five years. On average, rates plus growth would equal a 16.35% increase, which is about 3.1% per year compounded for five years²⁰.

0.2.30 SEC Recommendation. SEC therefore recommends, consistent with the Board’s focus on objectivity and benchmarking, as set out in the RRFE, that the costs of Toronto Hydro be forecast to increase at the same rate as their U.S. benchmark.

¹⁹ Sources of data: “Toronto Hydro Proposed” and “U.S. Benchmark Increased By” from K9.2, p. 38 (revised by THESL). “U.S. Benchmark Lower By” from J3.7.1, p.3. The latter calculation is (Toronto Cost-US Cost)/Toronto Cost, producing the relevant percentage.

²⁰ This compares to a total of \$990.2 million additional revenue requirement (\$3,971.2-\$2,981.0) as proposed by Toronto Hydro. That is a 49.70% five year rate increase, or 8.4% per year compounded for five years.

This would allow the Applicant an additional \$265.5 million in spending over the next five years, which should be more than enough if the utility makes serious commitments to productivity, and to prioritization of its spending. It would also mean rate increases that, while still greater than inflation, are more in keeping with the rate increases for other Ontario distributors.

0.3 Summary of Submissions

- 0.3.1** This Final Argument contains a detailed analysis of some of the issues arising in this proceeding. The following are the top-level rate recommendations resulting from that analysis.
- 0.3.2 *Nature of the Inquiry.*** SEC believes that Toronto Hydro has focused too specifically on its five year capital plan, and lost sight of the overriding goal of this process, “just and reasonable rates”. Thus, Toronto Hydro has given less credence to the benchmarking information than it should have. As noted above, the message is that, if in doubt, the Board should follow the cost of service evidence, not the benchmarking evidence.
- 0.3.3 *Revenue Requirement.*** SEC is proposing in this Final Argument that Toronto Hydro be allowed to increase its revenue requirement by 3.1% for each of the five years 2015-2019, for a total compounded increase of 16.35% over that period. This is exactly equal to the forecast increase in the US cost benchmark for the same period, although it is smoothed rather than volatile, as the benchmark would be.
- 0.3.4** SEC has also made specific proposals for the OM&A budget that it believes are appropriate for each year. That budget, adjusted for OPEBs on a cash basis, would be about \$234 million in 2015, increasing by about 0.7% annually. The balance of the revenue requirement would therefore be available to fund rate base and the capital program. The details are as follows²¹:

²¹ “Applied for” is from J9.5 App. OM&A and Revenue Requirement are as set forth elsewhere in this Final Argument. Implied capital service amount in 2014 was \$349.6 million, based on \$596.2 million of revenues less \$246.6 million of OM&A.

Toronto Hydro Custom IR Revenue Requirement						
	<i>2015</i>	<i>2016</i>	<i>2017</i>	<i>2018</i>	<i>2019</i>	<i>Totals</i>
<i>Applied For</i>	\$701.1	\$734.3	\$794.8	\$848.5	\$892.5	\$3,971.2
- % increase	17.6%	4.7%	8.2%	6.8%	5.2%	49.7%
<i>SEC Proposal:</i>						
<i>OM&A</i>	\$234.0	\$235.6	\$237.3	\$238.9	\$240.6	\$1,186.5
- % increase	NA	0.7%	0.7%	0.7%	0.7%	
<i>Capital Service</i>	\$380.7	\$398.1	\$416.1	\$434.7	\$453.9	\$2,083.5
- % increase	8.9%	4.6%	4.5%	4.5%	4.4%	29.8%
<i>Revenue Requirement</i>	\$614.7	\$633.7	\$653.4	\$673.6	\$694.5	\$3,270.0
- % increase	3.1%	3.1%	3.1%	3.1%	3.1%	16.5%

0.3.5 SEC believes that the proposed revenue requirement would be consistent with the benchmarking evidence, and would still provide Toronto Hydro with a substantial and increasing budget to fund capital programs.

0.3.6 Other Issues. SEC has provided submissions on many of the other issues in this proceeding, as more particularly detailed in the sections that follow.

1 RENEWED REGULATORY FRAMEWORK

1.1 General

1.1.1 This Application is one of the first (after Enbridge, Hydro One, and Horizon) to seek rates set on the basis of Custom Incentive Regulation under the Renewed Regulatory Framework for Electricity. Toronto Hydro is seeking an increase in its rates, over the next four years and eight months, of \$990.2 million, significantly more than would be allowed under 4th Generation IRM or Annual IR²².

1.1.2 A lot has been said about the RRFE in this proceeding, and we have made a number of comments about it in this Final Argument as well. In this section, we propose to deal with two aspects of the RRFE - Customer Engagement and Benchmarking – as they relate to Toronto Hydro.

CUSTOMER ENGAGEMENT

1.2 Introduction

1.2.1 SEC believes that the customer engagement exercise carried out by the Applicant, while perhaps well-intentioned, was fatally flawed in two key respects:

- (a)* First, the questions were put to customers in a biased manner, making support of the Applicant's excessive spending proposals inevitable because the customers surveyed did not understand the true context.
- (b)* Second, the generalizable results were received too late to have any meaningful influence on the Applicant's capital and operating plans.

1.2.2 Notwithstanding these serious problems, customers still opposed the rate increases proposed by Toronto Hydro.

1.3 Bias in the Workbook, Focus Groups, Interviews and Survey

1.3.1 Toronto Hydro carried out four different kinds of direct customer engagement:

- (a)* An online workbook for residential and commercial customers²³.

²² SEC estimates those two alternatives to produce a similar result for Toronto Hydro, i.e. a cumulative increase of about \$100 million over the 2015-2019 period (at 1.1% per year). Thus, Custom IR is being used to justify an additional increase of about \$890 million over five years, almost nine times the standard applicable to everyone else.

²³ Tr.9:105. We note that the witnesses admitted that the data from these cannot be relied on, at least in part because they have no way of knowing if the respondents were simply Toronto Hydro employees: see Tr.9:143.

- (b) Focus groups for residential and small commercial customers²⁴.
- (c) A telephone survey of residential and small commercial customers²⁵.
- (d) Direct meetings with key account customers²⁶, generally large users or users with many smaller loads, like school boards.

1.3.2 The various customer engagement approaches all had one common problem: bias.

1.3.3 SEC cross-examined about this at some length. It appears that Toronto Hydro and Innovative Research biased the customer engagement plan in three key ways. First, they started with a backstory of aging infrastructure, needing repair to avoid degrading reliability, essentially forcing customers to agree with their spending plans. Second, they failed to give clear information on comparative rates, productivity, and future rate increases. Third, they offered answers that were three green lights, and one red light, thus pushing a green light response.

1.3.4 *The Aging Infrastructure/Declining Reliability Backstory.* Several times during cross-examination, we sought to get a clear statement of how the system was characterized to respondents. The best is probably the following²⁷:

“MR. SHEPHERD: But you were able to tell them a story about a system that was totally broken and needed money to fix it, right?”

MR. LYLE: Well, in fact it didn't say it is totally broken. That is your characterization.

MR. SHEPHERD: We're going to --

MR. LYLE: What it did say is that 30 percent of the infrastructure is beyond the age of which it was expected to continue performing, and that another roughly third was going to age out over the course of the plan that they were putting together.” [emphasis added]

1.3.5 The information provided to the respondents included setting up a kind of “run-to-failure” model as a straw man, and then asking customers to choose between that model and the Toronto Hydro proposal. We asked Mr. Lyle about that, and got the following responses²⁸:

“MR. SHEPHERD: You presented the customers with two options: We're going to let everything break and then fix it after it breaks, or we're going to fix things before they break. Those were the two options you gave them, right?”

²⁴ Tr.9:106.

²⁵ Tr.9:107.

²⁶ Tr.9:108.

²⁷ Tr.9:111.

²⁸ Tr.9:130-1.

MR. LYLE: We gave them the range, yes.

MR. SHEPHERD: Okay. And so you didn't say to them: Well, no. We're going to let the light bulbs go out first before we replace the light bulbs, but we're not going to let the car break before we maintain it.

You didn't give them that option, right? That is how utilities are actually run.

...

MR. LYLE: But let's just add to the explanation. What it said in the run-to-failure approach was with this approach Toronto Hydro would only replace equipment as it fails, with the exception of critical assets such as stations equipment. Right?

So we weren't saying wait until something that 8,000 people depend upon breaks and then fix it depending on whether it is on hand.

MR. SHEPHERD: What you were saying was: If a pole falls down, we will replace it. If a pole doesn't fall down, we don't care how rickety it is.

MR. LYLE: Essentially, yes."

1.3.6 SEC submits that this is not how utilities are run, and in presenting this stark choice as the only alternative to the Toronto Hydro plan, they were simply setting up a straw man. It is a truism that you can make anything look good, if you can come up with a bad enough alternative.

1.3.7 Respondents were also told that there was a link between the capital plan and reliability, and they had to accept cost increases if reliability is to be maintained. For example²⁹:

"MR. SHEPHERD: All right. And so the point of this, then, was to get the customers to help you understand what's the right balance between spending more money and getting more reliability.

And you gave them some information on the connection between the two, right?

MR. LYLE: Yes.

MR. SHEPHERD: Okay. So how did you give them information on the connection between the two when the company can't give the Board information on that? How did that happen?

MR. LYLE: It's in the workbook; you can read it for yourself.

MR. SHEPHERD: But you're giving evidence, and I am asking you.

MR. LYLE: Well, this is the workbook that I was given by Toronto Hydro. This is the information they were able to put together for me."

1.3.8 Later, Mr. Lyle had this to say about reliability and the Toronto Hydro plan³⁰:

²⁹ Tr.9:133.

³⁰ Tr.9:141-2.

“MR. LYLE: ...The point is that they [the respondents] are put in the boat that Toronto Hydro was trying to understand where consumers were coming from. If they looked at those challenges and they look at their pocket book, what is the balance? Are they prepared to have a few more outages and keep their bills down, or is it important to maintain the current reliability there is and pay some more?”[emphasis added]

1.3.9 The story told to the respondents thus forced them to agree with the plan. The assets were too old, and needed to be replaced, the only alternative was just to let things fail, and it is necessary to spend more to maintain current reliability.

1.3.10 Mr. Lyle was clear, in the end, that if the story told to the respondents in the lead up to the questions was not true, then the responses may well have been different³¹.

1.3.11 ***Rates and Productivity Information.*** The story that was told to the customers can be contrasted to the story that wasn't. We asked about that as well³²:

“MR. SHEPHERD: In any of these interactions, did you say: By the way, our cost increases are higher than the US utilities we compare ourselves to? Ever?

[Witness panel confers]

MS. KLEIN: No, we did not.”

1.3.12 This was one of a series of important omissions from the story told to customers, including the following (among others):

“MR. SHEPHERD: Okay. In any of these customer interactions, did you tell the customers that the Ontario Energy Board had compared all of the LDCs in the province and found that Toronto Hydro's productivity performance was so bad it was considered an extreme outlier?

Did you tell any of them that?

*MS. KLEIN: We did not talk to the customers about the benchmarking results. I wouldn't agree with your characterization of them, but we did not talk to the customers about the benchmarking results as part of the customer engagement program designed to gauge needs and preferences, specifically with respect to the capital plan.”[emphasis added]*³³

“MR. SHEPHERD: In any of these customer interactions, did you tell the customers that you were going to increase their rates by 50 percent over five years?

MR. LYLE: We gave them -- and you can see in the workbook the dollar

³¹ Tr.9:149.

³² Tr.9:109.

³³ Tr.9:110.

impact on their bill, both by year and cumulatively. So they saw the total impact they would have on their bill.

MR. SHEPHERD: Did the 50 percent rate ever come up in any of those discussions, once?

MR. LYLE: We expressed it in dollar values.”³⁴

“MR. SHEPHERD: So even though you knew when you were talking to them that you were going to ask for \$990 million more, you didn't tell them that?

MR. BILE: What we told them, sir, was what their bottom-line impact was going to be.”³⁵

1.3.13 When asked why comparative information on costs was not provided to customers, Mr. Lyle said:³⁶

“MR. SHEPHERD: I don't see anywhere here where it says: And by the way, relative to others, this is how much we're charging you for where we are today?

MR. LYLE: Right. So there are two challenges in doing that in a workbook like this.

The first challenge is that, generally speaking, what customers are looking at is their own personal experience.

So they're looking at: How much do I pay for what I am going to get? And you actually summed it up exactly that way when you were talking about what a large consumer wants to get. I agree a hundred percent with what you said.

And so that is basically the approach we took here, to centre it on the experience of the consumer.

If we had done a comparative examination of costs, we would have also had to do a comparative examination of the grids; how old is Toronto's grid compared to other grids, how complicated is Toronto's grid compared to other grids, and what the reliability statistics are compared to other systems.

That would have taken a lot more time.”[emphasis added]

1.3.14 Mr. Lyle did not appear to see the irony that providing information on the aging grid, in isolation, was OK, but providing information on costs was not OK, unless the other information was also included.

1.3.15 What was more surprising was his unwillingness to agree that telling customers

³⁴ Tr.9:111. Contrast this with the evidence of Mr.Bile, at Tr.9:119, where he said: “Customers wold like to know what percentages their rates are going to go up by, and that is what we try to furnish.”

³⁵ Tr.9:120.

³⁶ Tr.9:136.

Toronto Hydro already has high rates would affect their answers:³⁷

“MR. SHEPHERD: I'm right, am I not, that if you -- let's say the average customer has a \$33 a month bill, distribution bill.

MR. LYLE: That's what it says in the workbook, sure.

MR. SHEPHERD: Sure. If that customer -- if you tell that customer: By the way, that \$33 is \$10 a month higher than the average for the province, if you tell them that at the beginning, their answers are likely to be different when you talk about the increases that are proposed; isn't that right?

MR. LYLE: Well, they'd start with questions. They would start by asking why it would be different here than it is in other places.

MR. SHEPHERD: And my question is: Is it likely that their answers to the questions about future spending would be different if they knew that Toronto Hydro's rates are higher than everybody else?

MR. LYLE: It depends on how they viewed the answers to the questions.

MR. SHEPHERD: So you can't estimate that?

MR. LYLE: No.”

1.3.16 With respect, the witness' response is disingenuous.

1.3.17 In SEC's submission, if the customers had been told the full story, instead of the biased story dreamed up by Toronto Hydro – including cost and rate differentials, benchmarking results, etc. – customers would certainly have responded in much more negative fashion.

1.3.18 *Three Green Lights and One Red Light.* The third kind of bias in the customer engagement activities was in the multiple choice answers allowed. We discussed that in two exchanges with Mr. Lyle:³⁸

“MR. SHEPHERD: All right. I wonder if we could go to the next page in your material.

You asked in the workbook -- and you asked this same question in the telephone survey and in the focus groups, so it's quite consistent. You'll see at the bottom you said you gave customers four options with respect to the --what they think for the future, right?

MR. LYLE: Yes.

MR. SHEPHERD: And the four options are: Spend more money. That's fine. I'm okay with the amount of money you're going to spend. I don't want you to spend this much, but you've convinced me that you should. Or no, it's too much.

³⁷ Tr.9:136-7. All he was willing to admit, later at p.149-50, is that if the story told to the respondents was not true, then the answers could be different.

³⁸ Tr.9:137-8.

MR. LYLE: Plus "not sure."

...

MR. SHEPHERD: But it's true, isn't it, that the first three answers are: Go ahead and spend the money?

And it is only the fourth answer that's: Don't spend the money. Right?

MR. LYLE: Well, the first answer is actually: Spend more.

MR. SHEPHERD: It is still at least approval of spending as much, right?

MR. LYLE: Yes."

1.3.19 Mr. Lyle refers to the answers that approve spending money as “green light” answers³⁹. SEC submits that the choices given to the customers were three green lights and one red light. It is not surprising that many customers chose the palest of the green lights, particularly after the tale of woe they had just heard about aging infrastructure, letting things break instead of fixing them, and declining reliability.

1.3.20 As a result of stacking the deck in this way, the Applicant is able to say that 58% of residential customers surveyed, and 48% of small commercial customers surveyed, approved spending some extra money on the system⁴⁰. However, we asked whether that could also be looked at another way, and got the following response⁴¹:

“MR. SHEPHERD: Okay. I look at that a different way, and I say, well, no, 19 percent said: I don't like your rate increase. And 73 percent -- or, sorry: I'm okay with your rate increase. And 73 percent said: I don't like your rate increase. Right? Isn't that true?”

MR. LYLE: That's true as well.

MR. SHEPHERD: And that's a legitimate conclusion from this, isn't it?

MR. LYLE: Well, if the conclusion is that the 73 percent are saying don't proceed, then that would be incorrect. Right? Because there is only 34 percent saying don't proceed. 39 percent are saying: I don't like it but I think it is necessary, so go ahead but pay attention.” [emphasis added]

1.3.21 We went on to discuss with Mr. Lyle the results of the telephone survey comments, which also showed that a majority of both residential customers (63%) and the small commercial customers (73%) said that the proposed plan cost too much⁴².

1.3.22 For all of these reasons, SEC submits that the results of the customer engagement were biased in favour of supporting Toronto Hydro’s plan, and despite that customers showed significant resistance to the Applicant’s spending proposals.

³⁹ Tr.9:139.

⁴⁰ Tr.9:140.

⁴¹ Tr.9:140.

⁴² Tr.9:146.

- 1.3.23** Toronto Hydro says that the customers say their plan is reasonable, and they accept it.

