Richard P. Stephenson
T 416.646.4325 Asst 416.646.7417
F 416.646.4335
E richard.stephenson@paliareroland.com
www.paliareroland.com

File 18721

VIA *RESS* FILING AND COURIER

November 2, 2010

Ms. Kirsten Walli
Board Secretary
Ontario Energy Board
P.O. Box 2319
2300 Yonge Street, 27th Floor
Toronto, Ontario M4P 1E4

Dear Ms. Walli

**Re: Hydro One Networks Inc. 2011-2012 Transmission Rates
EB-2010-0002**

Attached please find the Power Workers' Union's Submissions with respect to the above-noted application.

Yours very truly,
PALIARE ROLAND ROSENBERG ROTHSTEIN LLP

Original Signed by

Richard P. Stephenson

RPS:jr

Encl.

cc: *via email:*
John Sprackett
Judy Kwik
regulatory@HydroOne.com

EB-2010-0002

IN THE MATTER OF the Ontario Energy Board Act, 1998, S. O. 1998, c. 15, Schedule B;

AND IN THE MATTER OF a review of an application filed by Hydro One Networks Inc. for an order or orders approving a transmission revenue requirement and rates and other charges for the transmission of electricity for 2011 and 2012.

Submissions of the Power Workers' Union

1. The following are the Power Workers' Union's ("PWU") submissions on the issues reviewed in the matter of Hydro One Networks Inc.'s ("Hydro One" or the "Applicant") 2011-2012 Transmission Rate Application (EB-2010-0002).

A. GENERAL

I. REVENUE REQUIREMENT & RATE IMPACT

Issue 1.2: Are Hydro One's economic and business planning assumptions for 2011/2012 appropriate?

Issue 1.3 Is the overall increase in 2011 and 2012 revenue requirement reasonable?

2. The PWU submits that the revenue requirement sought by Hydro One in this application is reasonable, and should be approved by the Board. In addition to the consideration typically applied by the Board when assessing the reasonableness of the revenue requirement sought in a cost of service application, in this case there are two key additional factors that the Board should recognize, in particular:

a. The reductions in revenue requirement and in the costs of the various cost of service components as a result of the review of the original proposed plan conducted as per the Minister's May 5, 2010 letter ("May 5th

Minister's Letter") are real and factual. The issue before the Board is not a determination of HO's motivations related to the cost reductions. It is the reasonableness of the resulting revenue requirement that the Board must determine; and

b. The relevance of increases in all cost components on 'total bill impact' to Hydro One's revenue requirement and the Board's review of Hydro One's transmission rate application.

a. REDUCTIONS IN REVENUE REQUIREMENT FROM ORIGINAL PROPOSAL

3. The Board has heard in this proceeding considerable cross examination by consumer groups aimed at establishing that the revisions to Hydro One's original proposal, shared with stakeholders in its consultation process, is not a consequence of the May 5th Minister's Letter or Hydro One's concern over rate impacts on electricity consumers. Some intervenors pointed out, and Hydro One's witnesses confirmed, that some of the reductions in the different cost components are in fact due to factors other than consideration of rate impacts on consumers[1,2]. The PWU submits that while those developments contributed to the revisions of the transmission rates proposal, there is no evidence that in anyway suggests that the May 5th Minister's Letter that raised 'concern for customers' was not also a factor in the cost reductions. Ultimately, the issue for the Board is not to examine *why* Hydro One arrived at the revenue requirement amount that it applied for, but rather to determine *whether* that amount is reasonable and prudent in the circumstances.

4. There is no basis for the Board not to take the May 5th Minister's Letter at face value. The issue before the Board is not the determination of the credibility of the Minister's expressed concern over rate impacts. The issue before the Board is the determination of the reasonableness of the proposed revenue requirement. Subsumed in this issue is the recognition that due to a number of factors Hydro One revised the costs filed in its application downward from its original proposal. These factors included

[1] EB-2010-0002, OEB Transcript, Volume 6, September 28, 2010, Pages 23-24
[2] EB-2010-0002, OEB Transcript, Volume 4, September 24, 2010, Pages 119-123

the Board's decisions in other cases that have impacted the current application, the May 5th Minister's Letter that required Hydro One to review its application and other developments that led to the anticipation that some projects could be deferred. The result is a lower revenue requirement and lower consumer rate impacts compared to what would have been, absent Hydro One's revisions to its original proposal.

5. Compared to the original proposal the revenue requirement in the filed application has decreased by in excess of $120m over the two test years:

a. OM&A spending has decreased by about $40m over the two years and capital spending has decreased by about $370m; and

b. The transmission rate increase for 2011 decreased from 21.5% in the original proposal to 15.7% in the filed application with rate increases showing a slight upward adjustment for 2012 from the original plan: 9.8% in the filed application compared to 9.1% in the original plan.

6. The PWU submits that the cuts resulted in significant decreases to the test year revenue requirements that must be considered by the Board in determining the reasonableness of the proposed costs and in assessing the prudence of the proposed work programs. However in recognizing the value of these reductions, the Board cannot limit its focus to the reduction in consumer rate impact. The Board's statutory responsibilities require it to assess any potential adverse impacts of reductions made to the work plan on Hydro One's ability to maintain and improve system reliability and quality of service.[3] In this respect, the PWU notes that the application includes a reduction in sustaining OM&A by $13m and $9m in 2011 and 2012 respectively, from the original proposal. As the PWU argues in the section on Sustaining OM&A and Capital, below, any reduction in proposed OM&A would put Hydro One into an even deeper hole in its efforts to maintain the standards of an aging system that has suffered from years of underinvestment. Hydro One appears to downplay the reliability impact of

[3] *OEB Act, 1998,* S.O. 1998, c. 15, Sch. B,, s. 1:

1. (1) The Board, in carrying out its responsibilities under this or any other Act in relation to electricity, shall be guided by the following objectives:

1. To protect the interests of consumers with respect to prices and the *adequacy, reliability and quality of electricity service.* (emphasis added)

the reductions in sustaining OM&A, stating that risk analysis indicated that while individual assets may face increased risk in the short-term, minimal impact is expected on maintaining current overall system safety and reliability levels:

> **A risk-based assessment of the Transmission system at this reduced OM&A sustainment funding levels was carried out. ... It was concluded that while individual assets may face increased risks in the short term, the overall system impact is minimal with safety and reliability remaining at current levels.**[4]

7. However, with regard to reliability improvements, in response to an interrogatory from Board Staff,[5] Hydro One states that a risk based assessment of the Transmission system at reduced OM&A Sustainment spending levels was carried out to ensure that risks could be managed within acceptable levels over the test years. The results indicate that reductions in some work programs have had the impact of sacrificing expected reliability improvements related to deterioration associated with aging assets:

> **<u>Power Equipment ($4.5</u>) – SAP functionality, part of Cornerstone Phase 1 & 2, facilitates analysis of maintenance activities allowing for targeted reductions to those previously planned. Expenditures remain close to historic amounts without expected improvements in reliability, but adequate over the next two years to manage deterioration associated with aging assets. Extending mid life refurbishment of transformers sacrificing reliability improvements.**
>
> **<u>Protection, Control, Monitoring, Metering and Telecom ($3.6M)</u> – Protection re verifications reduced on lower risk assets thereby minimizing reliability impacts. Maintenance deferred rather than improve current condition.**

8. The PWU submits that sacrificing reliability improvements required to address deterioration of aging assets for short-term cost savings should not provide the Board with comfort. As the PWU argues in section C of this submission, following years of underinvestment in an aging infrastructure, there is a substantial need to catch up on sustainment work. Critically, the proposed work plan does not even maintain Hydro One's aging system at its current demographic profile. Even if the Board approves the budgets supporting Hydro One's proposed work program, and even if all of the

---

[4] EB-2010-0002, Exhibit I, Tab 3, Schedule 1, Attachment 1, Page 4
[5] EB-2010-0002, Exhibit I, Tab 1, Schedule 38

proposed work program is completed as scheduled, it will leave Hydro One's system *older than it stands today*.[6]

9. Even focussing on the specific issue of cost impact on customers, the Board cannot limit its consideration strictly to the test period. If the mitigation of rate impacts in the test period is achieved by shifting the burden of required sustaining work to future generations of customers, the Board is not fulfilling its statutory obligation under s. 1 of the *OEB Act 1998*. Clearly, the stated reductions in sustaining OM&A from the original proposal would contribute to the backlog of sustaining investment that will have to be undertaken at a future date, at a higher cost to that generation of consumers.

b. RELEVANCE OF INCREASES IN ALL COST COMPONENTS ON 'TOTAL BILL IMPACT' TO HYDRO ONE'S REVENUE REQUIREMENT

10. Considerable time in this proceeding was spent on some intervenors' argument that the Board take into account "total bill impact", including bill impacts which arise from a host of factors beyond Hydro One's control. In addition, these intervenors posited that Hydro One should consider total bill impact related to increases in all bill components in its planning process.

