Feedback Received and IESO Response

Toronto Regional Electricity Plan Public Webinar #4: Options Analysis and Draft Recommendations – September 25, 2025

The IESO hosted a public webinar on September 25, 2025, for the Toronto Region as part of its engagement to inform the development of a long-term regional electricity plan – Integrated Regional Resource Plan (IRRP). During the webinar, the IESO provided an update on the Local Achievable Potential Study (LAPS), a recap of the draft regional electricity needs in the area, shared the detailed options analysis and draft recommendations for the Plan, and next steps. The webinar included time for a thoughtful discussion with participants. The presentation material and recorded webinar are available on the engagement webpage.

The IESO appreciates the input received, which will be considered by the Technical Working Group[1] to develop the IRRP. Feedback was received from the following parties, and the full submissions can be viewed on the engagement webpage:

- City of Toronto
- Environmental Defence Canada
- Enwave
- Email Petition
- EverGreen Energy Corp
- GEPR Energy Canada
- Harout Manougian
- Mark Freeman
- Mississaugas of the Credit First Nation (MCFN)
- Mississaugas of Scugog Island First Nation (MSIFN)
- NextEra Canada Development
- Ontario Clean Air Alliance
- Ontario Climate Emergency Campaign (OCEC)
- Pollution Probe
- SCAN!
- TD Consultants
- The Atmospheric Fund (TAF)
- Toronto East End Climate Collective (TEECC)
- Toronto East Residents for Renewable Energy (TERRE)
- Toronto Region Conservation Authority (TRCA)

1 The Technical Working Group consists of the IESO as the lead, the local transmitter (Hydro One Networks Inc.), and the Local Distribution Company (Toronto Hydro – Electric System Limited).

The section below summarizes feedback received related to the options analysis, and draft recommendations to be considered in the finalization of the electricity plan for the Toronto Region.

Note on Feedback Summary and IESO Response

The IESO appreciates the feedback received from stakeholders and communities. The tables set out below respond to the feedback received and are organized by theme.

Toronto Integrated Regional Resource Plan (IRRP)

1. Feedback on Options Analysis

Feedback submissions on the options analysis included emphasis on Thermal Energy Networks and requested clarity on battery storage feasibility in the Port Lands; advocated for rooftop solar inclusion; questioned whether advanced grid technologies were considered; calls for stronger efforts in local energy generation and efficiency; welcomed recognition of district energy for peak shaving; and requests that independent modeling be considered in options analysis. Feedback on these topics is summarized below.

Feedback / Common Themes	**IESO Response**
Participants provided feedback on specific options in the detailed options analysis, including: • City of Toronto commended the IESO for evaluating innovative solutions like non-wire alternatives, demand-side management, and battery storage in the IRRP. • City of Toronto and TAF emphasized the value of Thermal Energy Networks (TENs)—such as large-scale electric heat pumps with thermal storage—and calls for long-term contracts to support investment and fairly distribute benefits between electricity ratepayers and thermal customers. • Enwave is pleased to see recognition of peak-shaving district energy as future opportunity to reduce peak electrical demand from electrified heating loads. • TAF is unclear why BESS was screened out in north Toronto.	Thank you for sharing this feedback. The IESO recognizes district energy systems as a valuable resource that can contribute meaningfully to the City of Toronto's future energy needs, particularly in the context of reducing emissions and meeting its climate goals. District energy systems - which distribute thermal energy to multiple buildings – offer opportunities to scale low-carbon solutions that align with the City of Toronto's TransformTO climate action plan and net-zero targets. However, the IESO emphasizes that the successful development and integration of district energy projects require leadership from the City of Toronto and active participation from district energy service providers and customer awareness and willingness to participate. Municipal coordination, policy support, and investment are essential to unlocking the full potential of district energy as part of a diversified and resilient energy strategy for the City. The IESO recommends that the City of Toronto keep Toronto Hydro informed of plans

