

Peel/Halton (GTA West) Regional Electricity Planning Public webinar #3 – May 6, 2021

Responses to feedback received

The IESO hosted a final public webinar for the Peel/Halton (GTA West) long-term electricity plan – Integrated Regional Resource Plan (IRRP) – on May 6, 2021 to seek input on draft IRRP recommendations. The presentation material and recorded webinar are available on the [engagement webpage](#).

Feedback was received from the following parties and the full submission can be viewed on the engagement webpage:

- Region of Peel
- Town of Caledon
- Town of Oakville

The section below summarizes the themes that emerged from the feedback submitted and IESO responses. The IESO appreciates the feedback received, which has been considered by the GTA West IRRP Technical Working Group¹ to help inform the final IRRP, and future planning activities for the region.

Theme 1: Consideration of increasing electrification in needs forecasting

Feedback from Town of Caledon: The Town’s climate action plan, Resilient Caledon, has a target of achieving net zero emissions by 2050. This includes 100% adoption of electric or zero emissions vehicles by 2050, 100% of new buildings be net zero by 2030, 100% of buildings use electric heat pumps by 2040, and all viable rooftops having photovoltaic technology coupled with a battery storage system installed by 2040. The Town is not unique in that many other municipalities are setting similar aggressive targets and plans. The success of achieving emission reduction targets rely on the IESO and local utilities to proactively prepare the system for significant increases in electricity demand and decentralized energy systems to be able to accommodate this shift. This appears to be a gap within the current five year planning framework informing the IRRP. How is the IESO planning for these system changes?

¹ The GTA West Technical Working Group consists of Alectra Utilities, Burlington Hydro Inc., Halton Hills Hydro Inc., Hydro One Networks Inc., Milton Hydro Distribution Inc., Oakville Hydro Electricity Distribution Inc. and the IESO

Feedback from Town of Oakville: The Town is actively working to integrate the goals and objectives of its Community Energy Strategy into its policies and plans. North Oakville and densifying areas around Palermo TS are part of the targeted areas where the Town is looking to integrate and/or promote distributed energy resources and energy efficient buildings. Oakville is supportive of energy solutions that achieve high economic returns for the local community, reduces greenhouse gas emissions, and improves energy efficiency. In 2020, two significant electrification projects were announced, which includes working with our LDC for the electrical updates required to make the shift in the Town’s public transit fleet to electric buses.

IESO Reponse: The IESO recognizes the reduced emissions targets that communities are setting and efforts being made to work towards these targets as part of community energy and climate action plans, and the views voiced by communities and stakeholders with respect to the impact of electrification on the transmission system for the region.

The regional planning process is based on load forecasts provided by local distribution companies for their service territories. The IRRP has made firm recommendations to meet the electricity reliability needs emerging over the near to medium term as a result of forecast demand growth. These recommendations include upsizing Palermo TS and implementing control actions at Pleasant TS to provide additional capacity in northern Oakville and Caledon. The IESO also recognizes that demand growth could increase beyond what has already been captured in the current forecast. To help preserve options for future growth that do not require a firm commitment at this time, the IRRP also documents options for long-term needs (post-2030 timeframe). One example of a project that helps prepare the region for long-term growth above currently forecast demand is the NW GTA Transmission Corridor Study. The study seeks to identify a suitable corridor of land that can be preserved for future transmission infrastructure should the need arise. Protecting land for a future transmission corridor maintains flexibility to accommodate future demand growth in the northern areas and mitigates the challenges of needing to build transmission infrastructure through developed land.

The regional planning process is conducted every five years at minimum and regions are continuously monitored in between formal planning cycles. Should the region see greater load growth or different timing than the growth scenario depicts, or if there is new information that indicates significant load growth compared to the forecasted load or other regional needs, the IRRP process can be triggered to commence earlier in advance of the next scheduled planning cycle to ensure that communities have the supply capacity that they require.

Theme 2: Distributed Energy Resources/Non-Wires Alternatives

Feedback from Region of Peel: While the Region understands the IESO’s mandate to consider value for the ratepayer while scoping projects appropriately, in the case of the GTA West IRRP recommendations it appears evident that limiting the focus to financial payback on a localized issue prevented recommendations from considering larger issues such as system resiliency,

climate change and health benefits that non-traditional wired solutions can provide. This may result in greater costs to the ratepayer. Also concerning was the IRRP's minimization of the impact that the future electrification will have on electricity demands or the impact of climate change on traditional wired infrastructure. These issues could possibly be overcome through the use of 'non-wired' solutions such as decentralized energy resources and smart grid technology. The Region will continue to strongly encourage the IESO to ensure that the proposed recommendations be balanced, comprehensive, and inclusive, taking into the account the needs of the communities that it serves. At this time, the limited approach that has been taken does not allow for these needs to be met.

Feedback from Town of Oakville: There is an opportunity in the IRRP to broaden the metrics of success that align with municipal and community energy/climate action plans. For Oakville, community energy objectives include investment into the local economy, reducing energy costs, lowering greenhouse gas emissions and improving energy efficiency. This could assist in creating a cohesive narrative of how the IESO is integrating with local climate action work, and create a stronger business case for the IESO to examine non-wire solutions.

