Kitchener Waterloo Cambridge Guelph Scoping Webinar – June 17, 2024

Response to feedback received

The IESO hosted a public webinar on June 17, 2024 for the Kitchener Waterloo Cambidge Guelph (KWCG) Region. The purpose of the webinar was to seek input on the draft Scoping Assessment Outcome report to determine the most appropriate planning approach going forward to meet the future electricity needs of the KWCG region. The presentation material and recorded webinar are available on the Engagement Webpage.

This document summarizes feedback received under the following key themes:

- Study Considerations
- Identifying Solutions

The IESO appreciates the input received, which will be considered by the Technical Working Group[1] as the KWCG Scoping Assessment Outcome Report is finalized. Feedback was received from the following parties and the full submission can be viewed on the engagement webpage.

- City of Kitchener
- Woodridge Farm

[1] The KWCG Technical Working Group is led by the IESO and consists of Alectra Utilities Corporation, Centre Wellington Hydro Ltd., Enova Power Corp., GrandBridge Energy, Halton Hills Hydro Inc., Hydro One Networks Inc. (Distribution), Milton Hydro Distribution Inc., Wellington North Power Inc., and Hydro One Transmission.

Theme 1: Study Considerations

Feedback Provider: City of Kitchener

Feedback: The City of Kitchener emphasizes the importance of collaboration among municipalities and local utilities for the energy transition and noted a few local planning initiatives for consideration in the regional planning process.

The City of Kitchener and local partners are exploring various thermal loop district utility systems. A feasibility study for a district energy system with deep well geothermal components is underway in Downtown Kitchener. Additionally, WR Community Energy is evaluating the potential for similar systems in other regional areas.

A Kitchener Utilities Clean Energy Transition Strategy is also being developed, which involves planning for the future of natural gas distribution systems as technology and customer preferences change. This strategy may impact electricity needs in specific neighbourhoods over time.

The City of Kitchener, in partnership with other Waterloo Region municipalities and organizations, is supporting the energy transition by focusing on the electrification of transportation and space and water heating. To accommodate increased electrification, both wire and non-wire solutions are needed.

IESO Response: Thank you for this insight. As part of the regional planning process, information about current, planned and potential growth and energy projects are collected to inform the development of an electricity demand forecast for the region. The IRRP demand forecast will indicate how much power is needed in the region over the next 20 years, through input received from the Technical Working Group, municipalities, Indigenous communities, businesses, and other interested parties. The IESO and Technical Working Group look forward to engaging Q4 2024 on the process on these inputs.

Through the regional planning process, the IESO and Technical Working Group will identify, screen and evaluate various wire and non-wire options to address the future electricity needs of the region. The IESO and Technical Working Group look forward to engaging in 2025 on the options.

Feedback Provider: City of Kitchener

Feedback: The City of Kitchener recommends the IESO use multiple forecasts in the IRRP process to consider a broad range of scenarios, ensuring that regional planning meets the diverse and timely needs of the community. This approach is crucial for achieving the area's energy and climate change goals.

IESO Response: Thank you for the feedback. The suitability of forecast scenarios will be considered as part of the IRRP forecast development process. As the IRRP work progresses, the IESO will gather inputs from the Technical Working Group to develop the electricity demand forecast for the region. The local distributors will provide electricity load data and forecasts based on known growth, developments and other key local factors that may drive electricity demand in the area served. As part of this work, the IESO and Technical Working Group may also seek to develop different forecast

scenarios to reflect potential sensitivities in variables impacting the electricity demand and future needs based on the unique characteristics of the region. The demand forecast will also consider historical electricity demand trends, and future outlooks for distributed generation, energy efficiency, and electrification.

The IESO will engage with municipalities, community organizations, utilities and any other interested parties to inform the development of the demand forecast and any scenarios.

For additional context, the IESO has developed demand forecast scenarios for other planning regions such as Windsor-Essex and the City of Toronto based on local factors driving demand to enable growth in a timely manner while minimizing ratepayer risks associated with overbuilding or building too early.

Theme 2: Identifying Solutions

Feedback Provider: Woodridge Farm

Feedback: There is a need for detailed feasibility studies on solar photovoltaics (PV) development on agricultural land. Other areas that should be examined is how municipal governments will regulate renewable energy development, particularly solar, on prime agricultural land and protected countryside.

Waterloo's recent mapping restricts PV development to sub-prime agricultural land, limiting capacity to 800 MW. Including all agricultural lands can increase capacity to 7,500 MW.

IESO Response: Through the regional planning process, the IESO and Technical Working Group will identify, screen and evaluate various options to address the future electricity needs of the region. These options include wires and non-wires alternatives, such as Conservation and Demand Management, generation and storage, which are assessed based on their technical feasibility to meet the needs of the region and cost effectiveness. Later into the IRRP process, the IESO and Technical Working Group will also be engaging to inform this work.

For additional clarity, while long-term procurements for new generation and storage may be considerations for the IRRP, those activities are largely outside of the scope of the regional electricity planning process. The IRRP will focus on studying the specific needs of the KWCG region and actions required to ensure reliability.

The Minister of Energy provided a letter, co-signed with the Minister of Agriculture, Food and Rural Affairs on the proposed approach to subsequent long-term procurements. The letter outlines certain parameters for development on agricultural land, specifically that:

- no new energy projects may be built in specialty crop areas;
- ground-mounted solar generation cannot be sited on Prime Agricultural Areas;
- all other resource types may only locate on Prime Agricultural Areas if they have received both Municipal Council approval and municipal approval of an Agricultural Impact Assessment; and,
- rated criteria points will be awarded for projects that avoid Prime Agricultural Areas.