Feedback / Common Themes	IESO Response
• TD Consultants inquired if FACTS devices and Dynamic line ratings were taken into consideration to defer investments.	to implement district energy systems so that their impact on the electricity system can be properly assessed in local and regional plans. The province's recently released Integrated Energy Plan also highlights the importance of district energy systems in supporting growth and local energy resilience. As a next step in implementing the Integrated Energy Plan, the IESO has been directed to identify opportunities in policies, programs, and procurements for new and existing district energy systems to support the province's broader electricity system needs. The IESO will continue to engage with energy services providers and municipalities to understand potential for district energy systems where the density supports such opportunities, such as in the Port Lands area, and to understand opportunities for district energy systems to support the province's forecasted electricity system needs. Battery Energy Storage System (BESS) in northern Toronto was not screened into the options analysis phase due to scale of the need driven by the Update Downsview Secondary Plan. This Secondary Plan involves brand new communities, and therefore new transmission and distribution infrastructure will be required to supply this load. As a result, energy storage was screened out as an alternative to wires investment in the area. This does not preclude energy storage or district energy opportunities from being implemented by developers in Downsview or the city to reduce the total energy requirement ultimately needed in this new community. The City of Toronto and Enwave have also identified the Downsview area as an opportunity for district energy. Flexible AC Transmission Systems (FACTS) devices are generally used to optimize the capability of the existing transmission system through controlled power flows. While this is a useful ability, the capacity needs shown in the IRRP warrant that new wires options further

Feedback / Common Themes	IESO Response
	expand the system, rather than just optimizing it. The recommended HVDC line into Toronto will both provide additional capacity and provide operators the ability to control power flows through voltage source converters. Dynamic line ratings are useful in operations when assessing the real-time capacity of the system. However, planning standards require the use of fixed temperature assumptions to assess the system, thereby, ensuring that the transmission system can operate safely under worst-case conditions. As well, Ontario already uses real-time, ambient temperature adjusted ratings for system operations. This minimizes the incremental value dynamic line ratings can provide in Ontario.
Participants shared general perspectives on the outcomes of the options analysis, including: • Environmental Defence urges the IESO to prioritize distributed and demand-side energy solutions and to model the impact of removing policy barriers to offshore wind, as these changes would enable a cleaner, more resilient, and equitable electricity plan aligned with Toronto's climate leadership goals. • Environmental Defence and OCEC argue the options analysis favours transmission and bulk supply, undermining the full range of electricity pathways available such as non-wire options. • Mark Freeman argues the options analysis should prioritize renewables and distributed solar over nuclear and gas-powered plants. • Pollution Probe commends the IESO for recognizing that its planning approach should align with the City of Toronto's TransformTO initiatives, including opportunities for electricity Demand Side	Thank you for this feedback. The objective of the regional plan is to evaluate all technically feasible, cost-effective, and reliable options to meet electricity needs. Both non-wire and wire options were assessed to address Toronto's growth needs. Priority was placed on fully utilizing existing infrastructure before recommending additional grid reinforcements and new infrastructure. Given Toronto's dense urban geography, often a single solution can address multiple system needs. As electricity use in Toronto is forecasted to double by 2044 the scale of the needs means that the operational limitations of wind/solar/battery-only solutions cannot support meeting peak summer and winter need profiles at the regional level (e.g., solar is not as helpful during the winter months). Therefore, non-wire options will form part of a diversified mix of solutions including energy storage, DERs, and energy efficiency programs, as well as new and upgraded wires solutions. These resources are recommended in the plan, where they can address specific local reliability needs. The plan

Feedback / Common Themes	IESO Response
Management (eDSM) and DERs across the city. • TERRE wanted to see a greater effort to identify additional energy savings and electricity generation from within Toronto, such as a scenario for high adoption of energy efficiency and local renewable generation.	does not cap local resources where they may be pursued by customers, either independently or as supported through SaveOn Energy programs or provincial resource procurements, subject to other technical transmission and distribution constraints such as grid hosting capacity, fault current limits, etc. A policy review of provincial offshore wind is not part of the scope of an IRRP. To support customers, the IESO has launched a new $10.9 billion, 12-year Electricity Demand Side Management (eDSM) Framework, that includes funding programs for all sectors including, but not limited to, the Home Renovation Savings program, expansion of the Peak Perks program to small businesses and providing funding for solar PV systems for businesses and households. This includes new funding for Toronto Hydro to help customers to participate in eDSM programs.
City of Toronto requested more information on the following analysis: • Analysis of the Portlands Energy Centre scenario. • Clarity from the IESO on screening criteria, siting constraints, and connection feasibility for battery energy storage systems in the Port Lands, considering the preferred third supply line into the area.	Thank you for this request. More information and analysis of the scenario on the Portlands Energy Centre can be found in the Final Toronto IRRP Section 6.5.1 as posted to the Toronto engagement website. The objective of the IRRP is to make recommendations for investments in the grid that are integrated and deliver the highest value to ratepayers while supporting growth and reliability across Toronto. While BESS can provide local and provincial benefits, which are reflected in the net costs to the local region, the IESO has not recommended a large-scale BESS in the Port Lands as this creates a potential congestion issue when the transmission system is injecting into this location at the same time the BESS is discharging into the system. Therefore, with the HVDC option, siting a large BESS connected to the Hearn SS may not be technically and economically feasible in the long-term. The IESO has recommended BESS facilities at other locations such as downstream

Feedback / Common Themes	IESO Response
	of Manby West and Dufferin TS, which offers greater value and benefit to ratepayers.