“The bottom line, in my submission, as determined through the statistical telephone survey, is that customers surveyed in Toronto Hydro's most populous rate classes, the residential and small business classes, gave what I would call qualified acceptance to the proposed plan at the proposed bill increases.”

With the greatest of respect, the customers said no such thing. The customers, after being told the Toronto Hydro version of its problems and needs, and not told the sorry tale of Toronto Hydro's high costs and poor benchmarking results, still said that they don't like the increase, whatever it is. At its highest, what they said is that if everything Toronto Hydro was saying was true, and there were no other salient facts being omitted, and the increase was not too much, they would pay it.

- 1.3.24** We note in this respect that Mr. Lyle was not qualified as an expert in either polling or customer engagement (or anything else). There were, in our submission, two obvious reasons for that. First, Mr. Lyle and his firm were clearly not independent, as the Board requires of experts. By omitting qualification as experts, Toronto Hydro prevented parties from asking questions about that independence. The Board should conclude, both from the cross-examination and from the lack of expert qualification, that Mr. Lyle and his firm were not independent. Second, parties did not, because there was no expert qualification, have any opportunity to ask questions about the other work, as “spin doctors”, that Mr. Lyle and his firm do on a regular basis.

- 1.3.25** Thus, in our submission the Board cannot accept any statements from Mr. Lyle as to his conclusions from his work as evidence in this proceeding. His evidence on what work he did, and what the respondents answers, is all factual. Anything he says about what those answers mean is, in our submission, not evidence in this proceeding⁴³.

1.4 **Timing**

- 1.4.1** The second problem with the customer engagement was its timing, and that is a much simpler issue. Toronto Hydro did not go out to its customers first, find out their needs and preferences, and then develop a plan that was responsive to what they were hearing. Instead, they developed the plan that their engineers proposed, and asked the customers if it was OK.

⁴³ We note, in this respect, that this does not go to weight. If Mr. Lyle is not an expert, which in law he is not, then he was a person carrying out a task under the Applicant's supervision. He only has knowledge of what he did, and what happened as a result. Any conclusions can only be drawn by the Board.

1.4.2 This is not really much different from their approach to benchmarking. Instead of gathering evidence, and then planning with the assistance of that evidence, Toronto Hydro prepared a plan, and then sought to create evidence that would support it.

1.4.3 In our submission, Toronto Hydro has fundamentally misunderstood the role of customer engagement in the RRFE. The RRFE is not turning ratemaking into a democracy, in which customers vote on rate increases. The RRFE is urging distributors to understand their customers better, and develop operational and capital plans that respond to that understanding.

1.5 What About the Letters?

1.5.1 Toronto Hydro filed fifteen letters from key account customers that were generally supporting of additional infrastructure spending⁴⁴. This was part of a key account interview process that included face to face interviews with 133 key account customers⁴⁵.

1.5.2 SEC sought to interview the 133 key account customers, in order to find out what they were told, and how they responded to Toronto Hydro. Mr. Smith claimed in the oral hearing that no such request was made, but he is mistaken. The actual exchange is in the Technical Conference, as follows⁴⁶:

“MR. RUBENSTEIN: With respect to meeting your major customers and getting feedback from major customers, am I correct Toronto Hydro did attend those meetings?”

MS. KLEIN: Our engagement activities with respect to our very large customers can be found at Exhibit 1B, tab 2, schedule 7, page 8.

MR. RUBENSTEIN: Is the answer yes? [we understand the witness nodded]

Now, with respect to the meetings referred to, are you able to provide the name of the customers, the dates of those meetings, the list of attendees, and all the material that you provided to them and any minutes that were taken?

MR. SMITH: No, we're not prepared to do that.”[insertion added]

1.5.3 Over the following weeks there followed a discussion between SEC and the Applicant with respect to the refusal at the Technical Conference. This devolved to a discussion about the key account evidence, and how it was to be used. This is summarized in three letters, two from SEC and one from Applicant’s counsel, which are attached as Appendix A to this Final Argument.

⁴⁴ Ex.1/2/7/AppA.

⁴⁵ Tr.9:113.

⁴⁶ Tr.TC2:158.

1.5.4 As can be seen, Toronto Hydro made clear that they are not in any way saying that their key account customers support their Application. All they are saying is what is plain on the face of the fifteen letters filed. There is no inference that this represents the views of customers generally, nor any other particular customer other than those who wrote the letters.

1.5.5 The position of the large customers is therefore unknown, except for the fifteen who sent letters based on a sample provided by Toronto Hydro⁴⁷. Ultimately, SEC decided not to spend the extra time and money to interview those fifteen, because:

(a) Seven of the fifteen are landlords that do not pay their own electricity bills⁴⁸, and

(b) A majority are customers with specific, unusual reliability problems⁴⁹, and

(c) At no time were any of them told the extra dollar cost they were going to incur as a result of the Toronto Hydro plan⁵⁰.

1.5.6 In our submission, the Board has no evidence before it on which it could fairly conclude that large customers want Toronto Hydro to increase their capital spending and thus impose 50% rate increases. The Board can conclude that large customers want improved reliability. SEC agrees. What the Board cannot conclude is that large customers want improved reliability at any price.

1.6 What Should the Board Conclude?

1.6.1 Customer engagement is not intended to be a sales job for the utility's application. In our submission, the Board should conclude with respect to Toronto Hydro's customer engagement that:

(a) Toronto Hydro misunderstood the purpose of customer engagement, and as a result did it too late to be useful in their planning.

(b) The responses of customers in the various methods of engagement do not provide any evidence whatsoever that customers support the Toronto Hydro spending proposals.

(c) It is not useful to the Board to file survey and other data that is based on a thoroughly biased methodology.

⁴⁷ Tr.9:122.

⁴⁸ Tr.9:123.

⁴⁹ Tr.9:123-4.

⁵⁰ Tr.9:118-9.

BENCHMARKING

1.7 Introduction and Purpose of Benchmarking

1.7.1 SEC has dealt with some of the key aspects of benchmarking in Section 0.2 of this Final Argument, above. In our view, benchmarking is central to Custom IR, and the failure to respect that reality is the main problem with this Application.

1.7.2 In this section, we wish to augment that discussion with a more detailed look at some other aspects of benchmarking as it applies to Toronto Hydro.

1.7.3 **Toronto Hydro's View.** Central to Toronto Hydro's message in this Application is a particular view of benchmarking, expressed again by counsel in the Argument in Chief⁵¹:

"Benchmarking, of course, is just a data point."

1.7.4 This is not the first time we heard that message. Ms. Klein also repeated it more than once⁵², as did others. The message is:

*"And we recognize that benchmarking is a data point, but it's just that. It's not determinative of the overall funding that we're requesting. The issue for us isn't in relation -- sort of what we need in relation to other utilities. The issue is what Toronto Hydro needs, and the evidence that we have provided justifying the work that we intend to do." [emphasis added]*⁵³

1.7.5 It is understandable that Toronto Hydro would want to de-emphasize benchmarking. They do poorly in those comparisons. Unfortunately for Toronto Hydro, the RRFE and common sense require that benchmarking be given considerable importance, much more so than "just a data point". The reason is that this proceeding is not about "what Toronto Hydro needs". It is about "just and reasonable rates".

1.7.6 **Reasonableness.** In our submission, the importance of benchmarking lies in the concept of reasonableness. The Board is faced with a difficult task. Utilities come before it seeking more and more money, almost always more than is really appropriate. This is not because they are doing something wrong. It is because they have a particular point of view, and from that point of view additional money would allow them to do more in their jobs. Their view of "need", though, is different from the view a customer might reach, knowing all the facts but having

⁵¹ Tr.10:53.

⁵² Tr.9:102 and again on 103. The wording is identical. It is a planned message.

⁵³ Tr.9:102.

the pay the money rather than receive it.

- 1.7.7** The Board has to decide between what can be vastly different points of view. As Toronto Hydro and their consultants freely point out, ratepayers do not want to pay more money. The engineers and other operational staff at the utility have an almost unlimited list of things on which they could legitimately – and quite reasonably – spend more money. These two points of view cannot be reconciled, and some form of compromise is required.
- 1.7.8** The Board could simply cut the baby in half, but this Board, at least, has historically been insistent that decisions must be made based on hard data and real evidence. “Picking a number” is not an option.
- 1.7.9** So, the Board has developed a number of strategies for setting rates in more rigorous ways. For example, IRM is a formula which sets rates for four out of five years based on empirical data on industry norms. It is, in effect, the ultimate in benchmarking from past, industry-wide data. In addition, IRM includes a stretch factor that specifically adjusts for productivity differences between utilities, a more detailed form of benchmarking.
- 1.7.10** Even in a cost of service application, the Board does not just look at the evidence and exercise its judgment in a vacuum. The Board looks at other utilities, and at economic factors such as inflation, to assess whether the utility’s proposals are reasonable. In most cases, that inquiry results in the Board approving a revenue requirement and rates that are less extreme than those proposed by the utility. The use of external methods of testing reasonableness usually results in some adjustment to the amounts requested.
- 1.7.11** The Board also, of course, applies its own expertise. Board members are experienced, not just within the industry, but also in looking at rate applications. When Board members see cost per customer numbers, for example, they understand those within the context of similar numbers from many other utilities. This is a further lens through which to assess reasonableness.
- 1.7.12** What the Board does not do is simply look at the budget proposed by the Applicant, and without any context decide whether to accept it or not. That is not how rate regulation works.
- 1.7.13** *How Benchmarking Fits Into Custom IR.* The Board has been clear that Custom Incentive Regulation is still incentive regulation. What that means is that, like 4th Generation IRM, Custom IR is supposed to adjust rates using an empirical basis. It is not five year cost of service.
- 1.7.14** Toronto Hydro would like to relegate benchmarking to the stretch factor, and nothing more. If a utility has 40% higher costs than a benchmark of its Ontario

peers, and 33% higher costs than a benchmark of its U.S. peers, it is better to focus on the difference between a 0.3% adjustment each year vs. a 0.6% (or even 1.0%) adjustment each year. That is especially true if the adjustment is on only 30-40% of revenue requirement, as Toronto Hydro proposes. The alternative – looking at the overall costs relative to the benchmark – is hundreds of millions of dollars worse.

- 1.7.15** SEC believes that benchmarking is not a stretch factor issue. The stretch factor is set using benchmarking, to be sure. However, the benchmarking also informs the Board with respect to the reasonableness of the overall costs and revenue requirement.
- 1.7.16** The way Custom IR differs from 4th Generation, in our submission, is that the utility is given the opportunity to show, through hard evidence, how a different set of empirical parameters is more appropriate for that utility, as compared to the general empirical parameters applied to everyone in 4th Generation IRM.
- 1.7.17** A good example might be a utility that is underinvested in its capital infrastructure. It has to spend additional money on capital to catch up, and 4th Generation IRM would not have the flexibility to fund that spending. SEC would expect a utility in that situation to provide vintage information as to the age and cost of their assets, and benchmark that data to their peer group. If that information was not readily available, SEC would expect them to show that their rates are below the rates of comparable utilities, and that the reason for that differential is capital service, not operating costs. Either of those would provide hard evidence that the utility is different from the norm. In either case, the evidence would also provide a quantitative basis for the Board to set rates with a new, utility-specific rate trajectory.
- 1.7.18** Similarly, a utility could show that its growth is far greater, or far less, than the median for other distributors in the province, and as a result its spending pressures are different. That is, again, a measurable relationship, and SEC would expect that utility to file information tying the growth differential to spending (for example, by creating a reasonable peer group of high growth utilities, or developing an appropriate econometric model for this purpose).
- 1.7.19** In SEC's submission, custom benchmarking is a critical aspect of Custom IR. Any distributor that seeks greater increases in revenue requirement or rates than the norm should be in a position to file benchmarking evidence consistent with those greater levels. If they cannot, then in our submission their additional spending requirements are *prima facie* not valid. If the additional spending is reasonable, then proper benchmarking should bear that out. If it does not, then there is a legitimate question as to reasonableness.
- 1.7.20** In Toronto Hydro's case, SEC submits that the benchmarking evidence shows them

to be poor performers, and getting worse. In those circumstances, it is submitted that the evidence is inconsistent with their position that their spending proposals are reasonable.

1.8 Cost Benchmarking Evidence of Power Systems Engineering

- 1.8.1** Board Staff has provided a thorough analysis of the cost benchmarking evidence of PSE, and SEC does not believe it is worthwhile to add another detailed review.
- 1.8.2** In summary, SEC believes that PSE sought to replicate the Board's PEG econometric analysis, but made a number of mistakes in doing so. Most of those mistakes it has rectified over the course of the proceeding, in virtually every case by accepting the corrections proposed by Dr. Kaufmann. There are three mistakes that they have not corrected, discussed in more detail below. But for those final three mistakes, their results would be almost identical to those of PEG.
- 1.8.3** In our submission, the Board can place little weight on the conclusions of Mr. Fenrick and his team. They have been shown, on a consistent basis, to be wrong on everything that mattered. Their study, apparently designed to show that Toronto Hydro is not as bad on costs as they appear, has been unmasked.
- 1.8.4** An excellent example is the unwillingness to show the PSE results for Ontario only. It is clear why that is. If Ontario only had been filed, it would show that the urban core dummy variable – applicable in their theory only to Toronto Hydro – had the express effect of fudging the results in favour of Toronto Hydro. Without that adjustment, Toronto Hydro is a poor performer (as they are with the U.S. benchmark). With that adjustment, which artificially increases only Toronto Hydro's expected costs in the Ontario dataset, Toronto Hydro looks good.
- 1.8.5** Instead, PSE filed the combined dataset only, hiding the Ontario effects in the broader group.

1.9 Cost Benchmarking Evidence of Pacific Economics Group

- 1.9.1** SEC prefers the evidence of PEG, who did the original study on which both studies are based, and throughout the proceeding has spent time correcting the PSE study. We note that, except for bad debt (where PSE had data that PEG did not), and the high forecast future capital index (which was not disclosed until the oral hearing), PEG did not have to correct their study.
- 1.9.2** SEC submits that, as between the two studies, the more authoritative and reliable work was provided by PEG and Dr. Kaufmann.

1.10 Common Elements

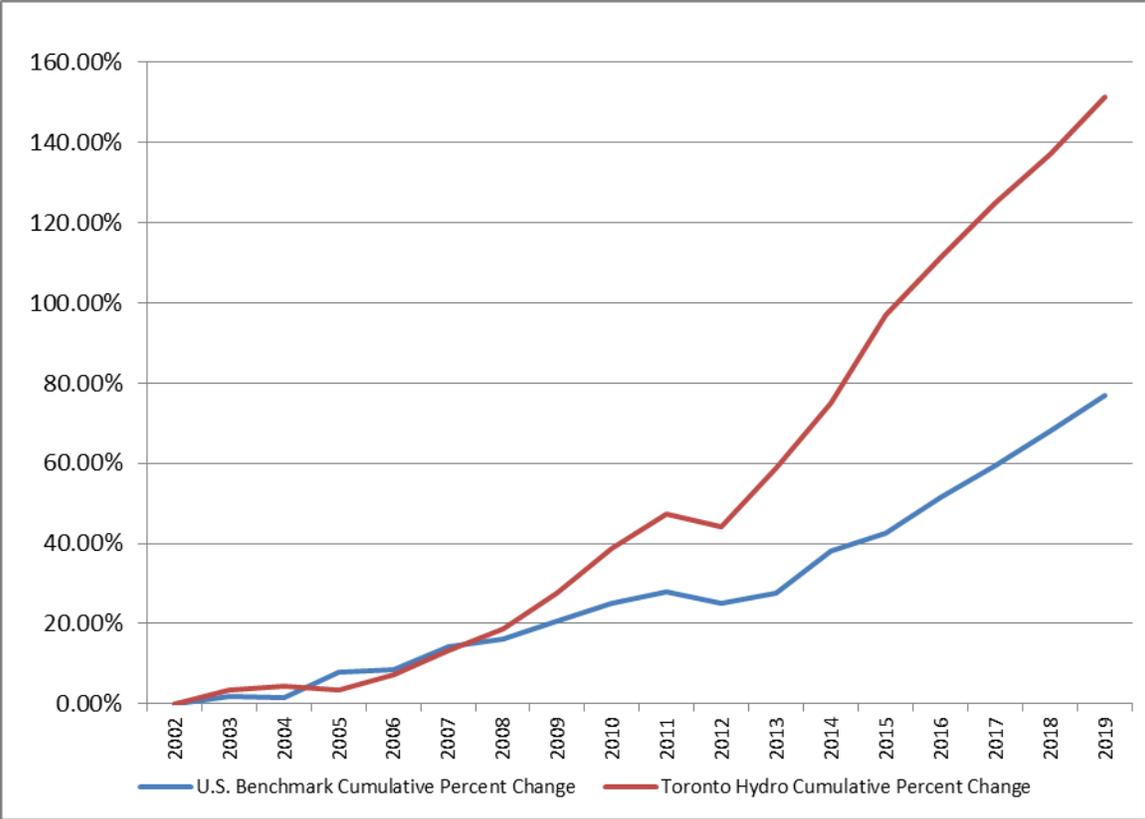
1.10.1 In any case, in our view the studies arrive at a similar place, except for three main differences that have now been thoroughly identified:

- (a) The urban core dummy variable.
- (b) The adjustment for CDM to make U.S. and Toronto Hydro data consistent.
- (c) The assumption as to capital service cost increases for the period 2015-19.

