IESO Response to Feedback

Regional Electricity Planning in the GTA North – Needs and Options Screening July 8, 2025

The IESO hosted a public webinar on July 8, 2025, for the GTA North (York Region) as part of its engagement to inform the development of a long-term electricity plan - Integrated Regional Resource Plan (IRRP). During the webinar, the IESO provided an overview of the regional electricity planning process and shared the draft electricity needs and options screening analysis for input. The presentation materials and recorded webinar are available on the <u>engagement webpage</u>.

The IESO appreciates the input, which will be considered by the Technical Working Group¹ to develop the IRRP. Feedback was received from the following parties and the full submission can be viewed on the engagement webpage:

- City of Markham
- City of Richmond Hill
- Clean Air Partnership
- Debbie Schaefer
- King Township
- MIDAC Corp.
- Town of Bradford West Gwillimbury

The section below summarizes feedback received related to key developments, projects, and initiatives, as well as local issues and concerns that should be considered in the electricity planning for the GTA North (York Region) electrical region.

¹ The Technical Working Group is lead by the IESO and consists of the LDCs in the region and the local transmitter (Alectra Utilities Corporation, Newmarket-Tay Power Distribution Ltd. and Hydro One.)



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Perspectives on high level wire and non-wire options screening

Feedback/common themes

IESO response

MIDAC corp. agreed that all options should be considered in light of the significant anticipated load growth, however, expressed that the options should align with the Provincial Integrated Energy Plan and promote more proactively the deployment of district energy in higher density urban areas currently served by natural gas.

Thank you for your feedback and for recognizing that given the significant demand, all options should be considered to enable growth in the region. The Technical Working Group recognizes the significance of district energy in providing heating and cooling in buildings. Certain options, such as district energy, can be considered on a case-by-case basis dependent upon the nature of the needs and technical information provided to the Working Group by district energy experts during the options analysis phase. The IESO continues to welcome more information from organizations regarding district energy potential.

As shared in the feedback form, the Ministry of Energy and Mines recently released the province's Integrated Energy Plan ("Energy for Generations") that reflects a coordinated and long-term approach to ensure Ontario has access to reliable and affordable energy. As part of this plan, the IESO was directed to identify opportunities within current and upcoming policies, programs, and procurements for new and existing district energy systems to support the province's broader electricity system needs. The IESO looks forward to working with the Ministry of Energy and Mines and stakeholders as part of this approach.

Municipal and advocacy groups emphasized the need for electricity planning to prioritize non-wire alternatives, align with environmental and climate goals, and ensure meaningful collaboration with local communities and governments:

 King Township staff supported a balanced approach to electricity planning that reflects technical feasibility, environmental protection, and land use compatibility. Staff emphasized that wire and non-wire options must be evaluated through the lens of the Official Plan, particularly Thank you for emphasizing the importance of aligning energy planning with Official Plans, climate goals, and land use protections (e.g., the Greenbelt and Oak Ridges Moraine). The Technical Working Group has identified the electricity needs in the region and conducted a screening of wire and non-wires options to meet the magnitude of the needs identified. The IESO recognizes the broad support for non-wire options and has screened in non-wires as well as wire options.

Behind-the-meter DERs are encouraged to help with demand management, however large scale solar and wind have been screened out as standalone solutions (i.e., as an alternative to grid reinforcements) based on the large land requirements and locational needs of this where infrastructure intersects with the Township's Natural Heritage System, Prime Agricultural Areas, and Oak Ridges Moraine lands. King Township suggests prioritizing non-wire alternatives (NWAs) in areas where wire solutions would conflict with environmental or agricultural policies and explore opportunities for community-based energy solutions in coordination with the Township.

