



OCTOBER 13, 2020

Southern Huron-Perth Sub-region Integrated Regional Resource Plan

Engagement Webinar #1

Objectives of Today's Engagement Webinar

- To provide an update on the electricity planning underway in the Southern Huron-Perth sub-region
- To seek feedback on the electricity demand forecast, needs and engagement for the development of a long-term electricity plan – Integrated Regional Resource Plan (IRRP) – for Southern Huron-Perth
- To outline next steps

Agenda


1. Southern Huron-Perth Regional Electricity Planning Status Update
2. Draft Electricity Demand Forecast
3. Community Engagement and Next Steps

Seeking Input

As you listen today, consider any additional factors that should be considered in the following processes:

- Determining the electricity demand forecast for the Southern Huron-Perth sub-region
 - *What key developments, projects or initiatives should be considered in the electricity planning for the region? What other information should be taken into account that would influence the forecast? (e.g. growth, expansion or retirement of large customers/electricity users, industry trends or other local activities)*
- Identifying needs that need to be addressed
 - *What areas of concern or interest in relation to electricity would you would like to see considered as part of the planning process?*
- Engaging with communities and interested parties
 - *What information is important to provide throughout the engagement?*
 - *Does the proposed Engagement Plan provide sufficient scope and opportunities for input? What other engagement activities or methods should be considered?*

Please submit your written comments by email to engagement@ieso.ca by **November 3**

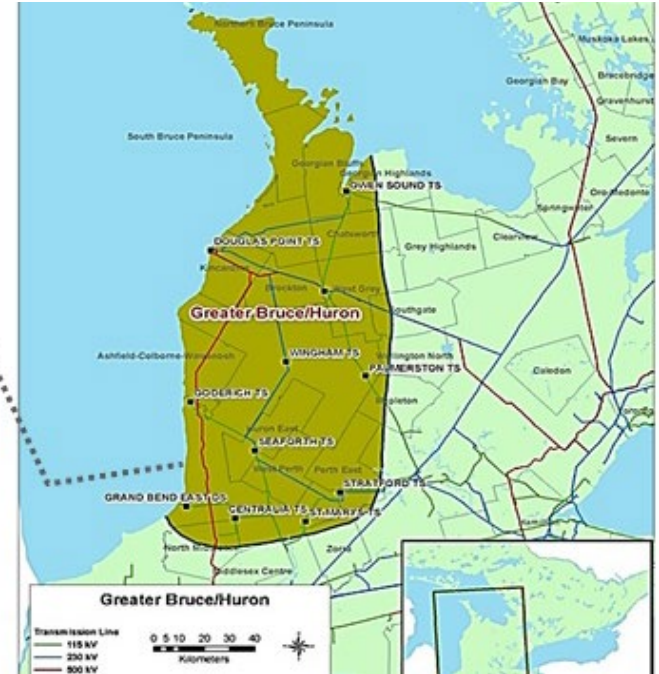


Electricity Planning in Southern-Huron Perth: A Sub-Region of Greater Bruce/Huron