11. In this proceeding, evidence was filed by the Canadian Manufacturers and Exporters ("CME") that sought to demonstrate the extent of bill increases consumers are facing related to factors including the HST, the government's Green Energy Plan, rising commodity prices, etc. Moreover, some intervenors pointed out that in its EB-2009-0096 decision on Hydro One's 2010-2011 distribution rates application, the Board did in fact consider the impact of factors other than distribution cost on bill impact as follows:

---

[6]EB-2010-0002, OEB Transcript, Volume 4, September 24, 2010, Page 60, Lines 5-11:

> **…**
> **But for a lot of your assets, most of your assets are in the oldest age category, and in most of those cases the demographic at the end of five years is worse than it is today. You are not surprised if I tell you that; right?**
> **MR. SPENCER: No, you are correct. Our assets are aging. We have put forward what we feel are appropriate capital replacement plans, but the assets continue to age.**

> **Fourth, the Board must take into account the overall increase and prospect of further increases in the commodity portion of the bill. While these charges are outside of the control of the applicant, they are no less real for customers. In giving effect to the Board's objective to protect the interests of consumers the Board cannot ignore the overall impacts on customers.**[7]

12. The PWU is sympathetic and sensitive to the total bill increases resulting from the Government of Ontario's energy policy that consumers have and will continue to experience. The PWU agrees that the Board should be informed of total electricity bill impacts that emanate from all sources. The concern is the manner and extent to which the Board might employ such information in its review of an individual rate application. In the comments noted above from the EB-2009-0096 decision the Board makes reference to its objective to protect the interests of consumers, but in doing so recognizes that the commodity portion of the bill is beyond the control of the applicant. Importantly, the Board's statutory objective is the protection of the interests of consumers, not only with respect to prices, but also with respect to the adequacy, reliability and quality of electricity services. In addition, in its review of Hydro One's rate application the OEB's second statutory objective with respect to electricity also comes prominently into play. In particular, the Board is required:

> **To promote the economic efficiency and cost effectiveness in the generation, transmission, distribution, sale and demand management of electricity and to facilitate the maintenance of a financially viable electricity industry.**

13. In giving effect to the Board's objectives, section 78(3) of the *Ontario Energy Board Act, 1998* provides the Board with the following authority:

> **The Board may make orders approving or fixing just and reasonable rates for the transmitting or distributing of electricity or such other activity as may be prescribed and for the retailing of electricity in order to meet a distributor's obligation under section 29 of the *Electricity Act, 1998*.**

Hydro One therefore has every right to recover costs that it is responsible for that the Board finds to be "just and reasonable". As such, in the absence of any evidence that the Applicant's proposed costs are not just and reasonable, the question is: what authority does the Board have to consider factors beyond the Applicant's control, and

[7] EB-2009-0096, Decision with Reasons, April 9, 2010, Page 13, 2010-2011 Hydro One Distribution Rate Application

including those over which the Board's has no other jurisdiction? How does concern for the rate impact override the Board's objective of allowing the Applicant to recover its just and reasonable costs? The PWU submits it does not.

14. The PWU recognizes that the Board, by virtue of its jurisdiction and mandate, is confronted by a number of competing objectives in discharging its duties. These competing objectives include the promotion and implementation of government policy, the promotion of the reliability and safety of the system, the financial well being of the utilities and consumer rate impacts.

15. What is critical to recall is that this is a cost of service application where the Board is under a statutory obligation to set just and reasonable rates. There is a long line of legal authority that, in such circumstances the Board is under a statutory obligation to permit utilities to recover their prudently incurred costs. Nothing in the Board's statutory objective of protecting the interests of the customers with respect to price derogates from this responsibility.

16. This precise issue was considered by the Board in its recent development of its Cost of Capital policy (the "Report").[8] In the Report, the Board considered the application and content of the "Fair Return Standard" for a utility's invested capital. Of course, the determination of a utility's return is but one specific example of its overall revenue requirement. In the Report, the Board notes and relies upon the decision of the Federal Court of Appeal in *TransCanada PipeLines Limited v. National Energy Board et al*. [2004] F.C.A 149 which provided that:

> **some other costs, it is a real cost that the utility must be able to recover through its revenues. If the… [Board] does not permit the utility to recover its cost of capital, the utility will be unable to raise new capital or engage in refinancing as it will be unable to offer investors the same rate of return as other investments of similar risk. As well, existing shareholders will insist that retained earnings not be reinvested in the utility**[9]

---

[8] EB-2009-0084, Report of the Board on the Cost of Capital for Ontario's Regulated Utilities, December 11, 2009, Page 19, Paragraph 2:

> **… Further, the Board notes that the Federal Court of Appeal was clear that the overall ROE must be determined solely on the basis of a company's cost of equity capital and that "the impact of any resulting toll increase is an irrelevant consideration in that determination. This does not mean however, that any resulting increase in tolls cannot be considered by a tribunal in determining the way in which a utility should recover its costs.**

[9] *TransCanada PipeLines Limited v. National Energy Board, supra, 12*

17. In the Report, the Board specifically considers how the obligation to ensure that the utility recovers these costs is to be balanced against the interests of consumers:

> **Second, the Board agrees with the National Energy Board which stated that "[i]t does not mean that in determining the cost of capital that investor and consumer interests are balanced." Further, the Board notes that the Federal Court of Appeal was clear that the overall ROE must be determined solely on the basis of a company's cost of equity capital and that "the impact of any resulting toll increase is an irrelevant consideration in that determination. This does not mean however, that any resulting increase in tolls cannot be considered by a tribunal in determining the way in which a utility should recover its costs." The Federal Court of Appeal also stated that:**
>
> > **It may be that an increase is so significant that it would lead to "rate shock" if implemented all at once and therefore should be phased in over time. It is quite proper for the Board to take such considerations into account, provided that there is, over a reasonable period of time, no economic loss to the utility in the process. In other words, the phased in tolls would have to compensate the utility for deferring the recovery of its cost of capital.[10]**

18. A utility is entitled to the recovery of its cost of capital because it is a prudently incurred cost of providing the utility service. The utility cannot be denied the ability to recover these costs simply by virtue of the impact that those costs may have on customers. The existence of an undesirable rate impact does not convert a prudently incurred cost of a fair return into an imprudently incurred cost of a fair return. Rate impact mitigation may be appropriate through the use of interest bearing deferral accounts, but this simply addresses the *manner* of recovery of costs, not the fact that the costs are recovered. The same analysis applies to all of the utility's other prudently incurred costs.[11] Once the Board has determined that those costs are prudently incurred, it must permit the utility the opportunity to recover those costs, subject to the application of deferral mechanisms that result in "no economic loss to the utility in the process".

19. Importantly, the analysis performed by the Board in the Report was undertaken within precisely the same legislative context as governs the Board in this case. There is

---

[10] Cost of capital Report, *supra*, p. 19

[11] *Natural Resource Gas Ltd. v. Ontario Energy Board*, 2006 CanLII 24440 (ON C.A.) at para. 28; *ATCO Gas & Pipelines Ltd. v. Alberta (Energy & Utilities Board)*, 2006 SCC 4, [2006] 1 S.C.R. 140 at para. 63-65

absolutely no basis for a different balance to be struck between consumers and other interests in this case.

20. It is particularly inappropriate for the Board to undertake the specific exercise which is urged upon it by certain consumers groups in this proceeding. In particular, inconsistent with its legislated objectives and responsibility, the Board is being asked to consider transmission rate impacts in light of categories of costs, over which Hydro One has no control. These costs fall into two categories. The first category are costs over which the Board has no jurisdiction, for example, electricity commodity costs, the costs of the "global adjustment" and the impact of HST on electricity bills. To deny the Applicant recovery of otherwise prudently incurred costs by virtue of the impact of these factors would result in the Board attempting to do indirectly, that which it has no statutory authority to do directly – that is, to regulate the cost of the electricity commodity, the global adjustment or the HST.

21. The second category of costs are those costs over which the Board does have regulatory authority – eg. distribution costs. It is arguably even more inappropriate for the Board to base any disallowance based on the impact of these costs. By definition, these are costs that are being recovered by others based upon a prior determination by the Board that these charges are just and reasonable. It is submitted that it is entirely inappropriate and unfair for the Board to deny costs recovery in one case based upon the impact of the recovery of costs approved by the Board itself in prior cases.

22. The PWU also understands that certain consumers groups attempt to distinguish the circumstances of Hydro One, as a government owned entity, from that of other utilities regulated by the Board. It is suggested that, to the extent Hydro One incurs costs in relation to government policy initiatives (eg. the *Green Energy Act,* HST); these costs should be borne by the government as shareholder, rather than being recovered from customers. This argument is ill conceived, both legally, and factually.

23. It is simply incorrect to characterize the *Green Energy Act* or the HST as "policy initiatives" of Hydro One's shareholder. These initiatives are statutory – duly passed into law by the legislature. One of the most basic principles of the Canadian constitutional fabric is the fundamental legal and constitutional separation between the "government"

(i.e. the Executive) and the legislature. The statutes in question are the product of the legislature, not Hydro One's shareholder.

