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 Hydro One Networks Inc., for an order or orders made pursuant to section 78 of the Act approving rates for the transmission of electricity.

Argument of

Energy Probe Research Foundation

December 16, 2019

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Executive Summary

This is the Argument of Energy Probe Foundation. It is structured as per the Issues List and Hydro One Transmission Argument in Chief.

A competitive Ontario economy must be based on reliable market-priced power. Ontario Hydro Transmission is key to achieving this goal. It has failed its customers in the past and must move towards being a top quartile transmission company by 2025.

The summary below reflects Energy Probe's assessment of the Application and also reflects its concern that Ontario should have a first-class transmission system by 2025 reversing the negative reliability trends that have occurred over the past 5 years.

- **Issue 1:** Energy Probe does not believe that Hydro One has responded appropriately to all relevant OEB directions from previous proceedings.
- **Issue 2:** Energy Probe suggests that in reply Hydro One provides a comparison of its transmission rates to other Canadian provinces using publicly available information.
- **Issue 3:** Energy Probe suggests that the OEB should provide a strong direction to Hydro One, that customer surveys should be based on a proposed set of real scenarios related to system reliability and capital investment. This is not the case in this application.
- **Issue 4:** Energy Probe believes that the proposed effective date of January 1, 2020 is appropriate.
- **Issue 5:** Energy Probe believes that custom IR formula proposed by Hydro One does not provide adequate incentive for capital productivity savings. One method that would restore incentive for capital savings would be to apply a stretch factor to the capital factor C. Energy Probe supports the total cost benchmarking analysis of PEG and suggests the Board adopt the PEG recommended stretch factor of 0.3% and a 0.15% capital stretch factor for a net X factor of 0.45%.
- **Issue 6:** Energy Probe supports the goal of productivity savings. However, the Hydro One's Progressive Productivity model has not been tested and until the proof has been provided, there is no basis for the Board to accept the claim that it represents additional stretch factor offsetting the usual PCI stretch factor in the IRM formula. Energy Probe is skeptical about the base from which progressive productivity savings are calculated and also whether they are expectations based on unconfirmable assumptions and analysis and should accordingly be severely discounted.
- **Issue 7:** The Board should not allow recovery of Incentive pay related to reliability in rates until a Threshold equal to the 2014-2018 average performance 54 .85 minutes is passed for System Reliability. Hydro one should amend the Team Scorecard threshold to 54.85 minutes so only better SAIDI (mc) would be eligible. This should be the threshold for SAIDI improvements with a target 22-minute reduction by 2024.

- **Issue 8:** Energy Probe supports the agreement between Environmental Defence and Hydro One Transmission.
- **Issue 9:** Energy Probe has concerns about the level of investment on transmission lines, given the limited direct impact on outages. Investment on transmission lines accounts for about 37.4% of the System Renewal budget. The \$323.9 million for 2020 represents an 83.0% increase. Accordingly, investment in lines should be reduced by about 10% or \$32 million. A more appropriate approach to the ISOCC would be to extend the development over a 5 year period for a 2025 completion.
- **Issue 10:** Energy Probe supports the submission of Board Staff on this issue.
- **Issue 11:** Energy Probe supports the submission of Board Staff on this issue.
- **Issue 12:** Energy Probe supports the submission of Board Staff on this issue.
- **Issue 13:** Energy Probe supports the submission of Board Staff on this issue.
- **Issue 14:** While overall CCFS costs are reducing in 2020, Energy Probe has specific concerns about Human Resources Costs continuing to escalate at a level that outstrips growth in the workforce (2.2 % growth in FTEs 2018-2020). A targeted reduction to 2020 Human Resources O&M should be made. HR O&M should be frozen at 2018 levels.
- **Issue 15:** Energy Probe supports the submission of Board Staff on this issue.
- **Issue 16:** Energy Probe supports the submission of Board Staff on this issue.
- **Issue 17:** Energy Probe proposes a \$2.3 million reduction in Management Unrepresented Employee Compensation over 2021 and 2022. Energy Probe Proposes that 50% of the Employer Pension contribution premium not be recovered in rates.
- **Issue 18:** Energy Probe supports the submission of Board Staff on this issue.
- **Issue 19:** Energy Probe supports the submission of Board Staff on this issue.
- **Issue 20:** Energy Probe supports the submission of Vulnerable Energy Consumers Coalition on this issue.
- **Issue 21:** Energy Probe supports the submission of Board Staff on this issue.
- **Issue 22:** Energy Probe supports the submission of Board Staff on this issue.
- **Issue 23:** Energy Probe suggests that a CIVSA 1% dead-band is more appropriate for a first generation transmission IRM.
- **Issue 25:** Energy Probe supports the current ETS allocation and 2020 ETS rate.

Submissions on Issues

Issue 1: Has Hydro One responded appropriately to all relevant OEB directions from previous proceedings?

Hydro One engaged an independent expert consultant, the Boston Consulting Group ("BCG"), to review the enhanced capital investment planning process. BCG found the enhanced process to be consistent and thorough, and that it meets or exceeds expectations for an above average utility planning process.

Hydro One also retained Metsco Energy Solutions Inc. ("Metsco") to review its asset condition assessment process. Metsco found that Hydro One's asset condition assessment process is aligned with other asset management frameworks in the industry that are sufficiently rigorous and robust to accomplish their intended functions from the analytical perspective.

Hydro One also commissioned Power Systems Engineering PSE to provide expert econometric studies of its costs relative to a peer group of U.S. utilities, as well as an assessment of the total factor productivity ("TFP") trend for the transmission sector.

Board Staff commissioned Pacific Economics Group to review this work and provide an alternative analysis.

The 2017 study by Mercer Canada ("Mercer") showed that although the Company's Total Compensation is lower relative to market, than in the previous study –Hydro One's Total Compensation costs for Society and Union employees still remain high relative to market median.21 The Compensation for Unrepresented Management non-Union employees, which is under Hydro One's direct control, still remains above Market, including Pension Contributions.

Following the Mercer study, Hydro One entered into multi-year (2020-2025) contracts with the Society and Union.

Energy Probe Submission on Issue 1

Energy Probe does not believe that Hydro One has responded appropriately to all relevant OEB directions from previous proceedings.

Energy Probe agrees that the enhanced planning and execution of the work programs, if successful, will be a positive move forward. However, the Company has let the state of the Ontario Transmission assets deteriorate which resulted in a major drop in its reliability rankings. This is irresponsible.

The Board has repeatedly expressed its concerns about Hydro One's Total Compensation Costs that continue to be above market. Hydro One has not done enough to reduce above Market Compensation and Pension costs, so Ontario transmission customers are paying too much for a transmission system that is now below North American best in class.

Energy Probe hopes the Board will take a positive approach to the proposed progress promised in this application but indicate to Hydro One that Ontario Transmission customers must have a top of class transmission (First Quartile) service by 2025.

Issue 2: Are the bill impacts resulting from Hydro One's proposed revenue requirement reasonable?

Hydro One's Application proposes a 0.3% increase to its Rates Revenue Requirement for 2020 (relative to 2019), which, combined with the 3.8% rate increase attributable to the resetting of the load forecast in 2020, results in an average transmission rate increase of 4.1% in 2020. Over the 3-year period from 2020 to 2022, the Application will result in an average annual transmission rate increase of 5.5%, or 3.8% when excluding the impact of changes in the load forecast¹.

The resulting total bill impacts in 2020 are 0.3% for both an average transmission connected customer and an average distribution-connected customer. On this basis, the total bill increase is expected to be about 37 cents per month for a typical Hydro One Medium Density (R1) Residential Customer (750 kWh/month) and 88 cents per month for a typical Hydro One General Service (GSe) Customer (2,000 kWh/month)².