- City of Richmond Hill staff
 acknowledged the significant population
 and employment growth projected for
 the City and continue to encourage the
 review and implementation of non-wire
 options for electricity generation and
 storage needs, which supports the
 City's Community Energy and Emissions
 Plan and goal of net-zero emissions by
 2050.
- Clean Air Partnership highlighted the importance of aligning IESO's assumptions with Municipal Climate Action Plans, particularly by incorporating efficiency and Distributed Energy Resources (DERs) that can reduce reliance on centralized infrastructure. Clean Air Partnership also noted the importance of Local Distribution Companies (LDCs) engaging with municipalities to ensure their inputs are provided to the IESO.

type of generation to reliably meet the magnitude of projected growth in York Region. Given the projected growth over the next 20 years, wire investments will be required to ensure sufficient and reliable electricity is delivered to the region to support future growth.

However, a further analysis on the potential of non-wire options to complement wires solutions, to manage the scope of reinforcements required, or to play a role in deferring the required in-service date for necessary wires reinforcements for the region will be provided in the next webinar via a detailed options analysis supported by a rationale based on technical analysis.

Given the current phase of regional electricity planning, the precise location for any wire options has not yet been determined. Once the IESO publishes the final IRRP report, the implementation of any recommended infrastructure, including siting decisions and any associated environmental assessment (EA), is the responsibility of transmitters and LDCs.

The EA will assess potential effects of new transmission infrastructure, determine measures to avoid or mitigate these effects, and evaluate the route alternatives. Engagement with Indigenous communities, the public, business, stakeholder groups, and other interested parties is critical. Any images shared in IESO webinars were for illustrative purposes only and do not indicate a confirmed location. More detailed mapping will be available during the development stage after the IRRP report is released. While the final siting will occur later in the process, we welcome any considerations or feedback you may have. Learn more about the regional electricity planning process on the IESO website.

The IESO hosted several targeted meetings with municipal representatives in the GTA North region to present the details of each plan milestone and understand local energy priorities and feedback. During the forecasting milestone, these targeted meetings were held to understand municipal growth plans, climate

action plans, and energy demand management plans, and to ensure alignment between LDC forecasts and municipal plans and priorities. During need identification, several factors are crucial in understanding what is technically feasible, including consideration for a range of wire and non-wire options. Further analysis of the screened in and out options will be provided, alongside the rationale, in the next webinar.

Clean Air Partnership would like to better understand the value and cost-effectiveness of efficiency and DERs compared to traditional generation and transmission. They emphasized the need to evaluate the larger system benefits such as reduced peak demand, deferred infrastructure investment, and improved resilience to inform policy, programs and guide future energy planning.

Thank you for your feedback on providing a further valuation of non-wires vs. wire solutions. We will consider this suggestion in the completion of the detailed options analysis. Non-wires are beneficial and can provide resilience and defer the need for transmission upgrades by helping reduce peak demand. Given the significant demand projected in York Region, both wires and non-wire options, such as transmission-connected generation or storage, and electricity and demand-side management (eDSM) have been screened in and are being evaluated further. At the next webinar, the IESO will provide a detailed options analysis that will recap what has been screened in and out to meet regional needs and provide the details and rationale from the subsequent technical options analysis.

The IESO's Save on Energy has several programs that prioritize reducing peak demand and energy efficiency retrofits for residential and commercial businesses. The value of eDSM to the system increases as a cost-effective, non-emitting resource that can respond to changing system needs and support broader economic development and decarbonization objectives. As Ontario seeks to decarbonize to reduce greenhouse gas emissions, the demand on the electricity system will grow. Energy efficiency will play an important role in ensuring the reliability of the electricity grid as we head into this period of increasing system needs by mitigating the demand growth and helping to defer infrastructure investments. You can visit the <u>Save on Energy</u> website to learn more about the program offerings.

Debbie Schaefer expressed content that the presentation highlighted that solar and wind solutions will be considered in combination with wire options. Thank you for your comment. The IESO agrees it is important to recognize the different benefits of technology types and encourages you to participate in the upcoming webinar to learn more about the finalized recommendations. <u>Subscribe</u> to updates for the GTA North and stay informed on upcoming engagements.

Perspectives on York Energy Centre

Feedback/common themes

IESO response

MIDAC Corp. emphasized the importance of understanding local sentiment, particularly past health concerns about transmission infrastructure, before making decisions about phasing out or replacing the facility. It recommended surveying the Newmarket community to understand current sentiments.