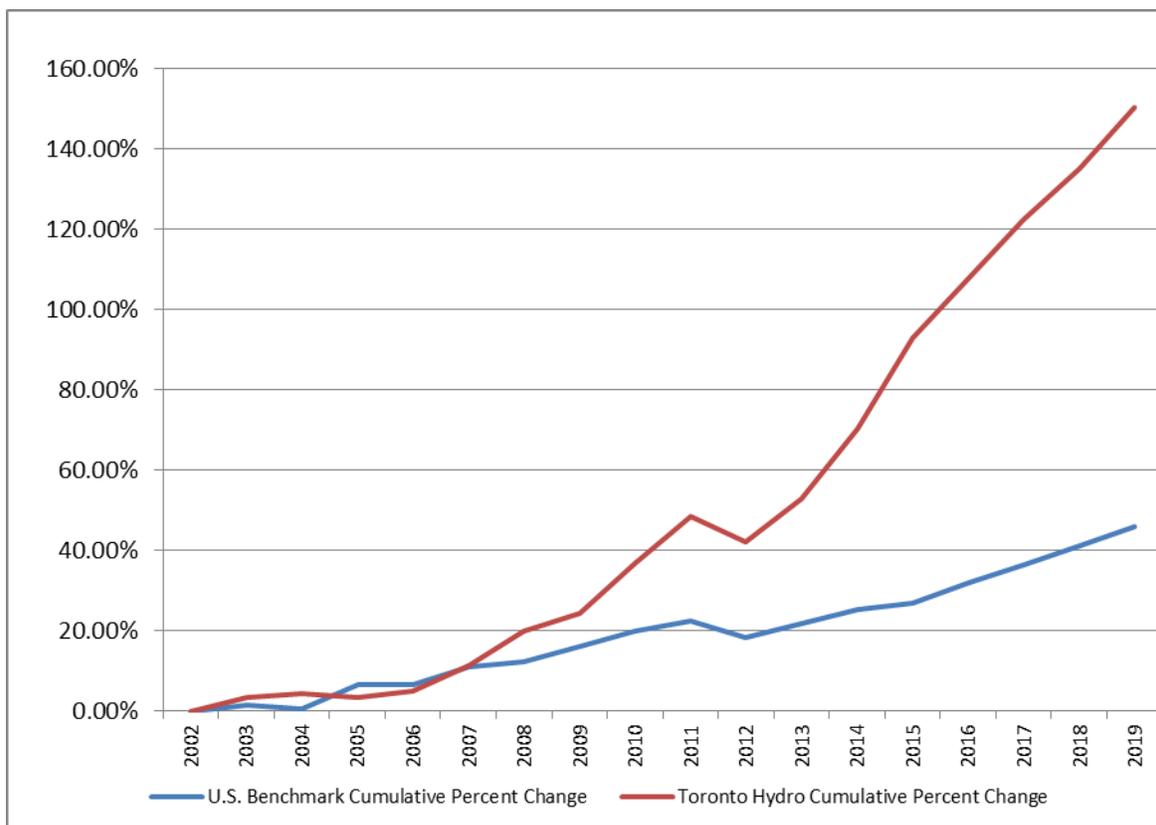
1.10.2 What we do see, though, is that on the key issue of annual increases in costs, PEG and PSE are largely in agreement.

1.10.3 In Section 0.2 above, SEC has provided the PSE and PEG tables of benchmark vs. Toronto costs for the 2002 to 2019 period. The same data also provides information on the year over year increases in costs for both the U.S. benchmark and Toronto Hydro. Those were included in K9.1, the SEC Panel 5 Compendium, at pages 15 and 34.

1.10.4 PSE shows that Toronto Hydro`s costs are, and have been, increasing at a faster rate than the U.S. benchmark since 2007, and the gap continues to widen. That graph looks like this:



1.10.5 The PEG graph of rate of change⁵⁴, looks very similar:



1.10.6 It is important to note that these are rate of change graphs. They show an essentially identical pattern, with the PEG results simply more extreme. However, because of the urban core dummy variable, the PSE results start with Toronto Hydro costs lower than the benchmark, rather than the same, as with PEG.

1.10.7 SEC submits that the rate at which Toronto Hydro's costs are increasing, relative to the U.S. utilities, is an important area of agreement between the experts. Unless they have a good reason for the difference, Toronto Hydro is forced to admit that their year over year performance has been poor relative to the U.S. benchmark.

1.10.8 Do they have a good reason for the difference? SEC put that to Mr. Fenrick and Toronto Hydro executives, in cross-examination. Neither was able to provide a good reason.

⁵⁴ Data from Undertaking J3.7.1.

1.10.9 There are really only three possibilities, and all stem from the fact that the PSE study shows that Toronto Hydro's costs in 2002 are well below those of the U.S. benchmark utility:

- (a) Accounting methods for capital assets for the period prior to 1999 may have been different for Toronto Hydro and the U.S. benchmark group. Member Quesnelle asked about that, and Toronto Hydro responded by undertaking. The response⁵⁵ was that Canadian GAAP was used from 1998, and may have been used prior to that time. The response, which has not been tested, does not say that municipal accounting was not used, or that none of the rate base of Toronto Hydro at that time was calculated using municipal accounting. Having said that, the Board's only evidence is that different accounting methods may not be the reason for the 2002 cost differential. SEC must accept that.
- (b) Toronto Hydro may have been underinvested in capital in 2002, and had to catch up. There is no evidence that this is the case, and when asked whether they were taking this position, Toronto Hydro steadfastly refused to do so⁵⁶.
- (c) Toronto Hydro may have been more efficient than the U.S. utilities in 2002, but that efficiency advantage has been eroding year by year as Toronto Hydro increases its spending.

1.10.10 In SEC's submission, in the absence of evidence to show that Toronto Hydro was underinvested in 2002, of which there is none, the Board must be seriously concerned with the pattern of cost increases at Toronto Hydro over the 2002 through 2019 period.

1.11 Areas of Disagreement

1.11.1 The three areas of disagreement have been considered by Board Staff in detail in their Final Argument, and SEC adopts those submissions.

1.11.2 In SEC's submission, it is clear that PEG's conclusions are correct in the case of the urban core dummy variable, and the assumed increase in the capital service cost going forward. The issue of how to adjust for CDM is more problematic, since neither of the proposed solutions is really a good one, but on balance SEC believes that the PEG solution is the more rigorous.

1.11.3 In any case, it is really the urban core dummy variable that is the big issue. That makes up about two-thirds of the difference between the PSE and PEG results. The story is a simple one. PSE developed a variable based on a theory that serving an

⁵⁵ Undertaking J9.1.

⁵⁶

urban core causes costs that are not captured in the many other related variables in the PEG econometric model. As is required, PSE tested that hypothetical variable to see if the data supported it. Unfortunately, they used only four U.S. cities, of which only two – New York and Chicago – can reasonably be thought of as similar to Toronto. They ignored dozens of U.S. cities that are also similar to Toronto in the nature of their urban core.

1.11.4 PEG tested the variable properly, using 27 U.S. city cores. Properly tested, the variable proved not to be empirically valid. The point of testing is to validate the variable against the data to see if it is explanatory. When subjected to a proper test, the PSE variable failed. The supposed urban core dummy variable does not explain in a statistically significant way incremental costs to serve a large urban core. It is not more complicated than that.

1.11.5 SEC notes that, without the urban core dummy variable, there is no configuration of the PSE study in which Toronto Hydro is other than a poor cost performer relative to the U.S. benchmark utility costs.

1.12 Conclusions and Application to Toronto Hydro's Rates

1.12.1 SEC has set out its overall proposal earlier. In our submission, the Board should not approve rates that allow Toronto Hydro to get any more offside the benchmarks than it already is. Whether Toronto Hydro is 15%, or 33%, or 47% higher than the benchmark costs today, the Board's rate orders should ensure that its cost performance doesn't degrade further from 2015-2019.

2 CAPITAL PLAN

2.1 Introduction

2.1.1 This Application is driven almost entirely by the five year capital plan. This was essentially admitted in the Argument in Chief⁵⁷:

“Effectively, the capital is central to this application because of its size and magnitude and demands that are currently faced by Toronto Hydro, and so the need for that capital is also central to your decision.”

2.1.2 The Toronto Hydro witnesses had similar comments, such as the following⁵⁸:

“MS. KLEIN: Mr. Shepherd, we're here today to talk about our application and Toronto Hydro's capital needs. As far as other companies and their particular needs, that is not something that this panel would have sufficient insight into the operations of those companies to speak to.

MR. SHEPHERD: Yes. We're actually not here to talk about your capital needs. We're here to talk about your rates; isn't that right?

MS. KLEIN: Mr. Shepherd, I think, as we discussed earlier, a primary driver of our need for rates and revenue requirement are the underlying capital needs. That is what has driven us to bring this custom IR application, and that is -- I think more than half of the prefiled evidence is dedicated to is discussing those capital needs, in particular detail, over the next five years.” [emphasis added]

2.1.3 There are many other examples, in the written evidence, in the interrogatory responses and Technical Conference, and in the oral hearing. This is a capital-driven Application, and neither the Applicant nor anyone else has made any bones about it. They believe they need to spend \$2.5 billion over the next five years on capital. It is an entirely bottom-up, “this is what we need”, approach. Everything else is secondary.

2.1.4 SEC’s view, expressed elsewhere in this Final Argument, is that the capital plan should be seen through the lens of the benchmarking evidence, and not the other way around.

2.1.5 However, in this section we will also look at the capital plan itself, and assess its weaknesses.

⁵⁷ Tr.10:3.

⁵⁸ Tr.9:45.

2.1.6 Given those weaknesses, in our submission the Board should not rely on the capital plan proposed by the Applicant as a basis for setting rates for 2015 - 2019.

2.2 Overview

2.2.1 Toronto Hydro is proposing almost unprecedented capital spending levels over the five year term of its plan. It is seeking approval for \$2.56 billion in capital expenditures between 2015 and 2019.⁵⁹ The forecast in-service additions, the amount customers will see in their rates, would be even larger at \$2.68 billion.⁶⁰

2.2.2 The issue before the Board in determining the appropriateness of Toronto Hydro's proposed capital plan is not primarily a question of type of capital work it plans to do, but the level of capital work it plans to do. SEC does not take issue with the capital programs set out in the DSP. Where there are significant concerns, they are about the amount of capital work that Toronto Hydro claims it must do, and the cost to do that work.

2.2.3 Even the amount proposed in the Application is a misstatement of the true forecast of capital. Toronto Hydro is forecasting \$119 million for externally-driven capital projects, but has only included \$20 million in its budget, with the rest to be collected through a variance account to be disposed of in 2020.⁶¹ The true cost of its capital plan is thus expected to be \$2.66 billion (on a capital expenditures basis) and a similar amount more on an in-service addition basis. This amount is significantly more than Toronto Hydro will have spent in the previous 5 years.⁶²

2.2.4 The main justification given by the Applicant for its high capital spending is that the system is, in essence, "falling apart". In our submission, the Board should disregard Toronto Hydro's bleak view of its own assets' health. While the evidence is that 26% of its assets are operating beyond end of their useful life, up 4% from 2011, the condition of those assets, and the actual system reliability metrics, reveal a more accurate picture of Toronto Hydro's assets. This is discussed in more detail below.

2.2.5 SEC submits that for the reasons set out below, the Board should significantly reduce the size of Toronto Hydro's proposed capital program. Thus reduced, in our submission it is then possible for Toronto Hydro to operate the utility within the annual increases the benchmarking evidence shows to be reasonable.

⁵⁹ See Ex.2B-00, p.15.

⁶⁰ J4.3.

⁶¹ 2B-SIA-22. Tr.4:22-24.

⁶² 1B-SEC-5.

2.3 Distribution System Plan

- 2.3.1** Fundamental to Toronto Hydro’s capital plan, is the oft repeated position that it has a capital “backlog” of approximately \$2.56Bn.⁶³ The backlog cost is calculated by determining the cost to get to what it claims is its steady state.⁶⁴ Steady state for Toronto Hydro is ensuring no assets are being used in its system beyond what it calls the “optimal intervention time” as determined by its Feeder Investment Model (“FIM”).⁶⁵
- 2.3.2** At a high-level, the optimal intervention time is supposed to demonstrate the point in time at which it is the most cost efficient to replace an asset. The problem with the FIM’s calculation of the optimal intervention time is that it has an inherent bias in favour of replacing assets more quickly than they actually need to be replaced.
- 2.3.3** *The Feeder Investment Model is Structurally Biased.* Toronto Hydro’s asset analytics, and its use of what it calls its “decision support systems”,⁶⁶ most importantly its FIM, appear on the surface to be an advanced way to approach asset replacement. In reality, this method is no more sophisticated than the old way of approaching asset replacement. Indeed, it may be a retrograde step.
- 2.3.4** In contrast to most other utilities, which have increasingly moved away from simple age-based assessments of their assets, and towards condition-based assessments, at its core Toronto Hydro still uses an age approach. In its Argument-in-Chief, Toronto Hydro was honest about this approach, stating “[i]n terms of the age of the assets, it’s the primary driver with respect to renewal.”⁶⁷ The problem - as demonstrated below - is that the difference between the health of an asset class, measured by the asset condition assessment, and the remaining useful lives of the assets in the class, can and often will be very significant.⁶⁸
- 2.3.5** By way of example, Toronto Hydro’s largest single program is its Underground Circuit Renewal Program (E6.1), which is aimed at replacing underground switches, transformers and cable at a cost of \$459.3 million over the plan term. Toronto Hydro plans to replace 1,667 underground transformers over those 5 years, including 348 in 2015 alone. Yet, the Asset Condition Assessment conducted by Kinetrics shows that as of 2014, only 33 underground transformers⁶⁹ are in very poor or poor condition.⁷⁰

⁶³ See Ex.2B-00, p.15. Evidence Conference Tr:11, Tr:1:48.

⁶⁴ Tr.4:25-26.

⁶⁵ Tr.4:25-26.

⁶⁶ Evidence Conference, p.21. Tr:1, p.84-5, 129. Tr:4, p.159.

⁶⁷ Tr.4:10.

⁶⁸ Technical Conference J1.3.

⁶⁹ Underground transformers include i) submersible transformers, vault transformers, and pad mount transformers (Tr.4:52-53).

⁷⁰ K4.1, p.25. Table extrapolated from 2B-D2, Appendix A.

- 2.3.6** SEC submits it is simply not reasonable to replace, in 2015 alone, over 10 times the amount of assets whose assessed health shows a need for replacement.
- 2.3.7** During the hearing, Toronto Hydro tried to explain away this significant discrepancy by reference to some other issues with multi-taps, or fast degradation in the last few years, but that is not a rationale for replacing the assets at such a rate.⁷¹ The real driver is this: Toronto Hydro is using an age-based assessment, not condition-based.
- 2.3.8** Mr. Paradis fairly commented that they look at age as the most important factor in determining if they should or should not replace an asset.⁷² This is what the FIM does. It only uses asset condition – the health index – to accelerate the need to replace an asset. The health of an asset only has an effect on the FIM if it shows that the health of a given asset is worse than what one would expect the condition of the asset would be for its age.
- 2.3.9** Yet, the inverse is not true. If the asset is in better condition than what Toronto Hydro would expect for its age, that would not lower the probability of asset failure in the model, and thus it would have no effect on the decision to replace the asset at that time.⁷³ As Mr. Otal explained:

“The health index will only be considered within the calculation to indicate whether the asset is accelerating, in terms of its failure probability, from the baseline calculation.”⁷⁴

This one-sided approach artificially increases the amount of assets the FIM model says should be replaced at this time.