Participants provided feedback that the IRRP should consider independent/external modeling, additional costs, and other lenses in the analysis, including:
• Environmental Defence and OCEC argue the IRRP should incorporate:
  • independent modeling of DERs
  • include health care costs and climate costs when comparing costs of energy efficiency and solar vs. SMRs and gas
  • equity considerations
  • trends such as grid decentralization, V2G, and flexible demand
• SCAN argues there is a discrepancy between what the IESO has concluded and other external studies such as those provided by Environmental Defence and Ontario Clean Air Alliance.
• TERRE suggests external costs for dependence on PEC and gas-fired plants (i.e., health care, infrastructure damage, insurance, burdens from pollution, etc.) be considered.
	Thank you for sharing these considerations. At this time, the IESO does not account for environmental, health or social equity impacts in the analysis as quantitative inputs or metrics. It would be a matter of policy direction to include additional benefits and/or costs outside the scope of electricity infrastructure planning. For infrastructure development, these issues are captured as part of the environmental assessment. For more information on the assumptions currently used in the economic assessment, please visit our Regional Planning website.
	
	Bidirectional charging/discharging from V2G/B were not factored into the L-APS as these opportunities lack data and market insights that can be credibly modelled for the purposes of quantifying the potential. The IESO has indicated that such technologies have future potential and is aware of pilots and demonstrations of V2G in Europe and elsewhere. At the present time, the IESO does not have confidence that a program of meaningful scale and impact could be delivered cost-effectively to inform program decisions in the near-term. Recognizing stakeholder interest in this emerging technology, the IESO has prepared a memo explaining this conclusion and how the IESO is working to advance V2G/B outside of the IRRP. More details can be found here.
	
	The IESO does not comment on the findings of studies undertaken by other parties, as the IESO has not validated the objectives, methodology or assumptions used. In developing IRRP analysis, the IESO uses industry standard assumptions and follows reliability standards and planning criteria that

Feedback / Common Themes	IESO Response
	have been established for the North American power system, which may account for some discrepancies with third party studies.

2. Feedback on Draft Recommendations

Multiple participants comment that the draft recommendations prioritize centralized, costly, and emitting energy infrastructure while overlooking distributed energy resources, local generation, and climate-aligned solutions. Participants call for clearer plans to phase out the Portlands Energy Centre and support City of Toronto's climate goals, offering recommendations to overcome barriers for inclusion of non-wires solutions. Feedback on these topics is summarized below.

Feedback / Common Themes	IESO Response
Participants provided feedback on the draft recommendations for the Plan, including: • Environmental Defence argues rooftop solar potential should have been included. • Environmental Defence, SCAN, OCAA and OCEC argue the draft recommendations do not include a clear pathway for retiring PEC by 2035, per the wishes of Toronto City Council. • Email Petition demonstrating support for an IRRP that prioritizes energy efficiency, rooftop solar, electricity storage, and renewable energy to meet Toronto's future electricity needs while reducing reliance on fossil fuels. • Mark Freeman expected the draft recommendations to align with opportunities to mitigate climate change and lower energy bills. • OCEC suggests the draft recommendations rely heavily on electricity infrastructure supplied by nuclear and gas generation. • OCEC suggests the draft recommendations will cause debt for Ontario for outdated and	Thank you for your feedback. The objective of the regional plan is to evaluate all technically feasible and cost-effective options that allow for reliability needs to be addressed. Both non-wire and wire options were assessed to address Toronto's growth needs. The IESO's draft recommendations to meet Toronto's growing needs include new and upgraded transmission, and complementary local non-wire solutions including energy storage, energy efficiency, and demand response. Together, these solutions form an integrated approach to improve reliability and resilience, while meeting Toronto's growing electricity needs. The new and upgraded transmission infrastructure recommendations will connect to the provincial grid which is supplied by a diverse mix of resources. Resiliency was contemplated by the IESO in the plan as part of determining if a solution is able to meet the City's reliability needs, by accessing alternative supply paths, increased flexibility, and restoration capabilities. Decarbonization was also contemplated in the Plan by including TransformTO and other