Thank you for your feedback. The IESO acknowledges the importance of understanding local sentiment, including historical concerns about infrastructure and health impacts. The IESO will be hosting another webinar with an opportunity for public participation and feedback. We encourage all interested parties to stay informed on GTA North engagements by <u>subscribing</u> to updates on the GTA North regional planning, following the <u>GTA North Engagement Page</u>, and registering for the upcoming webinar.

As planning progresses, the IESO encourages continued dialogue with communities to ensure that decisions reflect local values and priorities. Decisions on the future of YEC will continue to evolve through current and future IRRP engagements. Regional planning is a continual process with plans developed for a 20-year outlook but evaluated every five years at minimum. Options will continually be evaluated during further cycles and solutions will be triggered as needs begin to materialize on the system, allowing flexibility in the planning process.

Debbie Schaefer advocated repurposing the existing YEC site into a Battery Energy Storage System to support climate goals, minimize environmental impact, and align with land use policies by avoiding new development in protected areas.

Thank you for your feedback on the future of York Energy Centre. The IESO is actively evaluating a range of technically feasible and cost-effective solutions to meet electricity needs in the region. This includes exploring the potential for non-emitting technologies such as Battery Energy Storage Systems (BESS), particularly where existing infrastructure can be leveraged to minimize environmental impact. Please

note, the York Energy Centre is a private entity and the IESO does not provide recommendations on the commercial operations of private entities, such as repurposing the facility.

Without YEC, the region would be left with an approximate 400 MW supply gap. This substantial supply gap would alternatively mean building new transmission or building similar sized generation with the same operational characteristics. The IESO will continue to engage with municipalities, stakeholders, and the public as planning milestones are reached. Feedback on the future of the YEC will inform the options analysis and recommendations in the upcoming, and future, IRRPs for York Region.

City of Richmond Hill staff supported reducing reliance on fossil fuel energy production, prioritizing alignment with the City's net-zero goals through energy conservation, renewable energy adoption, district energy and deep retrofits.

Thank you for your feedback. As part of the evaluation, the IESO has screened in both wires and non-wires options to address electricity needs in the GTA North. In the upcoming webinar, a detailed options analysis will be presented which further evaluates the technically feasible options that meet electricity needs in GTA North. It is important for us to understand community preferences and encourage you to register for the upcoming webinar and to stay updated on GTA North engagements by subscribing and following the GTA North Engagement Page.

Additionally, A scenario is being evaluated to understand the timing and options to reduce reliance on York Energy Centre (YEC), and address the 400MW supply gap, in addition to meeting incremental growth in the area. Given limitations with siting both transmission and generation, reducing reliance on YEC could be achieved, but would likely require a combination of wires and non-wire options to address the system needs. The IRRP is highlighting measures to accommodate reduced reliance or potentially a phase out of York Energy Centre. Decisions will not need to be made in this IRRP cycle, but we encourage ongoing discussion in affected communities to understand preferences.

City of Markham urged a full use of the YEC's lifespan while transitioning to cleaner fuels, cautioning that premature phase-out could disrupt planning and infrastructure coordination, and seeks clarity on how this affects long-term transmission priorities and system resilience.

Thank you for your feedback. The IESO will consider these recommendations as planning continues to advance. As noted in the presentation, York Energy Centre's contract expires in 2035 and the IESO will continue to study and elicit feedback in future IRRP cycles as needs materialize on the system. A scenario is being evaluated to understand the options to reduce reliance on the facility with careful consideration for the alternative options, such as transmission and solar/wind generation, and the land use requirements within York Region. However, a further analysis on the potential role of non-wire options as part of an integrated solution to meet the region's needs will be provided in the next webinar via the detailed options analysis.