Energy Probe Submission on Issue 2

Hydro One has not provided any evidence positioning its proposed transmission rates relative to other Canadian Provinces. This is a deficiency in its evidence. Energy Probe suggests that in reply, Hydro one provide a comparison of its Transmission Rates to other Canadian provinces using publicly available information. The relative cost for Ontario transmission customers is material information that should have been filed and is relevant. If Hydro One has higher costs, than other Provinces, we need the Board to understand that and the reasons.

Issue 3: Were Hydro One's customer engagement activities sufficient to enable customer needs and preferences to be considered in the formulation of its proposed spending?

Hydro One's customer engagement activities related to Residential Customers consist primarily of the transmission customer engagement survey.

Transmission Customer Engagement Survey

Conducted by Innovative Research Group (IRG) in 2017, the customer engagement survey sought feedback regarding customer needs and preferences in advance of Transmission System Plan ("TSP") development (prior to the start of the Investment Planning process. The survey specifically asked LDCs to respond "with your customers in mind" and "with consideration to your customers' needs".

¹ Undertaking J8.5, Tables 6,7,8.

³ Exhibit B-1-1, TSP Section 1.3, Attachment 1, pages 44-48

The participation rate of 66% (103 out of 156 transmission-connected customers) was a 51% increase from the 2016 customer engagement.

Hydro One states the survey obtained customer feedback on the outcomes they prioritize (when considering the TSP potential investments) and on investment pacing (taking into account costs), including based on illustrative investment scenarios and associated costs outcomes. The survey methodology and results are detailed in IRG's Customer Engagement Report⁴.

Key feedback from customers included the following.

- Safety, reliability and outage restoration are top priority outcomes.
- All customer segments prefer pacing that spreads investments over time, instead of investing now with higher short-term rates and lower future increase or delaying investments with lower short-term rates and higher future rates.
- Outage frequency (SAIFI) reduction is more important than duration (SAIDI) reduction, but the most important issue is to reduce the number of day-to-day interruptions.
- When presented with several investment scenarios, most customers (by at least a three to one margin) preferred investment levels in line with what was before the OEB in EB-2016-0160.
- Half of end-user participants rate power quality as being "extremely important".

Energy Probe Submission on Issue 3

The 2017 Transmission Survey failed to properly inform customers about either the current status of system reliability as indicated by recent Delivery Point metrics⁵, or about the 2017 pace of the System Renewal capital investment. (~\$750 million/yr). Accordingly, the responses would have been very different if customers had been asked a question such as: "System reliability has got worse so do you agree we need to invest more in replacement of aging infrastructure?"

Two years after the survey, Hydro One has now filed an Application aimed at correcting declining Reliability by a major increase in System Renewal capital. This was not a scenario put to the respondents. The capital investment scenarios provided to customers in the survey did not correspond to that provided in EB-2016-0160.

Description		Histo	ric Years	Bridge Year	Test '	Years	
	2012	2013	2014	2015	2016	2017	2018
Stations	322.5	355.3	481.3	565.8	552.2	537.5	496.2
Lines	66.8	124.8	140.0	128.4	172.2	239.3	345.9
Total	389.3	480.0	621.3	694.3	724.3	776.8	842.1

Table 1: Sustaining Capital (\$ Millions)

EB-2016-0160 Exhibit B1, Tab 3, Schedule 2, Table 1

⁴ Exhibit B-1-1, TSP Section 1.3, pp. 6-8, and Attachment 1

⁵ Regulatory Scorecard filed as Table-7 AIC Page 34

Customers were asked about pace, and as would be expected, preferred to have investments spread out. However, the planned major increase in System Renewal capital for 2020-2024 was not put to customers. It appears that post survey, Hydro One decided, perhaps for good reasons, to increase the pace of investment in a manner that is not consistent with the survey results. The Board should provide a strong direction to Hydro One that surveys should be based on a proposed set of *real scenarios* related to system reliability and capital investment. This is not the case in this application.

Issue 4: Is the proposed effective date of January 1, 2020 appropriate?

Energy Probe believes that the proposed effective date of January 1, 2020 is appropriate.

Issue 5: Are all elements of Hydro One's proposed CIR framework for the determination of revenue requirement appropriate?

As allowed under the RRFE, Hydro One Transmission proposed a Custom IR ("CIR") as appropriate for its recurring and variable capital investment requirements during the plan term. The OEB's Handbook, requires including an index for the annual rate adjustment, benchmarking, performance metrics which Hydro One included.

Hydro One calls its proposed CIR a *revenue cap*. It calculates the revenue requirement for 2021 and 2022 by escalating the 2020 revenue requirement by a revenue cap index ("RCI") for annual rate adjustment, which includes an industry-specific inflation factor, productivity factors, as well as by adding a capital factor.

The proposed RCI is similar to the RCI approved by the OEB in Hydro One's most recent Hydro One Sault Ste. Marie Decision -EB-2018-0218. Industry-specific inflation factor is based on a custom weighted two-factor input price index as recommended by Hydro One's independent expert consultant, Power System Engineering, Inc. ("PSE"). The values proposed for Hydro One's two custom productivity factors (which together comprise the proposed X factor of 0%) are derived from the econometric total cost benchmarking ("TCB") work and the TFP trend research conducted by PSE. Stretch factor of 0.0% based on PSE's total cost benchmarking study. On average, Hydro One is projected to be 32.9% below the benchmark during the 2020-2022 period⁶. Hydro One's custom industry TFP measure based on PSE's industry productivity factor recommendation from its TFP study. The TFP trend of the industry from 2004 to 2018 shows an average annual decline in industry-wide TFP (at a -1.61% growth rate).

PSE recommended an industry productivity factor of 0%, consistent with previous OEB direction that it did not wish to have a negative industry productivity factor in an escalation formula⁷. Hydro One states that using a 0% industry productivity factor amounts to a significant implicit stretch factor for Hydro One because it is stretched to outpace the industry by 1.61%.

⁶ PSE Reply Report (October 15, 2019),

⁷ Exhibit A-4-1, Attachment 1, p.13.

Custom Capital Factor

As Mr. Fenrick confirmed, PSE did not examine, or provide an opinion on the Custom Capital Factor that provides the incremental revenue requirement associated with new capital investment that is not recovered pursuant to the I -X escalation.⁸ However Hydro states incorrectly: "It is noteworthy that PSE's studies confirm that Hydro One's proposed capital spending compares favourably to the industry⁹".

In addition, Hydro One states it has built into the revenue requirement progressive productivity savings which impose a further stretch on Hydro One and provide an explicit financial incentive for continuous improvement. The built-in progressive productivity results in lower capital factors than would otherwise be the case and amounts to an additional stretch from a revenue requirement perspective of about 0.15% in 2021 and 0.3% in 2022¹⁰.

Dr. Lowry examined the proposed Capital Factor and recommended that "the OEB add a supplemental stretch factor and calibrate this so it produces a markdown on plant additions that is similar to that which would be produced by an ACM"¹¹.

In responses to interrogatories and undertakings Dr. Lowry provided examples of the supplemental stretch factor under different scenarios. The third scenario is PEG's proposed X factor of 0.05% and an S factor that provides an equivalent markdown to the materiality threshold and dead-zone applied to the OEB's capital modules (e.g., S=0.26%).

