

PUBLIC INTEREST ADVOCACY CENTRE LE CENTRE POUR LA DEFENSE DE L'INTERET PUBLIC

ONE Nicholas Street, Suite 1204, Ottawa, Ontario, Canada K1N 7B7 Tel: (613) 562-4002. Fax: (613) 562-0007. e-mail: piac@piac.ca. http://www.piac.ca

Michael Janigan Counsel for VECC (613) 562-4002 (x 26)

December 13, 2013

VIA MAIL and E-MAIL

Ms. Kirsten Walli **Board Secretary Ontario Energy Board** P.O. Box 2319 2300 Yonge St. Toronto, ON M4P 1E4

Dear Ms. Walli:

Re: **Vulnerable Energy Consumers Coalition (VECC)**

Wellington North Power Inc. EB-2013-0178

Final Submissions of VECC

Please find enclosed the submissions of VECC in the above-noted proceeding. We have also directed a copy of the same to the Applicant.

Thank you.

Yours truly,

Michael Janigan Counsel for VECC

Encl.

Wellington North Power Inc. CC:

ONTARIO ENERGY BOARD

IN THE MATTER OF

the Ontario Energy Board Act, 1998, S.O. 1998, c. 15 (Schedule B);

AND IN THE MATTER OF an Application by Wellington North Power Inc. ("Wellington North") for an order or orders approving or fixing just and reasonable distribution rates effective May 1, 2014 under the Board's Guidelines for 4th Generation Incentive Regulation Mechanism.

Submissions of Vulnerable Energy Consumers Coalition (VECC)

VECC will address Wellington North's proposed Incremental Capital Module (ICM) in its submissions.

Incremental Capital Module

- In its original application, Wellington North requested the approval of incremental rate
 riders to recover the incremental cost to replace an existing substation (MS2 in Mount
 Forest) with a new 44kV 5 MVA substation at a capital cost of \$1,600,000. Wellington
 North requested an incremental capital amount of \$1,360,000 to account for \$240,000 that
 relates to a provision for substation major asset component replacement that was included
 in its original 2014 CapEx plan.
- Wellington Hydro calculates the 2014 incremental revenue requirement impact of its ICM at \$105,665.¹ Wellington North requests approval to recovery this revenue requirement though Option A, which allows for the collection of a combined fixed service charge and variable volumetric charge.
- Wellington Hydro retained the services of Costello Associates (Costello) to undertake an
 asset condition assessment study of its six distribution substations. In its June 2013
 Report, Costello identified deficiencies that require attention and specifically identified two
 substations (MS2 and MS4) as candidates for replacement based on concerns regarding
 age and condition.
- At the MS2 substation, the station age and transformer age is 41 years. At the MS4 substation, the station is 21 years old and the transformer is 49 years old. Based on the Kinetrics Study, the new typical useful life for a transformer is 45 years.² Both stations have shown safety and reliability concerns, equipment deficiencies, issues with cables, wiring code violations, bonding and grounding issues.

-

¹ 2014 Incremental Capital Workform_20130926

² VECC IR#1

- Costello concluded that the general age and condition of the stations warrant the
 development of a long term replacement/rehabilitation program.³ Costello assessed
 each substation independently and did not recommend replacement of one substation
 over another.⁴ Costello recommended that ongoing periodic assessments be performed
 to determine the priority of replacement projects.
- Based on its experience and knowledge of its distribution infrastructure, Wellington Hydro is requesting replacement of the MS2 substation as a priority in 2014, ahead of MS4 which it has marked for replacement in 2016.⁵
- In response to VECC interrogatory #3, Wellington Hydro provided additional details to justify replacing MS2 before MS4 in part MS2 is more heavily utilized than MS4. MS2 supplies four 4,160V circuits with capacity to supply 5MVA, whereas MS4 station currently supplies one 4,1460V circuit with a capacity to supply 2 MW. Wellington North indicates the impact of a major equipment failure at MS2 is more significant than at MS4 based on the current configuration: four feeders at MS2 to be backed up by MS1, MS3 and MS4 affecting the entire distribution system in Mount Forest, compared to one feeder at MS4 to be backed up by MS2. In addition, MS2 is critical to the majority of the industrial load in the north part of Mount Forest. MS2 is a large parcel of land allowing for more design flexibility. MS4 has land constraints and the distribution plant in and around MS4 requires significant upgrade making re-build of this asset with an in-service date of 2014 difficult.⁶
- Wellington North indicates it is planning to replace the MS4 substation and may include it as part of its next Cost of Service application for 2016 rates or in an IRM application depending on the learning and experience gained from replacing MS2.⁷
- Costello classified MS4 as "red" due to the age of the transformer, the improperly installed neutral connection and the diagnostic test results. Costello indicates maintenance and safety issues may degrade a condition classification and once corrective action is taken, the condition classification may improve. VECC acknowledges that the transformer at MS4 is past end of life but notes that Wellington North has resolved the neutral connection problem at MS4 and returned the substation to service. VECC submits Wellington North's proposal to replace MS4 beyond 2014 (in 2016) is reasonable given the capital planning and distribution capital construction needed and difficulty in undertaking the work in 2014.
- With respect to Wellington North's ICM request for the replacement of MS2, VECC makes the following comments.
- For incremental capital expenditures to be considered for recovery prior to rebasing, the Board's Guidelines indicate the amounts must satisfy the following