24. It is correct that s. 1 of the *Ontario Energy Board Act, 1998* requires the Board to be mindful of certain policies of the government of Ontario. Obviously, these policies are distinct from those embedded in legislation enacted by the legislature. Nevertheless, in this situation too, the obligation on the Board is created not by the "government" (i.e. Hydro One's shareholder), but rather by the legislature, through the provisions of the Board's enabling legislation.

25. As noted above, there are, options at the disposal of the Board in this proceeding that permit the Board to make a decision on *the manner in which* the applicant might recover its costs, that address total bill impact without disallowance of prudent costs. The PWU notes two cost elements in this application that are eligible for such consideration. The first is the accelerated cost recovery mechanism requested by Hydro One for the Bruce-Milton project. Hydro One has submitted that the preferred route, from the perspective of both Hydro One and consumers, is the inclusion of Construction Work in Progress ("CWIP") in rate base as opposed to the traditional Allowance for Funds Used During Construction ("AFUDC") capitalization methodology. Hydro One states that there is a real prospect that the project could suffer from further delays. Therefore under the latter approach, with the increase in projected costs consumers would be paying more at a future date when the project comes into service. The PWU argument on this issue is presented in section E of this submission.

26. Under cross examination on this issue, Hydro One's witness indicated that while the preferred approach is the recommended CWIP alternative, Hydro One is providing the Board with options:

> **MR. BUONAGURO: So I am going to move on to a little bit about CWIP. It sounds like a song. My understanding, just before I start, in speaking to Mr. Shepherd, you used the word -- you used the phrase that you are "presenting an option" to the Board with respect to CWIP. Do you recall that?**
>
> **MR. STRUTHERS: Yes, I did. I was providing the Board the option of either proceeding with a CWIP alternative, or else putting the full cost of the project through an AFUDC methodology at the higher number, and putting that through**

for recovery.[12]

27. The Bruce-Milton project has already received leave to construct and work on the project is underway. The need for the project and the prudence of costs that are and will be incurred are not the issues before the Board in this proceeding. Neither is the issue of whether or not the applicant recovers its prudently incurred cost. Those are matters that have or will be determined elsewhere. It is the method of recovery for which approval is being requested. Therefore, what is expected of the Board is to decide between the proposed CWIP in rate base approach and the alternative of putting the full cost of the project through an AFUDC methodology, with a clear recognition of the consequences of each alternative.

28. The former approach would lower the consumers costs related to the project and allow Hydro One to recover costs sooner and improve its credit rating. The latter option, given the real prospect of project delays, could cost consumers more and will expose consumers to rate shock in the future, when the assets come into service. In choosing this option the Board would be choosing future rate shock to mitigate short-term rate increases. While the PWU is sensitive to the increases in total electricity bill amounts faced by Ontarians, in the PWU's view, it behoves the Board to consider the near term as well as the long-term electricity bill outlook in considering a cost recovery methodology for the Bruce-Milton project. In any case, there is no question that this is one area where the Board could use the information on "total bill impact" related to impending increases in all bill components in determining the manner of cost recovery for the Bruce-Milton project.

29. A second example would be the treatment of the PST/HST difference. While Hydro One has proposed a deferral account, in cross examination, Hydro One's witnesses did not express any objection to the alternative treatment of tracking the difference in a variance account:

> **MR. SHEPHERD: And, basically, as I understand this, you have an estimate of what the impact of this is in each of the test years; right?**

---

[12] EB-2010-0002, OEB Transcript, Volume 7, September 30, 2010, Page 113, Lines 8-18

> **MR. FRASER: We do.**
>
> **MR. SHEPHERD: But you are not proposing to adjust your revenue requirement to reflect that estimate?**
>
> **MR. FRASER: No. The impact in 2010 would be going into the deferral account, for the half year of 2010. We had made the proposal that the impacts on 2011 and 2012 also go into the deferral account –**
>
> **MR. SHEPHERD: Why?**
>
> **MR. FRASER: -- into the tax changes account.**
>
> **MR. SHEPHERD: Why?**
>
> **MR. STRUTHERS: But to be clear, yesterday I said that if the Board determined that such a variance should be applied against the revenue requirement, then it would be the Board's decision to do so.**
>
> **MR. SHEPHERD: Okay. I am trying to understand the rationale for using a deferral account, rather than putting in your estimate and having a variance account. I didn't hear a rationale on Tuesday. That is why I am asking.**
>
> **MR. STRUTHERS: To be honest, I don't know why. Like, we would have asked for a variance account, but we decided to ask for a deferral account.**[13]

30. As the witnesses confirmed, the use of a variance account would reduce revenue requirement by an amount in the order of $10M[14]. Therefore this is an area that is readily available to the Board in mitigating rate impact in the short-term.

31. The PWU fully acknowledges the Board's authority to disallow costs that it determines are not reasonable or prudent. That said, it is incumbent on the Board to identify which costs it concludes to fall into that category, to identify the evidence and to provide the analysis that justifies its conclusion. While the PWU appreciates the Board's desire to avoid short-term rate impacts and its desire not to "micro-manage" the utility, those desires are no substitute for the Board's fulfilment of its obligation to base its conclusions on evidence and sound reasoning.

32. The PWU is also of the view that the Board should recognize that there are limits to what Hydro One can do under circumstances of broad arbitrary revenue requirement disallowance. There is a need to recognize the following facts:

---

[13] EB-2010-0002, OEB Transcript, Volume 7, September 30, 2010, Page 73, Lines 7-28; Page 74, Lines 1-2
[14] Ibid., Page 74, Lines 12-25

a. Some of the cost components such as compensation are determined through collective bargaining with its unions and Hydro One is under a legal obligation to bear the costs and fulfil the terms of the collective agreement arrived at. In other words, the Board's decision in the last two cases with respect to compensation levels could not and did not result in direct cuts of wages and salaries.

b. Hydro One has no choice but to implement investment programs required to meet Government policy objectives.

c. The rate base is going to continue to increase for the foreseeable future due to increasing investments - thereby creating further cost pressure.

d. Hydro One, like any other commercially structured company, has every right to earn a commercial return for its shareholders, the people of Ontario. There is no legal or other ground for requiring Hydro One to use its returns to offset "total bill impact" as some might wish.

e. Hydro One has continued to improve efficiency and continues to seek areas where savings can be made.

33. It is submitted that the natural course for a company under such cost pressure is not to defer government mandated new projects but to defer sustainment work programs. In the case of Hydro One, the sustainment programs are crucial to maintain and replace an aging system that has already suffered from years of underinvestment. Sustainment work is easy to cut because in a large and diverse system the impact of doing so does not show up right away[15]. Deferring maintenance work to the future may be an easy solution because it has no immediate, measurable negative effect on customer service or reliability.

34. In reality, however, the future consequences of the deferral of sustainment work in an environment where the system has already suffered from years of under-investment are serious. The integrity and reliability of the system will be compromised

[15] EB-2010-0002, OEB Transcript, Volume 4, September 24, 2010, Page 66, Lines 2-6

and a point could be reached where the trend is irreversible.[16] Inevitably, a time will come when the volume of work will exceed the time available to perform it. Catastrophic failures will become more frequent.

35. Further, since the need for the deferred work programs will not go away, deferring costs today results in deferral to an environment of higher costs in the future. The Green Energy initiatives, growth in rate base, aging infrastructure with more assets reaching end-of-life ("EOL"), all lead to the unavoidable conclusion that Hydro One's costs and rates will continue to rise for the foreseeable future. While it is never palatable for consumers to experience the increases in their electricity bills, the inevitability of the increases in transmission system costs can not be lost, even on the consumer representatives. Yet these groups seek, and inappropriately so, Board consideration of broad cuts to Hydro One's proposed transmission revenue requirement for the test years to mitigate total bill impacts related to electricity bill components other than transmission costs. Cross examination of Hydro One's witness on International Financial Reporting Standards ("IFRS") by School Energy Coalition ("SEC") clearly demonstrates SEC's recognition of the inevitability of increasing transmission system costs:

> **MR. SHEPHERD: Okay. You also have a number of places where you deferred spending from this period to the next period, 2013, right?**
>
> **MR. FRASER: I am not sure what you mean.**
>
> **MR. SHEPHERD: You made some adjustments to --**
>
> **MR. FRASER: Oh, you're talking --**
>
> **MR. SHEPHERD: -- this application.**
>
> **MR. FRASER: I see what you mean, yes.**
>
> **MR. SHEPHERD: Not IFRS anymore, but you have a number of adjustments. You are going to have to spend that money at some point, right?**
>
> **MR. STRUTHERS: You're talking about deferral accounts or --**
>
> **MR. SHEPHERD: No, the deferrals of spending.**
>
> **MR. STRUTHERS: Oh, you're talking about the green energy projects or --**

[16] This is the so-called "bow wave effect". Deferred work is simply added to the work that was scheduled to be done in future years. Ultimately, the amount of work that is to be done exceeds the time available to complete it.

