EB-2017-0049

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 the Application by Hydro One Networks Inc.'s for 2018-2022 Distribution Rates.

Argument

Energy Probe Research Foundation

August 9, 2018

Section 1: Executive Summary of Positions

1. Energy Probe's main submissions in response to Hydro One's proposed five-year application for distribution rates are as follows.

2. First, the Board should reduce, at the minimum, Hydro One's proposed Capital Factor by 50%. If the capital factor was reduced in full, it would reduce the annual revenue requirement, according to our calculations, by $30 million in 2019 and $59 million in 2020, prior to the inclusion of the acquired utilities. Energy Probe's reasoning for reducing the capital factor – or eliminating it altogether – are two-fold. First, we submit that the proposed Custom Rate Application lacks a real and concerted effort to achieve the goals and objectives of incentive regulation. And second, Hydro One's past performance on its capital projects and programs has been subpar.

3. The Board should disallow half of Hydro One's $170.7 million in above Board-approved 2017 rate base that the utility is seeking approval in this application. As stated previously, and detailed at length in Energy Probe's argument, Hydro One has repeatedly missed both budgets and schedules in meeting its Board-approved targets. Energy Probe submits that the utility should not be allowed to benefit from that poor performance going forward.

4. The Board should reduce Hydro One's OM&A spending so that it doesn't recover any cost for compensation that is over the P50 median, as detailed in Hydro One's own evidence. The Board has, repeatedly, warned that Hydro One needs to find ways to control its compensation compared to that of its peers. Energy Probe submits that the utility has had nearly a decade of warnings from the Board. Hydro One's shareholders should now have to bear the cost of above-market compensation. Energy Probe calculates this reduction as $37.75 million annually.

5. The Board should also block Hydro One from recovering pension contributions from ratepayers, given that its own actuarial evaluation says the pension is in a surplus position to the tune of hundreds of millions of dollars and is not required to contribute to the fund for the foreseeable future. Energy Probe estimates that this would result in a $37 million annual reduction.

6. The Board should consider tightening the Revenue-to-Cost ratio (R/C) for all rate classes in order to minimize, to the greatest extent possible, cross subsidies between customer groups. Energy Probe also submits that the Board should consider imposing a R/C ratio of 1.0 for certain groups of customers, starting with the residential class. This would ensure that the overall R/C ratio for the residential class (UR, R1 and R2) must be 1.0 and any deviation from that R/C ratio would occur between residential customers, not between other rate classes, such as large customers. If one residential rate class is paying less than

the cost to service them, other residential rate classes should cover the difference. It should not be spread across Hydro One's full customer base.

Section 2: Preliminary matters

7. Energy Probe's argument is broken down into five sections: General Comments (Section 3), Custom Application (Section 4), OM&A (Section 5), Capital Spending (Section 6) and Rate Design, Cost Allocation and Service Charges (Section 7). At the top of each section, we highlight the issues addressed, as laid out in the issues list. Energy Probe has also collaborated with a number of other parties to this proceeding. We indicate areas where we support their argument, as well as Board Staff's.

Section 3: General Comments on Hydro One's Application and Performance *(Issues 1, 2, 3, 9, 19, 20, 23, 24)*

8. Hydro One is, in Energy Probe's view, at a critical point in its existence. It could continue to take steps forward and become a great, customer-centric utility that closely aligns the interests of its customers (lower bills) with those of its shareholder (better performance and execution of its business plans). Or it could go back to being a mediocre, high-cost, low-ranked utility that is viewed unfavourably by its own customers. Energy Probe believes that in this proceeding, the Board could help point them in the right direction, away from mediocrity and towards greatness.

9. Hydro One has improved in a number of ways in recent years. This improvement is most noticeable in the service guarantees it now offer its customers, which include customer rebates for missed appointments and the timely returning of phone calls, among others.[1] The cost of these guarantees is, rightly, borne by the shareholder and not recovered in rates. Energy Probe has long pushed for these types of service guarantees – or penalties, depending on your viewpoint – for LDCs in Ontario, as is common with investor-owned utilities in other jurisdictions, such as the United Kingdom and Australia.[2] We hope this policy will be rolled out across the province and we commend Hydro One for taking the lead.

10. Hydro One has also taken other, positive steps for the benefit of its customers, such as the returning of unnecessary customer deposits, ending winter disconnections and having a Winter Relief Fund for customers struggling to pay their bills during winter season. These are all steps in the right direction.

[1] EB-2017-0049, Exhibit I, Tab 2, Staff 2 and 3
[2] "While Canadians endured hardships during recent storms, customers in UK got compensated", *Financial Post*, January 7, 2014

11. Hydro One is also making progress on becoming a more cost-effective utility. Its operating costs are declining over the test period – although they are still too high (a point we address in Section 5).[3] It has recently implemented an improved vegetation program, which will result in improved reliability and operational savings of $6 to $12 million annually by the end of the test period. Hydro One has also, at the request of the OEB in the EB-2013-0416 Decision, performed a number of benchmarking studies and outside reviews of its various capital programs to test their cost effectiveness and find efficiencies. Several recommendations from these reviews are now being implemented by the utility in an effort to reduce costs.[4] Again, Energy Probe addresses our concern with a number of those policies, but we do recognize that they are steps in the right direction.

12. Hydro One also appears to be taking seriously the OEB's push for greater productivity savings from the utilities it regulates. This push, according to its evidence, results in nearly $400 million savings over the test period.[5] Again, this is a step in the right direction, as well as a key component of incentive regulation, although we share Board Staff's concerns over the clarity of those savings and how they differ from standard efficiencies that should be undertaken by responsible management.[6]

13. And finally, it appears that Hydro One has, to some extent, finally internalized the dynamic between "gold-plating" its assets by replacing them prematurely, without adequate data or lacking concrete evidence on how this will improve reliability, and the impact this unnecessary work has on customers in the form of higher rates. One example of this is in its decision to change its vegetation management from a nine-year cycle to a defect-based approach, as recommended by consultants hired by the utility to review its work programs.[7]

14. Hydro One appears to have finally grasped that the push by its planners for an ever-greater amount of capital spending needs to be put in check by the rate impacts this spending has on its customers. Note that in Hydro One's first presentation to its Board of Directors, it was sent back to the drawing board to reconsider its spending proposal ("Plan A" was too high). In its final presentation to its Board of Directors before filing this application, Hydro One ultimately admitted that it has considered the tradeoff between "reducing or deferring investment levels" if it can "reasonably be justified by lower rates."[8] It seems that after

[3] EB-2017-0049, Exhibit I, Tab 38, SEC 70, page 2
[4] See EB-2017-0049, Exhibit I, Tab 25, Staff 122, 126 and 130 for examples
[5] EB-2017-0049, Exhibit I, Tab 25, Staff123
[6] OEB Staff, Final Argument, page 50-53
[7] EB-2017-0049, Exhibit I-3-SEC-4, Attachment 4
[8] EB-2017-0049, Exhibit I, Tab 3, SEC 4, Attachment 3, page 5

hearing its customers – and the public at large – kick and scream over soaring hydro bills, Hydro One is more open to acknowledging the trade-off between trying to eliminate the entire demographic risk of its assets and the very real struggle of its customers, ranging from households to large industrial consumers, to afford their monthly hydro bills. Hydro One appears to be listening. This is a certainly a step in the right direction.

15. And yet, there are many problems at the utility that have been examined in numerous previous proceedings that continue to linger – ranging from excessive compensation and OM&A costs to the poor execution of its capital programs. Hydro One's own witness admitted that as recently as the 2015-2017 period (the test period for the previous application), the company's performance in executing its capital plan "wasn't as strong as we planned to have it for the go forward period".[9] Hydro One admits that its capital programs are what is driving rate increases and, as such, if the utility can't control this part of their business, then it will be difficult – near impossible – to control customer rates, which continue to be the biggest concern among its customers. As noted previously, the OM&A budget is declining over the test period, yet the average distribution rate is increasing by, on average, 3.4% annually -- a clear example of how the utility's capital budget is now largely responsible for rate increases.[10]

16. And yet, in its various presentations to its Board of Directors, instead of dealing with its own failures, the utility continued to focus on the aging demographics of its assets – thereby painting a gloomy picture of the future (i.e. more blackouts are coming) and leading its management and the public to believe that spending more money is the only way out of this predicament.

17. In Energy Probe's view, the utility should now be held to account for these shortcomings of excessive operating costs and poor capital management, particularly in light of the fact that Hydro One won't, for the most part, have to come before the OEB in the next five years for a detailed look at its costs and performance. Energy Probe submits that the Board should both hold the utility to account for its past performance and use that as the basis going forward, as we have no concrete evidence that the utility will perform noticeably differently over the next five years as it did in the last three, no matter how many times the utility says "this time is different." It's up to Hydro One and its new management to prove to its customers, its shareholders and the OEB that it really is different this time. Energy Probe and its supporters are struggling to accept Hydro One's premise that, "we're better now, give us everything we ask for and we promise to do a good job," when we don't know if that is actually the case. The OEB approved Hydro One's full capital spending proposal in its last application – although for three years instead of five – and the company missed many of its

[9] EB-2017-0049, Transcript Volume 6, page 151
[10] EB-2017-0049, AIC, page 22

targets, budgets and schedules. It appears that some of that poor performance is appearing in 2018, the first year of its five-year application, with Hydro One already admitting that its storm costs for 2018 are higher than expected and it is deferring planned investments.[11]

18. Energy Probe's general concerns with the application are as follows.

19. Energy Probe's concern starts with the presentations Hydro One made to its Board of Directors in the preparation of this application. In these presentations, Hydro One's management maintained that the bare minimum rate increase was 5.1% and anything below that is out of the question.[12] If that were the whole truth, then Energy Probe would accept it in its entirety. But in our view, that figure is overstated and misleading for a number of reasons.

20. For starters, it includes $105 million in additional rate base that Hydro One is seeking to include in its revenue requirement over the test period that is a result of overspending on its capital projects in the preceding three years.[13] That rate base figure was subsequently raised to more than $170 million.[14] Hydro One assumes – and informs its Board of Directors – that this rate impact is "non-discretionary" when, in fact, that rate base addition is completely discretionary, both from the company's perspective – it could eat that overspending given that it admitted its performance was below what it expected – and the fact that this addition must be approved by the OEB in this application (i.e., it's up to the OEB's discretion on whether it's justified, not Hydro One's). Non-discretionary implies that there is nothing Hydro One or anyone else can do about this cost, but that's clearly not the case.

21. Hydro One even admitted this in the oral hearing, saying "we need to explain the variances [in capital spending] and seek approval from the Board based on those explanations."[15] Contrary to what Hydro One stated to its Board of Directors, the rate impact associated with that additional rate base is fully discretionary – with that discretion largely lying with the OEB in this case – as it must be approved and reviewed as prudent by before it is included in the utility's revenue requirement. Hydro One, instead of presenting this cost to its Board of Directors as something already baked in, should have made it clear that it was planning – halfway through the second year (2016) of its three-year test period (2015-2017) – to request approval for cost overruns on a number of capital projects. In short, the utility simply assumed that its cost overruns would be approved at full value by the OEB and, as

[11] EB-2017-0049, Transcript Volume 9, page 75
[12] Exhibit I, Tab 18, Schedule SEC-4, Page 4
[13] EB-2017-0049, Exhibit I, Tab 33, Schedule AMPCO 52, Table 1
[14] EB-2017-0049, Exhibit I, Tab 33, Schedule SEC-67
[15] EB-2017-0049, Transcript Volume 6, page 135.

shown later, its own missteps in executing its capital programs would have no bearing on that approval. It also shows that, essentially from day one of its last application, the utility was already missing its schedule and targets – a problem that is happening in 2018 as well, as we show in Section 6.