- 2.3.10 Replacement Based on Condition vs. Age.** Nobody disputes that at a high level there is a relationship between asset age and asset condition. A new asset will be much less likely to fail than a 50 year old asset. The problem arises when determining the point at which a distributor needs to replace any given asset. If one is going to use an age-based assessment, as Toronto Hydro does, it must ensure that that the age it believes it must replace an asset is statistically likely to be the age it actually needs to be replaced. Using the useful lives given to the asset internally or by some third-party is problematic, and that is why utilities have been relying increasingly, over the years, not on age but on condition.
- 2.3.11** The Underground Circuit Renewal Program is a perfect illustration of this problem. As shown by the table below, Toronto Hydro has a significant number of

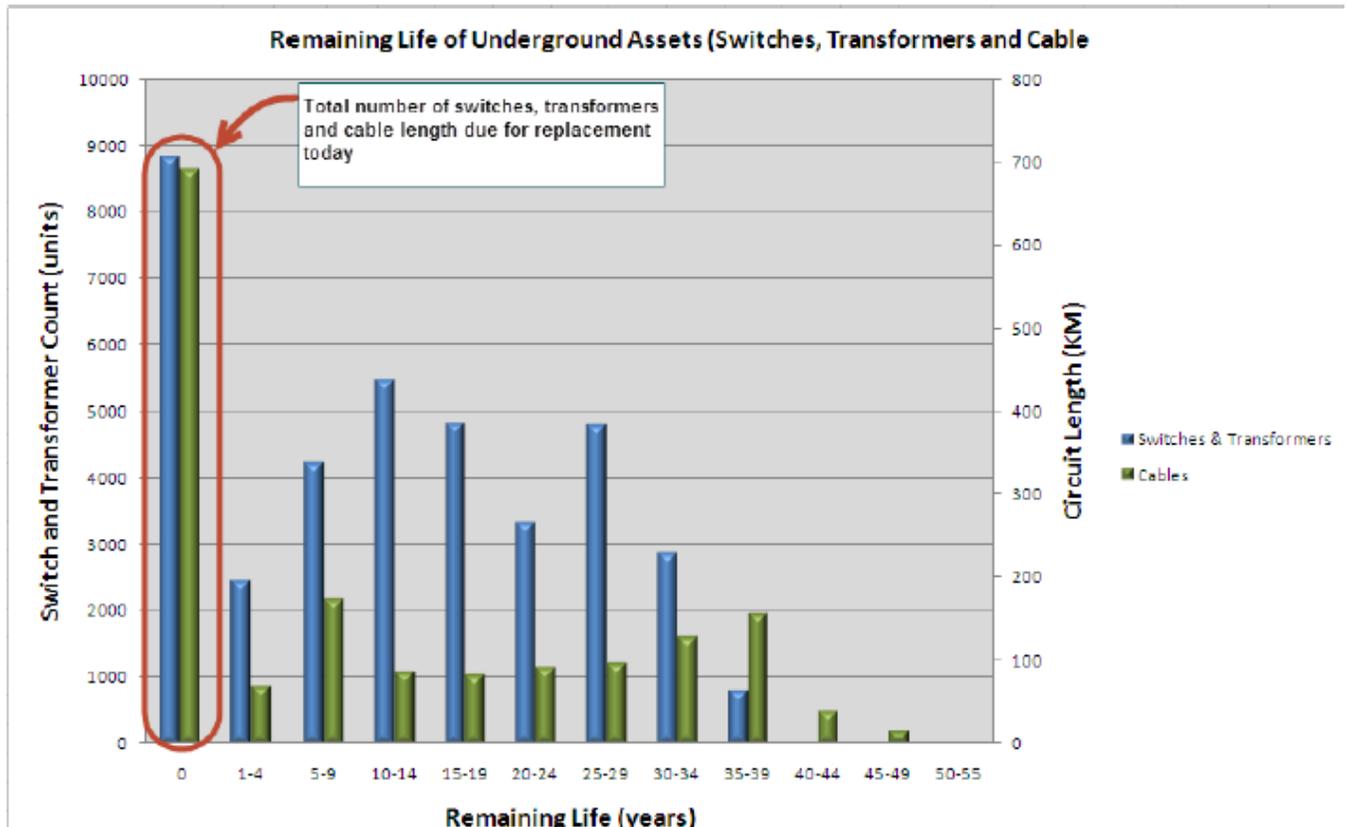
⁷¹ Tr.4:54-55.

⁷² Tr.4:55.

⁷³ Tr.4:59.

⁷⁴ Tr.4:60-61.

transformers and switches that are beyond end of life. In contrast, the Kinectrics Report makes clear that it has very few of those assets in very poor or poor condition. This demonstrates that, at least for Toronto Hydro, the calculation of the useful lives for those assets, and thus their age-based probability of failure for the FIM, is meaningless and should not be the basis for any decision on the level of assets to be replaced.



Source: Ex.2B-E6.1,p.31 (Figure 24)

2.3.12 This impact is not even the most important aspect of this problem. The blatant disconnect between the amount of assets at end of life, and their actual condition, not only leads to too many assets being replaced in a given program during the test period, but also drives how Toronto Hydro determines its overall level of spending. At a high level, Toronto Hydro’s “paced approach” is based in part, on getting to steady state by 2037, where all of its assets will be replaced at their “optimal time”. That assumes replacing assets not only in many cases before their so-called end of life, but at the very least, no later than the assumed end of life, regardless of their actual condition.

2.3.13 This is a fundamentally flawed basis for a capital spending program, where the end of life calculation is disconnected from the actual end of life of the asset. SEC submits the evidence demonstrates that the useful lives given to some asset categories are not reasonably consistent with their actual operational life. The

Asset Condition Assessment bears this out. This has the effect in potentially dramatically increasing the amount of assets that need to be replaced at any given time.

2.3.14 The condition of Toronto Hydro’s assets are much better than it would have the Board believe. The results of its asset condition assessment show that only 5 asset classes have more than 10% in poor or very poor condition.⁷⁵ Most asset classes have less than 1% in poor or very poor condition.

Exhibit 2B Section D2 Appendix A: 2014 Audit Results By Asset Class													
Asset	% very poor	% poor	% fair	% good	% very good	% very poor & poor	# very poor	# poor	# fair	# good	# very good	# very poor & poor	
1 Station Power Transformer	1.24%	13.64%	49.59%	23.14%	12.40%	14.88%	3	37	133	62	33	40	
2 Station Switchgear	4.84%	36.69%	33.47%	9.27%	15.73%	41.53%	14	102	93	26	44	116	
3 Air Blast Circuit Breakers	0.00%	3.89%	87.78%	2.78%	5.56%	3.89%	0	11	255	8	16	11	
4 Air Magnetic Circuit Breakers	0.21%	4.72%	74.25%	18.88%	1.93%	4.93%	1	30	466	118	12	31	
5 Oil Circuit Breakers	0.64%	10.19%	82.80%	6.37%	0.00%	10.83%	2	34	275	21	0	36	
6 Oil KSO Breakers	0.00%	4.55%	81.82%	13.64%	0.00%	4.55%	0	3	48	8	0	3	
7 SF6 Circuit Breaker	0.00%	0.00%	7.69%	46.15%	46.15%	0.00%	0	0	15	93	93	0	
8 Vacuum Circuit Breakers	0.00%	0.21%	3.14%	10.25%	86.40%	0.21%	0	1	21	69	583	1	
9 Submersible Transformers	0.00%	0.02%	6.68%	34.93%	58.36%	0.02%	0	2	638	3337	5576	2	
10 Vault Transformers	0.00%	0.23%	23.48%	39.80%	36.50%	0.23%	0	30	3060	5188	4757	30	
11 Padmounted Transformers	0.00%	0.02%	10.09%	43.51%	46.38%	0.02%	0	1	722	3115	3321	1	
12 Padmounted Switches	0.00%	0.39%	7.20%	36.12%	56.30%	0.39%	0	3	58	290	452	3	
13 3 Phase O/H Gang Manual Switches	0.00%	0.39%	3.01%	63.84%	33.15%	0.39%	0	4	33	707	367	4	
14 3 Phase O/H Gang Remote Switches	0.00%	0.00%	15.38%	76.92%	7.69%	0.00%	0	0	2	12	1	0	
15 SCADAMATE Switches	0.13%	0.00%	1.14%	57.34%	41.39%	0.13%	1	0	11	531	383	1	
16 Wood Poles	2.34%	7.64%	44.13%	7.28%	38.61%	9.98%	2885	9419	54403	8975	47598	12303	
17 Automatic Transfer Switches	0.00%	16.98%	32.08%	30.19%	20.75%	16.98%	0	10	19	18	12	10	
18 Network Transformers	0.00%	0.00%	16.40%	41.45%	42.14%	0.00%	0	0	310	784	797	0	
19 Network Protectors	0.00%	0.00%	3.75%	32.25%	64.00%	0.00%	0	0	61	521	1034	0	
20 Network Vaults	1.70%	8.80%	72.37%	16.08%	1.04%	10.50%	18	93	769	171	11	112	
21 Cable Cambers	0.26%	1.60%	10.77%	50.17%	37.20%	1.86%	28	174	1174	5470	4056	203	

2.3.15 Trend in Asset Condition. Toronto Hydro has tried to deflect the reality of its asset condition by putting emphasis on the declining trend of some of its asset classes.⁷⁶ What the condition trend analysis shows is that, for some assets, class condition on average has declined since 2011 (the last asset condition assessment undertaken) from very good to in some cases fair. As an example of that, the ACA says that pad mounted and submersible transformer condition trend is categorized as ‘extremely significant decline’ and ‘very significant decline’.⁷⁷

⁷⁵ K4.1, p.25. Ex.2B-D2-Appendix A.

⁷⁶ Ex. 2B-D-Appendix A, p.13-15.

⁷⁷ Argument-in-Chief Compendium, Tab 2, p.9.

- 2.3.16** When the Board looks at the actual numbers, SEC submits it should draw a very different conclusion. A total of 3 of those transformers, out of a population of 16,714, are in poor or very poor condition. An even more stark difference between trend and actual condition is seen with regard to network system assets.
- 2.3.17** Similarly, in the network transformers and protections category, where the trend shows a “significant decline”⁷⁸, there are currently zero assets in very poor and poor condition.⁷⁹ Further, approximately half the assets in those categories are in very good condition.⁸⁰
- 2.3.18** In previous cases, Toronto Hydro has said that it needs to replace assets in very poor condition in 2-3 years.⁸¹ A proactive asset replacement policy is not prudent if it means replacing significant levels of assets that do not need to be replaced within the next 5 years. This imprudence is especially problematic given Toronto Hydro’s dismal productivity and high existing rates.
- 2.3.19** *How Should the Board Respond to This Asset Replacement Strategy?* The Board should therefore, in SEC’s submission, disregard the doomsday comments of Toronto Hydro, i.e. if it does nothing, the percentage of its assets that will be beyond end-of-life will increase to 33%.⁸² The fact that 33% of its assets will be fully depreciated is not indicative of a problem with the quality of its infrastructure. As the Asset Condition Assessment points out, the age and the condition of the assets is not, either on a per asset basis, or on an aggregate basis, identical or even similar.
- 2.3.20** No party is suggesting that Toronto Hydro do no capital work during the next five years. SEC is recommending only that Toronto Hydro do significantly less than the \$500 million per year that it is forecasting over the next five years, by targeting assets in unacceptable condition, rather than older assets in good condition.

2.4 **Capital Planning Approach**

- 2.4.1** SEC submits there are several fundamental deficiencies in Toronto Hydro’s approach to capital planning. Those deficiencies include the following.
- 2.4.2** *Age Versus Condition.* As discussed in greater detail above, the starting point for its capital planning process, getting to what Toronto Hydro calls its “steady state”, is a fundamentally flawed approach. It assumes that all older assets must be replaced, regardless of their condition, and all younger assets in poor condition also have to be replaced.

⁷⁸ *Ibid.*

⁷⁹ K4.1, p.25. Ex.2B-D-Appendix A.

⁸⁰ Ex. 2B-D-Appendix A.

⁸¹ K1.1, p. 17. See EB-2007-0680 Ex.D1-8-9, p.4.

⁸² Argument-in-Chief, Tr.10:11,24. Argument-in-Chief Compendium, Tab 2, p.7. Evidence Conference Tr:11.

- 2.4.3 No Focus on Rate Impacts.** Toronto Hydro does not take into account rate impacts in the capital planning process. While at some other point in the rate application process rates are taken into account, the capital planners themselves do not consider rates⁸³, nor did they work to any budget or guidelines that were rate impact driven. The importance of this is that the capital plan has not actually been adjusted to take into account rate impacts. It is a plan built on an assumption of, for all practical purposes, unlimited funds. No business should actually plan that way.
- 2.4.4** Toronto Hydro says in their written evidence that their decision to implement the “Paced” instead of the “Accelerated” version of their spending was because it does not align with current resources and system constraints and most of all, rate increases. Yet, the evidence of the witnesses is that rate impacts were not a major focus. When asked about the decision to implement the “Paced” execution strategy, the witnesses’ rationale seemed entirely focused on system and operational constraints driving the decision, not rates.⁸⁴
- 2.4.5** This is also why Navigant’s review of the capital plan is insufficient, and not useful to the Board. Navigant admitted it did not consider rates at all when it reviewed Toronto Hydro’s capital plan.⁸⁵ A review of spending that starts from the premise “money is no object” will reach quite different results from a review that assumes spending control and availability of funds is a key restriction.
- 2.4.6** While one would expect that capital planners may want newer and better distribution assets, they must also understand and consider the rate impacts.
- 2.4.7 No Long Term Planning.** For a distributor that states quite baldly it will “require” capital spending at a significant level for the foreseeable future⁸⁶ (decades, in fact), it is more than a little surprising to hear Toronto Hydro say that it doesn’t do any long term capital planning longer than the 5 year horizon of the current rate period.⁸⁷ Toronto Hydro used to do rolling 10 year capital plans, but it apparently has now stopped doing them.⁸⁸
- 2.4.8** Long term capital planning is important in and of itself, and is supposed to be a cornerstone of distributor management under the RRFE. It is even more important for a distributor whose capital costs and distribution rates are among of the highest in the province. Part of the rationale behind the more comprehensive approach in the RRFE is the notion “You can’t just keep asking for more money. You have to have a plan that shows it will pay off in the end.”

⁸³ Tr.4:33-34.

⁸⁴ Tr.4:29-33.

⁸⁵ Tr.5:5.

⁸⁶ 1A-SEC-1.

⁸⁷ 2B-SEC-21.

⁸⁸ Tr.4:100.

2.4.9 SEC submits the lack of any long term planning evidence from Toronto Hydro is a clear indication that there is no actual plan to get capital costs under control. They will simply continue to ask for more money until the Board starts to say no.

2.4.10 *Lack of Unit Cost Forecasting.* Toronto Hydro has not only detailed the amount of money it plans to spend in each year of its plan. It has also forecast the number of assets it plans to replace or install. This is important because ratepayers are rightfully concerned with the amount of money Toronto Hydro plans to spend, but just as important is ensuring that, for that amount of money, they would be receiving good value.

2.4.11 The problem is that the link between the two – the amount of money being spent, and the quantity of assets being replaced/installed – is illusory. One would expect a distributor of the size and sophistication of Toronto Hydro to be able to determine the average cost to undertake a project, and then budget accordingly. But that is not what occurs.⁸⁹ As revealed during the oral hearing, Toronto Hydro used “historical considerations” to do its apparent “unit forecasting”. This means Toronto Hydro simply estimates the numbers of assets in each category it believes it will be able to replace/install in 2016-2019, based on the 2015 budget.⁹⁰

2.4.12 This approach to planning is inadequate. As discussed in more detail below, forecasts of unit costs, including declining unit costs due to productivity, are a key part of any good capital plan. The failure to forecast unit costs and reductions is a major gap in this plan.

2.5 No Productivity Has Been Forecast

2.5.1 *Productivity Forecast – Zero.* The Board should also, in our submission, be very concerned that Toronto Hydro has forecast no productivity improvements in its capital program during the test period. While the Applicant makes sure to include inflationary increases in its capital plan, it has neither implicitly nor explicitly budgeted a level of offsetting productivity it expects to achieve each year. Toronto Hydro’s view seems to be that there is actually no productivity to be had.

2.5.2 SEC submits the Board should apply a productivity factor to the capital budget. It is simply not credible to claim there is no productivity to be had, especially considering Toronto Hydro is seeking approval of over \$2.5 billion in capital spending over the plan term. Even based on the Applicant’s own total cost benchmarking evidence, Toronto Hydro is far from the most productive utility. The assumption that it cannot achieve any capital cost productivity is not realistic.

⁸⁹ Tr.4:44.

⁹⁰ Tr.4:46,51.

- 2.5.3** While Toronto Hydro claims that it has a desire for continuous improvement, all it is providing to ratepayers is performance metrics that it believes will measure productivity.⁹¹ Appropriate performance measures are important, but they are certainly not a substitute for giving a proper financial benefit to ratepayers arising out of productivity targets, nor do they provide an appropriate incentive to achieve actual productivity gains.
- 2.5.4** Even Toronto Hydro doubts that its metrics are meaningful. It has steadfastly refused to provide targets for any of its efficiency metrics, let alone incentives for achieving them.⁹²
- 2.5.5** *Contracting Out Does Not Equal Productivity.* Toronto Hydro claims that since 81% of its capital program is based on “market rates” - i.e. contracted work and external prices for material - there is no productivity that can be achieved during the plan period.⁹³ Of course, SEC notes that 81% of the capital budget is not the entire capital budget, but that is not the real issue. Toronto Hydro assumes that external contracting cannot deliver productivity.
- 2.5.6** The Board should reject this conclusion, as it based on a narrow view of how productivity savings can be achieved. For example, Toronto Hydro could create new processes for planning and executing capital projects, or better and more cost-effective ways to procure materials, especially considering the size of the projects proposed. Other distributors do this quite well. Toronto Hydro thinks they cannot, but we note that Toronto Hydro admits it has not done any analysis to determine if their approach is optimal.⁹⁴
- 2.5.7** In our submission, you can’t ask for approval to spend \$2.5 billion without at the very least looking to see if there are more efficient, productive ways to spend it. And, if some of your competitors/peers have better answers, it is incumbent on you, as a regulated utility, to at least have reviewed what they are doing, and assessed whether you can achieve similar results.
- 2.5.8** Toronto Hydro is essentially telling the Board that there is no way for it to deliver its capital program more efficiently on a year over year basis. It is simply not credible for Toronto Hydro to claim that it is as efficient as it could be.
- 2.5.9** It is not just a question of being more efficient within individual capital program, which clearly should be the case. In addition, certain capital programs themselves create productivity improvements.

⁹¹ Argument-in-Chief Tr.10:7. Ex.2B-C.

⁹² Tr.4:89, 92-93.

⁹³ Tr.3:46. Tr.4:87-88. Argument-in-Chief Tr.10:28.

⁹⁴ Tr.6:112.