Southern Huron-Perth Sub-region

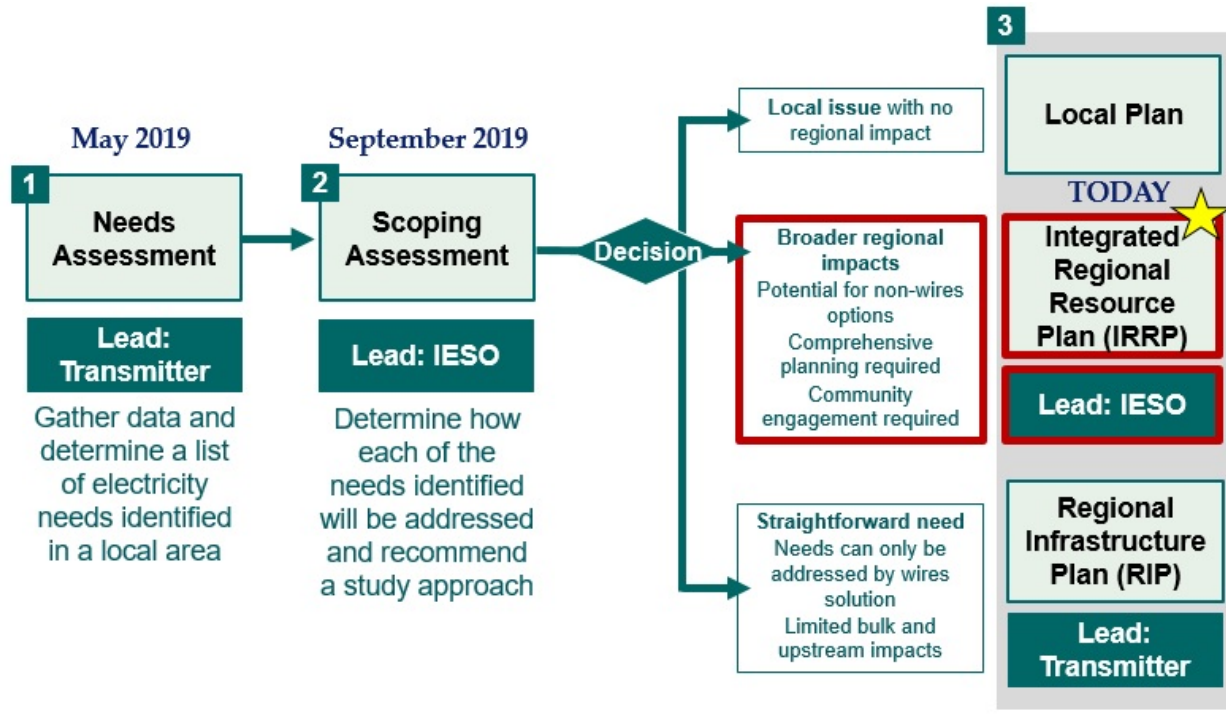
- Southernmost portion of Greater Bruce/Huron region comprising of the municipalities of Bluewater, South Huron, Lambton Shores, Lucan Biddulph, Middlesex Centre, North Middlesex, Thames Centre, Zorra, Perth South, St. Marys and West Perth
- Served by seven stations, which are primarily supplied by 115 kV circuit L7S that originates from Seaforth area
- Another 115 kV circuit D8S also supplies part of Town of St Mary

Southern Huron-Perth Sub-region



Map of Southern Huron-Perth sub-region and Greater Bruce/Huron region

Recap: Regional Planning Process



Scoping Assessment Study Team

Team Lead,
System
Operator

- Independent Electricity System Operator (“IESO”)

Lead
Transmitter

- Hydro One Networks Inc. (“Hydro One Transmission”)

Local
Distribution
Companies

- Hydro One Networks Inc. (“Hydro One Distribution”)
- Entegrus Powerlines
- Festival Hydro

Current Status of Southern Huron-Perth Regional Planning

- IRRP study work began in Q3 2019, and is on track for completion by Q2 2021
 - Draft electricity demand forecast has been completed
 - Studying the underlying factors driving the forecast to determine and assess the needs to be addressed in this planning cycle and develop a detailed description of needs to better screen and evaluate options



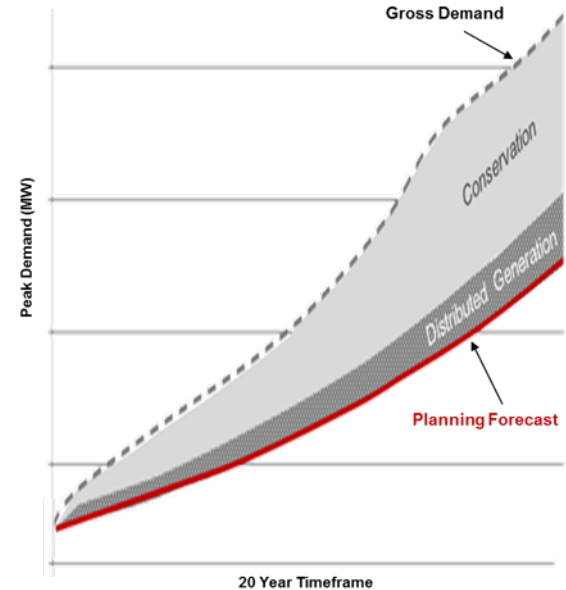
Electricity Demand Forecast and High Level Needs

