

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

September 6, 2019

**Re: EB-2019-0077 Leave to Construct for the South Nepean Project
Pollution Probe Submission**

Dear Ms. Walli:

Please find enclosed Pollution Probe's Submission for the above noted proceeding.

Respectfully submitted on behalf of Pollution Probe.

Original signed by

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ONTARIO ENERGY BOARD

Hydro One Networks Inc. and Hydro Ottawa Ltd

**Application for leave to rebuild and extend an existing transmission line and to
build a municipal transformer station.**

POLLUTION PROBE SUBMISSION

September 6, 2019

Submitted by: Michael Brophy
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Background

Hydro One Networks Inc. and Hydro Ottawa Ltd (Hydro One and Hydro Ottawa, jointly referred to as “the utilities”) applied to the Ontario Energy Board (“OEB”) under section 92 of the Ontario Energy Board Act, 1998 (Act) for approval to:

- rebuild a 10.9 km section of the existing 115 kV single circuit line as a double circuit 230 kV line from a point at West Hunt Club Road to Cambrian Road JCT
- build a new 1.3 km section of double circuit 230kV line from the Cambrian Road JCT to a new proposed Municipal Transformer Station (South Nepean MTS)
- construct the South Nepean MTS

The utilities indicate that the facilities are required to increase supply capacity to accommodate Hydro Ottawa’s customer load growth in the South Nepean area of Ottawa.

The Ontario Energy Board (“OEB”) notice indicated that the Leave to Construct hearing would focus on the following three issues in alignment with the OEB Act:

- The interests of consumers with respect to prices and the reliability and quality of electricity service;
- The promotion of the use of renewable energy sources in a manner consistent with the policies of the Government of Ontario; and
- The form of agreement that Hydro One Networks Inc. and Hydro Ottawa Ltd. offer to landowners affected by the route or location of the transmission line and station facilities.

Pollution Probe was granted Intervenor status with a predominant focus on the first two issues noted above per its letter of intervention and the scope outlined by the OEB. The utilities provided supplementary information based on the interrogatories from Board Staff and Pollution Probe.

This document is the written submission from Pollution Probe in relation to this proceeding.

Introduction

This submission has been developed to support a better understanding of key issues and to inform the OEB's decision related to this application. Key references are provided while avoiding repetition of similar themes that exist throughout the evidence. Pollution Probe believes that this is an efficient approach while still providing a strong evidentiary basis for its submission. Pollution Probe promotes an open and collaborative approach to ensure that facilities applications leverage best available information, consider cost-effective and consumer (i.e. Ratepayer) oriented alternatives that align with the policies of the Government of Ontario.

Pollution Probe represents the direct interests of consumers and provides policy understanding directly related to the scope of this proceeding. This includes a focus on project costs, need and reliability from a consumer, policy and community perspective. This project represents almost \$60 million of costs to consumers (\$58.8 million of project costs and annual O&M costs of approximately \$26,000 per year) that will be recovered in rates over decades and it is important to be able to assess whether this project is a prudent approach to meet consumer needs in a cost-effective manner and supports policy objectives. Similarly, it is important to ensure that this project systematically aligns with both Regional and Community Energy Planning to enable renewable energy related solutions and avoid infrastructure conflict resulting in unnecessary costs or stranded assets. Developing infrastructure without a deep integration with Regional and Community Energy Planning results in a sub-optimal system that does not support renewable energy policy or a cost-effective and reliable system for Ratepayers.

The sections below identify several evidentiary issues related to project costs, need and reliability from a Ratepayer, policy and community perspective. Recommendations are also included to assist in remediating these gaps to ensure better Ratepayer value and alignment to policies promoting renewable energy.

Price, Reliability and Quality of Service

The utilities indicate that *"The current regional planning cycle for the Greater Ottawa region was initiated in 2018 and is ongoing. A technical working group consisting of Hydro Ottawa, Hydro One and the Independent Electricity System Operator ("IESO") is currently developing an Integrated Regional Resource Plan ("IRRP") for the Ottawa sub-region"* (reference: Response to OEB Staff IR #1). This is consistent with interrogatory references provided in Pollution Probe IR #1 which indicates that an updated IRRP has been underway for several years and is forecasted to be completed in 2019. In

response to interrogatories, the utilities provided additional information and an updated forecast developed since the 2015 IRRP. Significant work has been conducted by the utilities, IESO and other stakeholders to develop a new IRRP and those elements, plus additional information from the City of Ottawa community energy planning initiative (Energy Evolution) provide a more prudent basis to inform the Board on the cost, need and timing related to the proposed project. Although these information sources are not integrated into a single model, the pieces provide valuable insight to assess the proposed project.