The IESO will be hosting another webinar with an opportunity for public participation and feedback. We encourage all interested parties to stay informed on GTA North engagements by <u>subscribing</u> to updates on the GTA North regional planning, following the <u>GTA North Engagement Page</u>, and registering for the upcoming webinar. There will also be more opportunities for input in future IRRP cycles, and we encourage municipalities, communities and all interested parties to continue to offer input as planning evolves.

Considerations for future engagements

Feedback/common themes

IESO response

Debbie Schaefer suggested further clarity on whether large-scale rooftop solar in combination with BESS could be a viable option to address needs in the GTA North.

Thank you for this feedback on future engagement opportunities. Any DER that targets peak demand, including, Large-scale rooftop solar in combination with BESS, has the potential to defer transmission needs. At the next milestone a detailed options analysis will be presented and the IESO will endeavor to ensure further clarity is provided on the technically feasible options to address electricity needs in GTA North. The IESO is committed to helping ensure that interested parties are kept informed and are provided with opportunities for purposeful engagement to contribute to electricity

Participants stressed the importance of transparent, coordinated energy planning that aligns with local policies, supports growth, and enables

informed community participation:

- King Township staff emphasized the need for transparent planning, including detailed mapping, clear alternatives, and alignment with local policies. They called for accessible information, consideration of cumulative impacts, and meaningful public engagement to support community-informed energy decisions.
- The City of Richmond Hill emphasizes the need for coordinated energy planning that supports municipal growth projections, low-carbon solutions, and diverse electricity needs

planning initiatives, including the evaluation of technically feasible and cost-effective solutions.

During the Forecasting phase of the IRRP, the TWG meets with municipal staff to gather details from their community and energy plans, electrification and climate targets, and understand projected growth and development in their municipality. These demand drivers are then used by the LDCs to develop the forecast. The IESO uses the forecast to identify needs within the system and investigates solutions to meet identified needs. The IESO publishes the <u>forecast methodology</u> and load forecast <u>data tables</u> on the <u>GTA North engagement page</u> to ensure transparency in the planning process.

The TWG carefully considers local policies and initiatives, such as the Official Plan, Climate Action Plans, and local energy priorities, in the evaluation of wire and non-wire options to understand what is technically feasible to meet the needs in the region. The IESO is committed to a transparent planning process and welcomes input at each step of the planning process. The next step in the planning process is to share a detailed options analysis and draft recommendations where more information will be made available, including maps explaining recommended infrastructure to meet regional needs.

Please note, the IESO is not responsible for siting transmission. The IESO provides recommendations for the Transmitter who will initiate the infrastructure work, including the environmental assessment (EA).

Feedback/common themes	IESO response
	We strive to enhance our engagement practices and will endeavor to provide more opportunities for engagement. We value local input and encourage continued feedback as we move through the regional planning process.
Clean Air Partnership stated that the IRRP relies on LDC forecasts that are primarily based on population and electrification assumptions, but do not adequately incorporate municipal Climate Action Plans. Clean Air Partnership is concerned that this disconnect can lead to underinvestment in energy efficiency and DERs, and over investment in costly infrastructure. Clean Air Partnership called for greater alignment, clearer assumptions and a valuation of local energy solutions.	LDCs is key and informs the assumptions, including municipal electrification targets. The LDCs determine demand drivers based on the information provided by municipalities, which includes their growth trends, community, energy, and climate action plans. Additionally, the IESO engages directly with municipalities at each step of the IRRP to ensure alignment between municipal initiatives (i.e., climate action plans, economic development plans, etc.) and energy planning, and that community priorities are incorporated into final recommendations. The TWG forecast accounts for population and development growth, and electrification targets, but also carefully considers the potential of energy efficiency and DERs in meeting regional electricity needs considering the low-cost, low-carbon benefits of these solutions. In York Region, the forecast is projecting significant
	electricity demand over the next 20-years and considering this growth, energy efficiency and DERs will not adequately meet the electricity needs in the region. Significant supply is needed to ensure a reliable supply of energy is provided to support growth and electrification targets. However, although wire options will be required to meet needs, the IESO will continue to identify opportunities in the area for non-wires alternatives to improve reliability and defer transmission infrastructure.
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Energy efficiency and DERs are a valuable tool for helping maintain a reliable, affordable, and sustainable electricity system. The IESO plans to continue to grow electricity Demand-Side Management (eDSM) targets in future program plans to maximize potential for these programs to cost-effectively meet system needs. Through the new 2025–2036 eDSM Framework, the IESO is expanding programs to support residential, commercial, and municipal sectors. You can visit the Save on Energy website to learn more about the program offerings.