MR. SHEPHERD: The capital. And you got OM&A, right? You have a whole bunch of OM&A you deferred too, right?

MR. STRUTHERS: I will say yes, but... yes.

MR. SHEPHERD: So that all kicks in starting in 2013, right?

MR. STRUTHERS: It would be -- first of all, it would depend on what we came forward with a filing in 2013 for, in terms of recovery through revenue.

And it also depends what the work program is and sort of all of the elements that would make up -- as you referred to them, as deferred projects, whether those projects are deferred or whether they are continually deferred, or however we did it.

MR. SHEPHERD: So these various things, see, what I am -- where I am trying to go with this is that these various things are sort of like a train coming down the track at the ratepayers.

And I am concerned that we may be talking about a lot of things that could hurt us at some point down the line, whether it is capitalization or premature asset retirements or deferred OM&A or new projects, et cetera.

And we may be hit for a whacking great increase in 2013 or '14. That is a real possibility, isn't it?

MR. STRUTHERS: There is always the risk, depending on what we are directed to do or what is undertaken, that those costs could be recovered and they could be substantial in the future, yes. That is one of the issues with deferral accounts.[17]

36. The natural consequence of the anticipated increase in expenditures is that Hydro One's transmission rates will be rising in the foreseeable future[18]. Obviously, any deferral of costs to future periods will only result in future ratepayers facing even higher rates and being unfairly burdened with costs that should be shared by current ratepayers.

37. The PWU recognizes that the impacts of the current increases in electricity bills and those expected in the foreseeable future on certain groups of consumers such as low income consumers could be significant. In that respect, the PWU notes that the Board has been instructed by the Minister of Energy in July of 2010 to resume its

---

[17] EB-2010-0002, OEB Transcript, Volume 7, September 30, 2010, Page 69, Lines 10-28; Page 70, Lines 1-25

[18] EB-2010-0002, OEB Transcript, Volume 4, September 24, 2010, Page 64. Lines 17-21:

So while the fleet may be older, I agree, and while there are a lot more transformers in the 50-year range, you will also notice there is an increased spend to specifically deal with end-of-life transformers, end-of-life within the foreseeable time frame.

suspended work in relation to low income energy customers[19]. The PWU supports the Board's work on Low-income Energy Assistance Program which is expected to include emergency financial assistance, targeted conservation and demand side management programs, and more flexible customer service rules. The PWU considers this initiative as an effective and necessary rate impact mitigation exercise.

38. In conclusion, while the PWU is sympathetic with the increases in total electricity bills that consumers have and will face related to the various bill components, the PWU submits that it would be improper for the Board to seek to address total bill impact largely related to non-transmission cost components through a short-term rate objective that places undue burden on future transmission rates and future transmission rate payers. While the PWU has grave reservations as to the adequacy of the proposed levels of sustainment spending, it is of the view that from a transmission cost perspective Hydro One has struck the minimally acceptable balance between its ongoing operational needs and current rate impacts. The rate increases proposed for the test years are lower than they would have been, but for the circumstances that resulted in the downward adjustment of the proposed revenue requirement that Hydro One had originally planned to file. The Board should reject submissions which subordinate the integrity of the transmission system as well as the service quality, reliability and rates of future ratepayers to short-term rate impacts.

B. OPERATIONS MAINTENANCE & ADMINISTRATION COSTS

I. COMPENSATION AND STAFFING

Issue 3.3: Are the 2011/12 Human Resources related costs (wages, salaries, benefits, incentive payments, labour productivity and pension costs) including employee levels appropriate? Has Hydro One demonstrated improvements in efficiency and value for dollar associated with its compensation costs?

39. The PWU recognizes the Board's obligations with regard to assessing the prudence and reasonableness of costs, including compensation costs, at Hydro One.

[19] Minister's Letter to Ontario Energy Board Regarding Low-Income Energy Customers, July 5, 2010

With respect to unionized staff, compensation costs are determined through collective bargaining. There is no doubt that Hydro One goes to the negotiating table with the objective of maximizing its gains and minimizing its costs taking into account the Board's and its own demands. Those demands may or may not be satisfied depending on the specific circumstances and factors that shape the outcome of that specific collective bargaining process. The PWU's submission on compensation derives from the concern that decisions by the Board to make broad cuts in OM&A spending in part as a consequence of flawed perceptions on the reasonableness of compensation levels, while favourable to consumers in the short-term, would lead to the deferral of necessary work rather than the targeted but unachievable cuts in compensation costs. The result therefore would be an unfavourable long-term rate outlook.

40. The PWU submits that the only evidence that parties making the assertion that compensation levels are "too high" or "excessive" have adduced in this proceeding is the Mercer-Wyman Compensation Cost Benchmarking Study ("Mercer Benchmarking Study") and the Board's decision with respect to compensation costs on Hydro One's last two applications (Transmission case EB-2008-0272 and Distribution case EB-2009-0096). In those decisions, the Board suggested estimates of what the appropriate disallowance attributable to compensation cost would be in the overall blanket disallowance for OM&A spending. The PWU submits that in this proceeding the Board needs to address the following two broad questions in order to render an appropriate decision on the issue of compensation:

a. What is reasonable and prudent compensation cost in the context of collective bargaining?

b. Is it appropriate to continue to apply the Board's last two decisions on compensation as precedent on the basis of the Mercer Benchmarking Study, a study that the PWU submits failed to meet the objectives and intent set out for it by the Board?

a. REASONABLENESS AND PRUDENCE OF COMPENSATION COSTS

41. The PWU submits that the basis for the Board's decision with regard to compensation costs is Hydro One's obligation with respect to the reasonableness and prudence of the costs that it seeks to recover. If the Board finds that the proposed costs are reasonable and prudent, the Board must approve them. In general, the two inputs that determine compensation cost are headcount and the actual payment amounts (compensation levels) made to employees. In this respect, the PWU submits that there is no evidence before the Board that suggests the headcount and the compensation levels, and hence Hydro One's proposed compensation costs, are not reasonable and prudent.

42. With respect to headcount, the PWU submits that the evidence is that increases in headcount in the two test years are very modest – about 4.5% and 1.7% in 2011 and 2012, respectively. What is more important, however, is that Hydro One is not seeking explicit Board approval with respect to any particular headcount. Hydro One's staffing strategy is designed in such a way that headcount is an output: a function of a work plan that has been costed. Approval is sought for the cost of the work plan. While headcount is implicit in the work plan it should be understood that the forecast of headcount is derived from the work plan and not the other way round. In developing and costing the work plan, Hydro One forecasts the number of people that would be needed to carry out the planned work. Hydro One is a commercially structured business that has interest in staffing levels required only to meet planned work.

43. With respect to compensation levels, the only basis upon which Board can conclude that Hydro One has failed to be reasonable and prudent is if it determines that Hydro One has failed to obtain decreases in compensation by way of reductions in wage levels in previous negotiations of collective agreements and/or in its forecast with respect to the outcome of future collective bargaining. It is submitted that there is no evidence upon which such a conclusion can be made.

44. Compensation levels at Hydro One are founded upon legacy compensation levels. Hydro One had no control over the legacy events that established its base levels of compensation; what Hydro One can influence is what it does at the time of renewals of collective agreements. The Board cannot ignore the widely accepted fact about

collective agreements: unless a business is under threat of bankruptcy or closure, it is extremely difficult to achieve absolute reductions in compensation rates in a collective agreement. The phenomenon of "downward wage rigidity" was confirmed by Hydro One's witness under cross examination[20]. Insofar as the compensation levels of PWU represented employees are concerned, the unchallenged evidence is that obtaining a decrease is "impossible".

> **MR. STEPHENSON: … If the Board told you -- that is the company -- that it thought you needed to achieve a 10 percent reduction in compensation levels for PWU staff in your next collective agreement, what would you tell the Board as to the achievability of that outcome from your perspective?**
>
> **MR. GOLDIE: I think we would tell them that the chances of that are extremely low, that that would not happen within one collective agreement[21].**
>
> **MR. STEPHENSON: And let me just conclude on this. I asked you earlier about your view as to the achievability of a 10 percent across-the-board decrease in compensation, and you gave me an answer on that.**
>
> **Is your answer any different if I asked you about 5 percent or 3 percent or 1 percent, any amount of decrease?**
>
> **MR. GOLDIE: I think the chances of getting a decrease in compensation, a true decrease in compensation, is zero[22].**

45. The reasonableness of any costs, including compensation costs, must be gauged relative to what it is actually possible for the utility to achieve. Reasonableness and prudence can only be assessed by comparing what the utility proposes to do relative to other achievable outcomes. Clearly, the Board considers it desirable for Hydro One to achieve such decreases; that said, Hydro One cannot be punished for failing to achieve something it cannot do. The obligation of the Board is to allow costs where the utility is reasonable. It is not reasonable to insist that a utility achieve something that cannot be done, and then punish it for its failure to do so.