22. Hydro One, both in the oral hearing and in its Argument-in-Chief, is adamant that the overspending was, largely, out of its control and the result of severe storms and other unexpected capital programs.[16] As such, the utility argues that spending was "non-discretionary". But what Hydro One didn't tell its Board of Directors in its early presentations is that it failed to complete the work that it promised customers (and they paid for) in its last application and the cost for the work completed was, in most cases, significantly higher than it forecast. As a result of not completing that work, but charging customers as if they had, work was deferred into this application and test period. According to Hydro One's witness, in just six categories of "material investments," as much as 40% of the work in the test period is deferred projects from the previous application.[17] Ratepayers are, essentially, paying twice for the same assets.

23. Energy Probe will deal with this topic in more detail in the Section 6, but at this juncture will highlight one example of Hydro One's poor execution. In the EB-2013-0416 proceeding, Hydro One forecasted that it would spend $34.6 million to $40 million on Station Refurbishments and complete between 36 and 38 refurbishments annually in the 2015-2017 period.[18] Yet, what the utility actually completed was between 9 and 29 station refurbishments annually at a cost of between $29 million and $59 million annually. In every year, the per unit cost was hundreds of percent higher than initially forecast – in 2016, it was more than 400%. When questioned on this in the oral hearing, Hydro One responded by highlighting the modular distribution station program, in which the per unit cost was nearly double what the utility initially forecast.[19] Energy Probe fails to see why Hydro One's inability to adequately forecast the cost of one part of its station refurbishment program justifies the poor results.

24. Many of its other capital programs suffered from similar – although less severe – cost overruns and deferrals (as shown in Section 6).

25. Hydro One didn't highlight this failure – among many others – in its presentations to its Board of Directors. In fact, it did the opposite and provided an analysis detailing the impact

[16] EB-2017-0049, Transcript Volume 6, page 139
[17] EB-2017-0049, Exhibit B1-1-1, DSP Section 3.7
[18] EB-2017-0049, Exhibit I-24-SEC-42, Attachment 1 and EB-2017-0049, Exhibit I-29-SEC-52, Attachment 1
[19] EB-2017-0049, Transcript Volume 6, page 144

that its aging stations will have on reliability over the test period as a way to justify its capital budget for the next five years.[20] This is highly misleading. Energy Probe fully supports Hydro One's push to ensure that its aging asset base doesn't fall into repair. But we also believe the company should be held to account – by the OEB, its shareholders and its own Board of Directors – when it fails to manage that stewardship in a cost-effective manner. Highlighting to its Board of Directors the impact of letting the demographics of its stations continue to worsen, but failing to show that part of the demographic slide was a result of the utility's inability to accurately forecast costs and work levels, is an incredibly one-sided presentation.

26. Hydro One also hasn't fully incorporated remarks made in its presentations to its Board of Directors requiring the utility's planners to "consider and incorporate the findings of the customer consultation process and productivity studies as information becomes available."[21] The obvious reason for ensuring the utility incorporated those results was that the consultants would, presumably, provide a number of suggestions to the utility on how to more cost-effectively manage its capital programs. Hydro One hasn't fully implemented this policy and adjusted its rate application, even though the utility was recommended – and at times implemented – a number of changes from the consultants it hired to review its capital programs. The whole point of hiring consultants to provide suggestions for more efficient operations was to lower the rate increases to be paid for by ratepayers, but that doesn't appear to have happened.

27. Take the new vegetation management program, known as Optimal Cycle Protocol (OCP), as an example of the utility's unwillingness to be flexible in the two years (and counting) period between when planning for this application was started and when it becomes effective. In November 2017, Hydro One presented the OCP strategy to its Board of Directors, highlighting that it will "improve reliability" and "reduce the total program costs."[22] Yet, the utility didn't change its revenue requirement or other parts of its application in response to this significant change, even though vegetation accounts for around 30% of outages and that figure would be reduced by double digits over the test period as a result of the OCP. In its February 2017 presentation to its Board of Directors, the utility admitted that its approach to its business plans was shaped, in part, by "reducing or deferring investment levels to where any tradeoff with respect to reliability can reasonably be justified by lower rates."[23] And yet, when the company – assisted by consultants – came up with a plan that would reduce outages at no extra cost over the test period, it didn't consider whether other

[20] See its November 11,2016 presentation to its Board of Directors.
[21] Exhibit I-3-SEC-4, Attachment 2, page 8

[22] EB-2017-0049, Exhibit I-3-SEC-4, Attachment 2
[23] Exhibit I-3-SEC-4, Attachment 3, page 5

parts of its capital plan could be adjusted in order to maintain reliability and reduce customer bills simultaneously.

28. Instead, Hydro One's response, as detailed at length in its AIC, is that the improved reliability metrics that will result from the OCP don't "provide a sound basis to support cuts in the investment expenditures required for other programs and projects."[24] Yet, that's exactly what its presentations to its own Board suggest that the company should consider in the event that it was able to find ways to complete any one of its many capital projects or programs more cost effectively. Hydro One was clear in its presentation to its own Board of Directors that it was open to considering programs and projects that would maintain current levels of reliability while reducing costs. Yet, in this case, it has decided to improve reliability – something Energy Probe supporters obviously support – but would not consider reducing its costs and revenue requirement in the process.

29. The consultants hired by Hydro One also highlighted a number of other ways to improve their performance, yet Hydro One did not subsequently adjust its revenue requirement. For example, in the Navigant report, the consultants provide a number of suggestions, one of which is that it is common practice among the utilities they reviewed as part of their evidence (13 of 17 utilities reviewed) to have dedicated pole replacement crews.[25] While the witness, Mr. Grunfeld, wouldn't confirm that this would produce lower pole replacement costs, he did confirm that it is common practice, which Energy Probe assumes is more cost effective or utilities would abandon it. In response to that recommendation, Hydro One's evidence shows that by 2017, 37% of its pole replacement was completed by dedicated crews and it expects that number to increase over the test period.[26] Yet, nowhere in its presentations to its Board or application to the OEB did the utility show that this will reduce costs (as it presumably would) or increase the number of poles it will be able to replace annually over the test period, even though this will be the largest area of capital spending by the end of the test period.

30. Hydro One has also failed to meet its own customer performance targets over the past three years. While Hydro One has repeatedly stated that it is moving towards a customer-centric utility – or one that "meets customer needs and preferences" – it has repeatedly failed to meet the internal targets it has set. For example, in its previous application, EB-2013-0416, Hydro One provided future performance targets related to two important customer-focused outcome measures. These measures were: Residential and Small Business Satisfaction (%)

[24] EB-2017-0049, AIC, page 126
[25] EB-2017-0049, Transcript Volume 5, page 154
[26] EB-2017-0049, Exhibit Q-1-1, Attachment 1, page 16

and Handling of Unplanned Outages Satisfaction (%).[27] The targets for these outcome measures ranged from 80-82% for the former and 80-83% for the latter.

31. Yet, Hydro One fell well short of meeting those targets, with its actual figures coming in at 67-66% in the Residential and Small Business Satisfaction measure – dropping in 2016 from 2014 levels – and 75-76% in the Handling of Unplanned Outages Satisfaction measure.[28] In 2017, the figures are hardly any better. The Unplanned Outages Satisfaction (%) measure, for example, came in at 76%, which is 7 percentage points below the targets established in the previous proceeding. The Customer Satisfaction-Perception Survey (%) also came in below target in 2017 – at 71% compared to a target of 72%.[29] While Hydro one initially attempted to deflect those numbers by highlighting the fact that the perception of the company from the point of view of the customer is out of its control – an argument Energy Probe vehemently disagrees with – it did admit that that handling of unplanned outages is firmly within its control.

32. Worse still is that, going forward, Hydro One is proposing outcome targets that are, in some cases, below what it achieved in recent years. For example, the Customer Satisfaction measure target is set at 76% in 2022 when it was as high as 80% in 2013. Meanwhile, the Handling of Unplanned Outages measure is forecasted to hit 79% in 2022 when it was as high as 81% in 2011.[30] In Energy Probe's view, this is a step backwards for the company and its relationship with its customers.

33. As Energy Probe details in Section 6, Hydro One has also failed to hit many of its targets in its capital spending programs and projects. Take, for example, the major sustaining capital programs. Hydro One missed its in-service targets for nearly every category.[31] It is a similar story in development capital programs. In short, while Hydro One's customers were promised certain assets for the rates they paid, the utility ultimately did not live up to its end of the bargain. This simply reinforces the decline in customer satisfaction numbers and is the reason why the utility failed to hit targets established in the previous rates application.

34. Hydro One's application is also plagued by data issues with its Assets Analytics (AA) tool – a problem highlighted by both the Auditor General and an internal audit completed by the

[27] Exhibit B1-1-1, DSP Section 1.4, Page 13, Table 9
[28] Exhibit I, Tab 18, Schedule SEC-31, Page 2

[29] Exhibit I, Tab 18, Schedule SEC-29, Page 4
[30] Exhibit I, Tab 18, Schedule SEC-29, Page 4
[31] EB-2017-0049, Exhibit I, Tab 24 AMPCO-22 and EB-2017-0049, Exhibit I, Tab 29, SEC 52, Attachment 1

utility. The AA tool, as Energy Probe interprets it, is a key factor in determining what assets need to be replace or refurbished. In fact, the internal audit noted that "the absence of well-understood and quality asset information increases the risk of inadequate asset need assessment…"[32] Yet, in its AIC, Hydro One disputes this finding in two ways.

35. First, Hydro One says that both the Auditor General report and the internal audit report were focused on just one "tool used by Hydro One to conduct assessments of its assets – the asset analytics tool."[33] As such, Hydro One argues, these audits do not relate to the "quality" of the utility's data, but more about the "usability" of that data.

36. Second, it states that if its data was lacking, it was likely *underestimating* the number of assets that need to be replaced or refurbished.[34] Yet, Hydro One's witness provided no evidence that the utility's asset base was significantly worse than is currently presented in this and many previous applications. Energy Probe suggests that the Board put little weight on this comment.

37. As to the first point, the internal audit report is very clear that, as highlighted above, the AA tool is vital in the decision-making process of the company's planners when coming up with its investment plans. In fact, Hydro One said exactly that when it publicly announced the AA tool:[35]

> *Through its innovative asset analytics tool, Hydro One is able to identify and monitor the condition of all of its critical assets and make more effective and prudent investment decisions. Replacing critical assets as they approach end of life is key in ensuring reliability.*

38. But now, after both the Auditor General and an internal audit have questioned the data going into the AA tool, the company is quick to admit that it is just one of many aspects of its investment planning process. In short, Hydro One is changing its position based on circumstances. When the AA tool was first announced, it was to be a key – if not the most important component – in the investment planning process, but after it became clear that much of data being entered into that system is suspect, the company says it is just one small part of the process. And finally, the internal audit report concluded that, even with Hydro

[32] EB-2017-0049, Exhibit: JT 3.2, Attachment 2, page 7
[33] AIC, page 91.
[34] AIC, page 91
[35] https://www.newswire.ca/news-releases/hydro-one-invests-more-than-845-million-to-improve-electricity-reliability-in-toronto-and-surrounding-areas-517405641.html

One's claims that the AA tool is just one tool amongst many, "control improvements are needed to effectively identify, develop, prioritize and select investment plans in support of the Hydro One six-year business plan and the work program."[36] Given this report was completed after Hydro One had submitted its five-year application, it highlights Energy Probe's concern that the company's investment decisions over the next five years may have been made based on poor data and prioritization.