The City of Markham encouraged the IESO to engage Regional and Municipal Councils directly once preferred electricity planning options are identified, prior to the Environmental Assessment (EA) process. Additionally, providing municipal staff with broader context and access to events beyond IESO-led consultations would support stronger collaboration and understanding across all involved parties.

Thank you for your feedback. The IESO is committed to continuing to engage municipalities in York Region on the development of this plan, and the Technical Working Group welcomes municipal and councillor input and perspectives as part of the regional plan.

As planning work for the IRRP advances through each milestone, the IESO will continue to host public webinars that are accessible for everyone to attend. These sessions provide opportunities for municipal representatives to share input and ask questions.

As part of the public engagement process the IESO welcomes the views and preferences of municipal representatives, for consideration in the development of the IRRP. The next round of engagement is planned for late Q3, and will include targeted meetings with municipal staff and impacted ward councillors, as needed, followed by a formal feedback period.

Additional comments

Feedback/common themes

IESO response

The City of Markham shared that they will be updating their detailed growth forecasts as part of the City of Markham Official Plan Review, which is currently underway, and has been undertaking detailed build out analyses in several secondary planning studies for key growth areas in the city. They advised they can share this information to support the IESO's forecasting. They also shared Markham District Energy (MDE) Wastewater Energy Transfer Project as an additional resource to be considered.

Thank you for your feedback. The Technical Working Group appreciates municipalities, customers and Indigenous communities keeping their Local Distribution Companies (LDCs) up to date on any new or planned local developments to ensure electricity planning is aligned. We strongly encourage municipalities to share community, energy, and growth plans to ensure transparency and accuracy in developing future demand forecasts. As noted, regional planning occurs in a cyclical process at a minimum every 5 years to reevaluate the needs in the region. Sharing information with your LDC on a regular basis ensures LDC alignment with municipal plans.

Clean Air Partnership emphasized a need for clarity on how electrification and DER assumptions are developed, especially whether they reflect municipal climate action plans.

Thank you for your feedback. The IESO strives to make information available throughout the development of the Integrated Regional Resource Plan (IRRP) to enable meaningful feedback during the process. Data and information to be made available during IRRP development is outlined in the IESO Regional Planning Information and Data Release Guideline.

The IESO engages municipal staff before the first forecasting webinar to understand local priorities and community plans, including climate action plans. The IESO provides a high-level load forecast summary in its first engagement webinar supported by detailed forecasts and methodologies to encourage more meaningful community and stakeholder input. The details for the Forecast Methodology and Data Tables underpinning the demand forecast have been publicly posted to the IESO's GTA North website. As part of the regional planning process, the IESO uses the forecast to identify needs within the system and investigates wire and non-wire solutions to meet those needs.

By sharing this information, the IESO aims to promote transparency and enable more purposeful community and stakeholder participation.

King Township staff appreciated the chance to comment on the IESO's GTA North regional electricity planning and requested extended consultation to allow council endorsement and advocate for a collaborative, transparent planning process that reflects local policies and ensures community input is meaningfully integrated.

The IESO appreciates your time and effort in submitting written feedback and understands the importance of having Council's voice included. Due to time constraints and the need to meet the OEBmandated deadline for completing the IRRP, the IESO is unable to accommodate an extension. That said, the IESO highly values the perspectives of municipal representatives and want to assure you that there will be additional opportunities for Council to provide input. The next round of engagement is planned for late Q3 and will include targeted meetings with municipal staff, as well as Councillors representing wards directly impacted by the recommendations, followed by a feedback period. The IESO encourages both staff and Council to watch for upcoming IESO communications with more details. In the meantime, the IESO welcomes feedback on resources to share with Council to support these important discussions.