46. This situation is akin to circumstances where Hydro One has a sole supplier for a component. Unless Hydro One can find a substitute for that component, the vendor may be able to demand prices higher than the Board may consider to be warranted. However, unless and until the utility is able to obtain a substitute for the component,

[20] EB-2010-0002, OEB Transcript, Volume 5, September 27, 2010, Page 12, Lines 12-28; Page 13, Lines 1-2
[21] EB-2010-0002, OEB Transcript, Volume 5, September 27, 2010, Page 11, Lines 21-28
[22] EB-2010-0002, OEB Transcript, Volume 5, September 27, 2010, Page 23, Lines 22-28; Page 24, Lines 1-2

regardless of the utility's bargaining efforts, ultimately it will need to pay the best price that it can negotiate. The utility cannot be punished for failing to obtain the component at a lower price that cannot be achieved.

47. Significantly, neither the Board Staff, nor any intervenor has adduced evidence, or even suggested *the means by which Hydro One is supposed to achieve the demanded reductions in compensation*.

48. The reasonableness and prudence of Hydro One's compensation levels also has to be considered in light of the alternatives to a negotiated settlement. The evidence is that there are two alternatives: (1) binding arbitration; or (2) work stoppage followed by negotiated agreement or government mandated binding arbitration. The evidence is that a work stoppage is likely to result in service interruptions. The reasonableness and prudence of a negotiated settlement must be compared to the reasonableness and prudence of the potential service interruptions and the costs and inconvenience associated therewith. It is also necessary to consider the fact that there is no assurance that a work stoppage will achieve the compensation reductions sought.[23] It is equally likely that the opposite outcome will occur.

49. Further, the evidence was that binding arbitration is not likely to yield reduced compensation increases. To the contrary, binding arbitration is likely to yield escalations consistent with the market. The witness for Hydro One testified that based on the experience of both Hydro One and others, binding arbitration is not the preferred alternative: "generally speaking we [Hydro One] are not favorably disposed towards binding arbitration."[24] The witness also cited a study that confirms this view:

> **MR. GOLDIE: -- One last piece I would put forward is a recent study by the C.D. Howe Institute, who looked at particularly the public sector and found that, on average, arbitratored agreements resulted in a 1-1/2 percent higher overall cost to the company than did traditional bargaining with the strike lockout mechanism[25].**

50. The fact that compensation levels at other utilities may be at lower levels, while not irrelevant, is of limited value in determining the reasonableness and prudence of

[23] Obviously, the fact that a work stoppage occurs does not guarantee that the compensation cost ultimately arrived at are higher or lower than might have been achievable in the absence of a work stoppage.
[24] EB-2010-0002, OEB Transcript, Volume 5, September 27, 2010, Page 15, Lines 6-7
[25] EB-2010-0002, OEB Transcript, Volume 5, September 27, 2010, Page 16, Lines 14-19

Hydro One’s compensation levels. The pool of employees working at other utilities is not the "market" that Hydro One procures labour from. As a matter of both law and economics, the market that Hydro One procures from is the pool of employees represented by its bargaining agents. It is the prices for labour in that market which is relevant. Therefore, the test for the Board to apply is whether Hydro One has done all that is reasonable and prudent within the legal and economic constraints of that market. The PWU submits that all of the evidence demonstrates that Hydro One has done so. This has been demonstrated in a number of ways:

a. Hydro One’s unchallenged evidence is that the company has been successful in negotiating with its unions wage increases that are either similar or lower than the average for the Canadian utility industry. Average annual wage increases for the PWU and The Society represented employees for the period 1999-2009 has been 3.35% and 3%, respectively compared to the 3.2% average for the Canadian utility sector[26]. The evidence also shows that wage escalation rates at Hydro One are consistent with those prevailing in the broader labour market. For example, Mercer’s projection of the average 2010 salary increase for all employee groups in the utility sector is 3.5% compared to the PWU and the Society negotiated rates of 3% for 2010;

b. Further, it should be noted that Hydro One’s collective agreements with its construction trades are in fact agreements entered into on behalf of Hydro One (and others) by the Electrical Power Systems Construction Association (“EPSCA”), an employers’ organization representing various contractors in the electrical power sector (i.e. unregulated private sector companies). This organization is not controlled by Hydro One; it is but one member. These agreements are considered to be acceptable by the organization as a whole, not just Hydro One. The wage escalation in the EPSCA agreements is the same as contained in the current PWU

[26] EB-2010-0002, Exhibit C1, Tab 3, Schedule 2, Page 17

agreement (3%), and is evidence that Hydro One is maintaining wage escalations at competitive market levels; and

c. The evidence also demonstrates that Hydro One's efforts at the negotiation tables have resulted in significant savings as a result of concessions made by the unions over the years. These cost savings, listed in Exhibit C1, Tab 3, Schedule 2, page 5-7, Tables 1 and 2, are real. Hydro One's cost efficiency measures and staffing strategy, in particular the use of the PWU hiring hall, has resulted in ongoing cost savings.

51. In conclusion, the PWU submits that in assessing the reasonableness of Hydro One's compensation costs the Board must recognize that reasonableness and prudence are not absolute concepts that are determined without regard for environmental circumstances and alternatives. Implicit in any determination that a course of action lacked reasonableness and prudence assumes a conclusion, based upon evidence, that there is an alternative option available that is more reasonable and prudent than the proposed option. The PWU submits that Hydro One's course of action with respect to both headcount and compensation levels as discussed above is reasonable and prudent. It would be erroneous to assume that Hydro One's compensation costs could be reduced without any adverse consequences to Hydro One, its system and its customers.

b. IT IS NOT APPROPRIATE TO APPLY THE MERCER BENCHMARKING STUDY IN THE CURRENT APPLICATION

52. The PWU notes that parties that claim Hydro One's compensation costs are unreasonable and imprudent, having failed to produce any evidence to that effect, can be expected to ask the Board to disallow the proposed compensation costs based on the Mercer Benchmarking Study. Indeed the Board did this in the EB-2008-0272 (transmission) and EB-2009-0096 (distribution) decisions. Hydro One was asked in the current proceeding if it had updated the Mercer Benchmarking Study and Hydro One responded that it had not done so, first because the data are relatively recent and

second doing so would be costly[27]. In the PWU's view, updating data would not render the Mercer Benchmarking Study any less flawed than it is. The PWU's concern goes beyond whether the numbers are more recent or not. The PWU in both EB-2008-0272 and EB-2009-0096 argued that it would be problematic for the Board to rely on the Mercer Benchmarking Study. The PWU reiterates its submission for consideration in this proceeding. In the PWU's view it would be wrong to continue to apply the Mercer Benchmarking Study. In EB-2008-0272 the PWU argued that the Mercer Benchmarking Study provides questionable findings and that it was contrary to the Board's own instructions and objectives for the study in the first instance. In the PWU's view, it is inappropriate for the Board to continue to use selected partial results (i.e. compensation cost) of a flawed study that does not provide a robust and comprehensive basis for the Board's decision.

53. The Mercer Benchmarking Study was filed by Hydro One with its 2008-2009 transmission rate application in EB-2008-0272 as per the Board's direction in its decision in EB-2006-0501 on 2007/2008 transmission rates issued on August 16, 2007. The Board had directed Hydro One to engage an independent party to submit an independent, testable and repeatable report on compensation cost and **productivity** (emphasis added) for Hydro One and comparable companies as part of its next transmission rate application. The Board's direction had specifically stated that the Mercer Benchmarking Study should include empirical evidence that reveals the relative **productivity** (emphasis added) of Hydro One's workforce in comparison to other utilities.

54. The PWU viewed the Board's direction as confirmation that the Board should not to be interested only in what a company pays its workers, without also evaluating what the company gets in return (i.e. productivity).

55. Both the compensation and productivity aspects of the Mercer Benchmarking Study filed by Hydro One in EB-2008-0272 had limitations. Ratepayer groups and the Board in its decision questioned the credibility of the productivity findings of the study which, using four different metrics, put Hydro One's productivity in a generally

[27] EB-2010-0002, Exhibit I, Tab 1, Schedule 56

favourable position, at least as confirmed by most of the indicators, relative to other utilities included in the study. However, what the Board and the intervenors found to be more “convincing” was the conclusion of the Mercer Benchmarking Study that Hydro One’s compensation (base salary, bonus, etc) was above market median by 17%. In particular the compensation for the PWU represented employees was found to be the main contributor to the above-median figure.

56. It is clear that the Board, when confronted by the difficulty of accepting the technical analysis and conclusion, particularly of two of the four metrics, ignored the entire productivity consideration. In doing so, it ignored its stated objective of its directive to consider the combination of cost and productivity. Instead, the Board considered the partial findings that only related to comparisons of salary, pension and bonus levels.