39. And finally, Hydro One's performance in its largest capital spending program – pole replacement – is 16% more expensive than its peers, according to its own evidence.[37] Navigant's Mr. Grunfeld tried to explain away this gap by saying that if one particular outlier was removed from the sample, then Hydro One would only be 6% higher than the median.[38] When questioned on this outlier, the witness concluded that it never received a response for why this utility's pole replacement costs were so low as to be unbelievable and that, given the small sample size, it was difficult to ascertain any of their results with statistical certainty. Energy Probe believes the Board should either accept the consultant's findings – that Hydro One is 16% above median when it comes to pole replacement costs – or dismiss it altogether, given the witness couldn't adequately defend the statistical validity of its findings and did not appear to make a concerted effort to address a serious deficiency in its evidence.

40. In short, Hydro One is taking steps in the right direction, but it continues to benchmark poorly to its peers on its largest capital program (pole replacement), miss its own customer satisfaction target, fail to adequately lower its revenue requirement in response to suggestions from its own consultants, rely on data that has been criticized by the AG and an internal audit and has downplayed its subpar performance in presentations to its own Board of Directors. If this is the new Hydro One, as the utility repeatedly stated during the oral hearing, Energy Probe submits that the Board hold them to account for these shortcomings.

Section 4: Custom Rate Application *(Issues 6, 8, 12, 16, 19, 25)*

41. Hydro One has requested that the OEB approve its Custom Revenue Cap IR application. In its application and the course of the proceeding, Hydro One laid out five advantages of its proposed Revenue Cap IR over a Price Cap IR:[39]

1. It provides Hydro One with the needed flexibility to introduce new rate classes in 2021 to fully integrate the Acquired Utilities;

[36] EB-2017-0049, Exhibit: JT 3.2, Attachment 2, page 2
[37] EB-2017-0049, Exhibit B1-1-1, Section 1.6, Attachment 1, Page 13
[38] EB-2017-0049, Transcript Volume 5, page 135
[39] Exhibit A, Tab 3, Schedule 2, page 12-13

2. It permits the continued transition to fully-fixed rates for residential customers;
3. It provides adequate flexibility to reset customer rates should the OEB proceed with the elimination of the Seasonal Rate Class over the 2018 to 2022 Custom IR term;
4. It provides adequate flexibility to reset customer rates as the OEB advances its initiative relating to rate design for commercial and industrial electricity customers; and
5. It allows Hydro One to update its billing determinants to reflect changes in the load forecast over its Custom IR term, consistent with its proposal to integrate the Acquired Utilities.

42. None of these five "advantages" mention customers. The "advantages" are all advantages to Hydro One. In the discussion of the advantages of its Revenue Cap IR over Price Cap, Hydro One witnesses never mentioned any advantages or benefits of Custom IR to the customers of Hydro One.[40] Customers do not, in any way, appear to be better off with the proposed Revenue Cap approach than with a Price Cap, which would cap price increases for customers.

43. The major "advantage" according to Hydro One is largely "flexibility", which is present in "advantages" 1, 3, and 4. It is also clear from the evidence given at the hearing that flexibility essentially means ease of calculation.[41] While ease of calculation, or flexibility, may be of some advantage to Hydro One management and shareholders, it is not clear why it would be of advantage to ratepayers.

44. Additionally, the capital factor does not have the same level of review as an ICM, which is an additional advantage to Hydro One of its Revenue Cap approach.

45. The claim that Revenue Cap IR permits the continued transition to fully fixed rates whereas Price Cap does not, as implied in "advantage" 2, makes little sense and was even refuted by Hydro One's own witness.[42] Both Price Cap and Revenue Cap are able to transition to fully fixed rates.

46. Furthermore, the claim that Revenue Cap provides flexibility should the OEB proceed with the elimination of the seasonal rate class is misleading, as was pointed out by the Chair and admitted by the Hydro One's witness.[43] The OEB has already decided to eliminate seasonal rate classes.

[40] EB-2017-0049, Transcript Volume 1, page 20-30
[41] EB-2017-0049, Transcript Volume 1, page 25
[42] EB-2017-0049, Transcript Volume 1, page 28
[43] EB-2017-0049, Transcript Volume 1, page 29

47. Hydro One's claim in "advantage" 4 that Revenue Cap IR proposal provides "adequate flexibility" compared to Price Cap relating to the OEB rate design initiative for commercial and industrial customers is purely speculative at this time, as the consultation is underway and the outcome of that consultation will come after Hydro One's application has been approved and will, most likely, not be implemented during the test period.[44]

48. The last "advantage", number 5, claims that the proposed Revenue Cap IR will allow Hydro One to update its billing determinants in way that Price Cap would not allow. First, Energy Probe sees no technical reason why billing determinants cannot be updated in Price Cap. Second, updating of billing determinants is, in many ways, an advantage to Hydro One, but not an advantage to its customers. For example, if load is below Hydro One's forecast, the utility will eat that cost, as they admitted during cross examination. Resetting billing determinants reduces – or eliminates altogether – that risk for the utility. If load is higher than forecast, Hydro One would – assuming it pushed earnings above the ESM deadband – be required to share those overearnings with ratepayers. Locking in billing determinants, and allowing the utility to update that forecast in 2021, both allows the utility to avoid having to absorb the cost of low demand, while if load forecast is higher than expected, Hydro One will earn additional revenue and not have to share it will ratepayers until it goes above the ESM deadband. In 2021, when resetting bill determinants, Hydro One can ensure that its revenue will not exceed that deadband. In short, by adjusting its billing determinants, the utility avoids the cost to its shareholder of lower-than-forecast demand and avoids the ESM if demand is higher-than-forecast.

49. More importantly, the OEB has consistently looked at Revenue Cap and shown that it is in many ways worse for customers than a Price Cap. It has been shown, on numerous occasions, that from the perspective of customers, Price Cap is a better form of regulation. Even though Hydro One is celebrating its new "customer-centric" mindset, it is not considering a rate application that best aligns with that claim. When the OEB was given the mandate to regulate electricity distributors it considered various methods of rate setting and selected Price Cap. The report of the OEB Cap Mechanism Task Force, describes Price Cap.[45]

> *"The price cap mechanism provides an upper limit or cap to the price, or basket of prices, charged by an LDC and allows flexibility below the cap. It is designed to allow for the pass through of increases in the prices of inputs to the operations of the LDC and also for normal improvements in productivity in the industry. It may also be structured to allow for corrections of various sorts such as extraordinary events, the sharing of profits*

[44] EB-2017-0049, Transcript Volume 1, page 30
[45] EB-2017-0049, Exhibit K1.4, page 11

outside a pre-determined range, infrastructure investments and service quality adjustments."

50. Although the report was written in 1999, the evolution of OEB's Price Cap IR has remained consistent with this description. The largest change since that time, the Incremental Capital Module (ICM), is within the scope of changes "structured to allow for corrections of various sorts such as extraordinary events". Contrary to what Hydro One claims, Price Cap IR in its latest generation provides an upper limit on rates, something that Revenue Cap does not.[46]

"The revenue cap mechanism attempts to resolve the throughput problem associated with a price cap PBR. Instead of setting a price cap it sets a revenue cap. However, in resolving this problem it creates others. Specifically, once the revenue cap has been set the LDC has an incentive to set prices at levels that would under utilize the capacity of its system. This discretionary control over prices could also lead to greater price volatility. Moreover, the revenue cap mechanism requires throughput growth projections and the use of true-ups in the event of errors in any of the projections that make up the revenue cap. Perhaps, most importantly, it does not focus on the setting of relative prices and providing a set of incentives within this framework that encourages optimal efficiency."

51. The OEB Task Force clearly recognized that a Revenue Cap did not provide as much of an incentive to increase efficiency or productivity, while also resulting greater rate volatility. When confronted with this fact Hydro One witness stated that "the revenue cap we've proposed is essentially identical to the price cap". Which then leaves Energy Probe asking the question: why not use Price Cap when it has clearly been the preferred approach by the Board for more than a decade? It's clear to us, as shown above, that the Revenue Cap model is better for the utility, not ratepayers.

52. Hydro One's proposed Revenue Cap IR includes a capital factor that it claims is required to deal with its unique capital needs. The OEB's existing fourth generation IRM (4GIRM) allows distributors to deal with unusual capital needs by applying the ACM or ICM module. Yet, according to the testimony, Hydro One did not do any calculations to see if its capital needs could be met by ACM or ICM.[47] The ICM, as Hydro One would certainly understand, would result in greater scrutiny of its capital projects. What confidence can the OEB have in the judgement of Hydro One's management if it did not numerically assess the most obvious alternative to its proposal? Without providing any evidence whatsoever, Hydro One claims that its "circumstances are such that it wouldn't be suitable to make use of an ACM."[48] The Board should be skeptical of this unsupported claim.

[46] EB-2017-0049 Transcript Volume 1, page 40-41 and EB-2017-0049, Exhibit K1.4, page 12
[47] EB-2017-0049 Transcript Volume 1, page 51
[48] EB-2017-0049 Transcript Volume 1, page 53-54

53. The Board's 2016 Handbook for Utility Rate Applications requires that Custom IR Index for the Annual Rate Adjustment must be supported by "explicit financial incentives for continuous improvement and cost control must be included in the application."[49] When asked about this requirement, Hydro One witness could not point to any explicit incentives, even suggesting that "productivity savings are already baked into our custom IR."[50] The Board should be concerned about the lack of explicit incentives in the Revenue Cap IR proposal by Hydro One.

54. The Board's Handbook goes on to say that "the Index must be informed by an analysis of the trade-off between capital and operating costs which may be presented through a five-year forecast of operating costs and volumes."[51] While Hydro One has provided a five-year forecast, its witnesses could not point to any analysis of trade-offs between capital and operating costs.

55. Hydro One states in its response to CCC IR #10 that it "determined that the Custom IR method was required to meet Hydro One's operational requirements."[52] When asked to explain the specific operational requirements Hydro One witnesses could only point to "large and variable capital expenditures". As addressed elsewhere in this argument, Hydro One's capital requirements are not particularly large considering the size of Hydro One nor are they particularly variable. In the Toronto Hydro proceeding, the utility was proposing a significant increase in capital spending from previous rate applications, something that Hydro One is not doing. Toronto Hydro's annual capital spending proposal was more than double what it had been undertaking less than 10 years prior to the application.[53] Instead, Hydro One is proposing a steady increase in capital spending on projects that, largely, it has been undertaking for many years – in fact, there are few, if any, new projects barring the new operations centre. Energy Probe fails to understand why Hydro One desperately needs an additional capital factor and can't live within a single revenue envelope, as would be normal under a Revenue Cap (increase revenue requirement by 1.45% annually, for example, with no additional capital funds) or on a Price Cap, where price increases for its customers would be capped.