Capital In-Service Variance Account ("CISVA")

Hydro One proposed a Capital In-Service Variance Account ("CISVA") which it claims will protect customers by tracking the difference between the revenue requirement associated with actual and OEB-approved in service capital additions. The proposed CISVA is identical to the CISVA approved by the OEB in Hydro One's recent distribution proceeding and is designed to incent appropriate behaviours throughout the CIR term¹³.

Alternative Benchmarking and Productivity Analysis by Pacific Economic Group (PEG) Evidence for Board Staff

PEG provided a critique of the PSE Benchmarking and Productivity Study¹⁴. The Main findings were that:

- Hydro One Total Cost performance was below the US Sample for the period 2004-2018.
- Hydro One Total Cost Performance is projected to be above the US sample from 2018-2022
- Hydro One Total Factor Productivity is similar to the sample and indicates a productivity factor offset of 0 %

⁹ Exhibit A-4-1, Attachment 1, p.14.

⁸ Exhibit A-4-1, page 7, Table 2

¹⁰ Exhibit A-4-1, Attachment 1, pp. 5-6; Oral Hearing Transcript, Volume 8, p. 19, ln. 8 to p. 20 ln 8; Undertaking JT2.42.

¹¹ PEG Report Page 45

¹² Undertaking 9.4, Table B1 revised

¹³ Exhibit A-4-1, Section 2.3.

¹⁴ Pacific Economic Group report: "IRM Design for Hydro One Transmission"

- Hydro One should be assigned a Stretch Factor of 0.45% for a net offset of 0.15% and a PCI = I 0.15%
- The Capital Factor should include a Stretch Factor hat should have a value of 0.15%

Energy Probe Submission on Issue 5

The problem for Hydro One Transmission is that it has declining transmission load. If it used a traditional revenue cap formula with output growth factor g, its g would be negative, or -3.8% due to its declining load growth¹⁵. The formula shown below is the traditional Revenue Cap formula.¹⁶

$$RR_t = RR_{t-1} (1 + (I - X + g))$$

Where

 RR_t is the revenue requirement in year t

 RR_{t-1} is the revenue requirement in the previous year

I is the inflation factor

X is the productivity factor which may include a stretch

g is the growth in output which may be load for electricity transmitters or throughput for gas transmission pipelines.

Hydro One's Custom IR formula, which it claims is a revenue cap, looks similar but it is significantly different.

$$RR_t = RR_{t-1} (1+RCI)$$

 $RCI = I - (X + stretch) + C + Z$

$$RR_{t}=RR_{t-1}(1+(I-X-stretch+C+Z))$$

C is the Custom Capital Factor, determined to recover the incremental capital-related revenue requirement in each rate year necessary to support Hydro One's proposed Transmission System Plan, beyond the amount already recovered in the revenue cap-adjusted revenue requirement for that year.

By making this change Hydro One has taken a large part of its capital outside the IR formula into Cost of Service territory. Rather than providing an incentive to constrain capital spending, Hydro One's Custom Capital Factor creates an incentive for the Company to increase capital spending. Indeed, it is only Hydro One's "progressive productivity" proposal that distinguishes its treatment of capital expenditures from that of cost of service.¹⁷

¹⁵ Tr. Vol. 8, page 67

¹⁶ Tr. Vol. 8, page 68

¹⁷ Tr. Vol. 8, pages 74-76

In its formula Hydro One has replaced output growth g with its capital factor C which is capital input growth. The resulting custom IR formula does not provide an incentive for capital productivity. In fact, Hydro One Transmission's custom IR formula encourages capital unproductivity. It encourages the Company to spend money on capital while cutting back on OM&A. Energy Probe believes that a custom IR formula should provide incentives for a utility to seek productivity improvements in both OM&A and Capital which the proposed custom IR does not. In a competitive marked, a business would cut spending in order to maintain financial viability if the demand for its product is falling. Regulation is intended to be a substitute for competition. A properly functioning custom IR formula would provide an incentive for Hydro One to cut spending if demand is falling. The custom IR formula does not do that. It rewards Hydro One for increasing spending on capital. Hydro One gets greater revenues if it spends more capital as Hydro One's expert witness acknowledged. 18

MR. LADANYI: So let's turn to page 15. Oh, thank you for the answer. In there, could you move the screen further down on the page? I want to address the equation.

Okay. So this is your equation, growth and revenue equals inflation, minus productivity, minus the stretch factor, plus capital factor.

And when I look at this equation I would say that the incentive for someone using this equation would be to maximize capital spending. Wouldn't that be the case? You get greater revenue if you can spend more capital. Isn't that what it says?

MR. FENRICK: It is true that, yeah, the higher the c-factor the higher the revenue will be.

Board Staff's expert witness summarized the problem with Hydro One's proposed Custom IR.

"The proposed ratemaking treatment of capital is our chief concern. The C factor would ensure that the Company would recover almost all of its projected/proposed capital cost if it incurred this cost. Almost all of any cumulative capex underspend would be returned to the ratepayer. Several additional variance accounts and the Z factor would also address capex. Hence, capital revenue would chiefly be established on a cost of service basis.

Despite the proposed clawback of capex underspends, Hydro One would still have some incentive to exaggerate its capex needs, since exaggerations strengthen the case for a C Factor and reduce the pressure on the Company to contain capex. Exaggeration of capex needs may reduce the credibility of Hydro One's forecasts in future proceedings. However, the Company can always claim that it "discovered" ways to economize. British distributors operating under several generations of IR plans with revenue requirements based on cost forecasts have repeatedly spent less on capex than they forecasted. Hydro One would also be incentivized to "bunch" its deferrable capex in ways that increase supplemental revenue. If, for example, the Company could somehow manage to time its capex so that the I-X escalation was compensatory, it would obtain no supplemental revenue.

¹⁸ Tr. Vol. 8, page 79

The clawback of almost all capex underspends and the variance account and Z factor treatments of some kinds of capex would greatly weaken the Company's incentive to contain capex. Incentives to contain capex and OM&A costs would be imbalanced, creating a perverse incentive to incur excessive capex in order to reduce OM&A costs." ¹⁹

Productivity is doing more with less. Unproductivity is doing less with more. That is what Hydro One is doing. Hydro One is comparing itself to a group of other transmitters to justify its unproductivity and has found some that are even more unproductive. It is benefiting from being a member of a "losers club", a group of unproductive utilities.

Hydro One's proposed stretch factor is 0, which is the same as other OEB regulated utilities which do not have a custom IR formula. This is not in agreement with the Handbook to Utility Rate Applications.

"It is insufficient to simply adopt the stretch factor that the OEB has established for electricity distribution IRM applications. Given a utility's ability to customize the approach to rate-setting to meet its specific circumstances, the OEB would generally expect the custom index to be higher, and certainly no lower, than the OEB-approved X factor for Price Cap IR (productivity and stretch factors) that is used for electricity distributors." ²⁰

The two expert reports both indicate that the Industry TFP and Hydro One TFP are similar resulting in a recommended 0% X factor. The PSE TFP analysis comparison used a different time frame and other assumptions to PEG. However, the two results are similar and Energy Probe suggests the PSE and PEG TFP analyses can be relied upon the Board.

The divergent results from the PSE and PEG Total Cost Benchmarking ("TCB") models, are disturbing and will not assist the Board. This leaves the Board with a difficult decision on the appropriate stretch factor.

Energy Probe has reviewed the transcript²¹ of its cross-examination of Mr. Fenrick, and concludes that PSE used assumptions in its TCB sample and model that favor Hydro One relative to the US Industry sample and place its TCB findings in doubt. These have been detailed in PEGs alternative benchmarking analysis.

Energy Probe also points to material changes in the coefficients of the variables from the PSE HOSSM study that are not explained by changes in load data from three of 57 US utilities.