- 2.5.10** As an example, Toronto Hydro is planning to spend \$51.3 million on a new Enterprise Resource Planning (“ERP”) system that it plans to bring in service in 2016. Toronto Hydro’s own evidence is that this will create \$1.7 million (year 1), \$2.2 million (year 2), and \$2.3 million (year 3) in capital expenditure cost and productivity savings.⁹⁵ These productivity savings relate to new back office IT systems allowing Toronto Hydro to implement its capital program more efficiency and cost effectively. None of those savings have been built into Toronto Hydro’s capital budget.
- 2.5.11** In the competitive market, companies are expected to find productivity improvements. This happens whether or not they source their labour or materials by way of competitive process. The Board, as the market proxy, should in our submission seek to replicate that market drive towards continuous cost improvement.⁹⁶
- 2.5.12 *Inconsistent with RRFE.*** We note that Toronto Hydro’s plan to include zero productivity savings with respect to capital cost is not only obviously inconsistent with the RRFE. It is also inconsistent with other North American incentive regulation plans.⁹⁷
- 2.5.13** The RRFE is clear that continuous improvement is an important goal⁹⁸, and that it must include externally imposed incentives.⁹⁹ This is not just for OM&A, but also for capital. The Custom IR option is supposed to be comprehensive. As the Board said in the RRFE, “[r]ate-setting that is comprehensive creates stronger and more balanced incentives and is more compatible with the Board’s implementation of an outcome-based framework.”¹⁰⁰
- 2.5.14** SEC therefore submits that, at a minimum, the Board should approve the approach recommended by Board Staff’s expert Dr. Kauffman, and apply a stretch factor to whatever capital plan is ultimately approved.¹⁰¹
- 2.5.15 *Productivity Impact.*** Even if there are productivity savings, Toronto Hydro plans to measure them¹⁰², but does not plan to give any of the benefit to ratepayers. It plans to take those available funds and spend them on more capital work. As Mr. Walker stated:

⁹⁵ J6.5, p.2.

⁹⁶ *Decision with Reasons* (EB-2013-0321), dated November 20 2014, at p.80. *Power Workers' Union (Canadian Union of Public Employees, Local 1000) v. Ontario (Energy Board)*, 2013 ONCA 359 at para 38.

⁹⁷ Kauffman Report, p.51.

⁹⁸ Hydro One Dx Decision (EB-2013-0416), p. 12-13, 17-18.

⁹⁹ Hydro One Dx Decision (EB-2013-0416), p. 13-14.

¹⁰⁰ Report of the Board, *Renewed Regulatory Framework for Electricity Distributors: A Performance-Based Approach*, October 18 2012, p. 9.

¹⁰¹ Kauffman Report, p.51.

¹⁰² 2B-EP-24, p.3.

“MR. RUBENSTEIN: So the rest, if there are productivity gains because of the capital, we won't see that? Ratepayers don't get that during the term plan?”

MR. WALKER: If there is available capital, we will do more work. That would be the intent.”

2.5.16 Re-investing these savings in more capital is a clear indication that the capital plan is not in any way optimized for ratepayer benefit. If the amount of work to be done in this plan is the right amount (it isn't, but just say...), then there is no reason to do more work. The only reason would be, “we have the money, let's not lose it”. This is not the right approach to dealing with the ratepayers' money.

2.6 Incremental Capital Module

2.6.1 One of the struggles parties have had during this proceeding is understanding whether Toronto Hydro implemented its ICM program adequately, i.e. both on time and on-budget. Throughout this proceeding, Toronto Hydro has been secretive about the implementation of its ICM program. Toronto Hydro has consistently stated that this information will be provided in the true-up process which will take place later this year in a subsequent proceeding. This is contrary to the Board's explicit direction that the review of the ICM must take place in this proceeding:

“With respect to the “true-up” of ICM capital spending and rate riders, the Board notes that the policy does not specifically speak of a true-up. Rather the policy requires reporting of the actual spend on the approved ICM projects versus what was approved by the Board. The Board, at the time of rebasing, whether this is through a cost of service review as part of 4th Generation IR, or through a Custom IR application, will determine whether any overspending should be allowed in rate base, or whether any underspending should be returned to ratepayers. [emphasis added]¹⁰³” [emphasis added]

2.6.2 *What We Do Know.* After much urging from the Board panel during the hearing, Toronto finally provided some information.¹⁰⁴ In SEC's view the information is still inadequate in determining not only whether Toronto Hydro has completed the projects (formerly referred to as jobs), but also whether they were on budget. This information is not just important to determine the prudence of opening rate base, but also to ensure that Toronto Hydro is likely to do the work it is proposing during the 2015-2019 plan, and at the cost it is forecasting.

2.6.3 It is not adequate for Toronto Hydro to provide the cost information on an aggregate basis, as that does not provide information on the amount of work actually completed. For Toronto Hydro simply to say that the total spending is

¹⁰³ *Partial Decision and Order* (EB-2012-0064), dated April 2, 2013, p.75.

¹⁰⁴ Tr:7:156. Ex.OH-1-3 filed February 22 2015.

within 5% of the approved amount is insufficient and not useful to the Board.¹⁰⁵ That does not provide the Board with enough information about the number of jobs that were completed. Even if some of that information has been provided separately, it has not been done on a per segment basis. This is important because the mix of spending is different from the ICM to the proposed plan.

2.6.4 What the limited information on this basis does show is that for the largest proposed programs, for those similar jobs completed in 2012-2013 (similar segments), Toronto Hydro overspent, in some cases by a significant amount. In the ICM Underground Infrastructure segment (B1) which is similar to or the same as the current Underground Circuit Renewal program (E6.1), Toronto Hydro overspent by 14.5%.¹⁰⁶ In the Overhead Infrastructure segment (B4), which is similar to the Overhead Circuit Renewal program (E6.4), it overspent by 22.8%.¹⁰⁷ These are the two largest capital programs in this Application.

ICM Segement	Job Count	Approved CAPEX (\$M)	Actual CAPEX (\$M)	Variance (%)
B1 Underground Infrastructure	40	39.92	45.70	14.5%
B4 Overhead Infrastructure	26	17.51	21.50	22.8%

Source: Oral Hearing J4.4

2.6.5 There is no evidence to demonstrate 2015-2019 will be any different from 2012-2013. There are two potential consequences of such a significant overspend. Toronto Hydro can overspend and then seek to add the additional amounts into rate base upon in 2020, or it can cut back on the number of projects, and the assets it says it will replace. The problem with the first option is that ultimately ratepayers will have to pay for the overspend beginning in 2020. The second option means less actual work will be done for the same cost, i.e. less value for money. It will also likely lead to Toronto Hydro requesting more funds that it would have asked for in 2020. Neither of these scenarios is to the benefit of ratepayers.

2.6.6 *Separate ICM Proceeding and Opening Rate Base.* Toronto Hydro’s opening rate base assumes that the Board will accept the prudence of any ICM overspending which will be tested in subsequent proceeding. During the oral hearing Toronto Hydro has changed its position and have now proposed that a variance account be established to capture the difference of outcome of the true-up process and the proposed opening 2015 rate base.¹⁰⁸ SEC agrees that this proposal for an asymmetrical variance account is appropriate given that Toronto Hydro has not followed the Board’s direction in the Phase 1 Decision.

2.6.7 Toronto Hydro has proposed that any amount collected in the variance account be

¹⁰⁵ *Ibid*, p.1.

¹⁰⁶ J4.4.

¹⁰⁷ J4.4.

¹⁰⁸ Tr:7:157. Argument-in-Chief, Tr.10:63.

dealt by way of negative rate rider.¹⁰⁹ SEC submits the Board should not prescribe at this time how the any variance will be cleared. SEC submits it would better to determine that in the true-up proceeding. In addition, the Board should make clear that what is reconciled is not just the negative revenue requirement difference in 2015, but also the negative revenue requirement difference for subsequent years of the plan, where rates are adjusted based on the 2015 approved rates.

2.7 Operations and Maintenance

- 2.7.1** The lack of any stretch factor or productivity savings does not just relate to a lack of capital specific efficiencies from which ratepayers should receive a benefit. There is an interrelationship between capital spending and OM&A.
- 2.7.2** Increased capital spending has the effect of creating OM&A savings. There are two ways that this usually occurs.
- 2.7.3** First, new capital spending, such as replacement of older and faulty assets, decreases maintenance expenditures. Costs that would have been occurred to repair an asset are now avoided.
- 2.7.4** Second, new capital assets create productivity improvements by making OM&A activities more efficient. As an example, Toronto Hydro's ERP system is expected to create significant OM&A cost and productivity savings.¹¹⁰ Toronto Hydro has not built any of these savings into its OM&A budget. As Dr. Kauffman recognized, Toronto Hydro "has not addressed the important issue of how its Custom IR plan recognizes the inter-relationship between capital and OM&A expenditures."¹¹¹
- 2.7.5** Toronto Hydro does recognize that there are O&M savings as a result of its proposed capital expenditures.¹¹² It simply has not quantified them, or included them in its application. There will be savings, but they will be for the account of the shareholder, not the ratepayers. For its \$2.5 billion capital plan, Toronto Hydro has only been able to quantify \$130,000 of savings per year for two projects (Rear Lot Conversation and Box Construction).¹¹³ Yet Toronto Hydro's own evidence admits that there will be further savings, in a number of different programs, in a whole host of O&M areas.¹¹⁴ Since it has not quantified those savings, ratepayers will receive none of the benefit.
- 2.7.6** Mr. Lyberogiannis' evidence was that much of the savings from capital spending in the DSP would occur in the corrective or emergency maintenance programs, but it

¹⁰⁹ Tr:7:157.

¹¹⁰ J6.5, p.2.

¹¹¹ Kauffman Report, p.51.

¹¹² Ex.2B-E3, p.14.

¹¹³ Tr.4:69. 2B-EP-24, p.1.

¹¹⁴ See Ex.2B-A, p.12-13. 2B-EP-24, p.2-3.

is “somewhat difficult to project out those savings.”¹¹⁵ He stated that, besides the two programs referenced above, “we can't directly state a specific dollar amount of savings for a specific dollar of capital spend.”¹¹⁶

2.7.7 But instead of estimating savings, Toronto Hydro simply has not included them. The assumption is that savings will be zero, the only number Toronto Hydro knows for sure is not correct.

2.8 Inappropriate Interpretation of the Used or Useful Principle

2.8.1 SEC has a concern that Toronto Hydro is including assets in rate base prematurely. In the EB-2012-0064 Phase 1 Decision, the Board determined that the proper approach was to include assets in rate base when they are “used or useful”, as compared to “used and useful”. Toronto Hydro claims they are following the Board’s decision¹¹⁷, but in doing so they are taking an overly broad definition of what is useful. As an example, Toronto Hydro considers the civil work part of a capital project to be used or useful even if their electrical components are not:

“MR. BRETT: And what I'm asking you to confirm for me is that in the case -- the example I gave you where you put conduit in the ground but did not put a wire into it and there was no electricity running through it, that that conduit would be neither used nor useful. So you would not put that into rate base.

MS. ROUSE: Actually we do consider our civil assets to be useful.

MR. BRETT: Sorry?

MS. ROUSE: We do consider our civil assets to be useful.

MR. BRETT: Well, no, I'm speaking of this particular civil asset. So you do consider all of your civil assets to be useful, and you put them into rate base as you do them?

*MS. ROUSE: Yes, that is correct.*¹¹⁸

2.8.2 The Board’s EB-2012-0064 Phase 1 Decision never approved this approach. What the Board said was that in limited circumstances, a completed asset would be considered “useful” even if it had not be energized and thus “used”, because of third-parties not completing their part of the project:

“The Board notes that in putting forward the “in-service” approach, the parties refer to capital additions as qualifying under the “used and useful” rule. The Board agrees with THESL that the traditional and long established test in Ontario has been the “used or useful” rule. Therefore, the “in-service” approach should more properly be described as the

¹¹⁵ Tr.4:71.

¹¹⁶ Tr.4:74.

¹¹⁷ Tr.5:147.

¹¹⁸ Tr.5:157-58.

“used or useful” approach. The Board does not anticipate that there will be any material difference for most of the projects, as they are likely to come into service at the same time as they become “useful”. However, in some cases, it may be that THESL’s work has been completed on a project but it is not yet “in service” as work which is the responsibility of other parties has not been completed. In these circumstances, the Board finds that THESL may consider the work to be completed and hence “useful”, even if it is not yet being “used.

References to “in-service” should be read to mean that the necessary work has been completed for it to be put into service.¹¹⁹”

- 2.8.3** This was never intended to mean that the civil part of a capital project would be considered in-service, and thus included in rates, before the actual project was complete. Unless, independent of the electrical aspect of the capital work, the civil work has an independent useful purpose that benefits ratepayers, it is not in-service until the electrics – the thing that makes it useful – are completed.
- 2.8.4** The problem is most pronounced when it comes to Copeland. The station is not expected to be energized and used until 2016. Toronto Hydro is seeking to put into rate base the civil components of the project, such as the tunnel, that will be completed in 2015.¹²⁰ The civil components of the Copeland project have no use to ratepayers until the project is complete and the station is operational.
- 2.8.5** Useful cannot simply mean complete. If that was the approach then utilities could break up every small part of any project and put that into rate base when that aspect is done. Such an approach is wholly unreasonable for ratemaking purposes, and is not in accordance with what the Board has stated in the past.
- 2.8.6** SEC submits Toronto Hydro should revise its in-service forecasts to remove civil work brought into service earlier than the completion of the actual project. This includes all in-service additions for Copeland before 2016, unless it meets the actual criteria set out in the Board’s Phase 1 ICM decision.

2.9 Reliability

- 2.9.1 *Reliability Trend Is Already Improving.*** A major driver of Toronto Hydro’s capital program, as a trigger cause or secondary reason, is to improve reliability. Yet Toronto Hydro’s own evidence is that its reliability has been improving since 2009 without the need of substantial levels of capital spending. Between 2009 and 2013, Toronto Hydro’s SAIDI and SAIFI metrics (when adjusted for loss of supply, major event days, and scheduled outages) have shown improvement. This has

¹¹⁹ *Partial Decision and Order* (EB-2012-0064), dated April 2 2013 at p.13.

¹²⁰ Tr.6:24.

occurred both before and after the significant increase in capital spending as a result of the ICM capital program.¹²¹ A significant portion of the improvement in these metrics was due to reductions in outages caused by defective¹²² and failing¹²³ equipment. Again, this occurred before the significant ICM capital was put in place.

Reliability	2009	2010	2011	2012	2013
SAIFI (Excl.MED's and LoS)	1.49	1.53	1.48	1.28	1.34
SAIFI (Excl. MED's, LoS and Planned Outages)	1.44	1.46	1.44	1.22	1.30
SAIDI (Excl. MED's and LoS)	1.24	1.18	1.38	0.99	1.12
SAIDI (Excl. MED's, LoS and Planned Outages)	1.21	1.02	1.29	0.94	1.05

Source: Ex.2A-10-2, p.1-2

2.9.2 The evidence is clear that the downward trend in the outage metrics (i.e. improved reliability) was occurring and is likely to occur even without a capital program that is outside its historic norm.

2.9.3 *Forecast Reliability Improvements Have No Empirical Basis.* The Board should give very little weight to Toronto Hydro’s forecast reliability improvements as an indicator of value or need for its proposed capital plan. Toronto Hydro admitted that there was no empirical approach in its forecasting.¹²⁴

2.9.4 This is not to say that the Board should not require targets; it should. But those targets should be based on a sound methodological approach that links capital spending to reliability outcomes. As it related to the reliability benchmarking, Dr. Kauffman was very critical of Toronto Hydro’s approach to reliability forecasting:

“I think, given that they have an inherent bias towards inflating the improvement in SAIDI and SAIFI, and it's not a checkable calculation, that I don't think that is -- I don't think it is credible as the basis for a benchmarking evaluation.”¹²⁵

2.9.5 SEC agrees and believes the same rationale extends to any basis to support the reasonableness of the Distribution System Plan. This lack of an empirical basis makes testing the forecast next to impossible, and allows Toronto Hydro to over-forecast reliability improvements as a demonstration of capital need or value.¹²⁶

¹²¹ SEC notes the above normal capital spending only started to take place in 2013. See 2B-OEBStaff-39

¹²² Ex.2B-10-2, p.15

¹²³ Ex.2B-C, p.28

¹²⁴ Technical Conference J2.11

¹²⁵ Tr.3:133

¹²⁶ Tr.4:135

2.10 Metrics

- 2.10.1** A key component of a Custom IR plan is measurement of performance, and continuous improvement, of the distributor's DSP.¹²⁷ Toronto Hydro has proposed a number of metrics that it believes meet this requirement. SEC submits the metrics are inadequate. With such a significant capital program, the proposed metrics provide very limited use for ratepayers, the Board, and even Toronto Hydro. While many of the metrics, such as the reliability metrics, are ones with which the Board is familiar, the cost efficiency and plan implementation metrics are not, and the way they are structured will provide little value.
- 2.10.2** Measurement of performance is an integral aspect of a Custom IR plan, as it allows the ratepayers, the Board, and the distributor, to measure not just the progress of the approved capital plan, but also whether ratepayers are getting value for money. The metrics a distributor selects should not only measure the results of the capital program. They should also include meaningful targets against which to measure the distributor's performance. Metrics alone do not tell the public anything, nor provide them with any confidence in the plan's execution. It is the targets which allow the benchmarking of actual performance.
- 2.10.3** The public should expect no less than what a distributor expects internally from itself. Toronto Hydro's corporate scorecard includes Key Performance Indicators ("KPI") that measure performance in selected areas.¹²⁸ What makes them a driver of how Toronto Hydro does its business is that they include annual targets¹²⁹, and meeting them is a part of the incentive compensation scheme. In contrast, the metrics proposed in the Application are not included in the KPI's, and there is no incentive for Toronto Hydro to do better in the areas they measure.
- 2.10.4 *Distribution System Plan Implementation Metric.*** Toronto Hydro's Distribution System Plan Implementation metric measures the total capital spending conducted during the plan to date, as a percentage of the total capital spending approved. SEC has a number of concerns with this metric.
- 2.10.5** While capital expenditures may be the most relevant measure for Toronto Hydro for business purposes, for regulatory and rate-setting it is in-service additions that matter. In-service additions are what is included in rates, not capital expenditures. Toronto Hydro should be measuring the in-service additions that flow from the Distribution System Plan.
- 2.10.6** Further, one would expect that this metric would be easy to set a target for, since Toronto Hydro is seeking approval of its proposed capital plan on a year-by-year

¹²⁷ Ontario Energy Board, *Filing Requirements for Electricity Transmission and Distribution Applications*, at 5.2.3.

