CCC Interrogatory #44

Interrogatory

Reference: Exhibit E2/ T/1/S1/ pp. 11-12

3.2.2 Vacuum Building Outage
A six-unit Pickering VBO is scheduled in 2022. Historically, OPG has undertaken VBOs at Pickering on an established 10-year regulatory test interval. The initial VBO date was 2020 to be consistent with the established 10-year regulatory test interval from the last execute VBO in April 2010. Based on innovative maintenance and inspection activities and after extensive technical reviews, the CNSC accepted OPG's request in March 2019 to increase the interval from 10 to 12 years, allowing the VBO to be deferred until 2022.This twelve-year frequency is consistent with the frequency used at Darlington.

a) Please confirm that the impact of the 6-unit Pickering VBO was included in the outage forecast for 2021 in EB-2016-0152, such that OPG's rates for 2021 were increased to account for the outage in that year;

b) Please confirm that moving the VBO outage to 2022 has the effect of reducing the production forecast for 2022, necessitating an increase in 2022 rates;

c) Please confirm the number of outage days included in the OEB approved number of 2021 outage days as a result of the VBO, and the number outage days OPG is seeking approval for in 2022 as a result of the deferral of the VBO to 2022;

d) Given the 10-12 year frequency of testing cited by OPG, please explain the benefit to ratepayers of initially increasing rates in 2021 to account for the impact of the VBO, shifting the VBO to 2022, and then accounting for VBO in 2022 a second time

e) Please provide the revenue impact of including the VBO in 2021 without incurring those outages, and the rate impact of including VBO in 2022.

Response

a) Confirmed.

b) Confirmed.

c) In EB-2016-0152, the nuclear production forecast included 120 PN VBO specific outage days in 2021. OPG is seeking approval of 150 PN VBO specific outage days in 2022.

d) Contrary to the question, rates were not "increased in 2021 to account for the impact of the VBO." OPG is unique in that it recovers its revenue requirement on a 100% volumetric basis. To set the payment amounts, the OEB approves a production forecast based on its assessment of OPG's generation plan, which represents OPG's best forecast of production at the time it is produced. When events unfold differently than forecast, as they always do, OPG bears the risk. Over the period during which the OEB has set OPG's payment amounts, this risk has resulted in OPG experiencing both under and over recovery as shown in Ex. L-E2-01-CCC-042, Attachment, Table 2.

Undertaking a VBO is both disruptive to OPG, in terms of resource availability, and to the Ontario electricity grid, given that a VBO requires a shutdown of all units at Pickering (6) or Darlington (4). In operating its facilities, OPG is expected to pursue continuous improvement and ratepayers have benefited from this pursuit. As an example, the last VBO at Pickering in 2010 was 44 days per unit in duration. In EB-2016-0152, OPG's generation plan assumed a VBO of 30 days duration per unit, reflecting the technological advances and innovative approaches OPG had taken to reduce VBO duration. While OPG continues to explore ways to reduce the duration of the 2022 VBO, risks remain that could cause the outages required to extend beyond 30 days. Building on the experience of the 2022 VBO and consistent with continuous improvement, OPG intends to reflect any lessons learned, operating experience, and technological advances and innovative approaches to reduce the duration of future Darlington VBOs, including the VBO currently planned for 2027.

e) The evaluation of the revenue or rate impact in any forecast year due to changes in assumed generation, such as the rescheduling of the VBO, would require evaluation of the key impacts to the generation plan in that future time period. The key impacts would be the following:

   i. Removal of the forecast planned outage days (increase in generation);
   ii. A forced loss rate adjustment to the increase in generation related to (i) above (decrease in generation);
   iii. Adjustments for forecast fuel costs associated with the increase/decrease of generation related to the above two factors.

Based on the above, the revenue (net of fuel) impact of not incurring the outages associated with the VBO in 2021 is approximately $121M. In addition, there is $35M in outage OM&A not incurred.

Based on the above factors, the forecast production impact of removing the VBO in 2022 is an increase in forecast generation of approximately 1.8 TWh. There is an additional rate impact of $17.9M ($28.1M in lower Outage OM&A with an offsetting $10.2M in fuel costs). Combined, this would result in a change of OPG's smoothed payment amount from $101.51/MWh to $100.01/MWh, and a change in the amounts recorded in the RSDA from $241.2M to $93.1M.