The PSE Reply Report both updates the data for 2017 and 2018 and criticizes PEG unfairly. It was a late filing with no opportunity for discovery, or for PEG to reply. This is inappropriate and the Board should reject the report and its updated findings.

¹⁹ Exhibit M1, page 41

²⁰ Handbook to Utility Rate Applications, October 13, 2016, page 26

²¹ Volume 8 Pages 17-52

Energy Probe is not an advocate for PEG, but on balance, supports the TCB analysis of PEG and suggests the Board adopt the PEG recommended stretch factor of 0.3% and a 0.15% capital stretch factor for a net X factor of 0.45%. Energy Probe believes that one way to restore incentive for capital savings would be to apply a stretch factor to the capital factor C as PEG has proposed.

Issue 6: Has Hydro One taken appropriate steps to identify and quantify productivity improvements in all areas of its transmission operations?

Hydro One has identified approximately \$704 million in savings opportunities over the 2020-2024 TSP period²². It states this is consistent with the OEBs direction in EB-2016-0160 to establish firm short-term and long-term targets for productivity improvements and associated reductions in revenue requirement.

Table 6-1: 2020-2024 Productivity Savings

\$ millions	2020	2021	2022	2023	2024	Total
Operations	47	52	53	53	54	259
Progressive Operations (Defined Capital)	6	12	12	10	10	49
Corporate	12	11	9	7	6	45
Capital Total	\$65	\$74	\$73	\$70	\$70	\$353
Operations	9	10	9	9	9	45
Information Technology	6	9	10	10	10	44
Corporate	7	6	5	4	3	25
OM&A Total	\$22	\$25	\$23	\$23	\$22	\$114
Total Defined	\$87	\$99	\$97	\$93	\$92	\$468
Progressive Operations (Undefined Capital)	11	27	49	68	81	237
Grand Total	\$98	\$126	\$146	\$161	\$173	\$704
Progressive Productivity						
Progressive Operations (Defined Capital)	6	12	12	10	10	49
Progressive Operations (Undefined Capital)	11	27	49	68	81	237
Progressive Productivity Placeholder	17	39	61	78	91	286

Over the TSP Period, there are \$353 million in fully defined capital productivity savings, \$114 million in OM&A productivity savings and an additional \$237 million in undefined capital savings that fall into the category of "Progressive Productivity".

Hydro One claims the "progressive productivity savings" amount to an additional Stretch Factor and the revenue requirement has been reduced in this Application by the full amount of these productivity commitments. The reductions are the equivalent of \$0.6million in 2020, \$2.4 million in 2021 and \$5.8 million in 2022²³. Hydro One confirmed that the progressive

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²² Table 6-1

²³ Undertaking JT 2.42

productivity savings were added at the final plan review and approval stage. The proposed capital expenditures went up by \$394 million at the final stage from the previous stage²⁴.

Energy Probe Submission on Issue 6

Energy Probe is skeptical about the base from which progressive productivity savings are calculated and also whether they are expectations based on unconfirmable assumptions and analysis and should accordingly be severely discounted. Based on the evidence it is not clear if Hydro One just padded its cost forecasts so it could add a productivity line in its tables.

Energy Probe fully supports the goal of productivity savings. However, the Hydro One's Progressive Productivity model has not been tested and until the proof has been provided, there is no basis for the Board to accept the claim that it represents additional stretch factor offsetting the usual PCI stretch factor in the IRM formula.

Issue 7: Are the metrics in the proposed scorecard appropriate and do they adequately reflect appropriate outcomes? Do the outcomes adequately reflect customer expectations?

Hydro One's scorecards consist of performance measures that enable the utility to monitor, demonstrate and drive performance relative to meaningful outcomes. The three relevant scorecards are:

- 1. The evolved Transmission Scorecard, which based on the OEB Reporting requirements for Distributors,
- 2. The Hydro One Team Scorecard, an internal corporate scorecard for performance-based compensation; and
- 3. The Operational Scorecard, which is the company's internal operational reporting scorecard with more granular measures and targets.

The Customer Focus measures within the Transmission Scorecard fall into two performance categories (Service Quality and Customer Satisfaction) and were selected to demonstrate that customers' expected level of service is met.

Historic System Reliability Indices - SAIDI(s), SAIFI(s), System Availability and Unsupplied Energy show that Reliability has deteriorated significantly over the period 2015-2018. The Scorecard filed in AIC shows these trends.²⁵

Only Momentary Interruptions are stable, all other indices show worsening trends (Red Arrows) Hydro One acknowledges this and points to its aging infrastructure as the primary cause. When measured against a US Peer Group Hydro One NATF rankings have fallen to below second quartile²⁶

²⁴ Tr Vol,1 Page 55-56

²⁵ AIC Table 7-1 Page 34

²⁶ Undertaking JT1.4; NATF Report filing in EB-2016-0160

Examination shows that despite declining reliability, the pace of System Renewal Investment has only slightly increased over the historic period²⁷. (see section D of TSP) The conclusion is that Hydro One did not invest enough in System Renewal over the last 5 years and has let the system reliability run down to unacceptable standards.

Hydro One Transmission is now proposing to invest an additional \$350 million a year system renewal capital for a total \$1.2 million in order to attempt to reverse the trends in declining reliability²⁸.

Key transmission performance targets are now incorporated into the Team Scorecard to link corporate goals and objectives with performance-based compensation and incent continuous improvement.

Hydro One states that the incentives that are embedded in Hydro One's compensation plans support continuous improvement in performance management and are designed to both increase efficiency and deliver outcomes that customers value.²⁹

Energy Probe Submission on Issue 7

Hydro One's Board of Directors and Senior Management should be held responsible for not replacing aging assets at an appropriate pace to maintain System Reliability. They have not done so, allowing the current situation to develop.

As also discussed under Compensation below, Incentive Pay should only be paid to Senior Management when the baseline historic Performance Standards are exceeded. Saying "it was not on my shift" is not a rationale that ratepayers can accept. The baseline for system reliability rewards should be the 2014-2018 historic 5-year average not the current 2018 poor level of performance.

The Team Scorecard for 2019 shows

Measure	Threshold	Target	Maximum
SAIDI mc (minutes)	8.4	8.1	6.1
SAIFI (hours)	7.0	6.3	6.0

The Regulatory Scorecard for 2018 shows for each delivery point SAIDI (Multi Circuits) 70 minutes interruptions and SAIFI 0.53 interruptions/Delivery Point.

The different basis of the two scorecards leaves customers unsure what to expect in improvements. Hydro One was asked about this and reluctantly agreed that the overall 2020-2024 goal was 22 minutes improvement in SAIDI relative to the historic 5-year average.³⁰

²⁷ Exhibit B Tab1 Schedule 2 Appendix 2AA Capital Projects Table. Hydro One invested about 750 million a year.

²⁸ Exhibit B Tab1 Schedule 1 TSP Section 3.3 Pages 15/16

²⁹ AIC Page 38

³⁰ Tr. Vol 1 Page 153

The historic average reflects declining system reliability. There is no rationale to reward Senior Managers until the historic 2014-2018 5-year average of 54.85 minutes is reduced. This should be the threshold for SAIDI improvements with a target 22 minute reduction by 2024.

Issue 8: What is the status of Hydro One's joint work with the IESO to explore cost effective transmission line loss reduction opportunities and to report on those initiatives?

In the proceeding for Hydro One's 2017-2018 transmission revenue requirement (EB-2016-0160), the OEB directed Hydro One to work jointly with the IESO to explore cost effective opportunities for line loss reduction and to explore, as part of its investment decision process, opportunities for economically reducing line losses.