57. The difficulty with comparisons of labour productivity has been known all along. The authors of the Mercer Benchmarking Study themselves indicated in the study that they encountered a number of data-related problems. They also pointed out that labour productivity analyses are not common in the industry because it is total cost that is of interest. From the outset, it was also clear that even the most complex analyses of productivity suffer from analytical shortcomings. This was recognized by some intervenors in EB-2008-0272, as the following excerpt from the Board’s decision in that case indicates:

> **VECC took the position that it would not be useful for the Board to direct Hydro One to pursue productivity comparisons. VECC is concerned that the data would not materially improve the results. VECC’s opinion is that the Board should direct Hydro One to develop benchmarking of its own productivity to be tracked over time.**[28]

58. However, the Board did not reject the Mercer Benchmarking Study in its entirety. Nor did the Board direct Hydro One to track its own productivity, and on that basis test the reasonableness of its compensation over time as suggested by VECC. Instead, the Board accepted the partial findings on compensation level, which have little meaning without the consideration of what Hydro One gets in return for that level of

[28] EB-2008-0272, Hydro One Transmission 2009/2010 Rate Application, Decision with Reasons, May 28, 2009, Page 27

compensation (i.e. productivity). In doing so, the Board abandoned the proper approach of measuring reasonableness, which is the consideration of compensation together with productivity.

59. The suggestion by some intervenors that the Board should simply apply the EB-2008-0272 and EB-2009-0096 decisions that were based on partial findings of the Mercer Benchmarking Study in the current proceeding and deny a corresponding amount from the compensation cost for each of the 2011 and 2012 test years gives further credibility to a flawed analysis that neglects the fundamental link between compensation levels and productivity which a benchmarking cost efficiency study must address. A “low cost” – “low productivity” company is not necessarily more cost efficient, and potentially even less so, than a “high cost” – “high productivity” company. Such a subjectively determined disallowance should not be used as the basis for another arbitrary disallowance in this or any subsequent rate proceeding. Any measurement and comparison of a company’s costs without due consideration to overall cost per unit of work is flawed, and therefore the Board should reject the request for the application of selected partial findings of the Mercer Benchmarking Study as a basis for its decision on compensation costs.

60. In addition, as noted above, the pool of employees of other utilities is not the "market" that Hydro One procures labour from. As a matter of both law and economics, the market that Hydro One procures from is the pool of employees represented by its bargaining agent. It is the prices for labour in that market which is relevant. Therefore, the test for the Board to apply is whether Hydro One has done all that is reasonable and prudent within the legal and economic constraints of that market.

61. As stated earlier, the PWU’s concern here is not that any disallowance would translate to a direct reduction of compensation levels that are determined in a process totally external to the Board’s jurisdiction; rather, the concern is that any Board disallowance of compensation costs based on the partial findings of the Mercer Benchmarking Study in case after case would force Hydro One to reallocate resources through the deferral of or cut in work programs, potentially costing the company and ratepayers even more in the longer term.

62. The Board has heard that Hydro One's greatest corporate risk with respect to its human resources continues to be an aging workforce. By December 31, 2009, approximately 1,000 Networks staff (transmission and distribution) were eligible for an undiscounted retirement. That number jumps to approximately 1,600 by December 31, 2012.[29] As Hydro One's witness testified, over the next five years 500 more Hydro One employees will have reached 35 years of service, which according to the witness is considered as a strong barometer for retirement[30]. Hydro One is becoming a bigger company with numerous new and additional responsibilities and as a result, not only does it need to replace departing staff, it must recruit new, incremental staff in significant numbers. And all this has to be done at a time when there is a North America and world-wide shortage of skilled electrical industry employees relative to demand.[31]

63. In conclusion, given the above argument, the PWU submits that the Board should approve Hydro One's compensation costs as filed.

C. OPERATIONS MAINTENANCE & ADMINISTRATION COSTS and CAPITAL EXPENDITURES and RATE BASE

I. SUSTAINING OM&A AND SUSTAINING CAPITAL

Issue 3.1: Are the proposed spending levels for, Sustaining, Development and Operations OM&A in 2011 and 2012 appropriate, including consideration of factors such as system reliability and asset condition?

Issue 4.2: Are the proposed 2011 and 2012 Sustaining and Development and Operations capital expenditures appropriate, including consideration of factors such as system reliability and asset condition?

Issue 4.6: Does Hydro One's Asset Condition Assessment information and Investment Planning Process adequately address the condition of the transmission system assets and support the O&MA and Capital expenditures for 2011/12?

[29] EB-2010-0002, Exhibit C1, Tab 3, Schedule 1, Page 1
[30] EB-2010-0002, OEB Transcript, Volume 5, September 27, 2010, Page 3, Lines 25-28
[31] EB-2010-0002, Exhibit I, Tab 7, Schedule 4, Attachment 1

64. Hydro One has proposed Sustaining OM&A spending of $233m for 2011 which represents a modest 3.8% increase over the projected spending in 2010 and a $243m spending for 2012 which represents a 4.3% increase over the 2011 requirements[32]. The PWU notes that these proposed amounts represent a reduction of $13m and $11m, respectively, from the amounts proposed in Hydro One's original plan[33]. The evidence in this respect indicates that the company is under significant cost pressures as a result of:

a. new Environment Canada regulations for PCBs;

b. new North American Electric Reliability Corporation ("NERC") regulatory requirements; and

c. aging assets that are increasing maintenance demands to maintain reliability and safety at current levels[34].

Hydro One also has proposed sustaining capital spending of $424m for 2011 which represents a 38% increase over the 2010 bridge year, and $443m for 2012[35]. The evidence indicates that the primary contributor to the significant increase in sustaining capital is Station re-investment needed to maintain reliability and performance. Hydro One explains that the reason for this is that many of these facilities have been identified as either in poor condition and at end of life ("EOL"), or obsolete with no spare parts available, or due to regulatory PCB management requirements.

a. NEW DEVELOPMENT WORK VS. ONGOING SUSTAINING INVESTMENT

65. The PWU is of the view that new development projects, particularly those arising from government policy initiatives, receive considerable recognition and support, whereas ongoing sustaining work on the existing transmission and distribution infrastructure is increasingly stressed. There are clear signs that sustaining investments, particularly Sustaining OM&A, are the first candidates for cuts and deferrals by utilities that are operating under resource constraints especially when they are required to undertake new and aggressive development capital programs or when

[32] EB-2010-0002, Exhibit C1, Tab 2, Schedule 3, Page 3, Table 1
[33] EB-2010-0002, Exhibit I, Tab 5, Schedule 3 (Question #5), Page 4
[34] EB-2010-0002, Exhibit C1, Tab 2, Schedule 3, Page 3
[35] EB-2010-0002, Exhibit D1, Tab 3, Schedule 2, Page 3, Table 1

proposed costs are disallowed. Unlike the case with government mandated new development projects, the delay, deferral or cancellation of sustaining work programs do not attract significant attention given the lag between work deferral or cancellation and resulting deterioration in service reliability. This provides the utility with short-term latitude because assets have some level of tolerance to inadequate maintenance.

66. Although this issue has been identified by Hydro One, the PWU submits that Hydro One has failed to act upon it. For example, sustainment issue was recognized by Hydro One in its 2009-2011 Business Plan filed in the last transmission rate case (EB-2008-0272) and raised in cross examination in the current proceeding. An excerpt from Hydro One's 2009-2011 Business Plan, which was confirmed by Hydro One's witness as the best information available at the time, is as follows:

> **As a result of transmission development requirements and limitations on resources, some sustainment work has been deferred, increasing risks to reliability and customer satisfaction in the short and medium term. Addressing this risk will be a key focus of the ten-year transmission plan.**[36]

67. There is no reason to believe that there has been a dramatic change in the state of "transmission development requirements" and "limitations on resources" since the above cited statement was included in the Business Plan. Similarly, there is no reason to believe that the "increasing risks to reliability and customer satisfaction in the short and medium term" have disappeared in a period of less than two years. In fact, the evidence in the current application suggests the opposite. As a result of the already deferred sustainment work and the ongoing competition for resources from Hydro One's development work, the reliability risk to the system has increased, and will continue to increase over the test years.

68. The PWU submits that the Board must be vigilant in policing the increasing reliability risks associated with deferral of sustaining investment whether they are the result of resource constraints posed by new development capital investments or decisions made by Hydro One in response to blanket disallowances by the Board.

[36] EB-2010-0002, Exhibit K4.1, OEB Transcript, Volume 4, September 24, 2010, Page 48, Lines 2-8

69. It is time for the Board to heed the deteriorating asset condition of the transmission infrastructure as a result of years of underinvestment and the build-up of assets that are increasingly older and at EOL. The Board can do this in two ways:

a. By looking at the condition of assets related to proposed investment plans project by project based on the evidence; and,

b. By looking at the 5, 20, 30 years outlook with respect to asset condition indicators such as demographics.

70. The first approach is the only way the Board can truly determine the reasonableness and prudence of any proposed investment programs in an individual rate application. It is the only way the Board can be informed of the increasingly worrying state of assets and their continued deterioration. The Board's requirement for the filing of distributor's Asset Management Plans and/or Studies in their rate applications indicates its appreciation of this fact.