⁵ Application, Page 58

3

³ Application, Page 71

⁴ VECC IR#3(a)

⁶ Board Staff Interrogatory #3

⁷ Application, Page 59

eligibility criteria: need, prudence and materiality.8

- <u>Need</u>: Amounts should be directly related to the claimed driver, which must be clearly non-discretional. The amounts must be clearly outside the base upon which rates were derived.
- Wellington North has identified MS2 as a high priority for replacement based on concerns identified in the substation condition assessment study completed by Costello in June 2013. Costello assessed MS2 substation as having potentially serious safety concerns as well as equipment deficiencies and future reliability is a concern. For MS2, Wellington North has assigned a high risk to public safety based on the fence and improperly installed sub-station bonding and grounding, and a medium risk to worker safety due to improperly installed sub-station bonding and grounding.⁹
- On an annual basis Wellington North has performed scheduled maintenance of its six substations including MS2.¹⁰ Wellington Hydro noted that in 2012 all six substations underwent preventive maintenance, which interestingly enough did not highlight any of the problems identified by Costello.¹¹
- In response to VECC interrogatory #1(b), Wellington North listed the types of deficiencies where it has the capability (knowledge, training and expertise) to address the issues compared to those where it does not and 3rd party assistance is required. Wellington North indicates it has taken immediate action to ensure safety at MS2 is improved and it has been working through all critical items identified by Costello. The perimeter fence is in poor condition and has been temporarily resolved. A perimeter fence could be replaced for \$30,000. Wellington North has spent \$14,000 to date on substation remediation as a result of Costello's report and is confident it has acted promptly to resolve the issues identified. Wellington North indicates more of these repair and maintenance costs are expected in late 2013 and 2014, however no costs for this work was provided. ¹²
- Costello assigns ratings based on public safety, worker safety and risk of major equipment failure. Costello assigned a rating of "red" to substation MS2 which will improve to "yellow" once the safety issues are resolved and switchgear deficiencies are addressed. The Costello report defines "yellow" as average condition and states that mitigation is required between 4 and 11 years. "Red" means poor condition and mitigation is required immediately within one year.
- VECC submits Wellington Hydro has adequately demonstrated the need to include MS2 as part of a strategy for replacement but the question to be addressed is whether it needs

⁸ Chapter 3of the Filing Requirements for Transmission and Distribution Applications, July 17, 2013, Page 14

⁹ Board Staff IR#3(a)

¹⁰ Application, Page 59

¹¹ VECC IR#2(a)

¹² Board Staff IR#3(b)

to be done as a priority in 2014.

- Wellington North indicates that according to the Kinetrics Study, the "new" typical useful life for a transformer is 45 years. VECC notes that once removed from service, Wellington North plans to keep the MS2 transformer on hand as a spare, given it has shown good performance characteristics and an assumed 4 years of remaining useful life.
- Given the recent work undertaken at MS2 to address the issues identified by Costello and future work to address all of the issues identified, VECC submits with mitigation it is probable the rating would improve to "yellow" thereby extending the life expectancy a minimum of 4 years. On this basis, VECC submits the need to replace MS2 in its entirety in 2014 is not required. For the purposes of ICM, the project should be considered discretionary.
- <u>Prudence:</u> The amounts to be incurred must be prudent. This means that the distributor's decision to incur the amounts must represent the most cost effective option (not necessarily least initial cost) for ratepayers.
- Wellington North considered three alternatives in addressing MS2 as follows:
 - 1. Do nothing (no cost)
 - 2. Replace the original substation with a new substation (\$1.6 m)
 - 3. Replace the original substation with a new substation using the existing Transformer and allowing \$50,000 to refurbish existing transformer prior to reuse (\$1.39 m)
- Wellington North recommended Alternative #2 (replace MS2) which is the highest cost option evaluated. Wellington North did not evaluate the option of remediating MS2.
- VECC does not support the implementation of any of the above three alternatives for MS2 in 2014.
- The "Do Nothing" option is not practical given the age of the substation and transformer and the condition issues identified by Costello.
- As discussed above, in VECC's view Option 2 is not the preferred option at this time given that remediation measures would reasonably extend the life of the substation between 4 and 11 years.
- Option 3 is similar to option 2 except that the existing transformer would be reused.
 Wellington North lists a number of disadvantages to using existing equipment including the risk of equipment failure given that the existing transformer is aged (41 years).¹³ VECC submits Option 3 is not the most cost effective option.