In response to the OEB's direction, Hydro One, with the support of the IESO, retained a third-party expert, EPRI, to review transmission line loss mitigation practices by other utilities and compare them to Hydro One's practices.

The resulting EPRI report concluded that Hydro One's design practices are materially consistent with industry best practices for loss mitigation. Furthermore, while the EPRI report demonstrated that line loss mitigation is not the primary driver for transmission investments, secondary or implicit savings may be achieved through system planning and equipment selection. On this basis, Hydro One states it incorporates line loss mitigation into its investment plan by identifying transmission line loss reduction for projects undertaken to provide supply adequacy or reliability.

Energy Probe Submission on Issue 8

Energy Probe supports the agreement between Environmental Defence and Hydro One Transmission.

Issue 9: Are the proposed forecast capital expenditures and in-service additions arising from the transmission system plan appropriate, and is the rationale for planning and pacing choices (including consideration of customer preferences, planning criteria, system reliability, asset condition and benchmarking) appropriate and adequately explained?

Hydro One is proposing a 31% increase in capital expenditures over the next three years when compared to the previous three-year period.³¹ The increase is mainly in the System Renewal category.³² These spending increases result in a 22% increase in in-service additions when compared to the previous three-year period.³³

The planning process resulted in a TSP that would have Hydro One spend \$6.6 billion over three years and that plan, called Scenario C, was "overwhelmingly" supported by customers according

³¹ Tr. Vol. 1, page 38

³² Tr. Vol. 1, page 41

³³ Tr. Vol. 1, page 42

to Hydro One³⁴ The planning process consisted of four process stages: Candidate Investment Development, Prioritization and Optimization, Enterprise Engagement, and Develop Final Plan/Review and Approval.³⁵ At the Candidate Investment Development Stage the plan total was \$7,616 million. In the Prioritization and Optimization Stage the total was reduced to \$6,540 million and was further reduced to \$6,511 million at the Enterprise Engagement Stage. However, in the Final Plan/Development Review and Approval it was increased by \$394 million to \$6,905 million. That increase was masked by a \$286 million "Progressive Productivity Placeholder" resulting in the plan total of \$6,619 million.

Hydro One states its proposed capital expenditures and in-service additions arising from Hydro One's TSP are appropriate and **supported by thorough planning practices.** The TSP establishes the Hydro One's investment needs and proposals on the basis of a rigorous and customer focused planning framework.

Table 9-4 Historical System Renewal Net Capital Investments 1 (\$ millions)

OEB Category	2015		20	16	20	17	20	18	2019
OLD cutogory	Act	Plan	Act	Plan	Act	Plan	Act	Plan	Bridge
System Renewal	688.9	573.6	733.9	539.9	740.7	733.7	776.2	780.4	773.3

Historical System Renewal spending is shown in Table 9-4. Variances in 2015 to 2017 resulted from higher than planned investments in transmission stations and line refurbishments, timing of projects, and higher spending on emergency replacements.130 Notably, in 2017 and 2018, System Renewal projects were generally in line with plan on an envelope basis and forecast expenditures for 2019 are in line with 2018 levels.

Prioritization and Optimization of Investments 2020-2024

Hydro One states it has enhanced its prioritization and optimization of investments through standardized risk scoring (as noted above) and the introduction of challenge sessions. A broad range of stakeholders across the organization participate in these challenge sessions to review the integrated portfolio, evaluate and confirm non-risk parameters, assess and debate investments on the margin, and make fact-based trade-off decisions³⁶.

Trade-off decisions assess which investments should be promoted or demoted based on the following data-driven levers:

- (1) risk: is Hydro One comfortable with the remaining risk, and are there unfunded investments which mitigate large risks?
- (2) flags (non-risk parameters): which investments need to be funded for non-risk merits?; and consideration of risk efficiency and risk mitigated per dollar, which supports prudent and data-driven trade-off decisions³⁷.

System Renewal Investments

³⁵ Exh. I, Tab 07, Sch. 28, Page 1; K1.2, page 17

³⁴ Tr. Vol. 1, page 53

³⁶ Exhibit B-1-1, TSP Section 2.1, pp. 40-41.

³⁷ Undertaking JT1.12

The key components and drivers for stations and lines renewal investments are discussed below. Hydro One's forecast System Renewal investments for 2020-2024 are shown in Table 9-5 below and reflect \$3.5 billion for stations investments and \$2.0 billion for lines investments. Over the 2020-2022 test period, System Renewal investments total \$3.1 billion.

Table 9-5 Forecast System Renewal Net Capital Investments (\$ millions)

OEB Category	2020	2021	2022	2023	2024	
OLD cutogory	Forecast					
System Renewal	865.2	1,103.1	1,172.8	1,177.4	1,193.8	

The TSP includes stations renewal investments of \$3.5 billion (53% of the total planning period forecast) to address transformers, circuit breakers, and protection, control and telecom equipment that are deteriorated as determined by condition assessments.

Hydro One states that its proposed system renewal investments represent the appropriate mix and level of investment that is required to effectively manage asset risk and system reliability while respecting customer preferences and minimizing rate increases.

System Renewal expenditures comprise the bulk of Hydro One's planned investments, representing close to 83.3% of capital expenditures over the planning period. Hydro One proposed an average annual increase of approximately 15.2% for system renewal projects over the 2020-2022 period. These expenditures are mainly driven by plans to replace assets that are near or at the end of their lives. Such projects include transmission line refurbishment, station reinvestments, transformer replacements, and air blast circuit breaker replacements.

The TSP delivers an increased emphasis on line renewal investments at a cost of approximately \$2.0 billion over the planning period, of which \$1.2 billion is required over the 2020-2022 test period, to refurbish and replace end of life transmission lines, underground cables, insulators and wood poles.

Energy Probe Submission on Issue 9

Energy Probe has earlier noted the failure of the company to replace aging infrastructure and assets over the last 5 years, so significant accelerated investment is now required to address aging and deteriorating assets in poor condition, contributing to declining system reliability.

As noted earlier, Hydro One Board of Directors and Management must acknowledge its responsibility for this situation. Letting the Provincial transmission system deteriorate is irresponsible. Now Hydro One is saying that it will improve and should be rewarded for that improvement.

Energy Probe disagrees with rewards for performance until the average performance from 2014-2018 is exceeded. Ratepayers should not pay for any incentives until the state of the system exceeds the historic average i.e. the three main outcomes are met based on a baseline of the 5

year historic average performance. Beating the historical average is the minimum that customers expect. The Scorecard should be amended to show SAIDI (mc) improvements below 54.85 minutes (5 year average historic).

The Board should not allow recovery of Incentive Pay related to reliability in rates until a threshold equal to the 2014-2018 average performance 54 .85 minutes is passed for System Reliability. Hydro one should amend the Team Scorecard threshold to 54.85 minutes so only better SAIDI (mc) would be eligible.

Based on the evidence it is not possible to determine if the pace of Hydro One's System Renewal spending will reverse the trends in declining reliability. However, if the System Renewal planning enhancements reviewed by BCG are appropriate, then the results should be evident by 2022.

Energy Probe has concerns about the level of investment on transmission lines, given the limited direct impact on outages. Investment on transmission lines accounts for about 37.4% of the System Renewal budget. The \$323.9 million for 2020 represents an 83.0% increase. Accordingly, investment in lines should be reduced by about 10% or \$32 million

Energy Probe has concerns about the apparent focus on assets that serve more customers per unit (transformers) or per km of line (lines). This concentration of investment will push back replacement/renewal investments for lower density areas of the Province, including those served by Hydro One Distribution. The end point for this is a two-tier transmission service, especially for areas supplied by single circuits.