[49] EB-2017-0049, Exhibit K1.4, page 25
[50] EB-2017-0049 Transcript Volume 1, page 53
[51] EB-2017-0049, Exhibit K1.4, page 26
[52] EB-2017-0049, Exhibit K1.4, page 30
[53] EB-2014-0116, Decision with Reasons, page 20

56. Hydro One also claims that it was guided by the Custom IR approved by the Board for Toronto Hydro. However, Toronto Hydro's Custom IR approved by the Board in EB-2014-0116 was a Price Cap, not a Revenue Cap. It should also be noted that Toronto Hydro's capital factor was reduced by 10% by the Board.[54] Energy Probe submits that if the Board approves Hydro One's Revenue Cap, it should reduce the Capital Factor by at least 50%, although eliminating the Capital Factor altogether would also be warranted.

57. Energy Probe believes that the proposed Revenue Cap IR transfers more of the load risk from shareholders to ratepayers than Price Cap. Hydro One's witnesses disagreed and maintained that there is no difference in the load risk between the two IR models.[55] As shown earlier, Energy Probe does not believe that is accurate.

58. Based on the evidence presented by Hydro One, there appears to be no significant differences between the 4GIRM Price Cap IR and its proposed Revenue Cap Custom IR. Which, if true, means that Hydro One has not presented a convincing case on why the Board should approve its Revenue Cap approach, as opposed to the Price Cap it approved in the Toronto Hydro proceeding.

59. Energy Probe submits that the Board should reject Hydro One's Revenue Cap application as it is currently presented, given that it provides very little value to its customers. In fact, not a single one of the "advantages" of Hydro One's Revenue Cap, according to the utility, are for their customers. Energy Probe submits the Board should reduce, or eliminate altogether, the utility's proposal for a Capital Factor. Combined with the utility's poor performance in managing its capital programs and projects (as detailed in Section 6) in the previous test period, there is ample reason, in Energy Probe's view, for the Board to lower the capital factor. Doing so would cap Hydro One's revenue increases, if it were to eliminate the Capital Factor altogether, to 1.45% annually (inflation minus productivity) and, in the process, save ratepayers $89 million over the first three years of the test period, prior to the integration of the acquired utilities.

Section 5: OM&A *(Issues 37, 38, 39, 40)*

60. Hydro One's operating costs have been a focus of this Board in numerous past proceedings. The Board has, repeatedly, ruled that the utility's operating costs are excessive.

[54] EB-2017-0049 Transcript Volume 1, page 60 and Exhibit A, Tab 3, Schedule 2, page 6
[55] EB-2017-0049, Exhibit K1.4, page 73-74

61. Starting more than a decade ago – and only looking at distribution proceedings – in its decision for the EB-2007-0681 proceeding setting 2008 rates, the Board warned that it was concerned about the future of the utility's OM&A budgets:[56]

> *The Board is also concerned that the cost structure of the Company, unless it is placed within reasonable boundaries based on appropriate comparisons, will simply continue to rise with successive labour agreements or supply contracts* ***without effective restraint or improvements in efficiency****.*

62. By 2010, the Board's concern over Hydro One's OM&A and compensation budgets were even more pronounced. In fact, the Board ruled that the utility's OM&A and compensation budgets were "excessive", among other concerns:[57]

> *Second, and more importantly, the various trend measures demonstrate that Hydro One* ***has had limited success in controlling expenditure increases****.*

63. In the EB-2013-0416 proceeding setting 2015 to 2019 rates, the Board concluded that it was not "fair that ratepayers pay for a 10% premium over the market median." [58] Rather than disallow all compensation costs above the market median, which would have amounted to $15.4 million annually, the Board disallowed half of that amount, or $7.7 million annually.

64. And yet, since that time, Hydro One's benchmarking evidence undertaken by Mercer shows that the company has actually become worse.[59] In 2013, for example, Hydro One's overall compensation was 10% above the median, which, as pointed out earlier, was criticized by the Board in its previous Decision on Hydro One's distribution rates. By, 2016, that figure had rise to 14% above market median, while by 2017 it had fallen back to 12% above market median. In short, while Hydro One made some progress in controlling its compensation costs compared to its market peers in the last year, it has done worse compared to the market over the last four years.

65. The benchmarking results in the Mercer study are likely even worse than the evidence shows, as it excludes the share grant that is being offered to a majority of the utility's employees.[60] The share grant – the cost of which is being collected from ratepayers over the test period – was, in large part, used as a bargaining tool to keep wage increases lower than they otherwise would have been in the previous round of negotiations. Given that

[56] EB-2007-0681, Decision with Reasons, page 13
[57] EB-2009-0096, Decision with Reasons, page 11
[58] EB-2013-0416, Decision with Reasons, page 24
[59] EB-2017-0049, Exhibit C1-2-1, Attachment 5 the updated compensation study
[60] EB-2017-0049 Transcript Volume 3, page 170

ratepayers will be paying for cost associated with that compensation program, it should be included in the benchmarking study. If it was included, Energy Probe assumes that it would push Hydro One's compensation ranking even further above the market median (as addressed later in our argument with the Willis Tower Watson evidence).

66. Hydro One's witness argued that the Mercer benchmarking study shows that, looking only at the "Total Cash" data in the Mercer study, the company compares much more favourably to its peers. On a "cash only" basis, Hydro One's compensation is 1% above market, with the remaining 11% attributed to pensions and benefits. Hydro One's witness confirmed "Hydro One just has much more generous pensions and benefits…than other employers."[61] The Mercer study also only compared Hydro One's costs to other utilities, which in Canada have, on average, higher compensation levels that other industrial sectors – something that Hydro One's witness confirmed.[62]

67. First, from the perspective of customers, it doesn't matter to ratepayers whether its Hydro One's cash compensation or the cost of its benefits that are keeping its compensation costs higher than its peers. Either way, ratepayers are being asked to cover these higher-than-market-median costs, which the Board has previously ruled is not "fair" to ratepayers.

68. Secondly, in a separate benchmarking study completed by Willis Tower Watson, Hydro One's cash compensation, including the share grant and excluding pension and benefits, was 7% above the market median.[63] If we include the generous pension and benefits findings from the Mercer study into the "cash only" Willis Tower Watson study, Hydro One's compensation costs may be nearly 20% higher than the market median.

69. In Energy Probe's view, the principal reason why Hydro One's labour costs are so high is largely a result of the utility inheriting the costly labour contracts and rigid work rules of its represented groups of employees from Ontario Hydro. Even though Ontario Hydro ceased to exist 20 years ago, the costly labour contracts and rigid work rules persist. There is no evidence that Hydro One is doing anything to reduce its labour costs by elimination of represented positions and outsourcing or contracting out more activities. Since Hydro One management is unwilling to tackle this problem, the Board should disallow a portion of its labour costs as it did in its OPG EB-2013-0321 Decision and which was ultimately confirmed by the Supreme Court.[64]

[61] EB-2017-0049 Transcript Volume 3, page 179-80
[62] EB-2017-0049 Transcript Volume 3, page 185
[63] EB-2017-0049, Exhibit I, Tab 3, SEC 3, Attachment 1
[64] https://scc-csc.lexum.com/scc-csc/scc-csc/en/item/15517/index.do?r=AAAAAQATQ2FuYWRhIEV2aWRlbmNlIEFjdAE

70. Worse still, is that the recent labour agreement shows that Hydro One continues to struggle to control wage increases. While Hydro One forecast that annual wage increases would be 1% in its next labour agreement – and what is included in this application over the test period – the actual annual weighted average wage increase range from 1.35% to 1.95%. The labour agreement also includes a number of changes to overtime compensation, increasing it from 1.5 times the base rate to 2 times the base rate.[65] While Hydro One isn't including the above-forecast wage increases in this application, the agreement shows that (a). Hydro One continues to keep above market wages from growing at a rate less than inflation and (b). when it submits its next rate application to the Board (transmission or distribution), these wage increases will likely flow to ratepayers, unless the Board specifically blocks the company from doing so.

71. As such, Energy Probe suggests that the Board disallow any compensation costs that are above market median. Hydro One has had years – decades even – to find ways to control its labour costs and it has failed to do so. There is no reason why ratepayers should continue to pay above market compensation costs. Energy Probe suggest that the Board disallow $37.75 million in annual OM&A costs that are above the market median, as provided by Hydro One.[66] This figure includes both compensation contained in both OM&A and compensation allocated to capital projects.

72. Energy Probe would also like to highlight to the Board that compensation costs are a significant portion of Hydro One's capital program. According to the most recently filed evidence, compensation costs would account for, on average, 47% of capital spending over the test period and as much as 54% in the first year of the test period.[67] As suggested above, Energy Probe submits that the Board should hold Hydro One to account on compensation costs in relation to both its capital and OM&A budgets.

73. Hydro One's incentive program is also of concern to Energy Probe. Hydro One introduced a new incentive compensation plan for non-represented employees, with a higher proportion of compensation now tied to performance.[68] Ostensibly, the objective is to provide an incentive to employees to perform better. Energy Probe supports employee incentive programs. During the oral hearing, when asked if there was a particular problem with employee performance that necessitated the introduction of the new compensation plan,

[65] Hydro One Networks Inc.'s Distribution 2018-2022 Rate Application – Memorandum of Agreement with PWU and Variance Analysis
[66] EB-2017-0049, Exhibit I, Tab 40, Schedule SEC 83
[67] EB-2017-0049, Exhibit JT 1.19, Page 2 and apply those figures
[68] EB-2017-0049 Transcript Volume 4, page 19

Hydro One witness – somewhat surprisingly to Energy Probe – said that there was no particular problem, but that Hydro One wanted to "incent behaviours and align their behaviors with corporate goals and objectives to obtain or to achieve our overall strategy."[69] Therefore, it appears that the major concern that the new compensation plan is attempting to address is a misalignment between individual and corporate goals. While this incentive structure is perfectly fine for shareholders, there is scant evidence that the new compensation plan provides a strong incentive to employees for the provision of better performance in general, nor of better service to customers.

74. But even if the Board accepted that the incentive structure is encouraging better performance by Hydro One employees, the utility appears to be overly generous in granting these incentive payments. Hydro One provided the overall performance rating of employees that received a Short-Term Incentive Plan ("STIP") payment for their performance in 2017.[70] This analysis shows that many employees received STIP, even though they didn't meet all of the targets required to do so. The Board Panel, in particular, highlighted this situation during the oral hearing.[71] Hydro One's witness explained that this was because Hydro One had a "good year" at a corporate level. This is concerning, as it shows that the incentive compensation plan does not do provide sufficient incentive for improved individual performance among employees, but is focused more on meeting corporate targets.

75. And finally, Energy Probe submits that the Board reduce the $37 million annual contribution that Hydro One is proposing be collected from ratepayers as part of its pension contribution. The simple reason is that the pension plan, according to Hydro One's own evidence, shows that the pension plan is in a surplus position.[72] The current surplus is more than $433 million, according to the most recent valuation.