Pollution Probe notes that there is a significant difference between the 2015 IRRP Reference Forecast and the 2019 Reference Forecast which results in a demand forecast increase of approximately 10 percent by 2034. This change in demand forecast reinforces the need to use more timely information and illustrates that additional capacity (beyond the 2015 IRRP filed with the project) has been built into the project. Pollution Probe also notes a significant increase (over 200 MW) from the end of the Historical Demand (data ending in 2018) and the Reference Forecast for 2019 (reference: Response to OEB Staff IR #1). This is a large increase in the demand profile and although the utilities have been able to meet the current 2019 demand, they indicate that this approach is not a permanent solution. It is also not possible to determine based on the evidence provided whether the upcoming IESO CDM programs and demand auctions will make up for the 200 MW CDM impact and what impact that could have on the project. If there was flexibility to delay the project (in part or whole), these options could have been assessed more thoroughly by the utilities, IESO and the City of Ottawa. The utilities will be in the best position to identify system risks associated with that approach.

Pollution Probe recognizes that it is difficult to accurately forecast supply and demand over several decades and that a conservative engineering approach is traditionally used to plan infrastructure projects. However, a more thorough, strategic and comprehensive assessment has the ability to reduce consumer costs over the short and long term. Leveraging more recent IRRP information is one input to ensure that decisions are made based on best available information and this could also be supplemented by a more current letter confirming IESO's understanding that the proposed project is the most cost-effective approach to meet the system's needs. Consistent with Board Staff IR #3, this approach is preferred to an interpretation that the current project is consistent with the dated 2016 IESO letter. Closer coordination with the City of Ottawa would also ensure that the utilities forecast aligns with increasing climate impacts underlying the City of Ottawa plan (reference: Response to OEB Staff IR #1, extreme weather impacts).

The utilities response to Board Staff IR #2 indicates that there are longer term solutions available and that those options were not assessed at this time. Providing a comparison of those options would have helped ensure that the proposed investment is better than longer-term supply options and congruent with the updated IRRP information and the 2030/2050 goals of the City's community energy plan. It is recommended that the utilities undertake to complete these scenarios and file them with the OEB as soon as possible to inform a more robust assessment of options for the future.

Policy Alignment

The Government of Ontario policies include promoting cost-effective renewable energy and complimentary solutions (e.g. distributed energy resources or DER). Ontario also has requirements for Broader Public Sector organizations (including the City of Ottawa) and large building owners to assess their annual energy use with the intent to reduce energy costs through CDM, DER (including renewable) and other options that impact the underlying need for the project outlined in this proceeding. Energy use from these sectors have a material impact on demand forecasted by the utilities and it is unclear whether the forecasted impact of these policies was included in the demand model.

In the response to Pollution Probe IR #3, the utilities indicate their support for aligned utility, regional (i.e. IRRP) and community planning. They highlight that surplus dividends from Ottawa Hydro support the City of Ottawa community energy plan. Pollution Probe suggests that the core function of the regulated utility is also impacted by regional/community planning and is inherently linked. That direct linkage drives a strong requirement to consider consumer (i.e. Ratepayer) and community energy planning as an integrated component of effective utility planning and delivery in order to support renewable policy. As outlined in this submission, there are gaps and opportunities for improvement that can be made to support more aligned and cost-effective planning for the facilities outlined in this proceeding.

Pollution Probe recognizes the inherent challenges to effectively plan while aligning IRRP and traditional supply planning practices with updated policy objectives, local community energy planning, CDM activities and consumer demands. Pollution Probe also acknowledges the utilities attempt to update their approach to balance these requirements (reference: Response to PP IR #3). It is critical that these elements closely integrate in order to ensure that investments are cost-effective and meet the interests of consumers over the life of the assets.

The utilities confirmed that there would be approximately \$26,000 of annual incremental O&M cost related to the facilities requested in this application. Pollution Probe

understands that these costs were not included for approval in this application and will be included in the Ottawa Hydro 2021-2025 distribution rates proceeding. For purposes of comparing infrastructure alternatives it is important to include all lifecycle costs to ensure an effective comparison. This becomes even more important with policy alignment to increase DER.

Recommendations

It appears that there is a future need for the infrastructure in part or whole and that the application may overstate the capital investment needed to meet the needs of the community given other potential alternatives. Given the uncertainty, Pollution Probe believes that it is likely that approval will be granted and that if the OEB approves the Leave to Construct it could include a condition that the utilities provide an updated forecast annually based on best available information and provide a variance explanation against the forecast provided by the utilities in this application. This will provide reassurance that the forecast methodology is sound and would provide an opportunity to make adjustments to the model if significant variances occurs.

The utilities have also identified a very small contribution (approximately 7 MWs) for existing renewable facilities (reference: Response to PP IR #3) and appear to not include any additional DER supply capacity in the model over the life of the assets. This is highly unlikely given the policy direction supporting increased DER in Ontario and the goals of the City of Ottawa's Energy Evolution initiative. The utilities indicate that they are significantly involved and supportive of the City of Ottawa Energy Evolution initiative which includes significant support to decrease energy use and increase DER (including renewables) in the community. All of these elements will impact the demand outlined in the application and provides a local opportunity to defer or avoid traditional infrastructure costs in a manner that aligns more closely with current and emerging policy and consumer benefits. Pollution Probe recommends that if the OEB approves this application, it also consider including a condition of approval that the utilities summarize specific actions (e.g. funding support, barrier removal, projects development), support (e.g. CDM, technical or regulatory) and outcomes (i.e. reduced demand, increased DER capacity, and additional benefits aligned with the Energy Evolution initiative) in their next rate proceeding. An integrated approach is a best practice for utility planning, removing planning silos that result in sub-optimal infrastructure solutions. This also aligns more closely with Government of Ontario policy (including promoting integrated community energy planning, increased DER and reduced energy costs for consumers).