-

¹³ Application, Page 63

- VECC believes the preferred option is to remediate substation MS2 in 2014 to address the
 issues identified by Costello in order to extend the life of the substation and improve the
 "red" rating to a "yellow" rating, and to include the replacement of MS2 in a longer term
 substation replacement strategy informed by future asset condition assessments. In
 VECC's view this is the most cost effective option for ratepayers.
- <u>Materiality:</u> The amounts must exceed the Board-defined materiality threshold and clearly have a significant influence on the operation of the distributor; otherwise they should be dealt with at rebasing. Distributors are to use a Board approved formula to calculate a materiality threshold
- The ICM is intended to address the treatment of capital investment needs that arise during the rate-setting plan which are incremental to the materiality threshold. The Board determined that the eligible incremental capital amount sought for recovery should be new capital in excess of the materiality threshold. A distributor applying for recovery of incremental capital should calculate the maximum allowable capital by taking the difference between 2014 total non-discretionary capital expenditure and the materiality threshold. 14
- Wellington North's total non-discretionary capital budget for 2014 is \$1,996,000 which includes the ICM project.
- Using the Board's formula (Threshold Test), Wellington Hydro calculated the materiality threshold as \$609,573 using a price cap index of 0.48% (price escalator of 1.60%, a productivity factor of 0.72% and a stretch factor of 0.40%), growth of 1.44% and a dead band of 20%. The resulting eligible incremental capital amount for the purposes of ICM funding is \$1,386,427 (\$1,996,000 \$609,573).
- If the Board finds that the replacement of MS2 is non-discretionary and should be done in 2014, VECC submits the materiality criterion has been met and the incremental capital requested by Wellington Hydro (\$1,356,100) exceeds the Board defined materiality threshold.
- Wellington North updated the Incremental Capital Project Workform and the rate riders in response to: Board Staff interrogatory#2 (revision to the useful lives of each capital asset in accordance with the Typical Useful Life from Kinetrics Report taking into account the revised amortization expenses and CCA balances; Board Staff interrogatory #6 (update rate class for GS 50 to 999 kW from 38 to 40 customers resulting in change in growth percentage from 1.44% to 1.15%); Energy Probe interrogatory #1 (update to stretch factor to 0.45%); and Energy Probe #3 (update actual forecasted amount to \$1,596,100 from \$1,600,000 less \$240,000 already provisioned for in 2014 CapEx plan substation asset condition replacement).

¹⁴ Chapter 3of the Filing Requirements for Transmission and Distribution Applications, July 17, 2013, Page 15

- Wellington North agreed the price escalator (inflation factor) and productivity factor should be updated to reflect the Board's calculation for 2014 IRM applications.¹⁵ On November 21, 2013 the Board released its report that sets the inflation factor at 1.7% for 2014 and the productivity factor at 0.0%.¹⁶ If the ICM for MS2 is approved, Wellington North should recalculate the materiality threshold and eligible incremental capital amount using the updated threshold parameters identified above resulting in a price cap index of (1.7-0.00-0.45=1.25%).
- VECC supports Energy Probe's calculation of the updated materiality threshold of \$645,076 based on a price cap index of 1.25% which reduces the eligible capital amount to \$1,350,024 for the purposes of calculating updated ICM rate riders, slightly less than the \$1,356,100 sought by Wellington North.¹⁷

Recovery of Reasonably Incurred Costs

VECC submits that its participation in this proceeding has been focused and responsible.

Accordingly, VECC requests an order of costs in the amount of 100% of its reasonably-incurred fees and disbursements.

All of which is respectfully submitted this 13th of December 2013.

¹⁵ Energy Probe IR#2

¹⁶ Report of the Board Rate Setting Parameters and Benchmarking under the Renewed Regulatory Framework for Ontario's Electricity Distributors, November 21, 0213 & corrected on December 4, 2013

¹⁷ Energy Probe Submission December 12, 2013, Page 4