Feedback / Common Themes	IESO Response
stranded assets that are expensive to produce and create polluting electricity. • SCAN suggests that the draft recommendations promote a costly, centralized energy system by undervaluing distributed energy resources and innovative technologies and should instead align with Toronto's TransformTO climate goals. • SCAN suggests the IESO's planning approach ignores relationships between energy choices and impacts to land/urban environment, climate crisis, opportunities for community development and local jobs. • SCAN offered that the IESO IRRP missed an opportunity to support city-led energy innovation and resilience and instead could have either contributed meaningfully or stepped aside to let the city pursue its ambitious climate and energy goals. • TAF supports expanded energy efficiency and BESS deployment in Toronto, emphasizes the need to unlock grid value from existing consumer-sited BESS through updated market mechanisms, and recognizes the importance of new and upgraded infrastructure to meet the city's long-term electricity needs. • TEECC is concerned the IRRP will not address the urgent need to reduce overall emissions in Ontario. • TERRE suggests the draft recommendations should give greater priority to the role of DERs, energy efficiency and eDSM opportunities, and that offshore wind should be reviewed. • TERRE and OCEC are concerned the draft recommendations do not include a plan for phase out of PEC especially given health concerns from harmful emissions. • TRCA notes that the draft recommendations across the city require development in TRCA's regulated areas and areas of	initiatives in the forecast development, scenarios (such as studying impacts of reducing reliance on Portlands Energy Centre (PEC)) and recommending complementary non-wire local solutions that include energy efficiency, DERs, and storage and not including new gas generation within the city. Per the City of Toronto's request to reduce reliance on PEC, the IESO assessed a scenario for a future without PEC to understand options and timing to ensure a reliable and affordable supply of power for local reliability. The IRRP is not making a specific recommendation concerning PEC. PEC is currently critical to the reliability of both Toronto's and the broader province's electricity supply. The Third Line is foundational to a future without PEC; however, the line is needed regardless of the future of PEC. Once the line comes into service, local reliance on PEC will be reduced, but it may still be needed to meet the provincial grid's peak needs. The Toronto IRRP is focused on local supply and does not address matters of provincial supply. The IESO's planning processes look to align system investment with growing needs as cost effectively as possible for ratepayers. Ratepayer costs incurred from potential stranded assets would be considered by the Ontario Energy Board as part of a project's regulatory requirements, and not during the planning phase. For rooftop solar, as solar generation is an intermittent resource and Toronto's electricity needs are seasonal (transitioning from summer to winter peaking during the forecast period), solar alone cannot reliably meet the needs as a standalone solution. Given the magnitude of the projected wintertime electrical demand resulting from continued electrification of building heating systems, solar combined with battery storage

Feedback / Common Themes	IESO Response
interest. TRCA requests careful planning for station expansions/upgrades to avoid or appropriately setback from TRCA regulated areas; TRCA requests for line upgrades that intersect sensitive areas such as steep slopes, wetlands, floodplains, TRCA properties, and river crossings, it should be avoided or carefully mitigated during design and implementation; TRCA recommends they be engaged early during potential BESS developments.	also cannot fully address this need, due to the scale of long duration storage needed through the winter heating season. Offshore wind generation was not considered to address regional electricity needs due to the provincial moratorium on offshore wind development in Ontario. For wire solutions (with the exception of the Third Line recommendation), the transmitter will lead the development of a Regional Infrastructure Plan, which assesses and develops a detailed plan of how wire options can be implemented. All projects will comply with all federal, provincial, and municipal approvals, permits or requirements, including an Environmental Assessment, if applicable.
OCAA offered recommendations to help overcome current barriers to non-wire solutions within Toronto, including: • Energy Efficiency: IESO should pay the full incremental cost of all Toronto's energy efficiency investment opportunities that can save electricity at a lower cost than new nuclear reactors. • Solar: IESO should establish a fair market-value standard offer price for solar power provided to Toronto's electricity system. • Offshore Wind: OCAA requests the Government of Ontario eliminate red tape that is preventing development of Great Lakes offshore wind power. • Electric Vehicles: IESO pay Toronto EV owners to provide power back to the grid when it is needed.	Thank you for this feedback. The IESO will take these recommendations into consideration when designing potential targeted eDSM programming, and future procurement opportunities.
Participants provided feedback on the influence of government policy on the direction of the IRRP, including:	Thank you for sharing this feedback. The IESO is a not-for-profit entity established by the Government of Ontario, with a mandate determined under the Electricity Act, 1998.