Data Gathering – Demand Forecast

- The IRRP assesses the electricity needs based on a 20-year forecast of peak electricity demand for a region that is created by:
 - Collecting electricity demand forecast information from each LDC in the region
 - Since electricity demand is weather sensitive, demand forecast information from LDCs are created assuming median weather conditions
 - Estimated impact of province-wide Conservation and Demand Management targets on the region's peak demand
 - Calculating the forecast peak demand contribution of contracted distributed generation
 - Adjusting the forecast to account for the impact of extreme weather conditions

Demand Forecast Assumptions and Approach

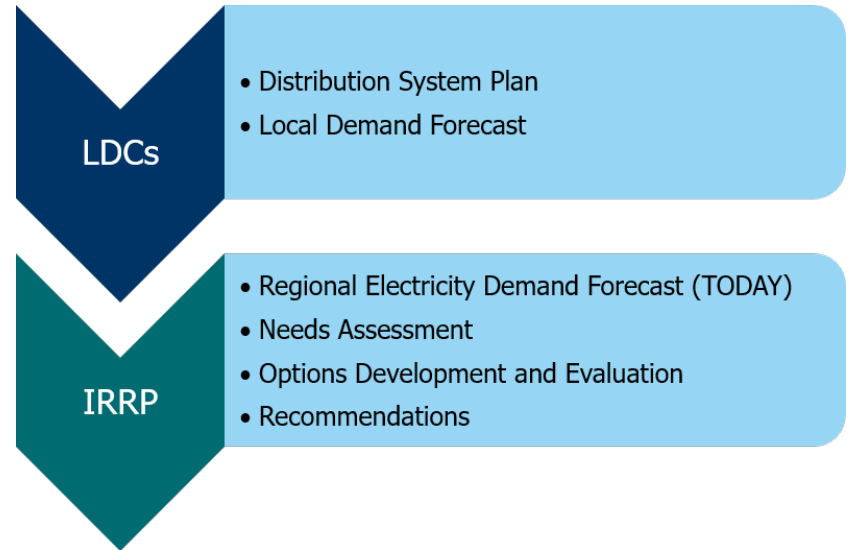
- Key considerations in an electricity demand forecast include:
 - Electrification
 - Population and growth forecasts (e.g. Places to Grow)
 - Community Energy Plans
 - Behind-the-meter projects