71. These plans and studies provide the Board with an understanding of the need for the proposed maintenance and replacement work to prevent further deterioration to a point where reversing the trend becomes virtually impossible. It would be entirely inappropriate to defer or scale down asset replacement and maintenance work, for example, with respect to the earlier cited Stations re-investment plan, which is the primary factor for the significant increase in sustaining capital. The following evidence on asset performance of projects proposed under Stations re-investment plan, based on such metrics as number and frequency of outage occurrences and unavailability should be of significant concern to the Board:[37]

- **The overall results of the analysis indicate that Hydro One's breaker and power transformer equipment performance is in most cases worse than the national composite averages (from CEA).**
- **Transformer performance for frequency has been about 1.6 times worse than the CEA national average that includes other Canadian transmission utilities in the CEA survey.**

[37] EB-2010-0002, Exhibit D1, Tab 2, Schedule 1, Page 5 of 74 (Section 3.0:ASSET PERFORMANCE)

- **Transformer performance for unavailability has been about equal to CEA average for 230 kV transformers, but over 7 times worse than the average for 500 kV transformers.**

- **Breaker performance for frequency has been 1.4 times worse than the CEA national average that includes other Canadian transmission utilities in the CEA survey.**

- **The frequency of sustained outages for lines is slightly above the CEA average for 115 kV circuits and about 1.5 times for the CEA average for 230 kV lines.**

72. Similarly the evidence on the state of the major individual Stations Re-investment projects as indicated in the information in the table below based on evidence filed in this proceeding is no less discomforting:

<table>
<tr><td rowspan="2">S3: Greater Toronto Area (GTA) Metalclad Circuit Breaker Replacement</td><td>2011</td><td>2012</td></tr>
<tr><td>$10.5M</td><td>$10.7M</td></tr>
<tr><td colspan="3">…These metalclad breakers are aging, with thirty one (31) of the 100 Hydro One Transmission metalclad breaker arrangements in the GTA currently exceeding the manufacturer's recommended life expectancy of 40 years…</td></tr>
<tr><td rowspan="2">S4: Beck #1 Switching Station (SS): Air Blast Circuit Breaker (ABCB) Re-Investment</td><td>2011</td><td>2012</td></tr>
<tr><td>$25.5M</td><td>$20.6M</td></tr>
<tr><td colspan="3">…The work includes replacing six English Electric (EE) type ABCB's that are 56 and 52 years old. The original breaker manufacturer is no longer in business. Technical support and spare parts are no longer available. Also included is the replacement of four end of life 115 kV SF6 breakers, as well as replacement of 32 high voltage switches, two high voltage ground switches, and 12 high voltage instrument transformers.</td></tr>
<tr><td rowspan="2">S5: Abitibi Canyon Switching Station (SS) and Pinard TS - Replace EOL Components</td><td>2011</td><td>2012</td></tr>
<tr><td>$10.3M</td><td>$10.3M</td></tr>
<tr><td colspan="3">…The 115 kV breakers at Abitibi Canyon SS are 62 years old and have proven to be poor performers. Furthermore, the sole provider of spare parts for these breakers has indicated that they no longer support the breaker type. In addition to the breakers, the insulation systems, switches, protection and control facilities, foundations and ancillary systems have all reached end of life. An asset condition and risk assessment has determined that the five 115 kV OCB's at Abitibi Canyon SS have reached end of life and have been prioritized for replacement with new SF6 breakers.</td></tr>
<tr><td rowspan="2">S6, S7, S8, S9, S10 : Air Blast Circuit Breaker (ABCB) Re-Investments</td><td>2011</td><td>2012</td></tr>
<tr><td>$31.4M</td><td>$32.7M</td></tr>
<tr><td colspan="3">….The type of ABCB's planned for replacement is the worst performing breakers in the system. This family of breakers is not produced anymore and there is no support for spare parts. The breakers planned for replacement have been problematic and are at end of life based on performance and obsolescence. Replacements in the test years are planned at Nanticoke TS, Orangeville TS, Richview TS, Pickering A switchyard and Hanmer TS.</td></tr>
<tr><td rowspan="2">S11: Merivale GIS</td><td>2011</td><td>2012</td></tr>
<tr><td>$6.3M</td><td>$6.4M</td></tr>
<tr><td colspan="3">… Merivale TS contains some early vintage (31 years old) Gas Insulated Switch bus duct runs that are known for poor performers and are at end of life.</td></tr>
<tr><td rowspan="2">S12: NRC TS EOL Replacements</td><td>2011</td><td>2012</td></tr>
<tr><td></td><td>$ 4.0M</td></tr>
<tr><td colspan="3">…This investment is required to replace the non-standard 115 kV and 14 kV switchyard portions of National Research (N.R.C) TS and other station components to address several issues associated with older equipment that affect the operability and reliability of this station. Both transformers are supplied off the same bus with only one disconnect switch for isolation, therefore when a transformer protection operates, both transformers are taken out of service. .</td></tr>
</table>

73. The PWU submits that while the above rationale for the proposed work plans and costs represent selected specific projects, it should concern the Board that unless the necessary investments are made today, the performance of increasingly more assets will be in a similar deteriorated state over time.

74. The second approach for the Board is to assess the outlook for Hydro One's asset demographics under the assumption the company's maintenance and replacement work is approved and carried out as planned.

75. Hydro One's transmission system already includes substantial populations of assets with service lives in excess of 40 or 50 years, which is the typical EOL period for many assets. Hydro One's evidence on asset demographics outlook as well as Hydro One's response to a PWU interrogatory reveal that even if Hydro One carries out its planned replacement programs, the percentage of assets getting older and presumably reaching EOL continues to increase.

76. The following chart, compiled from Hydro One's evidence and the response to a PWU interrogatory[38], summarizes the comparison of current asset demographics for the oldest group of assets with the expected demographics 5 years from now assuming Hydro One's replacement plan is carried out, for major asset categories. For trend analysis purpose, the chart also includes age demographics information from the comprehensive Asset Condition Assessment ("ACA") studies carried out by Hydro One and its consultants, Hatch Acres International in August 2006 which was filed in Hydro One's 2007/2008 transmission rates application in September 2006(EB-2005-0501)[39]:

[38] EB-2010-0002, Exhibit I, Tab 5, Schedule 8, Question #2

[39] EB-2005-0501, Hydro One 2007/2008 Transmission Rates Application, Exhibit D1, Tab 2, Schedule 1, Appendix A

Asset group	Asset Priority category	Age Group (Years)	Share (%)			
			As per the[40] August 2006 (ACA Study)	Current[41]	5 Years[42] from Now	Outcome
Wood pole structure	P1	>50	15.8%	17%	16%	Worse than 2006
Underground cable	P1	>50	6.3%	17.8%	24.9%	worse
Overhead conductor	P1	41-50	16.2%	10.95%	15%	worse
		>50	42.4%	52.32%	56%	worse
Protection	P1	41-50	3.0%	12.9%	20.3%	worse
		>50	1.0%	1.2%	0.8%	Slight improvement
Oil circuit breakers	P1	41-50	14.2%	23.59%	33.07%	worse
		>50	6.0%	7.80%	15.60%	worse
SF6 Circuit breakers	P2	>50	0.0%	0.0%	0.07%	-
Air blast circuit breakers	P1	41-50	13.70%	38.57%	73.97%	worse
		>50	4.70%	4.93%	19.18 %	worse
Metalclad switchgear	P2	41-50	1.5%	5.84%	8.50%	worse
		>50	0.3%	0.00%	0.00%	-
Power Transformers	P1	41-50	17.4%	19.9%	22.48%	worse
		>50	16.2%	23.3%	26.93%	worse
Capacitor Banks	P2	>50	0.0%	0.0%	0.0%	-

77. The proportion of assets that are over 41 years, and particularly those that are over 50 years old is expected to increase by the end of 2015 for most of the identified asset categories which are comprised mostly of Priority 1 assets. Priority 1 assets are assets that are of high value and high risk to the business and capture about 80% of the

[40] Ibid.
[41] EB-2010-0002, Exhibit C1, Tab 2, Schedule 2, Appendix A
[42] EB-2010-0002, Exhibit I, Tab 5, Schedule 8, Question #2

total sustainment program expenditures. Clearly, the current rate of replacement of assets is not coping with the increasing pool of aging assets approaching EOL.

78. While it is important to increase asset utilization as appropriate with due consideration for condition and age of the equipment, there is no denying that the risk of failure of equipment increases significantly with the increase in the pool of aging assets reaching EOL.