The utilities indicate that *“In March 2019, the Minister of Energy, Northern Development and Mines directed the IESO to immediately discontinue the 2015-2020 Conservation First Framework and implement a new Interim Framework with a centrally delivered program offering until December 31, 2020. As a result, the long-term province-wide conservation target of 30 TWh by 2032 described in the 2015 IRRP is no longer in effect. Compared to the 2015 Ottawa IRRP, this change affects 1 the energy efficiency programs portion of the conservation savings forecast beyond 2020. The codes and standards and time-of-use pricing portions of the forecast conservation savings are not affected. The result is an increase in the Ottawa sub-region planning forecast of nearly 200 MW by the end of 2032 (the end of the 2015 forecast period)”* (reference: Response to OEB Staff IR #1, part c). In alignment with the CDM changes outlined above, IESO continues to offer CDM across the province and has announced that it will include demand response auctions that have the potential to reduce demand in priority areas such as South Nepean and the City of Ottawa. The 2016 IESO letter indicates that CDM could fully offset the additional capacity if spending was increased, but that the short planning horizon impacts this as an option. Pollution Probe is not aware of any restriction for the utilities to leverage the IESO demand auctions or request additional CDM funds from the OEB that would provide an attractive alternative to traditional incremental infrastructure. Applying some or all of the \$85.8 million toward CDM demand reduction could have provided a viable option that appears to not have been fully explored. It is common to fall back on the traditional set of engineering supply solutions and that bias is one of the largest barriers to leveraging more innovative cost-effective and customer focused solutions including DER (i.e. renewables and complimentary supply/storage options). It is recommended that the utilities collaborate more closely with IESO, the City of Ottawa, customers and interested stakeholders to assess options to use the upcoming demand auction, CDM, DER and other innovative solutions that align with the City of Ottawa community energy plan.

The utilities indicate (reference: Board Staff IR #1) that “The current regional planning cycle for the Greater Ottawa region was initiated in 2018 and is ongoing. A technical working group consisting of Hydro Ottawa, Hydro One and the Independent Electricity System Operator (“IESO”) is currently developing an Integrated Regional Resource Plan (“IRRP”) for the Ottawa sub-region”. Pollution Probe notes that the City of Ottawa, customers and other relevant stakeholders are not highlighted as a critical part of this process and this will most likely lead to an IRRP that does not effectively integrate with consumer and community needs, provincial policy or integrate well with the City of Ottawa community energy plan. When planning exercises are conducted in silos, they typically lead to sub-optimal outcomes for the customers and communities they serve. It is recommended that the utilities enhance their current and future planning cycle to include meaningful alignment with the local community energy plan, including energy

demand assumptions, customer needs (e.g. increased CDM to reduce energy bills), climate model inputs, DER (e.g. renewable) goals, etc.

It may be difficult for the utilities to plan effectively with an evolving policy environment that includes an enhanced focus on cost-effective customer solutions, increased DER and changes to the CDM delivery model. That pace of change is likely to increase in order to meet the Ontario's policy objectives. There are several proceeding under way that deal with issues such as DER and customer value. In addition to the centrally coordinated CDM programs and demand auctions held by IESO, it is also important that the utilities understand that they can leverage cost-effective CDM opportunities to defer or avoid costly infrastructure expenditures. It could be helpful for the OEB to reiterate that option for consideration, particularly when it delivers lower costs options that align more closely with the community energy plan and customer needs.

Below is a summary of Pollution Probe's recommendations to the OEB.

1. It is recommended that the utilities complete the planning and infrastructure scenarios identified in the response to Board Staff IR #2 and file them with the OEB with (or prior to) to their next rates application to inform a more robust assessment of options for the future.
2. Include a condition of approval that requires the utilities to provide an updated forecast annually and provide a variance explanation against the forecast provided by the utilities in this application.
3. Include a condition of approval that the utilities summarize specific actions (e.g. funding support, barrier removal, projects development), support (e.g. CDM, technical or regulatory) and outcomes (i.e. reduced demand, increased DER capacity, and additional benefits aligned with the Energy Evolution initiative) in their next rate proceeding.
4. It is recommended that the utilities collaborate more closely with IESO, the City of Ottawa, customers and interested stakeholders to assess options to use the upcoming demand auction, CDM, DER and other innovative solutions that align with the City of Ottawa community energy plan.
5. It is recommended that the utilities enhance their current and future planning cycle to include more meaningful integration with the local community energy plan, including energy demand assumptions, consumer needs, climate model inputs, DER (e.g. renewable) goals and related factors.