¹²⁸ Tr.7:26. Technical Conference Undertaking J2.22, Appendix A.

¹²⁹ See J2.4. Technical Conference Undertaking J2.22, Appendix A.

basis. Yet, there are no targets. Toronto Hydro is clear that its preference is to use a rolling measure, since business realities and unforeseen events may intervene which will have a “significant effect on Toronto Hydro’s ability to implement certain programs or projects in any specific year”.¹³⁰

2.10.7 It is true that events may supersede to require the schedule of a specific project to be amended, but the total amount of capital spending in a given year should not vary too much. If it does, than that is a significant concern to ratepayers, as they will pay in rates for that level of capital spending. Moreover, if the intent of the metrics is not to set targets but to measure performance, which Toronto Hydro believes is not directly related, than for measuring progress, nothing is more important than understanding the level of capital spending on a capital expenditures or in-service basis occurs in each single year.

2.10.8 Cost Efficiency Metrics. The cost efficiency metrics¹³¹ that Toronto Hydro proposes do not have this important attribute. There are no targets.¹³² Toronto Hydro’s expert, Mr. Shaltz from Navigant, did seem to believe that these metrics were so new that targets could not be set. However, he also stated he had seen these metrics used by other utilities before.¹³³ He also said many of them do set targets.¹³⁴

2.10.9 Toronto Hydro has said the lack of targets is because these are new metrics, and they have no experience with them.¹³⁵ They have also said that the goal is not a ‘target-setting exercise’, but to demonstrate metrics “year over year over in comparison to what we forecasted it to be.”¹³⁶ Insofar as that is different from setting targets, SEC notes that Toronto Hydro has not provided its forecasts for these metrics in its application.

2.10.10 The only cost efficiency metric where a forecast has been provided - and that was after being asked directly in an interrogatory¹³⁷ - is the Planning, Engineering & Support metric, which is a measure of the planning, engineering and support costs as a percentage of total capital spending.¹³⁸ The forecast, though, does not show improvements. There is no forecast continuous improvement, which is what the metric is supposed to achieve. The forecast is that as a percentage, planning, engineering & support costs will be higher in the last four years of the plan, as compared to the first year.

¹³⁰ Ex.2B-C, p.16.

¹³¹ Those metrics include: i) Planning, Engineering & Support Efficiency, ii) Supply Chain Efficiency: Materials on Cost, and iii) Construction Efficiency: Internal vs. Constructor Cost.

¹³² Tr.4:89.

¹³³ Tr.:5:10.

¹³⁴ Tr.5:20.

¹³⁵ 2B-SEC-19.

¹³⁶ Tr.4:93.

¹³⁷ 2B-C-19.

¹³⁸ Ex.2B-C, p.17.

2.10.11 The Board should require Toronto Hydro to set targets for its metrics that show continuous improvement, not just during the plan, but compared to its recent history.

2.11 In-Service Addition Forecast and Ratepayer Protection

2.11.1 SEC is concerned that Toronto Hydro will not bring into service the amount of assets it forecasts in each year of the plan.

2.11.2 There is an important distinction for rate setting purposes between being able to spend the total amount of forecast capital by the end of the plan term, and being able to spend it as scheduled. Since rates are proposed on a forecast in-service addition basis for each of the 5 years, if Toronto Hydro is behind on bringing into service its capital, then ratepayers will have overpaid. This potential problem is significant with a capital plan of the size that Toronto Hydro has proposed.

2.11.3 The method by which Toronto Hydro has forecast its in-service additions is likely to lead to material variances in what is actually brought into service in any given year of the plan. With the exception of some specific large projects, Toronto Hydro does not forecast the amount of in-service additions based on when they expect will actually go into service. Toronto Hydro takes a percentage of its capital expenditures and translates it into an in-service additions amount, not on a per program basis, but by program category (i.e. system renewal, access, service). This is based on historical percentages. SEC's concern is that this is a far from exact method in determining in-service additions for each year, especially considering Toronto Hydro is forecasting new programs, and the mix of spending between programs has changed.

2.11.4 Toronto Hydro has a history of failing to bring into service the amount of capital it forecasts it will. In both 2012 and 2013, it brought into service 12% less capital than it had forecast and included in rates.¹³⁹ While it now says that over the three year ICM period the aggregate amounts (with the exception of Copeland) are close¹⁴⁰, that is only part of the story. If not for the scheduled true-up, the year-over-year variances would have had the effect of significantly over-compensating Toronto Hydro.

2.11.5 Toronto Hydro's proposed Custom IR framework does not have a true-up mechanism like the ICM does.

2.11.6 Further, Toronto Hydro itself does not feel that meeting its own forecast is

¹³⁹ 2B-OEBStaff-39-Appendix A. Total 2012 and 2013 Actual In-Service Additions (\$372.94M) / Total 2012 and 2013 Approved In-Service Additions (\$423.55M) = 88%.

¹⁴⁰ Ex.OH-1-3-Attachment 2.

important. It is simply interested in ensuring that, at the end of the plan term, it has spent - on a capital expenditures basis - the total amount they are seeking in their rate plan. Their DSP Implementation Progress metric is on capital expenditures basis, and is intended to measure how much capital they have spent as a proportion of the total 5 year approved spending.

2.11.7 Currently, Toronto Hydro's OEB scorecard metric for asset management, which each utility selects, is on a capital expenditure basis. More worrying is that in the explanation of that metric, Toronto Hydro says that it "deems its year-end results to be successful if the year-end results are within +/- 20% deadband from the approved amount."¹⁴¹ Ratepayers do not consider being anywhere close to 20% below the approved capital amounts to be a success.

2.11.8 SEC recommends that the Board establish a variance account to protect ratepayers. This account would record the revenue requirement difference between the approved in-service amount and actuals, if it was less. It will also allow Toronto Hydro to catch up in subsequent years, as long as it does not go over the cumulative total. This will ensure that if Toronto Hydro is behind on its capital program in any given year, ratepayers are to be held whole. This approach is consistent with the Board's RRFE¹⁴², and similar variance accounts have been approved recently in Horizon (EB-2014-0002)¹⁴³ and Hydro One Transmission (EB-2014-0140).¹⁴⁴

2.12 Conclusion

2.12.1 SEC submits Toronto Hydro does not grasp the magnitude of the capital expenditures for which it is seeking Board spending approval. The level of spending is based in a fundamentally flawed analysis, and is not moderated to account for the rate impacts. Although Toronto Hydro may not consider a 12% annual growth rate of its capital expenditures substantial, ratepayers do.¹⁴⁵ The Board should significantly reduce Toronto Hydro's proposed capital plan.

¹⁴¹ 2B-Ep-14-Appendix A, p.3

¹⁴² Report of the Board, *Renewed Regulatory Framework for Electricity Distributors: A Performance-Based Approach*, October 18 2012, p. 14. Under Custom IR method of rate-setting, for deferral and variance account, the Board states "Status quo, plus as needed to track capital spending against plan"

¹⁴³ EB-2014-0002, Settlement Proposal filed September 22, 2014, p.32-35. Approved in *Decision and Order* (EB-2014-0002), dated December 11 2014.

¹⁴⁴ EB-2014-0140, Section II, p.14-15. Approved in Tr.1:28.

¹⁴⁵ See Tr.5:129:

MR. BRETT: All right. So then the other point that was noted -- the other thing I asked you about and you answered in that same interrogatory was I asked you what the compound growth rate of actual CAPEX, capital expenditures, was over the historical period, 2006 to 2015. And the answer was 12 percent.

.....

Number one, do you agree that a compound rate of growth of 12 percent is a substantial increase? I mean, that's not - that's a substantial expansion of a program over a period of years.

MR. WALKER: I would not characterize it as substantial, necessarily. I suppose that is a matter of opinion.

.....

3 LOAD AND CUSTOMER FORECASTS

3.1 Introduction

3.1.1 SEC has had an opportunity to review a draft of the thorough revenue forecast submissions prepared by VECC, and in general supports those submissions. The details are set forth below.

3.2 Customer Forecast

3.2.1 VECC has provided an analysis of the evidence on customer numbers for both residential and non-residential customers. The result of that analysis is material increases in forecast customer numbers over the 2015-2019 period.

3.2.2 In the case of residential, VECC has shown that an increase of almost 5% is necessary to make the aggregate residential customer count consistent with historical experience and other components of the forecast. SEC supports this change, and the proposed implementation of that change set forth by VECC.

3.2.3 In the case of certain of the non-residential classes, VECC has demonstrated that the non-residential customer forecast is inconsistent with both the population forecast, and the unemployment forecast. We agree with VECC's proposed adjustments.

3.3 Load Forecast

3.3.1 Subject to our comments on the treatment of CDM, SEC has no submissions on the load forecast.

3.3.2 VECC has noted that CDM is dealt with incorrectly in both the historical data set, and the load forecast. In each case, the adjustment for CDM is on a gross basis, rather than a net basis. Not only is this contrary to the Board's normal practice. It is also conceptually incorrect, and statistically a poorer fit than the correct methodology.

3.3.3 SEC therefore agrees with the adjustments to the forecasting approach, and the CDM adjustment, proposed by VECC.

3.4 Revenue Offsets

3.4.1 The Board has determined that the matter of pole attachments will be dealt with in a separate process, commencing this month. SEC believes that the amount that should be included in calculating revenue requirement for 2015 should be the pole attachment revenue proposed by Toronto Hydro, which would then be subject to

any variance account the Board establishes in that separate process.

- 3.4.2** Toronto Hydro has proposed increases in the streetlighting revenue from the City of Toronto, and updates to its specific service charges. SEC has no additional submissions on those components of the revenue offsets.
- 3.4.3** The sale of properties during the test period is expected to generate substantial profits. Toronto Hydro has not included a forecast of those profits in revenue offsets, because any forecast amount is likely to be materially incorrect. Given the nature of the properties, SEC agrees. SEC also agrees, however, that the Board should establish a deferral account for property sales, to which the difference between sale price and net book value is credited.

4 OPERATING COSTS

4.1 Introduction

4.1.1 This Application is, as noted earlier, essentially all about the capital plan. However, Toronto Hydro is still asking for approval to spend about \$1.4 billion¹⁴⁶ over the five year test period on OM&A. This is an increase of about \$180 million over 2014 actuals.

4.1.2 SEC divides the OM&A issue into two components: the 2015 rebasing budget, and the proposed escalation for 2016 through 2019.

4.2 Rebasing Budget

4.2.1 We have three main concerns with the OM&A budget proposed:

- (a)* The absolute increase from 2014 to 2015 is not justified by the evidence before the Board, and is not in keeping with any reasonable focus on productivity and efficiency.
- (b)* Toronto Hydro seeks to deny the ratepayers any of the IRM benefit associated with the restructuring Toronto Hydro implemented in 2012.
- (c)* The OM&A levels are – quite deliberately - not reflective of the interaction of operating and capital budgets, which is particularly important in light of high levels of past and proposed capital spending.

4.2.2 *Bottom Up Budget Level for 2015.* The Applicant is proposing an increase in OM&A, from 2014 to 2015, of \$28.3 million, or 11.73%. This is despite the fact that the Chief Financial Officer told the financial planning group to try to keep the OM&A increases to inflation or less. On the evidence, no budget even close to an inflationary level was presented to the Executive Management Team for approval¹⁴⁷.

4.2.3 A budget increasing at inflation from 2014 to 2015, i.e. 1.6%, would be \$24.4 million less than the one proposed. That excessive increase is, by itself, \$125 million of the \$180 million OM&A increase over the test period, and represents

¹⁴⁶ \$269.5 million in 2015, escalated at 1.7% inflation less 0.3% stretch factor annually, reaches \$284.9 million by 2019, and totals \$1,385.8 over five years.

¹⁴⁷ When Applicant's counsel says, in the Argument in Chief [Tr.10:36], "It's planning process was appropriate and rigorous, it involved both top-down and bottom-up considerations", that is simply not true, and no reasonable person could reach that conclusion based on the evidence before this Board on OM&A.

12.6% of the \$990 million rate increase being proposed by Toronto Hydro.

- 4.2.4** Put another way, Toronto Hydro is proposing weighted average rate increases, compounding over five years, of 8.4% per year. Keep OM&A at inflation, and those weighted average rate increases are, instead, 7.3%. Further, the overall five year rate increase, 49.7%, would be reduced to 43.4%.
- 4.2.5** In SEC's submission, the proposed 11.73% increase from 2014 to 2015 is unjustified, and should be cut back to something closer to an inflationary level, before taking into account the two issues noted below.
- 4.2.6** *Denial of IRM Benefits.* In 2012, while under IRM, Toronto Hydro carried out a significant restructuring with the intent of reducing its operating costs¹⁴⁸. The result of that restructuring was that OM&A went down 10.6%, from \$238.6 million in 2011 to \$215.8 million in 2012¹⁴⁹.
- 4.2.7** This is one of the primary purposes of IRM, and Toronto Hydro appears to have accomplished it quite well. This is \$22.8 million of annual savings that should have been available to the ratepayers, to reduce rates on a go-forward basis.
- 4.2.8** Despite this, Toronto Hydro proposes that the ratepayers see no benefit from these savings. This is clearly demonstrated in the Argument in Chief, where the Applicant's counsel focuses entirely on OM&A changes since 2011, as if the restructuring had not reduced the baseline costs of the utility. Indeed, counsel points out¹⁵⁰ that the proposed 2015 budget is 13.2% higher than the 2011 actuals (3.3% per year), but fails to point out that the 2015 budget is 24.9% above the 2012 actuals, or about 7.7% per year compounded. The biggest increase, as the Board now knows, is from 2014 actual to 2015 proposed.
- 4.2.9** This is continued in the Argument in Chief Compendium, where the Applicant provides a table¹⁵¹, comparing OM&A costs by category/program between 2011 actual and 2015 proposed. This is, in SEC's submission, misleading, since it treats the 2012 restructuring as if it didn't happen.
- 4.2.10** SEC believes increases in operating costs from 2012 through 2015 have not been justified, and appear to us to be simply spending the benefit of the IRM restructuring rather than allowing the ratepayers to benefit.
- 4.2.11** There is no rigorous way for the Board to adjust for this problem. It is not simply a question of applying the \$22.8 million of annual restructuring savings to adjust the

¹⁴⁸ Tr.7:107, confirms that there was a new "base budget" in 2012.

¹⁴⁹ Excluding the one-time costs for the restructuring itself.

¹⁵⁰ Tr.10:39

¹⁵¹ AIC Compendium, Tab 3, p. 7.

2015 OM&A budget further. As we note below, the only way to give effect to these savings, in our submission, is to apply overall judgment in setting the reasonable level of the 2015 budget, and the formula for increases going forward.

- 4.2.12 *Impact of Capital Spending on OM&A.*** In Section 2.7 of this Final Argument, above, we have discussed the issue of lack of OM&A reductions from the past and projected capital plan.
- 4.2.13** In essence, while the Applicant accepts that its high levels of capital spending, particularly 2012-2014, will have a material impact on OM&A, and even in some cases knows that particular capital programs will cause specific OM&A reductions, it has with a couple of small exceptions ignored those reductions in setting the OM&A budget.
- 4.2.14** Simply put, they say that the reductions are “too hard to forecast”. As a result, they have forecast zero, which they know for sure is wrong. The effect of forecasting zero is, of course, that while they are asking the ratepayers to pay for the capital spend that drives those savings, they propose that the benefits of those savings will accrue to the benefit of the shareholder.
- 4.2.15** SEC submits that the Board, in establishing the 2015 OM&A level, and the formula going forward, should take into account the likelihood that there will be significant reductions in OM&A cost pressures because of capital spending.
- 4.2.16 *SEC Recommendation.*** SEC proposes that the gross 2015 OM&A budget be set at \$239.5 million. We arrive at that number in three steps:
- (a)* Starting with the 2014 actuals of \$241.2 million, increase that amount by 2.5%. This exceeds inflation of 1.6%, but takes into account initiatives like Disaster Preparedness Management. This is a \$6.0 million increase from 2014 actuals.
 - (b)* Reduce that total by 25% of the savings from the 2012 restructuring. Those savings were \$22.8 million, so that reduction would be \$5.7 million, leaving a net of \$241.5 million. SEC believes that part of the restructuring benefit should be immediate, and part of the restructuring benefit should be reflected in a higher stretch factor, as discussed below.
 - (c)* Reduce that total by a further \$2.0 million to reflect the OM&A impact of the past extensive capital program. SEC believes that this is smaller than it should be, but must be lower because it will take some time for Toronto Hydro to realize this impact, given that they have not done so at the outset. We note that, if the Board were, contrary to the recommendations of the ratepayer groups, to approve the substantial capital budget proposed by Toronto Hydro, then the resulting reduction to OM&A should be substantially higher.