The Integrated System Operations Control Centre is a "nice to have" state of the art facility for an investor-owned utilty. The supportive rationale and cost comparisons to other Utilities do not address the real issues:

- Is the rate impact of this addition to rates reasonable at this time.
- Can the ISOCC completion be postponed until the necessary major 5 year jump in System Renewal investment is moderated.

Energy Probe believes that the answer to these questions is no. Energy Probe suggests a more appropriate approach to the ISOCC is the extend the development over a 5 year period for a 2025 completion.

Issue 10: Are the methodologies used to allocate Common Corporate capital expenditures to the transmission business and to determine the transmission Overhead Capitalization Rate appropriate?

Energy Probe supports the submission on OEB Staff on this issue.

Issue 11: Is the proposed capitalization of other post-employment benefits (OPEB) for both Hydro One Transmission and Hydro One Distribution appropriate, and if not, what is the appropriate approach for these costs?

Energy Probe supports the submission on OEB Staff on this issue.

Issue 12: Does Hydro One's Transmission System Plan sufficiently address the unique rights and concerns of Indigenous customers and rights-holders

Energy Probe supports the submission on OEB Staff on this issue.

Issue 13: Are the proposed 2020 OM&A expenditures appropriate and is the rationale for planning choices appropriate and adequately explained?

Hydro One's total OM&A budget is comprised of the following categories: sustainment, development, operations, customer care, common corporate and other costs, and property taxes and rights payments. Hydro One states that in 2019 it had to implement one-time maintenance reductions, find productivity savings and reduce corporate costs due to Hydro One's 2019 application for inflationary rate adjustment³⁸.

The baseline for O&M accordingly is Cost of Service year 2018. The Total O&M was \$394.3 million Plan and \$419.2 million Actual after a Board ordered reduction of \$15 million, \$25 million over Budget. The 2020 Budget is \$374.1 million the lowest in recent history.

Hydro One states that the 2020 Stations Sustainment OM&A budget has been managed as in the Power Equipment Maintenance category by: shifting from time-based maintenance scheduling to a more condition-based maintenance schedule; avoiding maintenance costs due to replaced assets; and lowering life cycle maintenance costs due to new modern technologies (e.g., SF6 breakers). The 2020 Lines Sustainment OM&A has prioritized condition assessments for critical transmission lines located in publicly accessible areas and those connected to critical customers.

Energy Probe Submission on Issue 13

The reductions in operations, customer care, common corporate costs are appropriate. The only concern is whether the 2020 Sustainment budget of \$214.2 million is too low. Although the accelerated System Renewal capital program should reduce O&M costs in the longer term, the requirement to keep the system running over the interim is critical.

Energy Probe is concerned that if Hydro One's prioritized strategy for Stations and Lines does not work, there will be an increase in outages in 2020-2022. Energy Probe hopes Hydro Ones commitment and confidence will be correct.

"The proposed 2020 OM&A is lower than both the historical OEB-approved OM&A levels and historical actuals (despite upward inflationary cost pressures), reflecting Hydro One's commitment to minimize customer rate impacts while providing safe and reliable transmission service." ³⁹

³⁸ Exhibit F-1-3, p 3.

³⁹ AIC Page 95

Issue 14: Are the methodologies used to allocate Common Corporate Costs and Other OM&A costs to the transmission business appropriate?

Customer Care, Asset Management Planning, IT and other shared functions are Common Corporate Functions and Services ("CCF&S"), which provide common services to all business units. Other OM&A costs are comprised of credits associated with capitalized overheads which are determined from the Black & Veatch *Review of Overhead Capitalization Rates* (*Transmission*) – 2019 (see Issue 9), environmental provisions, indirect depreciation and other costs⁴⁰.

Table 1 below summarizes the HR spend per Hydro One Networks FTE. Increasing HR spend per FTE is as a result of the following:

- a shift from transactional work to more strategic work by HR;
- a shift of internal FTEs into the HR function; and
- additional HR FTEs to strengthen change management, analytics, internal HR consulting and Talent Management programming⁴¹.

The increase in HR spend per FTE is driven by internal transfers of employees into the HR function and the increasing accountabilities for the HR function over time. Hydro One states the metric below is not meaningful without this context⁴².

Table 1						
	2015	2016	2017	2018	2019	2020
\$ HR spend per FTE	\$ 1,684	\$ 1,865	\$ 2,197	\$ 2,551	\$ 2,593	\$ 2,657

Energy Probe Submission on Issue 14

While overall CCFS costs are reducing in 2020, Energy Probe has specific concerns about Human Resources Costs continuing to escalate at a level that outstrips growth in the workforce (2.2 % growth in FTEs 2018-2020). A targeted reduction to 2020 Human Resources O&M should be made. HR O&M should be frozen at 2018 levels.

Issue 15: Are the amounts proposed to be included in the revenue requirement for income taxes appropriate, including consideration of the Accelerated Investment Incentive (Federal Bill C-97)?

Energy Probe supports the position of OEB staff on this issue.

Issue 16: Is Hydro One's proposed depreciation expense appropriate?

Energy Probe supports the position of OEB staff on this issue.

⁴¹Exhibit I, Tab 10, Schedule 40

⁴⁰ Exhibit F-2-2.

⁴² Undertaking J4.12

Issue 17: Are the Compensation-related costs appropriate?

Hydro One's states it has taken meaningful steps to keep costs as low as reasonably possible, and made some progress in limiting compensation costs, limiting the size of its workforce and steps to reduce pension costs. Hydro One indicates the Transmission work program is increasing by approximately 26% between 2019 and 2022, but compensation costs are increasing by only 12% over the test period, or 4% per annum. Compensation costs as a percentage of total work program costs are reducing from 48% in 2014 to 44% in 2022. Further, compensation costs as a percentage of total Transmission costs are reducing from 49% in 2014 to 40% in 2022. This is a reflection of Hydro One's improved productivity and cost control measures⁴³.

Consistent with what was filed in the 2018-2022 distribution rate application (EB-2017-049), compensation costs associated with the Executive Leadership Team have not been allocated to Transmission, i.e. the 2020 revenue requirement excludes all Executive Leadership compensation.

Compensation Benchmarking Studies

Hydro One has conducted a number of compensation benchmarking studies. When assessing compensation positioning relative to the external market, a competitive range of +5% from market median is the desired positioning (due to limitations in published compensation data and fluctuations in market data year over year).303 The benchmarking studies show improvements by Hydro One in respect of its compensation levels relative to market median, with various categories of employees being at (or very close to) market median levels. For management and non-represented staff, the 2017 Mercer study shows that total compensation is positioned 1% above market median. For represented staff, while Hydro One remains above market median, Hydro One has made progress in this regard, and must work within the constraints of the existing bargaining process and collective agreements.

Five total compensation studies have been conducted by Mercer over the years, comparing Hydro One compensation to market median. Table 17-1 below shows the results of these Mercer studies.

Employee Group	2008 Survey Results	2011 Survey Results	2013 Survey Results	2016 Survey Results	2017 Survey Results	Total Change from 2008 to 2017
Management	-1%	-17%*	-1%	2%	1%	2%
Society	5%	5%	9%	11%	12%	7%
PWU	21%	18%	12%	16%	12%	-9%
Overall	17%	13%	10%	14%	12%	-5%

Table 17-1: Mercer Total Compensation Studies - High Level Results

legislative freeze for non-represented compensation.