76. This is not the first time this issue has been raised in the past year, as it was part of Hydro One's settlement in the its Remote's 2018 rates application, in which the utility agreed to track its pension costs and "adjust them accordingly through the RRRP", as it wasn't clear – using the same valuation used in this proceeding – that the utility should be collecting pension costs in rates when its own valuation has placed the Minimum Employer

[69] EB-2017-0049 Transcript Volume 4, page 20

[70] EB-2017-0049, Undertaking JT 2.8
[71] EB-2017-0049 Transcript Volume 4, page 24-26
[72] EB-2017-0049, Exhibit C1-2-2, Attachment 1, page 11.

Contribution at zero. Hydro One Remotes agreed to "true up" the pension costs once more information from future valuations was made available.[73]

77. Furthermore, the Willis Tower Watson actuarial valuation shows that Hydro One currently has a $48 million credit "which may be applied to reduce Employer Contributions in 2017, 2018 or 2019."

78. Hydro One's witness responded that there are new pension rules that have come into effect since this valuation was completed and that, while the plan is in a surplus at this point in time, "things can change."[74] Yet, Hydro One also admitted that if the plan were to swing to a deficit position, it would come to the Board and seek to recover those amounts.[75]

79. Energy Probe submits, first, that Hydro One respond in its Reply Argument on whether the new pension rules prevent it from taking a contribution holiday. And secondly, if it doesn't, we submit that the Board should reduce, at least to some extent, the amount of money in rates that Hydro One is seeking to collect to contribution to its pension plan, when its own valuation shows that is unnecessary. Hydro One agreed to reconsider these costs in the Hydro One Remotes proceeding and we see little reason why it shouldn't do the same in this proceeding.

80. Energy Probe would also like to note that a number of its concerns regarding compensation were echoed by Board Staff in its final argument.[76]

Section 6: Capital Spending (*Issues 28, 29, 32)*

81. Hydro One is proposing a sizable increase in its capital spending over the test period. By 2022, according to Hydro One's evidence, the utility will be spending $827.2 million, or $193.3 million more annually than it spent in 2017, to complete its capital projects and programs – amounting to a 30% increase in annual capital spending.[77] Much of this spending is on capital projects that the utility routinely undertakes. For example, Hydro One's pole replacement program, which is about as old as the utility itself, will increase from $73.8 million in 2018 to $133.9 million in 2022, amounting to an 81.4% increase over the test

[73] EB-2017-0051, Exhibit J, Tab 1, Schedule 1, Page 21
[74] EB-2017-0049 Transcript Volume 4, page 76-77
[75] EB-2017-0049 Transcript Volume 4, page 84
[76] OEB Staff, Final Argument, page 22
[77] EB-2017-0049, Exhibit A, Tab 3, Schedule 1, page 26, Table 9

period and become the single largest capital program.[78] By 2022, the number of poles being replaced annually will more than double from 7,282 in 2011 to 16,128.[79] In short, Hydro One is proposing to spend a lot more money on a projects that it has been undertaking for years, if not decades. This isn't a tear-down and rebuild of the system, but rather a large-scale renovation.

82. Hydro One has spent a significant amount of time in this hearing, previous hearings, in numerous presentations to its Board of Directors and its customer engagement sessions highlighting the demographic risk of its assets. It's the main narrative in every application Hydro One brings before the Board – both in its distribution and transmission assets. As would be expected, the older an asset is, the more likely it is to fail and lead to longer and more frequent interruptions for customers. This risk has been examined in detail for many years and, as such, Energy Probe won't spend much time on this argument. We accept that an aging asset base poses more reliability risk, even though we may not always agree with Hydro One on the severity of that risk.

83. Nonetheless, Energy Probe submits that the best way for this Board, Hydro One's shareholders and its customers to determine whether the utility's major increase in capital spending is warranted is to look at its past performance. Granted, past performance isn't an indicator of the future (as every investor understands), but it's the only benchmark we can use to determine (a). whether Hydro One spent its past Board-approved budgets appropriately and (b). whether it's capable of actually undertaking the increase in capital work that it's proposing over the test period.

84. Energy Probe submits that Hydro One's recent performance has been subpar and, as such, the Board should consider scaling back their capital program until there is a clear and definitive record that the company can undertake its capital programs on time and on budget. Energy Probe's guiding philosophy is that utilities like Hydro One shouldn't be micromanaged by the Board or parties to this proceeding. Our suggestions to the Board are not intended to achieve that outcome, which would be counter to that of incentive regulation that moves the regulator away from detailed and granular cost-of-service regulation. But we do believe that the utility should be held to account for its performance and track record whenever it comes before this Board. One way – and arguably the only way – is for the regulator to regulate the utility based on its actual performance, not its aspirations. As such, Energy Probe will highlight the areas of material deficiencies in Hydro One's execution of its capital plan in support of our submission that the Board reduce its capital factor (in conjunction with our concerns over its Custom IR proposal) as well as

[78] EB-2017-0049, Exhibit B1-1-1, DSP Section 3.7, Page 2
[79]

disallow half of the $170.7 million in above Board-approved 2017 rate base that the utility is proposing to be approved in 2018.

85. In nearly every category of capital spending, Hydro One either didn't meet its in-service targets, spent more than budgeted or some combination of the two. Energy Probe will provide a on overall look at a few of these categories to support its position. The mile-high view is represented in the following chart, which offers, in Hydro One's own words, a " comparison between the actual investment costs and accomplishments and the proposed investment plan throughout the year and at the end of the investment plan years".[80]

Table 1

Asset/Project Type	ISD	2015 Variance	2016 Variance	2017 Variance
Transformer Replacements	S-01	2	-3	-1
Transformer Spares	S-01	14	-20	-21
MUS Trailer Replacements	S-02	-2	-3	-1
MUS Purchases	S-02	-1	-1	0
Stations targeted for Spill Containment	S-03	-1	-1	-2
Feeders identified for Recloser Upgrades	S-05	-13	-9	-8
Station Refurbishments	S-07	-8	-27	-29
Pole Replacements	S-10	237	-903	-3558
PCB Lines Equipment Replacements	S-11	-366	-653	-2200
Large Sustainment Initiatives	S-12	1	-5	-9
Development Capital - New Connections	D-01	-2391	87	1423
Development Capital - Service Upgrades	D-01	-594	-424	-719
Development Capital - Service Cancellations	D-01	-911	1670	-1556
Upgrades Driven by Load Growth	D-02	-9	-6	2
Asset Life Cycle Optimization and Operational Efficiency	D-05	-5	-3	0
Reliability Improvements	D-06	-1	-2	-1
Distribution Station Security Upgrades	C-05	-3	0	-3

86. The obvious takeaway from that chart is: based on the number of projects completed, Hydro One underperformed in nearly every major capital spending category over its previous test period – including a number of its key (in terms of dollars allocated) programs, such as

[80] EB-2017-0049, Exhibit I, Tab 24, Schedule AMPCO-22, Table 1

Station Refurbishments, Pole Replacements and PCB Lines Equipment Replacements. Hydro One simply didn't complete the number of projects it said it would in a number of key areas of capital spending.

87. In terms of meeting approved budgets – i.e. spending the ratepayer money that the Board approved to be spent on various capital projects – the utility did no better. The utility's performance in meeting its approved capital budgets in a number of its key capital programs was subpar.[81] The following charts highlight Hydro One's inability to meets its capital spending budgets over the previous test period.