79. Similarly, the PWU draws the Board's attention to Exhibit K10.2[43] which includes Hydro One's asset demographics 10, 20, 30 years from now that attest to the fact that significant sustainment capital and OM&A investments will be required to address what Hydro One refers to as "increasing bow-wave of aging assets." Highlights of Exhibit K10.2 reveal problematic trends in asset demographics in the next 10, 20, 30 years. For demonstration purpose, the following 10-year demographics forecasts, which by far projects a younger demographics compared to the 20 or 30 years outlook, indicate that without a significant increase in sustainment work now and over the next several years, not only will Hydro One never be able to complete the essential work in the remaining available outlook timeframes, but the system's ability to provide ongoing service reliability will also be jeopardized:

a. Approximately 30% of Hydro One's assets will reach their expected EOL within the next 10 years. This will rise to about 50% in 20 years.

b. 390 (29%) transformers will be above the average age for expected EOL of 60 years with approximately 67 (5%) of these exceeding the expected total probable life of 76 years.

c. The number of oil circuit breakers that will exceed the average age for expected EOL of 60 years will more than double to 515 (25%) with approximately 16 (1%) units reaching their expected total probable life of about 78 years.

d. The number of air-blast circuit breakers that will exceed the average age for expected EOL of 40 years will triple to 210 (87.9%) with approximately

[43] EB-2010-0002, Exhibit K10.2, (Chapter 10, Transmission Sustainment –work scope details)

32 (13.4%) units reaching their expected total probable life of about 53 years.

e. The average age of Hydro One's GIS circuit breakers is presently 20 years. Over the next ten years, 40 (44.4%) GIS circuit breakers will exceed the average age for expected EOL of 40 years.

f. 174 (21.5%) metalclad circuit breakers will exceed the average age for EOL of 40 years, of which 18 (2.2%) will exceed the total expected probable life of 53 years.

g. Presently, 3,049 (31%) of all protection systems are over the average expected life of 30 years. Over the next ten years, this will be more than double to 6,250 (63%).

h. Presently, 171 (40%) of the Control (RTUs) exceed the average expected life of about 13 years. The expected total probable life of RTUs is about 20 years, except for PC based units which is about 10 years. All PC based RTUs (14 units) are already over 10 years old. Over the next ten years, 265 (62%) of RTUs will reach their total expected probable life of 20 years.

i. About 5340 (18.6%) circuit km of conductor will be above the average service life of 90 years; 10,047 (21.7%) steel structures will be above the average service life of 80 years; and about 27,704 (70.5%) wood poles will be above the average service life of 45 years.

j. Approximately 56 (21.0%) circuit km of underground cables will be above the average service life of 60 years.[44]

80. By its nature, sustainment work represents the current cost of maintaining the current system for the benefit of future users. Today, customers are experiencing the benefits of a relatively robust system paid for by the investments made by prior customers. However, in the near term, customers always benefit from inadequate sustainment spending in the current period because they enjoy the benefit of relatively

[44] Notably, these are not outcomes forecast to occur if no further work is done to the assets. Rather, these are the outcomes that are forecast to occur if the currently planned level of work is actually performed.

lower rates without experiencing the inevitable negative impact (in terms of increased costs and decreased reliability) which is imposed on future customers. The result is intergenerational inequity, as demonstrated by the above demographic forecast.

81. In the context of the aging infrastructure cited in paragraph 69, neither the deferral of sustaining investments nor a reactive strategy of fixing problems when they happen is a sustainable approach. Doing so in order to minimize short-term rate impacts will not only jeopardize the reliability and security of transmission service but also encourage further deterioration of assets that can only be reversed at a cost that would be unfair to and onerous for future rate payers. It should be recognized that relative to the cost of planned, ongoing replacement and maintenance work, the cost of correcting a system that is allowed to deteriorate is much higher.

82. The PWU, as noted earlier in this submission has grave reservations as to the adequacy of the proposed levels of sustainment spending. The PWU submits that the proposed levels of sustainment are not adequate to sustain the current asset age demographic of Hydro One's aging system. In the circumstances, the PWU submits the following:

a. Any decision by the Board to disallow the proposed Sustainment budget will serve to exacerbate the already dire state of assets and, therefore, the PWU recommends that the Board approve Hydro One's proposed Sustaining OM&A and Capital spending on the basis of the work program requirements identified in the evidence; and

b. Hydro One should be required to present a detailed plan, as a part of its next transmission rates proceeding, setting out a sustaining work program which ensures that it maintains or improves upon the demographic profile of its major asset classes over the term of the implementation of the plan.

D. GREEN ENERGY PLAN

83. The PWU notes that the evidence on Hydro One's Green Energy Plan has evolved since the filing of the application. The reason for this is the deferral or

suspension of most major projects included in the plan following a letter[45] dated May 7, 2010 from the Minister of Energy ("Minister") to the OPA requesting a transmission expansion plan that would update an instruction from the previous Minister to Hydro One, dated September 21, 2009, that asked Hydro One to "immediately" commence work on specific Green Energy Plan projects. The OPA advice to the Minister, although expected by June of 2010, has not yet been finalized exposing Hydro One's Green Energy Plan to uncertainties. The PWU assumes the OPA advice if and when it happens, may require Hydro One to modify its Green Energy Plan and therefore the projects identified in Hydro One's Green Energy plan may or may not go ahead and may or may not affect the costs forecasted in the application.

84. From Hydro One's final argument heard on October 7, 2010[46], the PWU understands that the Company is asking the Board:

a. To conceptually approve the Green Energy Plan;

b. To approve certain projects included in the Schedule of the Minister's September 21, 2009 letter, mainly the Leaside, Hearn and Manby TS upgrades. The first two will have a revenue requirement impact of $900,000 in 2011 and $10.3 million in 2012;

c. To approve the recovery with interest of $1.9 million actually spent in 2009, and placed in a Board-approved variance account; and

d. To approve the placement in a variance account of funds spent in 2010 on projects originally designated by the Minister before work was suspended following the May 7th, 2010 letter. These sums will be placed in a variance account, and the company will ask the Board to clear the account and allow recovery of those sums at its next rate case.

85. The PWU has no comment on the appropriate mechanism or terminology that the Board should use to address Hydro One's request for a "conceptual" approval of the Green Energy Plan. The only comment the PWU makes on this issue is that whatever mechanism is pursued, the decision should not prejudice the approval in the future of

[45] EB-2010-0002, Exhibit I, Tab 1, Schedule 98, Attachment 1
[46] EB-2010-0002, OEB Transcript, Volume 11, October 7, 2010

Green Energy projects requested by Hydro One, be it filed as a section 92 application or not, and the approval of Hydro One's next Green Energy Plan.

86. The PWU is of the view that there should be no issue with respect to the recovery of cost spent in 2009 and the placement in a variance account of spending for 2010 on projects that were designated to be undertaken by the Minister's September 21, 2009 letter.

87. The PWU believes there is strong evidence and support for approval of projects to upgrade short circuit capability at three Toronto area stations - Hearn, Leaside and Manby - required to facilitate distributed generation capability. The Board should reject any request that seeks the deferral of these projects on the basis that there may yet be a few years of useful life left in the facilities.

E. ACCELERATED COST RECOVERY FOR THE BRUCE-MILTON PROJECT

88. As mentioned in section A of this submission, the PWU considers Hydro One's proposal for accelerated CWIP recovery for the Bruce-Milton project beneficial from the perspective of consumers and Hydro One. Hydro One's evidence indicates that the proposed approach would reduce the total cost of the project to $695 million from the alternative capitalization of AFUDC that would cost rate payers $763 million. Potential delays in the project are possibilities and the proposed approach is one way of mitigating potential cost escalations arising from delays.

89. The PWU recognizes that Hydro One's evidence on the discounted cash flow analysis of the proposed approach and the alternative has been challenged on the ground of assumptions such as what the appropriate discount rate should be.[47] While it is important that the Board consider all the relevant factors in consideration of Hydro One's request, the PWU submits one of them should be whether the proposed

[47] The PWU notes that the issue of the comparison between the utility's cost of capital relative to the customers' cost of capital is a generic one. It is intrinsic in the application of the CWIP in rate base in every case. It is submitted that, if the Board was of the view that the relative cost of capital issue would preclude CWIP in rate base, it never would have proposed this treatment in its Report. Essentially, this argument is simply an argument which suggests that the Board's report is wrong, and should never be implemented. That is an argument that should have been made at the time the Board was formulating the policy, not when it is being implemented.

approach is more or less beneficial to consumers compared to waiting to recover costs when the full project goes in-service, given the forecast for rising transmission rates for the foreseeable years. The PWU is of the view that given the recent developments such as the deferral of projects and Hydro One's review of its original proposal that resulted in a significantly reduced revenue requirement; this may be a better time to start paying for a portion of the project's cost and thus minimize rate impact when the project comes into service.

90. Nevertheless, the PWU notes that Hydro One's witness under cross examination (see Section A) indicated that if the Board should disagree with Hydro One's view that the proposed approach would benefit consumers compared to the alternative, then Hydro One would be content to apply the alternative approach of capitalization of AFUDC. The PWU submits that in determining this issue, the Board must weigh the pros and cons of the alternatives in terms of not only today's customers, but also future customers.

F. CONCLUSION

91. For all the above reasons, and considerations that call for the Board's appropriate judgement with respect to the individual components of the application, the PWU respectfully submits that Hydro One's proposed 2011 and 2012 revenue requirement is reasonable and prudent, and therefore merits Board approval as proposed.

ALL OF WHICH IS RESPECTFULLY SUBMITTED