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^{*}Management employee group positioning of -17% to market median likely impacted by

⁴³ AIC Page 102

The 2017 study shows that on an overall weighted average, Hydro One was positioned approximately 12% above market median. Since the first study in 2008, Hydro One has improved its positioning relative to market median by 5%.

Management and Non-Represented Staff

Hydro One Indicates that the company's management compensation programs include the following elements.

- Pay for performance
- Pay at risk
- Fixed and variable pay
- short and long-term incentives
- Aligns target awards with market median (P50)
- Share ownership
- Short Term Incentive Plan ("STIP") and Long-Term Incentive Plan ("LTIP") programs

Key Transmission targets are incorporated into the company's Team Scorecard to link the company's goals and objectives with performance-based compensation. Hydro One's overall performance against these targets is reported to stakeholders by means of Regulatory Scorecards for each of the Transmission and Distribution businesses, as well as through Hydro One's Team Scorecard and Operational Scorecard.

Unionized Staff

Under the Ontario *Labour Relations Act*, Hydro One is legally obligated to negotiate collective agreements with its employees' bargaining representatives.

Over the 2016-2019 period, Hydro One states is has contained its wage increases to a level below the consumer price index ("CPI"). The average CPI increase over this period was 1.8%; whereas the average wage increase for Society of United Professionals ("SUP") employees was 0.9%, and for Power Workers Union ("PWU") employees was 1.45%.312 Managing base wage costs has a multiplier effect on savings in labour burdens including pension, benefits and overtime costs⁴⁴.

Reasonableness of Pension Costs

Hydro One states it has moved in a positive direction reducing pension costs by:

- 1. closing the defined benefit pension plan for new externally hired management employees as of September 30, 2015, in favour of a new and lower cost defined contribution pension plan;
- 2. introducing lower cost defined benefit plans for Management Compensation Plan employees (2004) and SUP employees (2005);
- 3. increasing employee pension plan contributions for all employee groups total annual saving from 2018 to 2022 resulting from increased employee pension contributions is over \$111 million for both Transmission and Distribution315 this, in turn, means lower customer costs; and 4. reducing future service benefits for all current PWU and future PWU employees as well as
- SUP legacy pension plan members by adjusting the number of years for determining the final

⁴⁴ Exhibit F-4-1, Section 7.5.

average earnings from three years to five years and increasing the early undiscounted pension eligibility from Rule of 82 to Rule of 85 (both effective March 31, 2025).⁴⁵

As a result of these steps taken by Hydro One, over the 6-year period from 2013 to present, Hydro One indicates that employee contributions have increased from 20% to over 40% as a whole (i.e. progress to the goal of 50-50 cost sharing,

Hydro One's math is for the years 2018 and 2019, savings relative to a historic 1.33-1.7 contribution ratio.

For the 2020-2024 CIR Period the average is over contribution is approximately \$6.7 million annually (on average)⁴⁶.

Difference between 1:1 and Current Service Cost Ratio								
2020 2021 2022								
PWU	\$4.70M	\$ 5.05M	\$ 5.00M					
Society	\$1.30M	\$1.20M	\$1.20M					
Management	\$0.55M	\$0.55M	\$0.55M					
Total	\$6.55M	\$6.80M	\$6.75M					

Recovery of Legally Required Pension Contribution Costs in Rates

Hydro One will not legally be permitted to take a pension contribution holiday in 2020,2021 or 2022⁴⁷. The current December 31, 2018 valuation report, which is operative until December 31,2021. Hydro One's pension plan is only 73% funded on a wind-up basis. This is well below the 105% funding threshold required to take a contribution holiday under the New Rules. For these reasons Hydro One says the OEB should allow the recovery of its legally required pension contributions, which have historically been accepted by the OEB as prudently incurred costs for the provision of the rate regulated services Hydro One provides to its customers.

Energy Probe Submission on Issue 17

Hydro One's logic in justifying the increases in compensation from 2020-2022 is "we are better than we were". The opposite is "we are not as bad as we were". Nether paradigm sits well with ratepayers. Energy Probe expects that it will not convince the Board either.

The facts are different. Total Compensation is increasing by 4.2% a year from 2018-2022 as shown at line 111 of Exhibit KT2.1. This results from a 2.2% FTE increase. Hydro One acknowledges that Overall transmission allocated compensation is increasing at a faster rate than FTE increases.⁴⁸

Hydro One's actions are counter to the Board's direction to control compensation costs. Hydro One should be sanctioned by reducing 2020-2022 cost increases recovered from ratepayers to an

⁴⁷ Exhibit F-5-1, p. 3.

⁴⁵ AIC Page 108

⁴⁶ JT4.11

⁴⁸ Undertaking JT 2.10

Inflation Factor using the Board's 2020 GDDPI factor of 1.6%/yr. Hydro One has already increased compensation per FTE by 2.2% in each of 2018 and 2019. Ratepayers should not pay for increases in compensation costs above the PCI inflation factor in 2020-2022.

The Ontario Public sector is now constrained to inflationary increases and ratepayers should not pay for higher compensation increases. It's up to the Hydro One Board of Directors to determine whether to pay its employees more than inflationary increases. Hydro One will no doubt indicate it is bound by the collective bargaining Agreements with the Society and Union. This is "Catch 22".

The Unrepresented Management and Non-Represented Staff comprise 290 positions in 2018 with a Total Compensation of \$68.5 million. The number of positions increases to 336 with Total Compensation of \$77.6 million in 2022.

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These are the most highly paid positions (except 25 Executives) in the Company and are the one area that Hydro One can directly control Total Compensation growth and thereby send an appropriate signal throughout the organization. If management is getting bigger increases in compensation than the workforce, there is no basis for negotiations with the Society and the PWU in future. This cuts across all elements of Total Compensation -Salaries, Benefits, Pensions, Incentive Pay and Share Options.

Y	'ear	Positions	Total Compensation
2	2018	290	\$68,526,913
2	022	336	\$77,762,769

The Towers Watson Benchmark Study compared 320 Core Services employees to a peer group. The 2018 Total Compensation for Hydro One is 8% above the median⁴⁹.

For the Unrepresented Management Non-Union employees, Energy Probe has estimated the appropriate amount of Total Compensation to be recovered in rates from 2020 Test Year to 2022 as shown below.

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Total Compensation _{2020} = \$74,018,853

Total Compensation _{2021} = [(TC_{2020} * 1.016)]
= [(\$74,018,853*1.016)]
= \$75,203,154

Total Compensation _{2022} = [(TC_{2021} * 1.016)]
= [(\$75,203,154*1.016)]
= \$76,406,404
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⁴⁹ Exhibit F Tab 4 Schedule 1Attachment

Energy Probe proposes a \$2.3 million reduction in Management Unrepresented Employee Compensation over 2021 and 2022. The reduction takes into account the increases in FTEs, but does not address the baseline well above market compensation found by Towers Watson, including the impact of high pension contribution ratios. Ratepayers are still paying for these compensation premiums as well as pension premiums estimated to be about \$40 million a year in total for Transmission employees⁵⁰.

Hydro One's progress towards more equitable pension contribution sharing and resulting lower costs for ratepayers has stalled. The current Contracts for both Society and Union have embedded the 2018 contribution levels and cannot be renegotiated until 2025. This is a case for the Board determine if the glass is half full or half empty.

The 2020-2022 Contribution ratios are PWU 1.33, Society Legacy 1.7, MCP 1.63⁵¹.

For the Management non-union Employees Group, which are not governed by collective bargaining, Hydro One has not made or proposed any significant change to contribution sharing ratios from 2020-2025.