IESO response: Distributed energy resources (DERs) – are one of the most significant changes to the electricity system in recent years and the IESO is working to continue to improve how this type of generation is incorporated in planning activities, and gain better visibility into the impact that they can have on the local grid. Impacts of existing or known future DERs are considered in the local planning forecasts and incorporated into the planning study when assessing regional needs. Work continues on how to further identify where new DERs or non-wires alternatives (NWA) may be a potential option to help address specific electricity needs, when and where technically feasible. As an outcome of the recently completed [Regional Planning Process Review](#), next steps related to addressing barriers to NWAs in regional planning have been identified and work has begun on changes to the regional planning process and tools to increase the consistency and rigour of screening for and analysing these opportunities. Updates on this initiative will be presented through the [IESO's Engagement days](#) in the early fall of 2021.

The IESO's work to identify and address barriers to NWAs in regional planning has been informed by a number of innovative pilot programs and procurements undertaken to foster innovation and enhance understanding of the capabilities that DERs can provide as an alternative to traditional transmission line solutions to meet local capacity and other system needs. These include a Demand Response pilot, a residential integrated solar-plus-storage and energy management pilot, a two-phased energy storage procurement, supporting a number of DER-related projects through the IESO's Grid Innovation Fund, and more. You can read more about these initiatives on the IESO's [website](#). The IESO is also working with various stakeholders to develop a series of [Innovative and Sector Evolution white papers](#) to support the creation of a shared and fact-based understanding of emerging trends and opportunities that have the potential to significantly impact the future of Ontario's electricity system and broader electricity sector. A white paper titled [Distributed Energy Resources: Models for Expanded Participation in Wholesale Markets](#) is available online.

The IESO also worked with stakeholders to develop the [Innovation Roadmap](#); a work plan that frames a path forward to focus and coordinate IESO and sector efforts on emerging technologies, increase the transparency and visibility of resources operating on the distribution system, and continue to work with stakeholders to further investigate opportunities to leverage existing and new resources. Further to this, as part of the broader [Enabling Resources](#) initiative, the IESO is developing a DER Potential Study and Roadmap with a keen interest of learning more about the types of DERs that are likely to emerge in Ontario over the next decade, and engagement is anticipated to take place in June. The work to address barriers to NWAs in regional planning is part of the overall DER roadmap. You can email engagement@ieso.ca to be added to the email list for communications related to this engagement or to submit comments and enquiries.

While the IRRP seeks to align with community energy/climate action plans where possible, not all of these plan objectives fall within the scope of the regional planning nor the IESO's mandate. For example, absent of provincial government policy, the IESO is technology agnostic and will generally choose the most economic option that adequately resolves the need and meets applicable reliability standards. Greenhouse gas emissions are considered in the IRRP's options analysis by accounting for the carbon price associated with emitting resources, but the IESO does not have emission reduction targets unless directed by government policy. Furthermore, while regional planning is responsible for ensuring electricity ratepayer value and minimizing electricity costs, the IESO relies on government policy for broader socioeconomic considerations.

Theme 3: Engagement

Feedback from Region of Peel: Will the IESO be truly committed to open, two-way dialogue with stakeholders and communities to understand their views? The Region is a strong proponent of community engagement. The IESO has expressed a commitment to engage with stakeholders and communities, however, in the case of the IRRP, it has been challenged to account for the needs of these communities when drafting the recommendations. There is an opportunity for the IESO to become more accessible and inclusive to better understand the needs of the community. It would be prudent to address concerns being expressed as part of the current iteration of the IRRP instead of through the next planning cycle. The Region would like to continue to discussions with the IESO so that together we can build a low carbon, resilient community for life.

Feedback from the Town of Oakville: The IESO can continue to engage with the municipality through the Climate Action team in Corporate Strategy and with the community by participating in the Oakville Energy Task Force; a cross sector group of leaders advising the implementation of Oakville's Community Energy Strategy.

IESO response: The IESO remains committed to providing and participating in opportunities for a transparent and consistent dialogue with communities and stakeholders to help inform its decision-making process such as recommendations in the IRRP, as outlined in the IESO's Engagement Principles. While the objective of engagement is to help build a mutual

understanding of needs and of the decision-making process itself, the IESO strives to ensure an inclusive, sincere and fair engagement process to continue to build a trusting relationship with communities and stakeholders as a result. One of the ways that the IESO is working to continue the dialogue in between planning cycles is through the five Regional Electricity Networks, which is a forum to keep interested parties engaged on local developments, priorities and planning initiatives in the region. More information on the [IESO's Networks](#), including the GTA/Central Regional Electricity Network can be found on the IESO's dedicated engagement platform, [IESO Connects](#).

The importance of engaging with communities and customers in order to gain a better understanding of local needs, priorities and drivers is a priority. Local distribution companies participating in the region have conversations with their customers of this nature to help inform their demand forecasts, as well as ongoing conversations that the IESO has with local communities and transmission-connected stakeholders. The IESO will continue to work with the Technical Working Group, stakeholders and communities to be kept aware and/or monitor initiatives as they develop and progress as an important consideration when planning for a community's needs.

The IESO will continue to participate in local community energy planning initiatives such as the Heritage Heights Community Energy Plan Working Group and others at the request of municipal staff.