[81] EB-2017-0049, Exhibit I, Tab 24, Schedule SEC-42

Figure 1

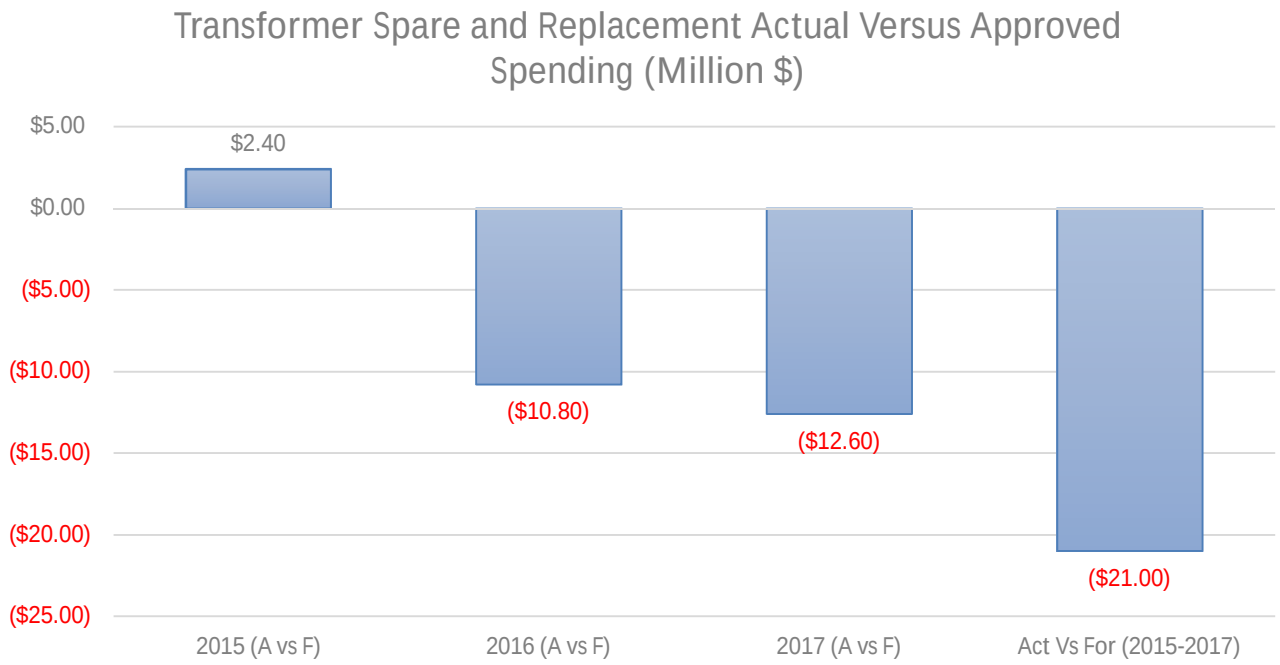


Figure 2

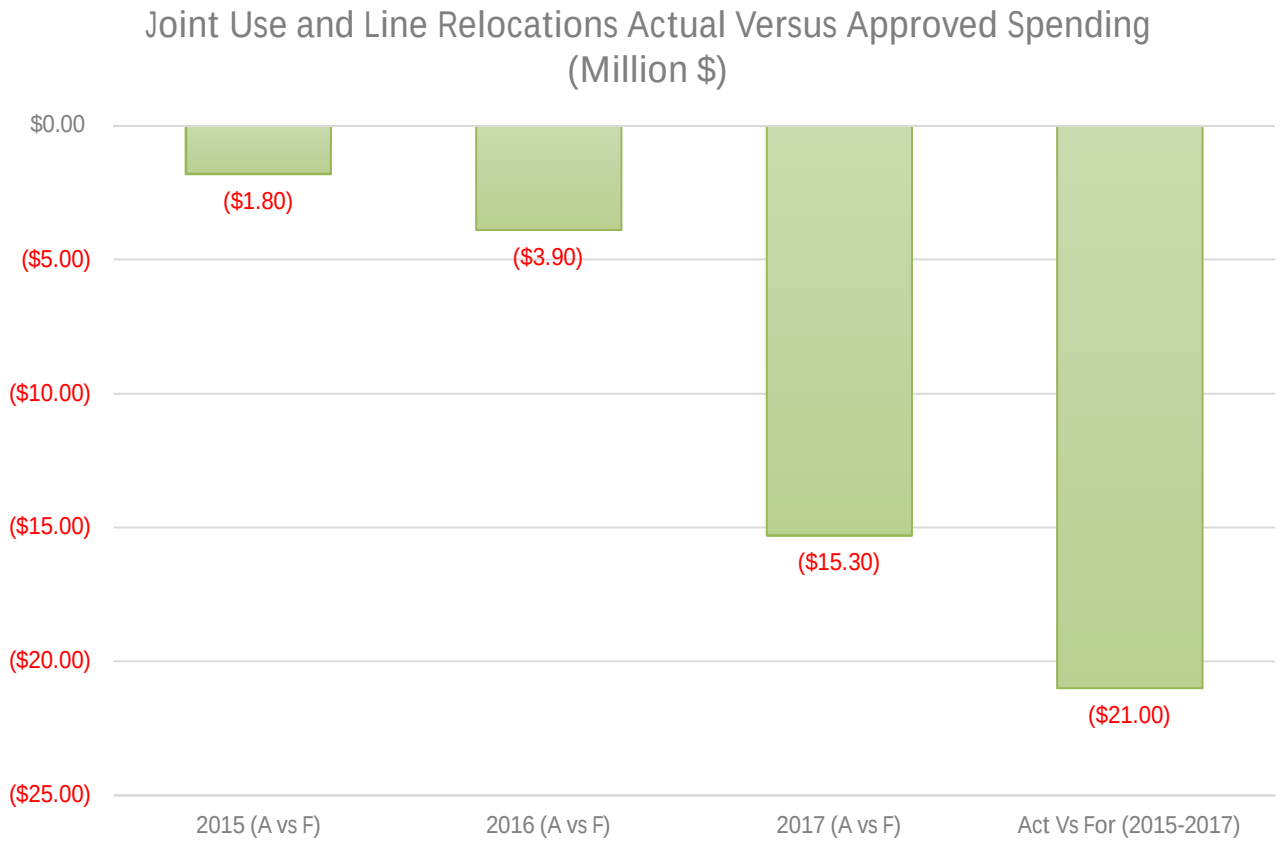


Figure 3

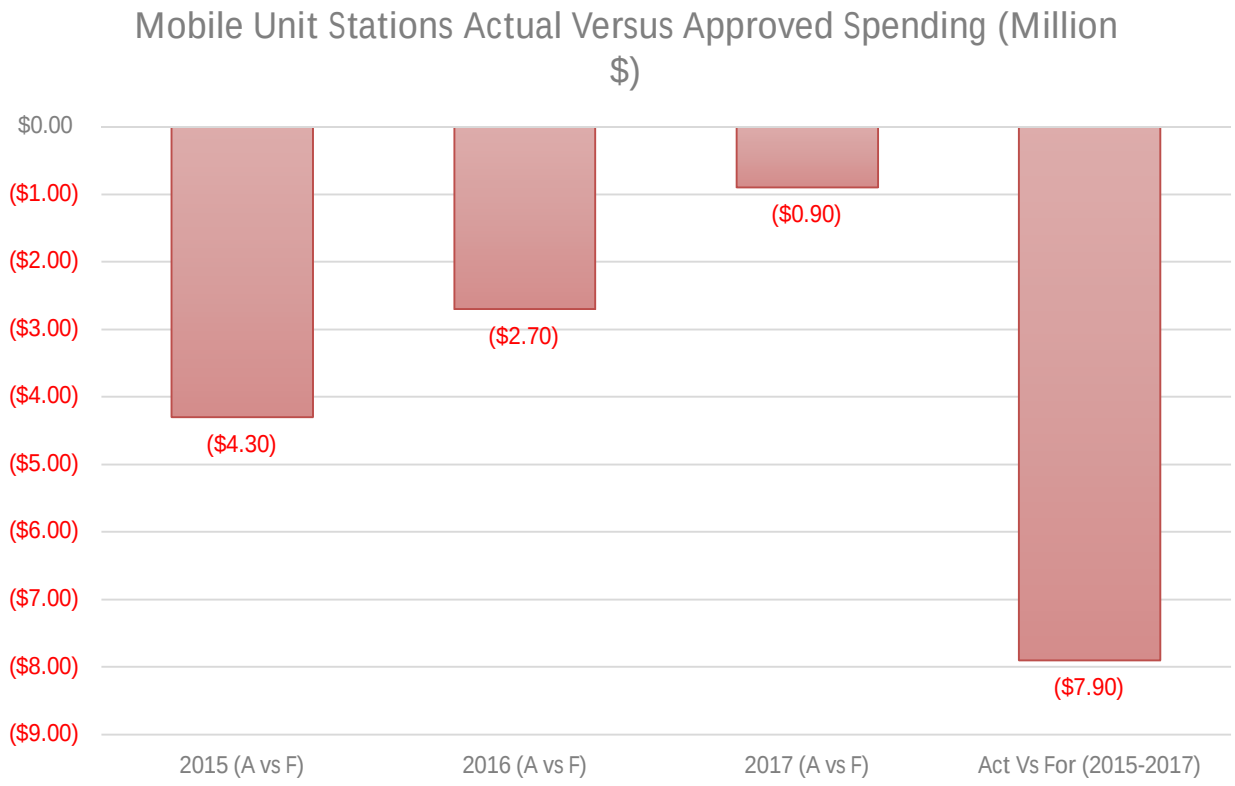


Figure 4

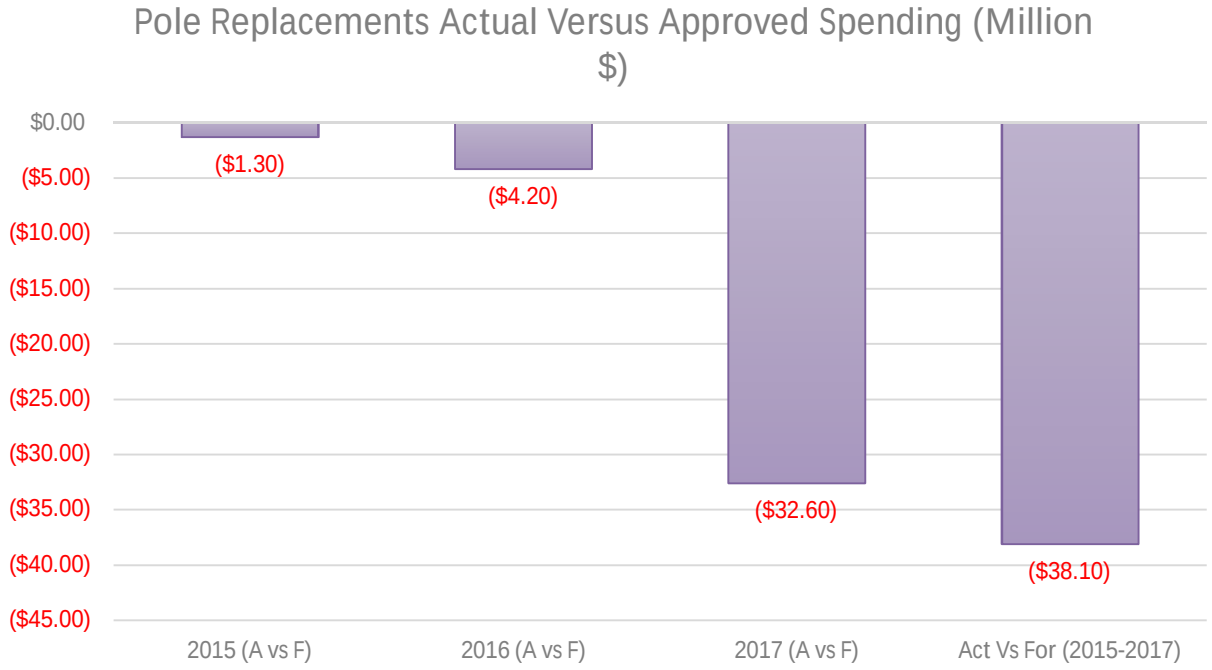


Figure 5

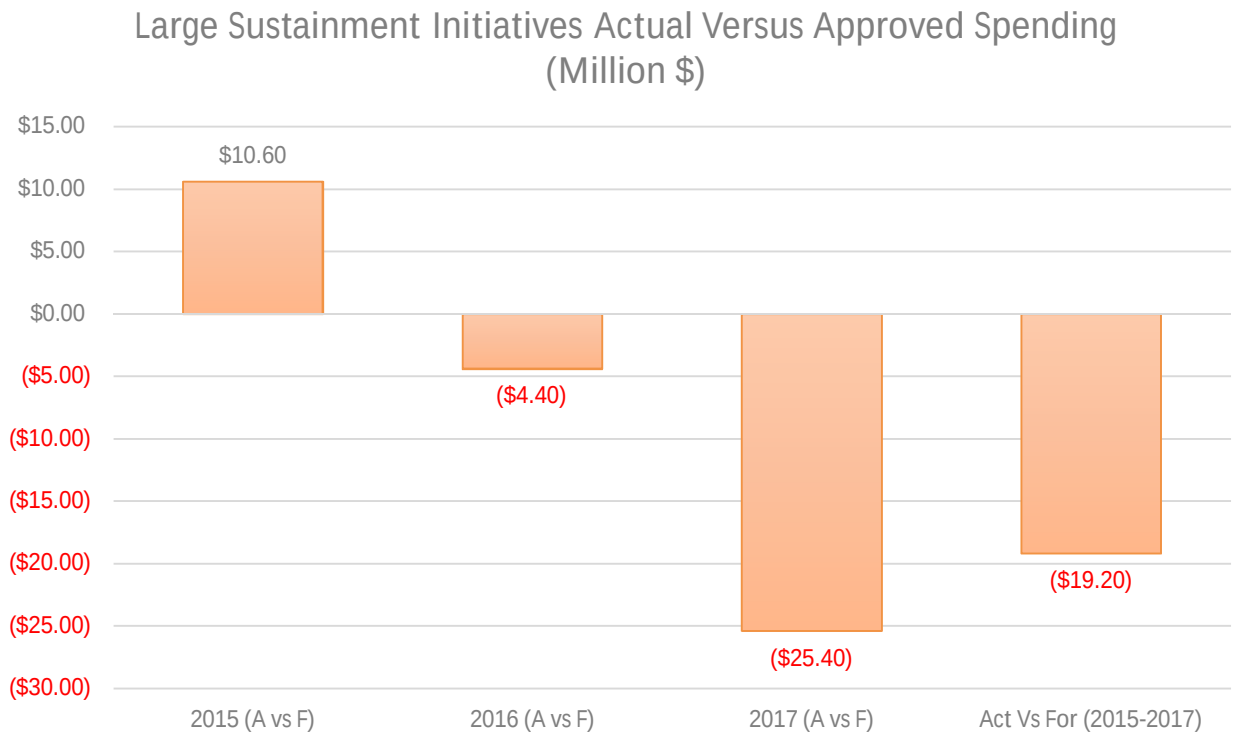
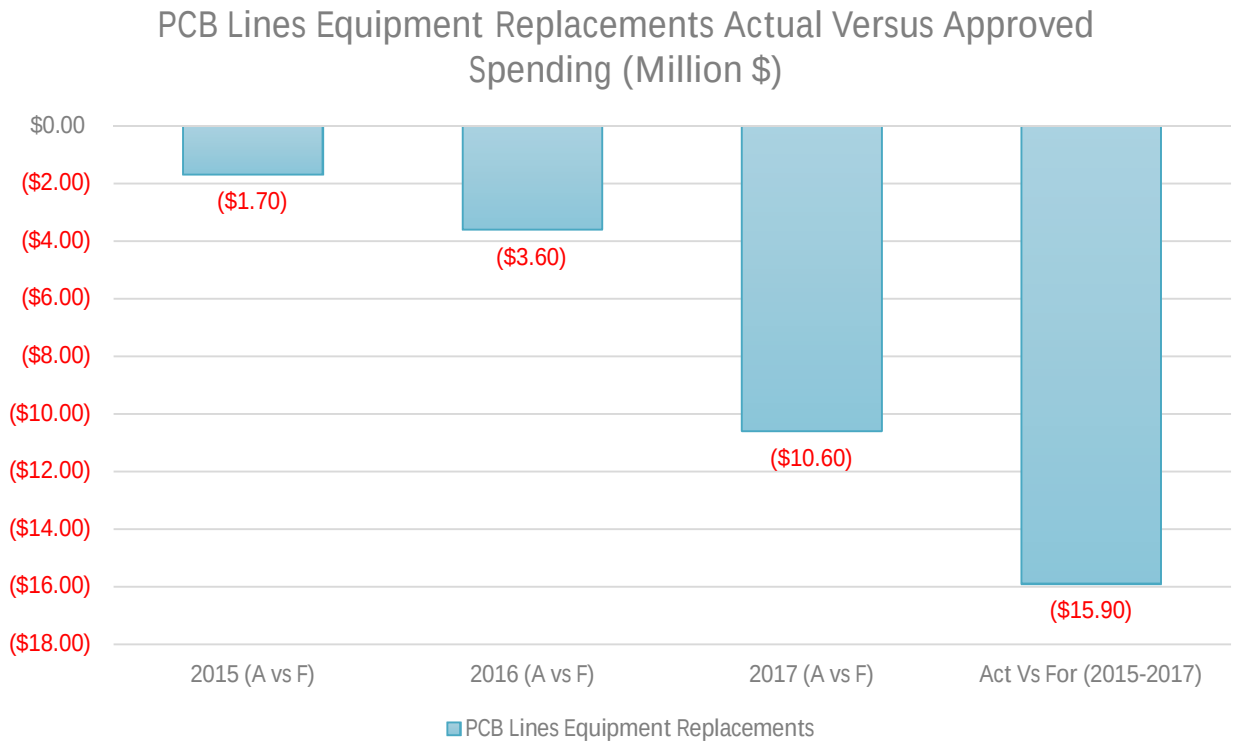