The IESO is committed to continuing to engage municipalities in York Region on the development of this plan, and the Technical Working Group welcomes municipal and councillor input and perspectives as part of the regional plan. As planning work for the IRRP advances through each milestone the IESO will continue to host webinars which are accessible for everyone to attend. This provides opportunities for municipal representatives to share input and ask questions. As part of the public engagement process the IESO welcomes the views and preferences of municipal representatives, for consideration in the development of the IRRP.

The Town of Bradford West
Gwillimbury (BWG) has urgently
requested the IESO prioritize energy
infrastructure upgrades in the region
to support its rapid growth and
economic development. BWG
highlights that current capacity
constraints and prohibitive connection
costs are stalling major industrial

Thank you for your thoughtful feedback and for sharing the electricity concerns in your municipality. The IESO recognizes the urgency of infrastructure upgrades in Bradford West Gwillimbury to support rapid growth and economic development. Capacity constraints and delayed industrial projects are being addressed through coordinated planning with the Technical Working Group.

projects, deterring investment, and threatening the success of provincial initiatives such as the Bradford Bypass and Metrolinx Projects. The town outlines the need to prioritize the municipality in the current IRRP, immediate and fast-tracked infrastructure planning to address their development needs, interim energy solutions, the development of contingency plans before the 2035 YEC contract expiry to address the identified 400 MW shortfall, and a collaborative framework for continuous engagement between the municipality, the IESO and Hydro One. BWG highlighted that the capacity issues have resulted in stalled development, the inability to create hundreds of high-value local jobs, and reduced municipal tax revenue impacting essential services and infrastructure. They also noted several municipal initiatives that are reliant on critical energy infrastructure such as the Growth Management Study and housing pledge, Industrial Land Strategy, and community improvement plans.

The IESO is actively evaluating interim and long-term solutions to address these needs. Urgent infrastructure needs will be outlined in the IRRP, including, where possible, interim measures to help meet customer reliability. The IESO agrees that targeted engagement with BWG, Hydro One and the IESO is important to the implementation of infrastructure solutions.

The IESO acknowledges the concerns in the municipality of Bradford West Gwillimbury and encourages you to participate in the upcoming webinar to learn more about the options analysis and draft recommendations. A communication will be sent out soon. The IESO also encourages you to subscribe to updates on the GTA North area and following the GTA North Engagement Page.

Debbie Schaefer highlighted the need for stronger retrofit incentives and proactive planning to ensure new housing meets modern energy efficiency standards, noting that outdated building codes undermine long-term climate goals. Thank you for sharing this feedback. Energy efficiency, including residential retrofits, are an essential component of meeting GHG reduction targets. Through the new 2025–2036 eDSM Framework, the IESO is expanding programs to support residential, commercial, and municipal sectors. You can visit the Save on Energy website to learn more about the program offerings. While these IESO programs can encourage and incentivize higher building performance, the IESO is not responsible for setting or enforcing building codes in Ontario.

MIDAC Corp. emphasized the importance of assessing Ontario's capacity to deliver on electricity growth forecasts considering ambitious electrification demand and government priorities such as increased housing, and industrialization.

MIDAC Corp. called for strong consideration for how Small Modular Reactors (SMRs), if successful and distributed, could reshape transmission planning, should be assessed.

MIDAC Corp. also emphasized the need to reassess planning assumptions around electrification, particularly the reliance on Air Source Heat Pumps (ASHPs) with resistance backup, and advocates for exploring alternative, community-scale solutions like district energy to improve cost-effectiveness and system feasibility.

Thank you for your feedback on measures outlined in the 2025 Annual Planning Outlook (APO). The focus on this engagement is the Integrated Regional Resource Plan (IRRP) for the GTA North region. Information on ASHP adoption, the provinces nuclear fleet, and APO demand drivers are out of scope for this IRRP. You can participate in the APO webinars by following updates on the APO engagement webpage.