4.2.17 The result of this additional reduction is a 2015 OM&A budget of \$239.5 million. SEC believes this is a conservative approach to the 2015 budget. If the Board were to implement fully and immediately the impact of the restructuring, and the impact of high capital spending, the reasonable OM&A budget would likely be in the range of \$220 million. In our view, that is not achievable by Toronto Hydro given where they are today.

4.2.18 SEC's recommendation on 2015, coupled with our recommendation below on the formula for adjustment annually, would result in OM&A over the test period of just over \$1.2 billion¹⁵². The resulting decrease in overall OM&A is actually \$171.3 million, reducing the \$990 million proposed deficiency by 17.3%. Translated into rate terms, the 49.7% five year weighted average rate increase would be reduced to 41.1% by the OM&A adjustments alone. This is approximately a quarter of the overall reduction in the rate increase that SEC is proposing in this Final Argument.

4.3 Human Resources

4.3.1 Four main issues have been raised with respect to Human Resources.

4.3.2 *Executive Compensation.* SEC pursued the question of why average compensation for Toronto Hydro executives increased at an average of 7.5% per year from 2011 to 2015¹⁵³. As a result of that cross, an undertaking response¹⁵⁴ explained the reason, which was essentially that as the responsibilities for the executives expanded, their compensation did as well. While there are details provided, and there is a specific impact from performance bonuses applying to the prior year in each case, the primary impact is that the smaller number of Toronto Hydro executives are simply worth more money today.

4.3.3 By itself, this is not a material item, and SEC has no recommendation to the Board with respect to any adjustment or other impact.

4.3.4 However, SEC has consistently been concerned with those few utilities whose compensation policies show questionable priorities. In this case, when the company is under severe funding pressure (according to the Application), and is holding a very tough line with its unions both in terms of numbers, and on compensation levels, a one-third increase in average executive compensation must be considered, at the very least, poorly timed.

4.3.5 *Contracting Out.* Both CUPE and the Society have expressed concerns with respect to the aggressive shift in strategy from in-house work, to contracting out,

¹⁵² \$239.5 million, escalated by 1.7% inflation less 1.0% stretch factor, ends up at \$246.3 million in 2019, and a total of \$1,214.5 million over the five year test period.

¹⁵³ Tr.7:132-139.

¹⁵⁴ Undertaking J7.9.

particularly for work requiring “tool-in-hand” workers.

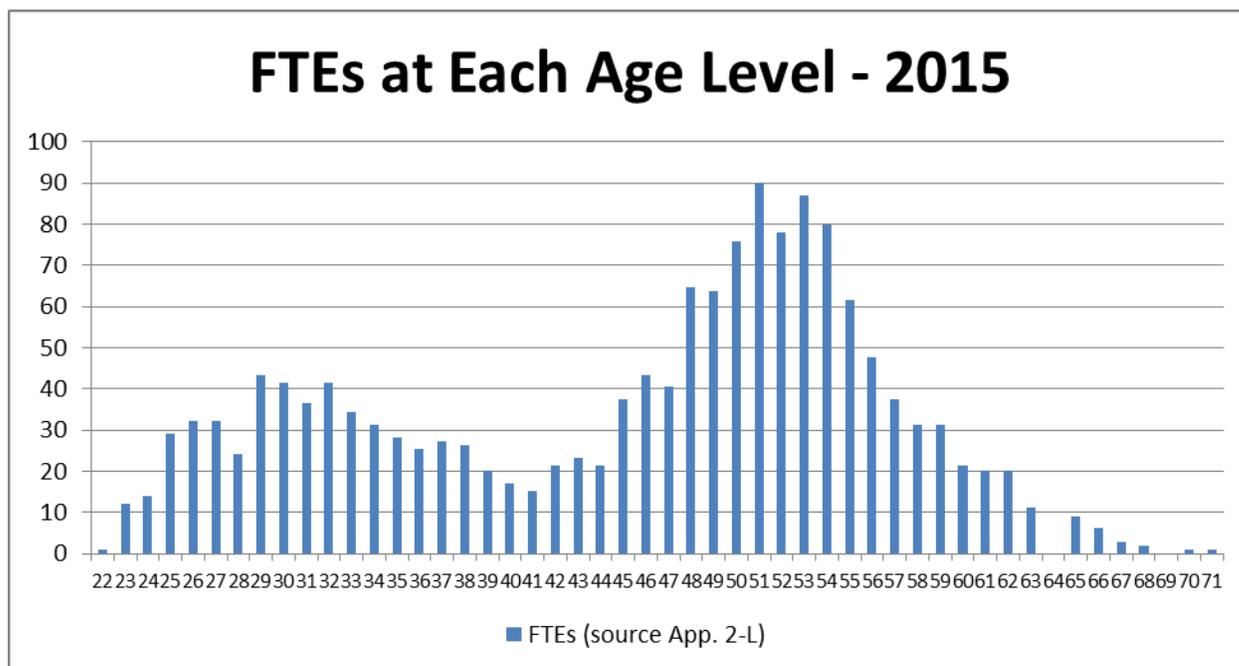
- 4.3.6** SEC will express no view on whether this increase in contracting out is a good idea, or a bad idea. What we do note, however, is that there does not appear to have been any rigorous analysis of the pros and cons of contracting out, whether overall or for specific aspects of utility operations.
- 4.3.7** If you are implementing a shift of that magnitude, it would seem to us self-evident that a disciplined analysis and decision process is required. That analysis would normally include studying the strategies of other utilities, both in Ontario and elsewhere. It would also include consideration of whether contracting out, or in-house, has proved to be preferable for particular functions, or in particular circumstances. Contracting out of IT development or operations may be the optimum approach for urban utilities with a mature IT contractor base. Contracting out of line replacements may be a bad idea for small town utilities far from major centres. There will be numerous examples like that.
- 4.3.8** SEC was also somewhat surprised at the fact that Toronto Hydro does not seem to feel it needs to know if employees are retiring earlier to join contractors. If aging workforce is a problem, as the Applicant claims, then factors that may promote earlier retirement should not be assumed to be irrelevant.
- 4.3.9** *Just in Time Hiring.* CUPE and the Society have also raised an issue of whether the new policy of just in time hiring is a good long term strategy.
- 4.3.10** As with contracting out, SEC does not have an overall opinion on this hiring strategy, but we are concerned with the apparent lack of analysis before it was implemented. On the surface, at least, it appears to have been decided without any real study of best practices.
- 4.3.11** Of course, this is all tied into the aging workforce issue. SEC pursued this briefly¹⁵⁵, and as a result Toronto Hydro provided a more detailed age distribution table for its employees¹⁵⁶. SEC’s purpose was to see if the “aging workforce” problem can be more precisely defined, and the information provided was useful in that respect.
- 4.3.12** SEC has graphed the data in J7.8, and it shows two things:
- (a) There may be less urgency to the aging workforce issue than was initially thought.

¹⁵⁵ Tr.7:129-132.

¹⁵⁶ Undertaking
J7.8.

(b) There is a second “age bulge” moving forward, but an apparent trough where there are very small numbers of mid-career employees.

The graph is as follows:



4.3.13 Again, SEC has no specific recommendation with respect to this information. However, we are concerned that Toronto Hydro’s workforce planning analyses do not appear to take this data into account, or if they do they do not provide any description of how that is being done.

4.3.14 Pension and OPEBs. During the oral hearing¹⁵⁷, Board Staff pursued in cross-examination the question of accounting for pension and OPEB costs, and in particular the cumulative over-collection of unfunded OPEB accrual costs from ratepayers. Since 2000 Toronto Hydro has collected more than \$37 million from ratepayers that it is not using for OPEBs, and has instead used for general purposes.

4.3.15 SEC agrees with Board Staff that the Board should allow in rates only the cash component of OPEBs for the 2015-2019 period. We estimate that this would reduce OM&A by a further \$5 million per year, and reduce capital costs by about \$3 million per year. Over the five years, the reduction in rates would be about \$28 million. This is not a real reduction in costs, of course, since Toronto Hydro is not actually paying this money.

4.3.16 SEC does agree that it would be reasonable, as the Board did with OPG in EB-

¹⁵⁷ Tr.8:10-14.

2013-0321, to provide for a deferral account in which Toronto Hydro can record the difference between cash and accrual. Over the long term, this deferral account should end up at zero.

4.4 Formula for Subsequent Years

- 4.4.1** The Applicant has proposed that the initial OM&A budget be adjusted using the 4th Generation IRM formula. Subject to our general recommendation on the overall increases in revenue requirement each year, SEC agrees with this overall approach. The issue is in the stretch factor.
- 4.4.2** In our submission, the Board should completely reject the proposed 0.3% stretch factor recommended by PSE and adopted by Toronto Hydro. As has been shown in our earlier discussion, the PSE data, when recalculated to remove errors in methodology and assumptions, would categorize Toronto Hydro as a very poor performer relative to its benchmarks. In Ontario, Toronto Hydro is more than 40% worse than its peer benchmark. Compared to its US peers, Toronto Hydro is currently 33% worse¹⁵⁸.
- 4.4.3** But that is not the only issue. As we have noted earlier in para. 4.2.16 and .17, the IRM restructuring benefit, and the impact of past capital spending, cannot be reflected fully in the 2015 OM&A budget. That would be too much of an operational shock for Toronto Hydro. The better approach, in our view is to use the stretch factor to get OM&A back to a more reasonable level slowly.
- 4.4.4** SEC therefore recommends that the Board implement the stretch factor of 1.0% that Dr. Kaufmann has proposed. That stretch factor reflects the fact that Toronto Hydro is an extreme cost outlier. It also would have the impact of including in a small way an adjustment for the IRM restructuring benefit and the past capital spending.

¹⁵⁸ Undertaking J3.7.

5 CAPITAL STRUCTURE AND COST OF CAPITAL

5.1 General

5.1.1 SEC agrees with the submissions of Board Staff with respect to capital structure and cost of capital.

6 REVENUE REQUIREMENT

6.1 General

No additional submissions.

7 COST ALLOCATION

7.1 Introduction

7.1.1 SEC has had an opportunity to review the final argument of VECC on these issues, and agrees, except as set out below, with VECC's analysis and recommendations.

7.2 Revenue to Cost Ratios

7.2.1 VECC has proposed that the revenue to cost ratio for the Streetlighting class be moved up to its status quo ratio of 92%, rather than being set at 82% as proposed by Toronto Hydro. SEC agrees with VECC on this point.

7.2.2 SEC notes that Toronto Hydro's latest cost allocation run shows the revenue to cost ratio for the highest ratio class, GS 50-999 kW, increasing from 118% to 119%. SEC believes that all of the revenue from adjusting the Streetlighting revenue to cost ratio should be used to reduce the revenue from the GS 50-999 kW class. If that class is still higher than the 118% previously approved, in our submission there should be a further shift of revenue responsibility to the lowest contributing classes to get the GS 50-999 kW class back down to 118%.

7.2.3 Further, given that the Board remains intent on narrowing the bands around 100% revenue to cost ratio, SEC submits that the Board should order Toronto Hydro to file a plan to bring all classes within the 90%-110% range recently approved by the Board in EB-2013-0416 for Hydro One. Such plan should achieve that change within no more than three years (i.e. 2017), as was the case with Hydro One.

8 RATE DESIGN

8.1 Fixed Variable Splits

No submissions

8.2 Other Charges

8.2.1 SEC agrees with VECC that the proposed charge for missed appointments is inappropriate, and should not be implemented.

9 DEFERRAL AND VARIANCE ACCOUNTS

9.1 General

- 9.1.1** SEC has commented elsewhere in this Final Argument¹⁵⁹ on the claim for so-called “lost revenue” from 2012-2014 due to the application of the half-year rule. We have also commented elsewhere¹⁶⁰ on the treatment of OPEBs.
- 9.1.2** With respect to LRAMVA, SEC adopts the positions of VECC.
- 9.1.3** With respect to all other deferral and variance account issues, except derecognition losses (see below), SEC agrees with the submissions of Board Staff.
- 9.1.4** SEC believes that derecognition losses could become a significant issue for distribution rates going forward. For Toronto Hydro, they could easily increase depreciation expense by 20% in any given year. Rate impacts could be as much as 5% per year. None of this was discussed in any detail during the Board’s consultation with respect to the transition to IFRS. This was not really on the radar screen.
- 9.1.5** Therefore, SEC recommends that the Board establish a policy review of the accounting treatment of derecognition losses, so that to the extent this IFRS rule has material impacts on rates, those impacts are dealt with either through mitigation, disposition/clearance terms, or other techniques.

¹⁵⁹ Section 12.4.

¹⁶⁰ Para. 4.3.14 to 4.3.16.

10 REPORTING REQUIREMENTS

10.1 General

- 10.1.1** Given our views on how rates should be set for Toronto Hydro, many of the issues on reporting requirements would be less relevant for the SEC proposal. Therefore, SEC will only make two general submissions.
- 10.1.2** First, in our submission all reporting by Toronto Hydro should include targets, whether it is for customer care, reliability, costs, or anything else. Reporting in a vacuum, while still useful, is less valuable to the Board and the stakeholders than reporting against a standard.
- 10.1.3** Second, it is clear to SEC that Toronto Hydro needs a much stronger focus on benchmarking and productivity. That has been the main theme in this Final Argument. In this regard, SEC believes it would be valuable for Toronto Hydro to report annually on key cost components, with comparisons to both Ontario and U.S. benchmarks. At the very least, those components should include:
- (a)* Total cost per customer (by class if possible);
 - (b)* Operating costs (PFP);
 - (c)* Total factor productivity (TFP);
 - (d)* Customer Care costs per customer by class;
 - (e)* IT costs per customer;
 - (f)* Unit costs (preferably against econometric benchmarks) for its largest capital programs, including things like vegetation management, pole replacements, low voltage transformer replacements, etc.
- 10.1.4** SEC believes that Toronto Hydro should be gathering this data in any case, in order to inform its planning and operational decisions. The requirement to report it would not only ensure that it gets done, but also inform the Board of Toronto Hydro's progress in getting its cost levels under control.

11 EFFECTIVE DATE AND SYNCHRONIZATION

11.1 General

11.1.1 There are two timing issues in this proceeding. The first relates to the effective date for 2015 rates, and revolves around the Board's requirements for timely filing and pursuit of rate applications. The second relates to the fiscal year synchronization in 2016, and relates to the Board's approach to synchronization, and to the requirements in the RRFE for Custom IR.

11.2 2015 Effective Date

11.2.1 Toronto Hydro filed this Application on July 31, 2014 for rates effective May 1, 2015, a total time period of nine months. This is the minimum period in which an Application of this level of complexity could be considered by the Board, and in practical terms was probably too optimistic.

11.2.2 Reality has borne that out. Despite the best efforts of the Board panel, which pushed the schedule as aggressively as possible¹⁶¹, it is now clear that rates cannot be implemented by May 1st.

11.2.3 Whenever rates cannot be implemented on time, the issue is raised whether rates should be made effective on that date, and implemented later. In that respect, the main issues are normally the timing of the original filing, the quality and completeness of that filing, and the conduct of the Applicant throughout the proceeding.

11.2.4 In SEC's submission, while the time available for this proceeding turned out to be insufficient, it would not be fair to fault the Applicant for that. A filing nine months before the effective date is normal practice, if optimistic. The filing itself was complete, and of very good quality. SEC disagrees with much of the substance, but we do not disagree that Toronto Hydro filed a very detailed and complete application. Further, Toronto Hydro's conduct throughout the proceeding was consistent with a desire to move it forward. It cannot be criticized.

11.2.5 Therefore, SEC submits that the rates established by the Board in this proceeding, even if implemented after May 1, 2015, should be made effective from and after that date.

¹⁶¹ Including very tight limitations on the length of the Technical Conference, and the oral hearing.

11.3 2016 Rate and Fiscal Year Synchronization

11.3.1 The more difficult question is whether Toronto Hydro should be allowed to synchronize its rate and fiscal years as of January 1, 2016. This has three components:

- (a)* Should the Applicant be permitted to synchronize rate and fiscal years at all?
- (b)* Is synchronization during an IRM year consistent with Board policy on that issue?
- (c)* Is the effect of the synchronization to make this Application non-compliant with the RRFE requirements for Custom IR?

11.3.2 On the first component, SEC has been vocal for some years that the four month delay in rates relative to fiscal year is unfair to utilities. We therefore support all requests to synchronize, unless there is a specific reason why a utility should not.

11.3.3 The second component is a little more difficult. The Board has been clear in the past that rate and fiscal year synchronization should happen in a cost of service year, so that all of the impacts can be tracked properly.

11.3.4 On the other hand, the Board in this case has a Custom IR application, in which there is extensive information on costs and impacts over a five year period. While that information is not complete (for example, there are no OM&A figures for 2016-2019), in our view the information is sufficient for the Board to satisfy itself that there are no unintended consequences to a January 1, 2016 synchronization.

11.3.5 SEC is concerned with respect to the third component, RRFE compliance. The Board has been clear that a Custom IR application must cover rates for a minimum of five years. This Application is for four years and eight months. Toronto Hydro says the reason is that they simply couldn't get their Application in early enough to have January 1, 2015 rates.

11.3.6 In and of itself, that seems like an immaterial difference, even though the dollars involved might be substantial. However, SEC is concerned that the Board not provide approval for any exceptions to the five year minimum. That is likely to become, in our view, the classic "thin edge of the wedge", leading to more requests for shorter period rate plans.

11.3.7 SEC believes that this presents the Board with three practical options:

- (a)* Allow the shortened time period in this case, but with a stern warning that it is not intended to be open season on shorter Custom IR plans. Five years is still

five years.