Hydro One talks about \$22 million in savings from historic levels This is a meaningless comparison. Savings should be counted relative to industry norms for contribution ratios. The Undertakings indicate that the Pension Premiums are \$6.7 million/yr and are increasing each year due to the YMPE increasing with compensation increases.

Energy Probe asks the Board once more to address the excessive cost of pension contributions on behalf of ratepayers. Energy Probe Proposes that 50% of the Employer Pension contribution premium not be recovered in rates (50% of \$6.8 million/year, or \$10 million over 3 years). Energy Probe believes that disallowances of employer pension plan contributions will send appropriate signals to both the executive and workforce

The pension contribution costs for the Management Compensation Plan ("MCP") are not prudently incurred. It is a decision of Hydro One that these employees should not pay an equal contribution amount to the employer. As noted above the above market pension costs for this group should not be recovered from ratepayers and should be removed from rates along with amounts for Society and MCP for a total of \$6.8 million. To recognize Hydro One has agreed to the level of PWU and Society pension contributions under collective bargaining, Energy Probe suggests as noted earlier, that a 50% reduction is appropriate. Energy Probe accepts that the Hydro One Pension Plan is not in a position to allow Hydro One to take a contribution holiday in 2020-2022.

In summary, for the reasons outlined above, Energy Probe believes that Hydro One's compensation related costs are not appropriate, particularly given:

(1) the limited progress that has been made in reducing/limiting compensation costs as evidenced by benchmarking results, and

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⁵⁰ SEC IRR 55 a)

⁵¹ Undertaking J4.10

(2) stalled progress in reducing pension costs in respect of collective bargaining and maintaining contribution ratios for the Management non-union Employees Group.

Issue 18: Are the amounts proposed for rate base (including the working capital allowance amounts) reasonable?

Energy Probe supports the position of OEB Staff on this issue

Issue 19: Is the proposed cost of capital (interest on debt, return on equity) and capital structure reasonable?

Hydro One has calculated its long-term debt rate to be 4.33% for 2020 to 2022 based on the weighted average rate of embedded debt, new debt and forecast debt planned to be issued in 2020. The 2020 revenue requirement was reduced due to 2019 actual debt issuances and the updated cost of capital parameters issued by the OEB⁵².

The deemed short-term debt rate of 2.75% has been updated by Hydro One for the 2020 to 2022 test years based on the 2020 deemed short-term debt rate, released by the OEB in October 2019.334 The ROE component of the cost of capital, the Application reflects an ROE of 8.52% based on the OEB's latest cost of capital.

Energy Probe Submission on Issue 19

The Cost of Capital for 2020-2022 is based on OEB defined parameters, except for the Cost of Long-Term Debt. Hydro One's 2020 Projection of LT Debt is based on lower costs for new debt issues in 2018 and 2019. With the US debt market moving lower, Energy Probe is not sure that Hydro One has reflected that post- 2020 debt levels for new issues may be lower.

Issue 20: Is the load forecast methodology (including consideration of CDM impacts) and the resulting load forecast appropriate?

Hydro One Transmission has forecast of the average 12-month peak load for 2020 to 2022, for Ontario and for each of the three transmission rate pools.⁵³ Hydro One's resetting of the load forecast for 2020 results in a drop of 3.9% relative to the load forecast built into the currently approved Uniform Transmission Rates ("UTRs").

The actual peak load in 2018 was 3.5% lower than the currently approved load forecast, primarily driven by the impact of the expanded Industrial Conservation Initiative ("ICI"), as well as the further decline of 0.4% between 2018 and 2020 due to a combination of slow economic growth and higher ("CDM") that are forecast during this period.

Energy Probe Submission on Issue 20

Energy Probe supports the submission of Vulnerable Energy Consumers Coalition on this issue.

⁵² Undertaking J8.5, Table 1.

⁵³Exhibit E, Tab 3, Schedule 1, Table 1

Issue 21: Are Other Revenue (including export revenue) forecasts appropriate?

Energy Probe supports the submission of OEB Staff on this issue.

Issue 22: Are the proposed amounts, disposition and continuance of Hydro One's existing deferral and variance accounts appropriate?

Energy Probe supports the submission of OEB Staff on this issue.

Issue 23: Are the proposed new deferral and variance accounts appropriate?

Hydro One is seeking approval to establish three new Regulatory Accounts

- Foregone Transmission Revenue Deferral Account,
- ESM Deferral Account
- CCRA True-up Variance Account; and modifications to the
- In-Service Capital Additions Variance Account

The proposed ESM protects customers by ensuring that 50% of any over-earnings over 100 basis points are shared with customers. The ESM is asymmetrical to the benefit of customers.

Hydro One proposes to continue the existing In-Service Capital Additions Variance Account (which was most recently approved by the OEB for 2017-2018 transmission revenue requirement), with certain modifications.

Capital In-Service Variance Account ("CISVA")

The CISVA account tracks the difference between the revenue requirement associated with actual in-service capital additions during the rate year and the revenue requirement associated with the OEB-approved in-service capital additions for that year. The revenue requirement associated with the amounts forecast in annual in-service. The difference between Hydro One's actual cumulative in-service additions above/below a 2% dead-band are recorded in the account and brought forward for disposition to customers at time of rebasing.

Energy Probe Submission on Issue 23

Energy Probe has no submissions on the proposed new accounts. With regard to the CISVA, Energy Probe is concerned that:

- With average total annual investments of \$1.2 billion, the 2% dead-band is too wide. The example provided by Hydro One uses a \$900 million ISA.
- A 2% dead-band represents a leeway of 4% in annual ISA, amounting to \$4.8 million/yr over three years this could be \$13 million.

Energy Probe suggests that a CIVSA 1% dead-band is more appropriate for first generation Transmission IRM.

Energy Probe also does not agree that there should be incentive for meeting in service additions. Dr. Lowry suggested that the shareholder could keep any the revenue related to underspent

capital along with proposing a capital stretch factor. Energy Probe suggests this is inappropriate for a first-generation transmission IRM

Issue 24: Is the transmission cost allocation proposed by Hydro One appropriate? Energy Probe supports the position of OEB Staff on this issue.

Issue 25: Is the Export Transmission Rate of \$1.85 and the resulting ETS revenues appropriate?

The currently approved ETS rate is \$1.85/MWh. The IESO collects ETS revenues from export transactions and remits them to Hydro One for the use of its assets in facilitating these transactions. ETS revenues serve as an offset to its revenue requirement. Historically, the ETS rate has been determined through a combination of OEB decisions and settlement agreements that have been accepted by the OEB. Though these outcomes have been informed by OEB-directed Elenchus cost allocation studies However as Hydro One notes the ETS rate has historically not been set strictly based on principles of cost causality.

In this Application, Hydro One is proposing to maintain the ETS rate at the existing level of \$1.85/MWh. Hydro One has updated the 2015 Elenchus cost allocation model based on the latest available information, and this update identifies a rate of \$1.25/MWh based on the cost allocation scenario recommended in the Elenchus study.

While the impact of a change in the ETS rate would be neutral to Hydro One, Hydro One does not support an outcome that would provide a benefit to extra-jurisdictional market participants at the cost of Ontario transmission customers.

Energy Probe Submission on Issue 25

Energy Probe supports the current ETS allocation and 2020 ETS rate. However, if the Board is inclined to address the issue, then it should direct the IESO and Hydro One to conduct a joint review of the costs/revenues and allocation, including line losses related to the ETS service and provide their findings and recommendations.

Respectfully submitted on behalf of Energy Probe by its consultants,

Roger Higgin, SPA Inc.

Tom Ladanyi, TL Energy Regulatory Consultants Inc.