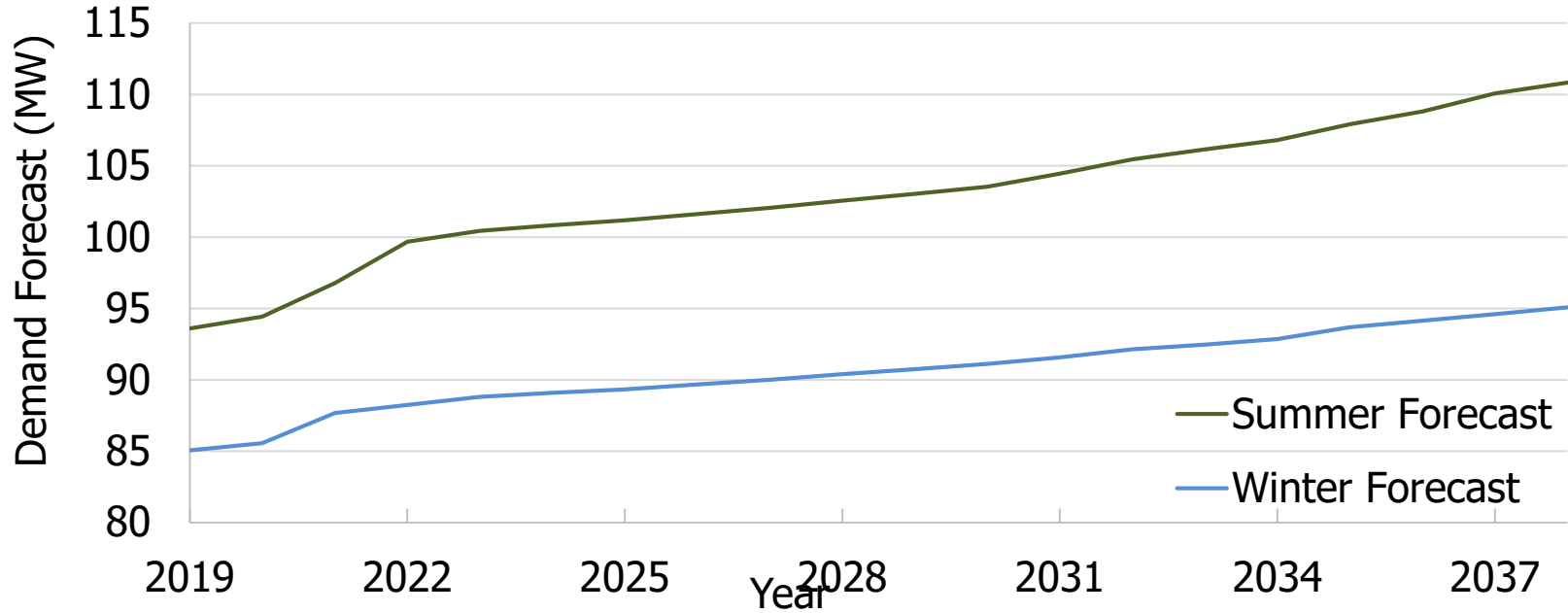
20-Year Demand Forecast & Scenarios

Coordinating IRRP and Local Planning Activities

- Local drivers:
 - Official and Secondary Plans
 - Major local developments, growth, expansion
 - Local generation/energy projects



Southern Huron-Perth – Demand Forecast



Demand Forecast Details

- 10 MW of forecasted load growth initially anticipated from the expansion of an industrial facility in the area has been deferred
 - Based on discussions with the customer, the additional electricity load would not be expected for at least the next 5 years, and was not included in the forecast
- 17 MW of load growth from other local developments is included in the forecast
 - Includes 8.5 MW of load growth - mix of residential and commercial developments
 - An additional 7.5 MW of industrial load growth
- No information has been received regarding Conservation and Demand Management plans from transmission connected customers

Southern Huron-Perth Preliminary Need

- Overall, no major emerging needs have been identified based on the electricity demand forecast and a Hydro One project to increase the limiting component of the line by 2022
 - A capacity need emerges in 2029, if the project is not in-place
- Although the capability of the electricity infrastructure is approaching its limits, local growth is very slow and is not expected to require any action
 - Any small changes in load or project delays can significantly advance or delay the need
 - Sensitivity analysis will be conducted to plan for a high growth scenario, where the previously forecast industrial load project is rescheduled in the mid- to long-term
- Due to organic nature of growth and its amplitude, this is an ideal opportunity to consider non-wires options in addition to wires options

Seeking Input

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- Identifying needs that need to be addressed
 - *What areas of concern or interest in relation to electricity would you would like to see considered as part of the planning process?*

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November 3**



Community Engagement and Next Steps

Key Elements of the Engagement Plan

Engagement Initiative

- Draft Engagement Plan posted for public comment September 17
- To inform and seek input from the broader public at various junctures during IRRP development
- Includes webinars and targeted municipal outreach

Technical Working Group

- Comprises of IESO, LDC(s), and transmitter(s) in the region
- Members conduct the regional planning process to identify local electricity needs and options

Activities to Date

- [Engagement launched](#) on Greater Bruce/Huron Scoping Assessment – July 2019
 - Draft report posted for public comment and [webinar](#) held – August 21, 2019
 - [Final report](#) posted – September 19, 2019
- Initial discussion with local municipalities on local growth, key developments and energy initiatives to consider in the electricity planning for the region – September 9, 2019
- IRRP [engagement launched](#) – September 17, 2020

What we've heard so far...