(b) Defer implementation of the Custom IR rates until January 1, 2016, in effect applying Annual IR for 2015 to bridge to that date. The Board's Custom IR order could then extend to December 31, 2020.

(c) Approve the rate timing as filed, but require Toronto Hydro to use Annual IR for the 2020 year, so that its next rebasing is deferred until January 1, 2021.

11.3.8 In our submission, the third option is the best. This would preserve the five year minimum term for Custom IR, while giving Toronto Hydro the timing of new rates they have requested, and an additional increase in 2020 to bridge the gap.

12 IRM COMPONENTS

12.1 Annual Adjustments

12.1.1 SEC has proposed that rates for the Applicant be set on a formula basis, without regard to the various adjustments (such as the SCAP and C factors) proposed by Toronto Hydro. Instead, SEC believes that the Board should follow the benchmarking evidence, and approve revenue requirement increases equal to the increases in the U.S. benchmark cost level each year.

12.1.2 As a result, SEC believes that the annual rate application should be essentially identical to a 4th Generation IRM application, but with the predetermined percentage increases, adjusted for growth in billing determinants, applied to prior year rates.

12.2 Z-Factors

12.2.1 After considerable confusion, both in the evidence, and in cross-examination, the Applicant has confirmed that they are not seeking approval by the Board of anything relating to Z-factors other than the Board's well-established policy as set forth in the RRFE. Mr. Smith clarified this in the Argument in Chief as follows¹⁶²:

“Let me just pause on Z factor for one moment to say that this was discussed at some modest length perhaps in cross-examination, and the takeaway I think you need is to know that Toronto Hydro is not proposing anything different than the Board's standard Z factor treatment. And it may have been perhaps inelegantly articulated, but what is actually being applied for is nothing more than the Board's standard Z factor treatment.”

12.2.2 On the basis thus proposed, SEC supports the Z-factor proposal.

12.2.3 We note that the Applicant has sought what amounts to generic policy guidance from this Board panel on what types of things qualify under the Z-factor provisions of the RRFE.

12.2.4 In our submission, this request is inappropriate. The RRFE speaks for itself, and provides the necessary guidance. Speculation by this Board panel as to qualification of any particular hypothetical, or category of hypotheticals, is unwise on three counts:

(a) It is the Board's normal practice to give generic policy guidance by Board

¹⁶² Tr.10:49-50.

communication, not through a decision of the specific Board members on a panel hearing a case. This Board panel is not seized with generic policy issues, and normally would consider policy issues only to the extent that they apply to the specific fact situation, and evidentiary foundation, before them.

- (b) The Board has likely omitted generic guidance on the application of Z-factor treatment to specific hypotheticals because, without knowing the actual fact situation, the Board cannot be confident that its guidance would be correct. Thus, the Board has established a general principle, and some rules to guide the application of that principle. Board panels then look at the fact situation actually before them, and determine whether and to what extent that principle should be applied.
- (c) Any guidance provided by this Board panel would necessarily purport to fetter the discretion of a subsequent Board panel hearing a Z-factor application. This is contrary to Board practice, and probably legally ineffective in any case.

12.2.5 For these reasons, SEC submits that the Board should not provide any commentary or guidance of a general nature relating to the Board's Z-factor rules, and should make clear in its Decision that it is declining Toronto Hydro's invitation to do so.

12.3 Off-Ramps

No submissions

12.4 Half-Year Rule

12.4.1 Toronto Hydro is once more (for at least the third time¹⁶³) seeking compensation for "foregone revenue" they claim to have suffered due to the operation of the half-year rule, this time \$33.3 million they say they lost due to the 2011 year end rate base. This should once more be rejected, for a number of reasons, including the following.

12.4.2 *How Many Times Does the Board Have to Say No?* There is a point at which, if a utility continues to ask for the same thing, with the same results, the Board should conclude that its time is being wasted, or its determinations are not being respected. That point may have been reached with Toronto Hydro and this issue.

12.4.3 It is not just Toronto Hydro that has been requesting this change. Enersource¹⁶⁴ and PowerStream¹⁶⁵ both sought the same treatment, and both were rejected. In the

¹⁶³ EB-2011-0144 and EB-2012-0064 being the first two times.

¹⁶⁴ EB-2012-0033.

¹⁶⁵ EB-2012-0161.

PowerStream decision, the Board said¹⁶⁶:

“The use of the half-year rule for depreciation is a long-standing policy of the Board. The policy was recently reviewed in the context of the RFE and remains unchanged in this area. The Board finds that PowerStream has not justified its request for full year depreciation and does not accept it.”

12.4.4 Retroactive Ratemaking. The current request is even more egregious, because it seeks to reach back into past years, and recover amounts that were wholly applicable to those past years, and the rates for those years, and were not the subject of any deferral or variance account.

12.4.5 In SEC’s submission, this is the clearest possible example of retroactive ratemaking. When asked about this, the Applicant declined to provide any valid reason why the rule against retroactive ratemaking would not apply¹⁶⁷.

12.4.6 We also note that we have been unable to find any reference in the Argument in Chief to this “foregone revenue” claim, let alone to the rule against retroactive ratemaking specifically. One would think that, given the claim was challenged based on retroactivity in the proceeding, counsel would have dealt with it in argument. We did find a reference to this claim in the AIC Compendium¹⁶⁸, but again there is no discussion of the issue of retroactivity¹⁶⁹.

12.4.7 Ongoing Policy Consultation. The question of the half-year rule has and continues to be the subject of a Board policy consultation. In EB-2014-0219 the Board convened a working group, in which SEC participated, to consider this question along with others. In its Report, the Board decided not to proceed with changes to the half-year rule immediately, saying¹⁷⁰:

“The Board does not intend to proceed with the elimination of the effect of the half year rule on test year capital additions for the IRM years at this time. The Board will continue to review this matter and may proceed with a further consultation at some point in the future.”

¹⁶⁶ EB-2012-0161, Decision with Reasons, p. 5.

¹⁶⁷ 8-OEBStaff-82, p. 2.

¹⁶⁸ AIC Compendium, Tab 7. p. 6.

¹⁶⁹ We suspect the de-emphasis is because counsel realize the claim is non-viable. However, if the result of arguments from intervenors and Board Staff is that the Applicant suddenly has detailed legal submissions on retroactivity in Reply, SEC believes it is important that other parties have an opportunity to respond to any such submissions. Leaving major arguments to Reply is generally not helpful to the Board. SEC has not provided detailed legal arguments on retroactivity in this Final Argument, because the issue appears self-evident, and the Applicant has not dealt with this in Argument in Chief. If the Applicant wishes to actually argue this issue on the law, the Board should hear detailed legal arguments on both sides before making a determination.

¹⁷⁰ EB-2014-0219, Report of the Board, September 2014, p. 4.

12.4.8 The Board has now re-convened a small working group to look at the half-year rule, and SEC once more intends to participate. The group is expected to meet this month to discuss the technical aspects of the issue, and provide recommendations to the Board.

12.4.9 In our submission, it would therefore be premature for the Board to allow any half-year adjustment for Toronto Hydro. The Board has a policy. If and when it changes that policy, it will be appropriate for Toronto Hydro's situation to be considered.

12.4.10 *There Is No "Foregone Revenue"*. The most compelling reason that this request should be rejected is that it is simply wrong. The so-called "foregone revenue" does not in fact exist. IRM and the half-year rule do not interact to deny recovery of any costs to utilities.

12.4.11 As the Board correctly pointed out in EB-2012-0064¹⁷¹:

"The Board does not accept that there is a "loss" to the distributor with the application of the half-year rule or that these policies are wrong."

12.4.12 The reason this is true is that, while half of new assets are included in rate base in a rebasing year, assets that are depreciated, and assets that are retired before being fully depreciated, remain in rate base during the IRM period. Further, the entire revenue requirement impact of the initial rate base (without reduction for any depreciation or retirements) is indexed according to the IRM formula. The cost of existing assets does not inflate in value, of course, because it is a sunk cost. However, the rate increase assumes that existing assets have an increasing cost. That is not actually the case. They actually have a declining cost, both in nominal and real terms.

12.4.13 Any mathematical model will demonstrate that, over the long term, the half-year rule has no impact on the amount recovered by distributors under IRM. In fact, if anything distributors over-recover, because on average their assets are actually placed in service later than half-way through the year. As the Board sees more and more applications in which distributors use the month-in-service method for accounting depreciation, this impact is increasingly clear.

12.4.14 *SEC Recommendation*. SEC therefore submits that the Board should clearly and bluntly reject this proposal by the Applicant. Further, the Board should make clear that continuing to ask for the same thing, in the face of consistent rejections, is not a reasonable regulatory strategy for utilities.

¹⁷¹ EB-2012-0064 Partial Decision with Reasons, p. 9.

13 OTHER MATTERS

13.1 Costs

13.1.1 The School Energy Coalition hereby requests that the Board order payment of our reasonably incurred costs in connection with our participation in this proceeding. It is submitted that the School Energy Coalition has participated responsibly in all aspects of the process, in a manner designed to assist the Board as efficiently as possible

All of which is respectfully submitted.

Jay Shepherd
Counsel for the School Energy Coalition

APPENDIX A



Jay Shepherd

Professional Corporation
2300 Yonge Street,
Suite 806
Toronto, Ontario M4P 1E4

BY EMAIL

December 30, 2014
Our File No. 20140116

Toronto Hydro-Electric System Limited
14 Carlton Street
Toronto, Ontario
M5B 1K5

Attn: Amanda Klein, Director of Regulatory Affairs

Dear Ms. Klein:

Re: EB-2014-0116 – Toronto Hydro 2015-2019 Rates

We are counsel for the School Energy Coalition. Further to our conversation today, this letter is sent seeking clarification of Toronto Hydro's position with respect to support by customers for its expanded capital plan.

It is a theme throughout the Application that the Applicant has reached out to its customers, and on balance they support Toronto Hydro's proposed increases in rates to cover capital spending (e.g. Ex.1B/2/7, and numerous other places in the Application). By implication (although we understand this may not be intentional), intervenors and others who oppose the level of capital spending in the Application are not representing the views of the customers.

On November 18, 2014, during the Technical Conference, SEC counsel asked for further information on that customer feedback, but was refused in the following exchange:

“MR. RUBENSTEIN: With respect to meeting your major customers and getting feedback from major customers, am I correct Toronto Hydro did attend those meetings?”



Jay Shepherd Professional Corporation

MS. KLEIN: Our engagement activities with respect to our very large customers can be found at Exhibit 1B, tab 2, schedule 7, page 8.

MR. RUBENSTEIN: Is the answer yes? [we understand the witness nodded]

Now, with respect to the meetings referred to, are you able to provide the name of the customers, the dates of those meetings, the list of attendees, and all the material that you provided to them and any minutes that were taken?

MR. SMITH: No, we're not prepared to do that." [p. 158] [insertion added]

It is SEC's intention to challenge the assertion of Toronto Hydro that it has the support of its large customers for its expanded capital plan. In order to do that, we need to be able to interview the customer representatives that Toronto Hydro claims expressed that support, in two subject areas:

- What was the nature of any support expressed by the customer to Toronto Hydro? For example, did the customer support capital spending only as long as reliability increased, or as long as rate increases do not exceed x%, etc.?
- What was the context in which the support was given? For example, did Toronto Hydro make statements of fact, on which customers relied, in concluding that expanded capital spending is necessary?

We have, of course, the letters from certain customers that you have included in the Application, but those appear to be form letters drafted by Toronto Hydro. We can interview those customers, and if that is all of the large customers that Toronto Hydro alleges have expressed support, that is sufficient for our purposes. However, if Toronto Hydro is alleging that other customers have expressed support, we require their names and contact information so that we can speak to them, and assess the nature and extent of that support.

It would appear to us that, if Toronto Hydro wishes to assert that customers said X, then Toronto Hydro must produce those persons that they claim made those statements. That "evidence" can then be tested in the normal course, and if necessary the Board can determine in an oral hearing whether it is credible.

Alternatively, if Toronto Hydro is not willing to put forward the persons who said that they support the expanded capital plan, then Toronto Hydro must, it would appear, withdraw all claims in its Application that large customers support the capital plan. You cannot, in our view, rely on evidence and then not make it available to be tested in discovery and cross-examination.

We therefore ask that you clarify whether Toronto Hydro is asserting that its large customers, or any of them, are supportive of the expanded capital plan. If Toronto Hydro is so asserting, we



Jay Shepherd Professional Corporation

require a list of names and contact information for each of those large customers alleged to be supportive. If Toronto Hydro is not so asserting, please so advise.

Please feel free to call the undersigned if you wish to discuss this. As you are aware, if you are unwilling to disclose the names and contact information of those customers, but wish to continue to rely on assertions as to what they have said, then SEC will have to seek a Board order compelling you to elect either one or the other. Given the Board's schedule for motions, your timely response would be most appreciated.

Yours very truly,
JAY SHEPHERD P. C.

Jay Shepherd

cc: Wayne McNally, SEC
Crawford Smith, Torys
Martin Davies, OEB
Maureen Helt, OEB
Interested Parties

January 6, 2015

EMAIL

Jay Shepherd
Professional Corporation
2300 Yonge Street
Suite 806
Toronto, ON M4P 1E4

Dear Mr. Shepherd:

Re: EB-2014-0116 - Toronto Hydro 2015-2019 Rates

We are counsel to Toronto Hydro and respond to your letter dated December 30, 2014 with respect to “very large customer” engagement regarding the utility’s capital spending plans.

As detailed in Toronto’s Hydro’s evidence, statements throughout the application regarding customer acceptance of the capital program are based on the customer engagement consultation program designed and carried-out by Innovative Research Group Ltd. (“Innovative”). As explained in the Customer Engagement evidence filed at Exhibit 1B, Tab 2, Schedule 7, Section 2 in particular, Toronto Hydro learned from this program that a majority of customers in its most populous rate classes, namely the residential and small general service classes, accept the need for timely renewal of the distribution system, while acknowledging that this will lead to an increase in rates.

The application-specific consultation initiative undertaken by Innovative expressly excluded very large customers, which are commonly referred to as “key accounts” and are comprised of generally sophisticated customers such as manufacturers, hospitals, large office towers, retail, educational institutions and property management firms.

Toronto Hydro maintains contact with these very large customers through a continuous Key Account Management Services program, as explained in more detail in the evidence filed at Exhibit 1B, Tab 2, Schedule 7, Section 1.3. The objective of this program is to enable Toronto Hydro to better understand its very large customers’ businesses, unique service requirements and power quality and reliability needs, and to assist them with conservation and demand management programs to help lower their energy consumption and cost. These interactions normally involve, among other things, engaging with customers regarding the utility’s future capital plans. The utility’s future capital plans are reflected in its Distribution System Plan, filed with this application.

The Key Account Management Service program consists of regular meetings which include discussions regarding the customer’s bill, their reliability experience, planned investments that could affect their electricity service, and ways that they can manage their electricity costs. The

feedback received from these meetings helps to inform Toronto Hydro's capital, maintenance, conservation and demand management, and customer care program planning.

At the key account meetings, Toronto Hydro presents high-level information about the utility's ongoing asset renewal and expansion programs and recently completed or ongoing rate setting applications. Within the context of these discussions, Toronto Hydro invited its very large customers to submit letters of comment outlining their views on matters such as service quality, reliability, and cost of electricity, as well as the utility's ongoing, asset renewal-focused capital investment plans. In extending these invitations, Toronto Hydro highlighted that the OEB is particularly interested in hearing from customers as part of the rate-setting process, and explained that any letter of comment submitted would be filed a part of the utility's application.

As you are aware, Toronto Hydro received 15 letters of comments from its key account customers. Those letters have been filed at Exhibit 1B, Tab 2, Schedule 7, Appendix A of this application.

In support of its customer engagement activities, Toronto Hydro relies on the information contained within the evidence filed, including the letters of comment. We do not agree that it is incumbent on Toronto Hydro to provide you with the contact information for those customers which chose not to provide a letter of comment.

Please do not hesitate to contact us if you have any questions.

Yours truly,



Crawford Smith

CS/lp



Jay Shepherd

Professional Corporation
2300 Yonge Street,
Suite 806
Toronto, Ontario M4P 1E4

BY EMAIL

January 6, 2015
Our File No. 20140116

Torys
79 Wellington St. W., 30th Floor
Box 270, TD South Tower
Toronto, Ontario
M5K 1N2

Attn: Crawford Smith

Dear Crawford:

Re: EB-2014-0116 – Toronto Hydro 2015-2019 Rates

This is a follow-up to your letter of today's date, and our telephone conversation with Toronto Hydro's Amanda Klein yesterday.

We interpret your letter, in light of the discussion with Ms. Klein, to mean that Toronto Hydro is not relying on an assertion that any key account customers, other than those who wrote the letters filed in Ex. 1B/2/7/2, are supporting the expanded capital program of Toronto Hydro. On that basis, we will contact those who wrote the letters to get the further information we require. Depending on the results of those discussions, we may also seek to have those customers appear as witnesses in the oral hearing on this Application.

In light of this, further information from Toronto Hydro is not required, and we will not need to file a motion with respect to the referenced Technical Conference refusals.



Jay Shepherd Professional Corporation

If our interpretation is in any way incorrect, please let us know, as we are aware the Board would like to schedule time for any motions, and this could obviously affect that schedule.

Yours very truly,

JAY SHEPHERD P. C.

Jay Shepherd

cc: Wayne McNally, SEC
Amanda Klein, Toronto Hydro
Martin Davies, OEB
Maureen Helt, OEB
Interested Parties