

Feedback Form

Electricity Planning in the West of London Area – July 15, 2021

Feedback Provided by:

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West of London Bulk Plan

What feedback do you have regarding the preferred option of a combination of new transmission line from Longwood TS (near the City of London) to Lakeshore TS and local generation?

Energy Storage Canada (ESC) has the following feedback on the preferred option.

Limited information underpinning analysis and conclusions. The IESO has stated a need for new transmission and local generation/storage of 500 MW based on qualified statements of need. While we appreciate and recognize the potential identified for energy storage, we are concerned that the IESO has not provided analysis that shows details of the system needs. For example, the IESO has not shared from an electrical perspective what circuits and load stations would help address the system need. Further, the IESO has not described the system need in terms of day-of issues (e.g., duration, peak capacity need, seasonal). Without further details it is difficult to determine the appropriateness of the preferred wires option or justify development investments (more feedback on information publishing is provided later)

ESC does not agree with the assessment framework for potential wires solutions.

The methodology uses a 70-year period which unfairly and inappropriately ensures that a wires solution is selected. A 70-year assessment is too long and requires the IESO to make significant assumptions of future load growth, O&M costs, price escalation capital cost reductions, operating capability, and rate-payer commitment. For example, changes in assumptions for cost escalations of basic materials can produce large swings in Net Present Value (NPV) values between different solutions. Further, ESC does not believe the IESO retained any expertise in future supply resource costs, therefore capital re-investments for life extensions to reach 70-years are not tied to a stakeholder-supported view of the future. The IESO reasoning for a 70-year time frame is that is the life of the transmission asset therefore all other solutions should match that. First, transmission assets may have an

operating life of 70-years, but that is not certain, and it is not the accounting life of those assets. Second, the approach unfairly punishes assets with shorter operating lives even though the approach is asking rate-payers to make a significant long-term commitment. Rate-payer value is being deteriorated significantly by requiring all solutions to meet multi-generation time commitments. Finally, the long-time frame is not used in any other IESO planning assessment including resource adequacy, regional planning, and ancillary service needs. The IESO demand outlook in the APO only goes to 2040; what forecast did the IESO use for the 70-year timeframe? ESC firmly believes that the IESO should eliminate the 70-year timeframe and redo the analysis using a more appropriate assessment methodology.

The IESO has completed limited engagement with third parties to investigate potential solutions or determine pricing of solution options.

ESC's understanding is that the IESO has not spoken directly with any existing supply resources in the region on options to expand capacity or adjust facility attributes to meet future system needs. Further, the IESO has not engaged directly with large customers to determine what specific regional demand response options may be available.

ESC recommends that the IESO engage third-parties directly to develop potential solutions and prepare indicative pricing. Formal requests for information (RFIs) or two stage RFPs can be used to receive pricing for potential solutions. Without a clear procurement mechanisms and compensation framework the IESO will not be able to properly assess alternative solutions to rate-regulated assets. It is also important to note that rate-regulated assets have a clear procurement mechanism and compensation framework (i.e., solutions developed through the

	technical working group provides justification for the utilities to receive rate-payer funding through rate applications). Third-payers have no such access to those funds.
What feedback do you have regarding a 230 kV versus 500 kV line?	Without a proper assessment framework ESC does not believe that the IESO can appropriately consider the difference between a 230 kV line and 500 kV line.
What other information should be considered in finalizing the recommended solution and final report?	Please see ESC's previous comments on additional information required.

What feedback do you have regarding the proposed list and format of datasets that will be made available with the West of London Bulk Plan (see Appendix)?

ESC believes the information listed by the IESO in the appendix is an appropriate start; however, the IESO indicated that the information would be published after the webinar. At the time of drafting this feedback, no information has been posted on the IESO Southwest Ontario Bulk Planning Initiatives webpage (<https://ieso.ca/en/Get-Involved/Regional-Planning/Southwest-Ontario/Southwest-Ontario-Bulk-Planning-Initiatives>) or the Windsor-Essex regional planning website. For the information to be useful and inform ESC's feedback, the IESO must publish this information prior to the webinar, and it must be in a functional and accessible format. Finally, ESC believes that the IESO should be publishing working sheets so that ESC and other stakeholders can understand the exact logic, assumptions, and conclusions the IESO reached.

Windsor-Essex Integrated Regional Resource Plan (IRRP) Addendum

Topic	Feedback
What feedback do you have regarding the preferred option for additional local 230 kV load supply stations and connection lines to the Kingsville area?	See above comments

Topic	Feedback
What feedback do you have regarding the options to address load restoration needs in the Kingsville and Leamington area? Including a potential new 230 kV double-circuit line between Leamington TS and the proposed new stations, or resource alternatives.	See above comments
What feedback do you have regarding the considerations for long-term generation in the Windsor area?	See above comments
What other information should be considered in finalizing the recommended solution and final report?	See above comments

General Comments/Feedback

Appendix:

West of London – Information Sharing Summary

The following table outlines the datasets that will be made available with the West of London (WOL) bulk study, as well as the format.

Category	Format	Description of Data
Planning Assessment Criteria	PDF, in report	Technical requirements and standards used to determine needs
Load Forecast	PDF, in report	Methodology and sensitivities/known drivers
Load Forecast	PDF, in report	Total West of London Annual coincident low, reference, and high scenarios for summer and winter
Load Forecast	PDF, in report	Annual station peak forecasts, by region
Load Forecast	PDF, in report	Annual greenhouse peak forecasts
Load Forecast	PDF, in report	Peak segmentation assumptions for West of London stations with greenhouse load
Load Forecast	Excel	Forecast West of London greenhouse hourly load profiles (2021, 2035)
Load Forecast	Excel	Forecast West of London total hourly load profiles (2021, 2035)
Load Forecast	Excel	Historical hourly station load profiles (2019)
Interface Data	PDF, in report	Capacity need methodology, Interface definition, limits, and driving issues
Interface Data	Excel	Hourly capacity need, no reinforcements/recommendations (2028-2035)
Interface Data	Excel	Hourly capacity need, with near-term recommendations (2028-2035)
Interface Data	Excel	Hourly capacity need, with near- and long-term recommendations (2028-2035)
Analysis of Alternatives	PDF, in report	Assessment criteria and principles for decision-making
Economic Assessment Assumptions	PDF, in report	Assumptions used in the analysis and evaluation of options