- High growth in nearby urban centres such as London is pushing growth to areas such as Lucan Biddulph and West Perth
- Increased growth in agricultural, residential and industrial developments is expected
- No major electricity concerns have been raised from the broader community

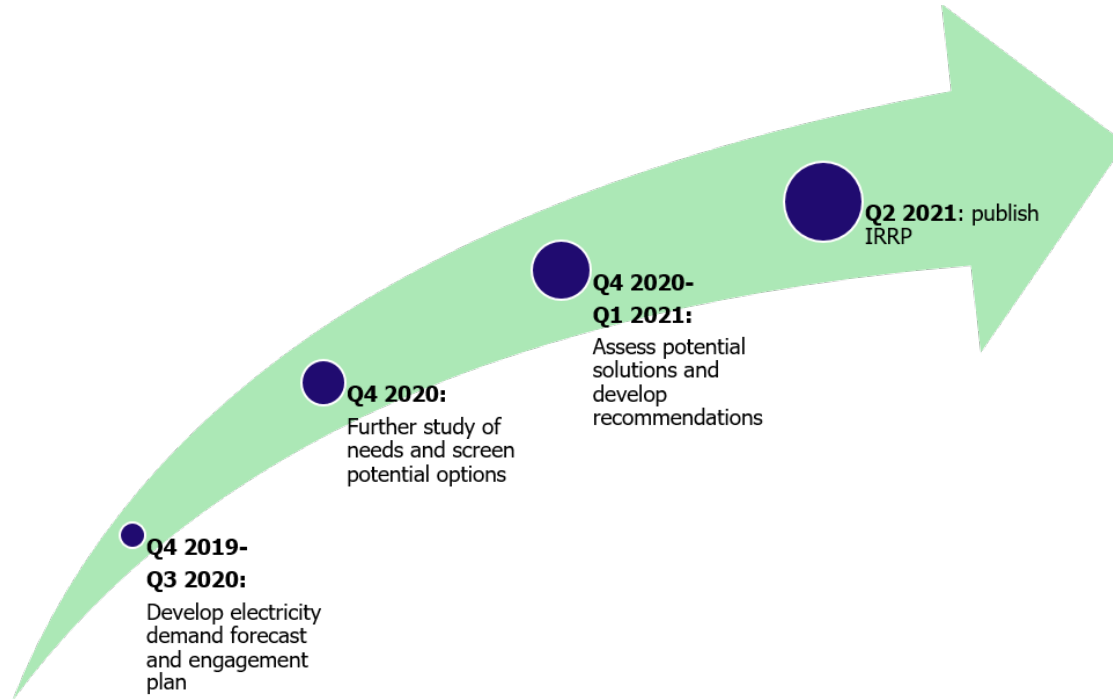
Seeking Input

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 - *What information is important to provide throughout the engagement?*
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IRRP Engagement Timeline



Next Steps

- Feedback due by November 3
- IESO to post and respond to feedback on draft engagement plan by November 23
- Next engagement webinar anticipated late Q4 2020

Keeping in Touch

- Subscribe to receive updates on the Greater Bruce/Huron regional initiatives on the IESO website – <http://www.ieso.ca/subscribe> > select Greater Bruce/Huron
- Follow the Southern Huron-Perth regional planning activities online – <http://www.ieso.ca/en/Get-Involved/Regional-Planning/Southwest-Ontario/Greater-Bruce-Huron>
- Dedicated engagement webpage – <http://www.ieso.ca/Sector-Participants/Engagement-Initiatives/Engagements/Regional-Planning-Greater-Bruce-Huron>
- Regional Electricity Networks provide a platform for ongoing engagement on electricity issues – <http://ieso.ca/en/Get-Involved/Regional-Planning/Electricity-Networks/2019-2020-Regional-Electricity-Networks> > join Southwest Network

Seeking Input on the Webinar

- Tell us about today
- Was the material clear? Did it cover what you expected?
- Was there enough opportunity to ask questions?
- Is there any way to improve these gatherings, e.g., speakers, presentations or technology?

Chat section is open for comments