Figure 6



88. In the previous test period, the Board approved Hydro One's proposal to spend $570 million on these six capital programs alone, but the utility actually spent $447 million, or $123 million less than that approved amount. Energy Probe submits that, given the very clear evidence that Hydro One struggles to spend the money on assets that the Board has approved, the Board should consider reducing its capital budget over the current test year, particularly in light of the fact that Hydro One is proposing increases in every one of these spending categories.

89. Energy Probe would also like to highlight (and support) AMPCO's submission as it related to pole replacement. Many of our concerns were also shared by Board Staff in its final argument.[82]

90. Hydro One's vegetation management spending – which was a key part of this (and previous) applications – was also underspent by tens of millions of dollars. Although this is an OM&A program, it highlights the utility's struggle to implement large work programs. As part of its evidence, Hydro One showed that it underspent its vegetation management budget by, on average $19 million in the 2015-2017 period.[83] It confirmed during the oral hearing that the 2017 actual number was actually $129.4 million, or nearly $40 million below the Board-approved level.

[82] OEB Staff, Final Argument, page 79, 81, 83 and 87.
[83] EB-2017-0049, Exhibit C1, Tab 1, Schedule 2, Page 29

Table 5: Vegetation Management Sustaining OM&A ($ Millions)

Description	Historic					Bridge		Test
	2014	2015		2016		2017		2018
	Actual	Actual	Approved	Actual	Approved	Forecast	Approved	Forecast
Landowner Notification *	9.2	6.6	7.3	6.9	10.1	0.0	10.0	0.0
Line Clearing *	97.9	93.7	82.4	87.4	104.6	0.0	107.3	0.0
Brush Control *	23.9	7.7	31.6	35.0	42.8	0.0	42.8	0.0
Cycle Clearing	0.0	0.0	0.0	0.0	0.0	80.3	0.0	79.9
Tactical Maintenance	0.0	0.0	0.0	0.0	0.0	48.5	0.0	57.4
Demand Vegetation Management	9.5	9.9	7.4	13.0	6.8	10.0	6.9	10.2
Hazard Tree Removal	0.2	0.0	0.3	0.0	0.3	4.0	0.3	2.1
Total	**140.6**	**118.0**	**129.0**	**142.3**	**164.6**	**142.9**	**167.3**	**149.6**

** In 2017, Hydro One has reorganized the structure of the vegetation management program such that the Landowner Notification, Line Clearing, Brush Control programs are now integrated under the new Cycle Clearing and Tactical Maintenance programs.*

91. Worse still is that as much as 50% of Hydro One's forestry spending was, in the words of its own consultant, "gold-plating."[84] Not only was Hydro One failing to actually meet Board-approved budgets, but much of the work it was completing was unnecessary to meet the "key objectives of public safety and system reliability."[85]

92. During the oral hearing, Hydro One's response to missing its own budgets almost always went back to highlighting the non-discretionary spending and work it must do in the wake of severe storms that occur throughout the province in any given year.[86] The utility also highlighted other non-discretionary work such as the CDMA replacement. In the 2015-2017 test period, the utility's budget for Trouble Calls and Storm Response was $180.6 million, whereas it actually spent $246 million, or about $65.4 million.

93. Even though it repeatedly under forecast these emergency costs in the past, Hydro One appears to be continuing to under-forecast its Trouble Call and Storm Response budget in its current application. By the time of the oral hearing, Hydro One had already spent $40 million of its $65 million storm budget for 2018.[87] Hydro One's witness noted that the company was already "going through the process of looking at which other program line

[84] EB-2017-0049, Exhibit I-38-CCC-44, Attachment 2, Page 5
[85] EB-2017-0049 Transcript Volume 5, page 139 and page 166
[86] EB-2017-0049 Transcript Volume 6, page 139 and page 153
[87] EB-2017-0049 Transcript Volume 9, page 75

items can be deferred this year out into future years," as a result of storm-related work. In short, the utility is telling the Board that it's already deferring work that ratepayers are paying for in rates due to under-forecasting of storm work. If the past three years (four if we include 2018) is any indication, the backlog of deferred work at the end of the current test period will total in the hundreds of millions of dollars due to Hydro One's under-forecasting of storm-related work.

94. In Energy Probe's view, there's a clear incentive for Hydro One to undersell its storm and trouble-call-related budget to the Board. If Hydro One were to come to the Board with a realistic storm and trouble call budget, it would – in order to keep bill impacts as minimal as possible – have to cut back on its other capital spending budgets. Instead, what the utility appears to be doing is under-estimating its storm budget, asking for a full capital spending envelope to be approved in other areas and then shifting money from its approved capital budgets to handle emergency work. It then gets to shift the deferred projects from one application to the next and continue to charge ratepayers for that work. By keeping its storm budgets below a reasonable estimate, the utility can then apply for a larger capital budget to be approved by the Board, knowing full well that a chunk of that money will never actually be spent on what is contained in its rate application. Hydro One's witness confirmed that, in year one of the test period in this application, it's already down the rabbit hole of deferring projects due to storm and trouble related work.[88] In short, Hydro One is vastly underestimating the true cost of its capital program.

95. On top of these concerns is the fact that Hydro One's budget forecasts in the future carry far greater uncertainty than those in year one and two of the test period. For example, Hydro One's witness confirmed that, while it has a "high level of confidence" in the budgets for its station work in the "next 12 to 18 months," it has "less confidence" in those estimates in the back half of the test period.[89]

96. But it's not just related to station work. Many other early budget estimates by Hydro One were significantly lower than the final amount that will ultimately be charged to ratepayers. Energy Probe highlighted a number of these projects in its cross examination of Panel 5. The Manitou Lake Distribution Station and Line Work was initially estimated to cost $3.8 million, but the budget has since been revised to $4.8 million.[90] The Leamington TS Feeder Construction was initially forecast to $19 million, but was subsequently raised to $33.7 million.[91] The Allanburg TS M5 feeder construction was originally forecast to $3.6 million,

[88] EB-2017-0049 Transcript Volume 9, page 75
[89] EB-2017-0049 Transcript Volume 9, page 97
[90] EB-2017-0049, Exhibit I-25-EnergyProbe 51, Attachment 1
[91] EB-2017-0049, Exhibit I-25-EnergyProbe 51, Attachment 3

but was subsequently increased to $4.7 million. Every one of these projects experienced double-digit (in percentage terms) cost estimates.[92] Ratepayers lose out on this poor forecasting, as Hydro One is never held to account for these cost overruns. Hydro One's witness even confirmed that if the projects at the tail end of the test period cost more than early estimates, it wouldn't be held to those estimates.[93] Hydro One also confirmed that it simply uses these higher-than-forecast budgets as a "lesson learned going forward."[94] While Energy Probe fully expects a utility to learn from its mistakes, it's not clear why ratepayers should by on the hook for the full amount of these learning experiences.

97. Energy Probe submits that, at the bare minimum, Hydro One be required to track the budget versus actual costs of its capital projects and report that information to the Board. Hydro One's witness confirmed that this is "something we can definitely consider."[95] Doing so would, at the minimum, provide ratepayers with a clear look at Hydro One's ability (or lack thereof) to prepare accurate budgets for its capital spending programs and projects. Overall, as we have suggested earlier, Energy Probe submits that the Board reduce Hydro One's capital factor by at least 50%, or eliminate it altogether. The basis for the rate reduction, as shown in this section is that Hydro One has failed to adequately meet its Board-approved targets – both in the amount of work it was scheduled to complete, as well as the budgets for that capital spending – in the previous test period. Energy Probe submits there is no concrete evidence that Hydro One is capable of meeting the aspirational targets it has set for itself in this application.

98. Energy Probe also submits that, for the same reasons as cited above, the Board not approve the full $170.7 million in above Board-approved 2017 rate base.[96] Energy Probe submits that, at most, a more reasonable amount would be 50% of that $170.7 million figure, as Hydro One has repeatedly struggled to meet both its Board-approved work programs and budgets. Energy Probe doesn't believe the utility should be micromanaged – in fact we argue for the exact opposite – there's no reason that ratepayers should be on the hook when Hydro One fails to meet the spending plans that it presented to the Board and its own customers.

