Orangeville Hydro Limited OEB Staff Questions EB-2021-0049

Orangeville Hydro Limited 2022-2026 Distribution System Plan EB-2021-0049

Please note, Orangeville Hydro Limited (Orangeville Hydro) is responsible for ensuring that all documents it files with the OEB, including responses to OEB staff questions and any other supporting documentation, do not include personal information (as that phrase is defined in the *Freedom of Information and Protection of Privacy Act*), unless filed in accordance with rule 9A of the OEB's *Rules of Practice and Procedure*.

Thank you for submitting Orangeville Hydro's 2022-2026 Distribution System Plan. OEB staff has reviewed the plan and observed the following items that it seeks clarity on.

OEB Staff-12: Reliability

In Table 2-5 of the DSP, Orangeville Hydro states its 5-year target for System Average Interruption Duration Index (SAIDI) as 0.55 and System Average Interruption Frequency Index (SAIFI) as 0.65.

From Table 2-6 of the DSP, the SAIDI and SAIFI excluding loss of supply and major event days is over the target for 2016 and 2020.

From Table 2-10 and Table 2-11 of the DSP, the main contributors for customers interruptions and customer minute interruptions are: defective equipment, loss of supply and foreign interference.

- a) What measures is Orangeville Hydro taking to maintain and/or reduce SAIDI and SAIFI values for the forecast period?
- b) What action is Orangeville Hydro taking to reduce the impact of a defective equipment outages on customers?
- c) Please clarify the significant increases in foreign interference contribution to customer interruptions and customer minute interruptions in 2019 and 2020.
 Please explain any steps Orangeville Hydro is planning to take to mitigate the contribution of foreign interference?
- d) Defective Equipment is a significant contributor to customer interruptions and customer hour interruptions during the historical period. Please explain any steps Orangeville Hydro is planning to take to reduce defective equipment interruptions? Does Orangeville Hydro anticipate a reduction in defective equipment caused interruptions as a result of System Renewal capital

expenditure increases during the forecast years, compared to historical years?

OEB Staff-13: System Access

In Section 4.4.1.1, Orangeville Hydro explains the forecast average System Access is 20% lower than the historical average.

a) How will Orangeville Hydro manage the planned increase in system renewal and system service projects, particularly voltage conversion, if system access projects do not continue to decrease as forecast?

OEB Staff-14: Voltage Conversion

From section 2.1.1, Orangeville Hydro states that feeder conversion work remains a key focus of Orangeville Hydro's investment program throughout the forecast period.

OEB staff notes that the System Service expenditure during the forecast period is 88% more than historical period. From section 4.3, Orangeville Hydro states that the primary reason for increase in System Service budgets for forecast years is the fact that most of the assets remaining in voltage conversion are underground cable and pad-mounted transformers, in which underground infrastructure costs more to replace than the overhead infrastructure.

- a) Please explain the original plan and current progress in the voltage conversion program in terms of kilometers of line converted.
- b) What criteria does Orangeville Hydro use to determine which part of the system to address as part of the voltage conversion program?
- c) How does Orangeville Hydro prioritize the different capital projects that are part of the voltage conversion program?

OEB Staff-15: System Renewal

From the Business Plan, the 2021 System Renewal expense was \$329,867. A major project in 2021 was 5 to 39 Main St. South Pole Line Rebuild costing \$98,327. However, from Table 4-6 in the Distribution System Plan, the actual System Renewal cost in 2021 was \$790,000.

- d) Why was the actual System Renewal expense during 2021 approximately 239% higher compared to planned?
- e) Please provide a list of projects, their costs per year in 2021 and their total costs for System Renewal.

OEB Staff-16: System Renewal

For test year 2022, the System Renewal expense is \$541,000. The System Renewal cost in 2021 was \$790,000.

The average per year System Renewal expense during 2023 to 2026 is forecasted to be approximately \$298,750. The average per year System Renewal expense during 2014 to 2020 was approximately \$265,000.

- a) The System Renewal expenditure during 2021 bridge year and 2022 test year is significantly higher than other years. Please explain what Orangeville Hydro took into account when determining the pacing of System Renewal capital projects.
- b) Has Orangeville Hydro considered deferring some capital projects during 2021 and 2022 to reduce the high expenditure during 2021 and 2022.

OEB Staff-17: System Renewal – Pole Replacement

Under Material Investments, Orangeville Hydro summarized P00-Pole Replacement capital project. Orangeville Hydro states it is proposing to increase the pacing of this program to \$130,900 per year. The average annual expenditure for this program were \$39,612 from 2015 to 2020.

From Page 7 of the Asset Condition Assessment Report, 3.96% of distribution wood poles are in Poor condition and 3.31% are in Very Poor condition.

- a) How many poles does Orangeville Hydro plan to replace every year under the Pole Replacement capital project for the forecast years? How many poles per year did Orangeville Hydro replace under the same capital project during the 2015 to 2020 period?
- b) Is there an increasing trend in per unit pole replacement cost? If so, please explain the reason for the increase.
- c) Why does Orangeville Hydro want to increase pacing of the Pole Replacement capital project, even though only 3.96% of distribution wood poles are in Poor condition and 3.31% are in Very Poor condition?
- d) Please explain the effects of increased pacing of pole replacement on system reliability metrics and future asset condition assessment results.

OEB Staff-18: General Plant

The forecast period (2022 to 2026) average General Plant capital expenditure of \$329,000 is 32% higher than the average during the historical period (2017 to 2021).

The two largest General Plant expenditures during test year 2022 are Building and Computer Software.

From Page 26 of Orangeville Hydro Business Plan, the two largest General Plant expenditures during 2021 are Computer Equipment and Computer Software.

- a) Please explain the significant increase in General Plant expenditure during the forecast period compared to the historical period.
- b) Please explain the high General Plant expenditure forecast during 2024, 2025 and 2026 compared to previous years.
- c) Please explain the significant expenses incurred under Building, Computer Software and Computer Equipment categories during 2021 and 2022.

OEB Staff-19: Asset Condition Assessment

Many of the asset condition assessment results are largely based on age-based assessment.

From Orangeville Hydro Limited Asset Condition Assessment section 5.2, METSCO recommends that Orangeville Hydro continue collecting information related to data points for condition parameters with low data availability.

- a) Please explain if Orangeville Hydro plans to include other test and inspection parameters in its asset condition assessment in the future to increase accuracy. If not, how does Orangeville Hydro plan to account for parameters that may affect asset condition other than age?
- b) Does Orangeville Hydro anticipate any obstacles it may face when collecting information related to data points for condition parameters with low data availability? Does Orangeville Hydro anticipate any impact on its OM&A and capital expenditure?
- c) Has Orangeville Hydro performed a cost-benefit analysis of including inspection and test parameters for its asset condition assessment?

OEB Staff-20: Asset Condition Assessment

From Orangeville Hydro Limited Asset Condition Assessment section 5.2, METSCO states that the age extrapolation method used for Overhead Conductors and Underground Cables is a reasonable approach, but empirical age data is preferred.

Moving forward, METSCO recommends Orangeville Hydro to record conductor installation year within its GIS system. It is expected that with every passing year, the inspection record database will continue to grow and be refined, allowing for His to be calculated more reliably.

a) Please explain if Orangeville Hydro plans to follow METSCO's recommendation in regard to asset data for Overhead Conductors and Underground Cables.