# 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

| Topic | Feedback |
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| 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? | The construction of the new transmission line is required mainly due to the additional greenhouse load in the Leamington and Kingsville areas. However, the requirements for operation and reliability for greenhouses are not the same as conventional customers. Therefore, we have the following concerns for your consideration:<br><br>. The Windsor area has a relatively large installed generation capacity. Have you consider using this generation capacity to mitigate some of the power flow limitations?<br><br>. The last slide of the presentation (Slide#10) indicates that there is a strong interest in the use of DER to meet needs. How is this fact being |

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| | taking into account in the study? Wouldn't this offset part of the increase of the greenhouse load?<br><br>. The greenhouse load is not as critical as other conventional loads. Most greenhouse customers have their own generation and the actual lighting load would exist only for short periods. If the greenhouse lighting loads were not supplied during a time where there was an upset on the transmission system, the consequence to not supplying the the greenhouse lighting loads is minimal. It is suggested to consider what savings could be realized in the design if criticality of the incremental loads were taken into account.<br><br>. We also noticed that the recommendations are based on assuming all existing services in-service and excluding import/export requirements (Slide # 17). If the estimated greenhouse load only exists for short periods and they have the flexibility to move their load, can the infrastructure build be reduced through the use of imports and existing generation? |
| What feedback do you have regarding a 230 kV versus 500 kV line? | We are not in a position to comment on 500kV vs 230kV with the limited information available. However, if the 500kV option is selected, the Lakeshore switching station may need additional interface transformers.<br><br>As per the IESO slide # 20, the incremental cost for 500kV line is $200-250M. It should be noted that the area needs an additional capacity of 1,100MW (2030-2035), which might justify the incremental cost. |

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| What other information should be considered in finalizing the recommended solution and final report? | Before finalizing the recommended solution we would suggest the IESO to consider the use of DERs for capacity planning. Usually, the greenhouse projects are associated with CHP generation. If the customer has generation and the capability to move load, the actual electrical load to the transmission infrastructure may not be as estimated today.<br><br>According to planning guidelines, the load needs to be restored at an specified time. However, all loads should not be treated the same way. For example, a greenhouse load shall not require the same reliability of typical residential or commercial customer loads. Most greenhouses have some generation, and reliability might not be their primary concern.<br><br>In our opinion it is critical to consider the customer's DERs and their required reliability level to proper evaluate the effective upgrade requirements of the upstream infrastructure. |
| 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)? | No comments |

## Windsor-Essex Integrated Regional Resource Plan (IRRP) Addendum

| Topic | Feedback |
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| What feedback do you have regarding the preferred option for additional local 230 kV load supply stations and connection lines to the Kingsville area? | If there is a genuine baseload requirement, lines & transformer stations are required to properly service the load and we have no comments. |

| Topic | Feedback |
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| What feedback do you have regarding the options to address load restoration needs in the Kingsville and Leamington areas? Including a potential new 230 kV double-circuit line between Leamington TS and the proposed new stations or resource alternatives. | From the reliability perspective, the additional line helps the radial Leamington and Kingsville areas. |
| What feedback do you have regarding the considerations for long-term Generation in the Windsor area? | To resolve the Windsor area generation issue, the IESO had a few years ago considered the upgrade of the 115 kV J3E & J4E circuit conductors to mitigate overloading under contingency situations. Shouldn't the conductor upgrade solution be considered today?<br><br>Also, it is not clear whether or not the total Windsor area generating capacity was taken into consideration when the transmission requirements was assessed along the incoming transmission corridors. |
| What other information should be considered in finalizing the recommended solution and final report? | Some considerations are included in our previous feedback. |

## General Comments/Feedback

1) The overall 115/230 & 500kV system upgrade is primarily due to the Leamington & Kingsville areas greenhouse load growth. Since this is a localized load requirement, is the IESO planning to consider a separate rate class for greenhouse customers to recover the investment?
   In addition, ENWIN would like to know the current plan for the cost recovery of the proposed transmission investment.

2) As an additional information, there have been several inquiries with ENWIN regarding the possibility of relatively large loads that would also require additional investments in the Windsor-Essex area.

3) Regarding the Windsor area generation, we have noticed some community resistance concerning air quality and sound pollution in the past.

4) The concentration of transmission lines at the Sandwich hub creates a single point of weakness with great consequence should that site be subjected to something such as a tornado or other catastrophe.

# 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 |