Section 7: Rate Design, Cost Allocation and Service Charges *(Issues 50, 53)*

[92] EB-2017-0049, Exhibit I-25-EnergyProbe 51, Attachment 7
[93] EB-2017-0049 Transcript Volume 8, page 77
[94] EB-2017-0049 Transcript Volume 8, page 74
[95] EB-2017-0049 Transcript Volume 8, page 178
[96] EB-2017-0049, Exhibit I, Tab 33, Schedule SEC-67

99. Energy Probe has long argued for the elimination of cross subsidies between rate classes. As such, we are concerned that the cross subsidies between rate classes is growing wider through the test period, that Hydro One appears to have significant concerns or little faith in the cost allocation model and that the company believes that the gap in delivery rates paid by urban and rural customers – a key component to cost-based ratemaking – is problematic. Energy Probe will address each of these points as they pertain to residential customers. Our submission regarding Rate Design and Cost Allocation is that the Board should (a). keep R/C ratios as close to one as is reasonable (b). consider setting a R/C ratio of 1.0 for certain groups of customers (we propose for the residential rate classes) and (c). require Hydro One to submit an outside of review of the cost allocation model, given the utility's concern over its efficacy.

100. Energy Probe's concern over the R/C ratio is in direct response to comments from a Hydro One witness during the oral hearing. When asked whether Hydro One believes there is "an inequity of rates between urban and rural areas," the utility responded that it does believe an inequity exists.[97] The witness went on to elaborate that urban delivery rates are significantly higher than those of rural customers (particularly the R1 and R2 rate classes). Energy Probe submits that, it appears to our supporters at least, that Hydro One is admitting that it would prefer to move away from cost-based ratemaking – where those customers that are the most expensive to serve pay higher rates – to one that is "more equitable." "Equity", under this model, appears to be the same distribution rate for all residential customers, regardless of whether the cost to serve customers in different geographic rate classes are different. This is the exact opposite of economic regulation. It appears to Energy Probe that one way in which the company will achieve this goal is by ensuring the R/C ratios are as wide as the Board allows. As stated earlier, Energy Probe submits that the Board block this move and shrink the R/C ratio range.

101. In Energy Probe's view, pure economic efficiency would see customers of various rate classes pay in rates in full what it costs to serve them. Doing so would bring the R/C ratio to 1.0, as the revenue collected from customers would fully match the cost to serve them. During the oral hearing, Hydro One disagreed with this assessment and responded that a R/C ratio of 1.0 only means that customers are paying the costs that the cost allocation model "says it costs to serve them."[98] Energy Probe will address Hydro One's comments regarding the efficacy of the cost allocation model, but for the moment will assume that it accurately reflects the cost of servicing each customer class. In Energy Probe's view, if the goal is economic regulation, then the R/C ratio should be either at 1.0 or as close is reasonably possible. The only reason to move away from it is if the cost of moving customers to a R/C ratio of 1.0 would be that it creates excessively high rate increases.

[97] EB-2017-0049 Transcript Volume 4, page 138
[98] EB-2017-0049 Transcript Volume 10, page 148

102. In the first year of the test, Hydro One, on its own accord, adjusted the R/C ratio for residential classes in an effort to move them closer to 1.0.[99] In the case of the its three largest residential rate classes (UR, R1 and R2), Hydro One either moved the R/C ratio closer to 1.0, as it did for the UR and R1 rate classes, or kept it at the same level as in 2017, as it did for the R2 rate class. The seasonal rate class is expected to be eliminated altogether and so will not be addressed in our comments. Energy Probe supports Hydro One's "recalibrating" of the R/C ratio in the first year of the test period to more closely align the rates charged to customers in various rate classes to the costs of servicing them.

Table 5: Revenue-to-Cost Ratios and Class Revenue Recovery – 2017 to 2018

Rate Class	2017		2018				Board Range
	R/C	Revenue Requirement ($ M)	R/C		Revenue Requirement ($ M)		R/C (%)
			CAM	After Rate Design	CAM	After Rate Design	
UR	1.10	87.6	1.05	1.05	96.2	96.2	85 - 115
R1	1.10	310.9	1.07	1.07	323.5	323.5	85 - 115
R2	0.95	519.4	0.95	0.95	529.4	529.4	85 - 115
Seasonal	1.04	113.4	1.09	1.09	114.1	113.9	85 - 115
GSe	0.99	160.6	1.01	1.01	160.5	160.5	80 - 120
UGe	0.95	21.8	1.02	1.02	22.7	22.7	80 - 120
GSd	0.95	145.5	0.97	0.97	143.5	143.5	80 - 120
UGd	0.95	30.3	0.95	0.95	29.8	29.8	80 - 120
St Lgt	0.95	12.1	0.93	0.93	12.5	12.5	80 - 120
Sen Lgt	0.95	7.3	1.03	1.03	6.4	6.4	80 - 120
USL	1.10	3.2	1.15	1.09	3.4	3.2	80 - 120
DGen	0.61	4.6	0.57	0.63	3.7	4.1	80 - 120*
ST	0.95	51.0	0.98	0.98	54.2	54.2	85 - 115
TOTAL		1,467.6			1,499.9	1,499.9	

** Assume same as for GS, as previously approved in EB-2013-0416*

103. And yet, by the end of the test period, Hydro One allows the R/C ratio for both the UR and R1 rate classes to move 5 percentage points higher to 1.10 (the cost allocation model put them at a R/C ratio of 1.11), while the R2 rate class continues to enjoy a R/C ratio of below 1.0.[100]

[99] EB-2017-0049, Exhibit H1, Tab 1, Schedule 1, Page 9
[100] EB-2017-0049, Exhibit H1, Tab 1, Schedule 1, Page 14

Table 9: Revenue-to-Cost Ratios and Class Revenue Recovery – 2021 to 2022

Rate Class	2021		2022			
	R/C	Revenue Requirement ($ M)	R/C		Revenue Requirement ($ M)	
			Before Rate Design	After Rate Design	Before Rate Design	After Rate Design
UR	1.10	108.2	1.11	1.10	112.2	111.4
R1	1.10	359.0	1.10	1.10	370.8	369.6
R2	0.97	582.3	0.97	0.97	599.2	599.2
Seasonal	1.10	122.5	1.09	1.09	125.6	125.6
GSe	1.00	170.0	0.99	0.99	173.1	173.1
UGe	1.01	24.7	1.01	1.01	25.3	25.3
GSd	0.93	154.9	0.92	0.92	158.5	158.5
UGd	0.91	32.1	0.90	0.90	32.8	32.8
St Lgt	0.95	15.0	0.95	0.95	15.4	15.4
Sen Lgt	0.96	6.4	0.95	0.95	6.5	6.5
USL	1.10	3.6	1.10	1.10	3.7	3.7
DGen	0.82	6.1	0.86	0.86	6.5	6.5
ST	0.89	58.8	0.89	0.89	60.4	60.4
AUR	0.86	5.9	0.87	0.87	6.1	6.1
AUGe	0.68	1.3	0.69	0.80	1.3	1.6
AUGd	0.61	2.1	0.61	0.80	2.2	2.9
AR	0.85	19.1	0.85	0.85	19.7	19.7
AGSe	0.78	4.2	0.77	0.80	4.3	4.5
AGSd	0.67	4.4	0.66	0.80	4.5	5.4
TOTAL		1,680.4			1,728.2	1,728.2

104. When questioned on why it was allowing the R/C ratio to move higher for two of its three largest rate classes, Hydro One simple responded that it was an "acceptable range", as determined by the utility and the Board in previous applications. Yet, in response to an interrogatory from Energy Probe to set all hold all R/C ratios for residential customers to a range of 95% to 105%, no customer class experiences a bill impact of more than 10%, which is the standard threshold for when the Board will consider some form of bill mitigation.[101]

105. Energy Probe submits that the Board should, at the minimum, set the R/C ratio for the residential rate classes at a range between 95% to 105%, as it more closely aligns the rates charged to customers with the cost of servicing, reduces cross subsidies between rate classes and doesn't result in undue rate increases for any particular rate class. We would also like to highlight that many customers paying higher (than UR) distribution rates are also receiving subsidies from the province in the form of the RRRP or the Distribution Rate Protection (DRP) program enacted under the Fair Hydro Plan.

[101] EB-2017-0049, Exhibit I, Tab 51, Energy Probe 68

106. Energy Probe also submits that the Board go one step further and consider setting an R/C ratio of 1.0 for the entire residential class. For example, if the entire residential rate class – consisting of UR, R1 and R2 customers was set at 1.0, any rate class within that umbrella, say the R2 class, that had a R/C ratio of below 1.0 would require that difference to be made up by the other two residential rate classes, UR and R1. In doing so, Hydro One and the Board would be ensuring that any internal subsidy to one customer is paid for by similar customers. Charging some residential customers less than it costs to service them would be paid for by other residential customers and not spread among Hydro One's entire customer base. In the long run, the Board could establish a variety of rate "groups" – such as large customers, general service and so on – and ensure that any cross subsidies are paid for by customers in this same group.

107. Hydro One disagreed with Energy Probe's assertion that R/C ratios outside of 1.0 amount to a form of cross subsidies between rate classes.[102] Hydro One's witness, instead, maintained that the cost allocation model, which determines the R/C ratios for various rate classes, is not a "perfect assessment of what it costs to serve each rate class."[103] In Energy Probe's view, the cost allocation model is the only method in which Hydro One's customers and this Board use to determine what the "true" costs are of servicing a particular class of customers. If the model is broken, Energy Probe would like to understand the difference between the real cost of servicing a particular rate class and what the cost allocation model determines that cost to be. If that difference is large, it should be addressed in Hydro One's next distribution rate application.

108. As such, Energy Probe submits that the Board direct Hydro One to have an outside consultant review the cost allocation model in order to determine whether it accurately reflects the true cost of servicing various rate classes. While Energy Probe understands that a "perfect" assessment of costs may be difficult, we are concerned about Hydro One's comments that dismiss the cost allocation model. If the model is broken, the Board should understand how broken it is and whether it needs to be modified in order to ensure costs and rates better aligned.

109. And finally, Hydro One is seeking OEB approval for large increases in many of its service charges. While Energy Probe has a general concern about the size of many of the increases, one particular service charge increase stands out because, if approved, would act as a deterrent that would prevent customers from dealing with meter reading errors. Hydro One is proposing to increase the Meter Dispute Charge from $30 to $290 plus a Measurement Canada Charge, which is unspecified but may be several hundred dollars more.[104]

[102] EB-2017-0049 Transcript Volume 10, page 147
[103] EB-2017-0049 Transcript Volume 10, page 148
[104] EB-2017-0049, Exhibit H1, tab 2, schedule 3, page 5, also Technical Conference Tr. Vol. 2, pages 140-141

110. According to Hydro One's evidence Interval Meters will be reaching the end of their useful life over the next five years. It is likely that some meters will experience technical problems resulting in faulty readings. If the proposed $290 pus Measurement Canada charge is approved, customers will be discouraged from contacting Hydro One to seek resolution of meter reading problems. There will also be the unintended negative consequence on Hydro One because it will not be obtaining information about faulty meters from its customers. This proposed increase in the Meter Dispute Charge is a lose-lose proposition and should be rejected by the Board.

COSTS

Energy Probe requests that it be awarded 100% of its reasonably incurred costs. Energy Probe worked with other intervenors throughout the process to limit duplication while ensuring that the record was complete

ALL OF WHICH IS RESPECTFULLY SUBMITTED

August 9, 2018

Brady Yauch, consultant to Energy Probe Research Foundation