Feedback / Common Themes	IESO Response
• TEECC notes the IESO developed an IRRP constrained by ministerial directives such as not including offshore wind. • TERRE suggests the IRRP was designed to realize the Ontario Governments gas and nuclear vision, ignoring community interests and municipal directives. • SCAN suggests through new Ontario legislations, the IESO's mandate of delivering 'reliable, affordable and sustainable' electricity has been now changed to reflect the current government's energy priorities and economic model for growth.	Under this mandate the IESO manages the operational independence of the electricity system and market, ensuring Ontarians have access to a reliable, affordable, and sustainable supply of electricity. Through this work, the IESO also offers independent expert advice to government to inform energy policy. In turn, the provincial government guides the IESO's initiatives through legislation, ministerial directives and policy objectives. Through the IRRP engagement process, the IESO invites all types of stakeholders and communities to share their diverse and unique perspectives in the regional planning process. These perspectives and community preferences are considered by the IESO in the development of the IRRP; however, community and local preferences cannot override provincial legislation.

3. Feedback on Third Supply Line

Feedback submissions demonstrated that participants support the proposed underwater HVDC third supply line for its resilience and system benefits, but emphasize it must complement local decarbonization efforts, local energy alternatives, and district energy integration. Participants advised that next steps for the third supply line should include early identification of environmental and infrastructure constraints, clear mapping for coordination with other parties and consideration to address potential impacts to First Nation communities. Feedback on these topics is summarized below.

Feedback / Common Themes	IESO Response
Participants provided feedback acknowledging the need and value of the preferred option for the third supply line for the City, including: • City of Toronto supports the underwater HVDC third supply line as a resilient, low land-use option with bulk-system benefits and seeks to engage with the IESO on	Thank you for this feedback demonstrating an acknowledgement of the need for a third supply line to support Toronto's growing needs, and the value it will bring. The scale of the needs means that a new transmission line and reinforcements are needed to bring more power (generated or stored elsewhere in the province) into the city,

Feedback / Common Themes	IESO Response
siting and distribution upgrades in the Port Lands. • Environmental Defence acknowledges that the HVDC line from Bowmanville to Toronto can enhance resilience and enable renewable imports but is not a substitute for local decarbonization. • Enwave states that the electrification of Toronto's existing downtown district energy system and the expansion of electrified district energy in other areas of Toronto will provide a reliable, predictable baseload for this new supply while the peak-shaving capabilities of electrified district energy will provide valuable, low-carbon peak capacity resources. • GERB Energy Canada strongly supports the underwater HVDC cable considering its superior technical performance, system resilience, city's infrastructure constraints, and minimal environmental impacts. • Mississaugas of Scugog Island First Nation (MSIFN) recognizes the need for enhanced electricity supply to support economic development in eastern Toronto; however, this option must address potential impacts on MSIFN unceded territories and rights. The MSIFN identified land and environmental concerns about the underwater transmission option, if pursued. The MSIFN also expressed an interest in ongoing participation and engagement in the regional planning process. • OCEC agrees the proposal to connect Toronto to east GTA via underwater line is in the public interest. A third unique transmission corridor to downtown Toronto will significantly increase Toronto's security of supply. • TAF recognizes need for third supply line to form part of the long-term strategy to meet	as part of a mix of solutions including local generation and energy efficiency programs. The IESO's preferred option for the new third supply line is an underwater HVDC cable which supports long-term growth under high-demand scenarios, minimizes impact on land and urban communities, enhances grid resilience, and delivers broader system benefits by easing upstream transmission constraints and enabling future supply connections. The IESO remains committed to ongoing, meaningful dialogue with communities to help shape long-term planning in regions across Ontario. This engagement was part of a broader commitment to fostering respectful relationships, ensuring transparency, and supporting informed participation in regional energy planning. Throughout the development of this Plan, the IESO's engagement with Indigenous communities included extending the opportunity to meet one-on-one to address any inquiries or concerns about the IRRP, and the third supply option.

Feedback / Common Themes	IESO Response
Toronto's electricity needs, and the strategic role it could play in enabling future renewable generation, including offshore wind.	
Participants shared inquiries and concerns regarding the risks of connecting the third supply line to a specific resource type, including: • City of Toronto requests confirmation that the third supply line is not tied to a specific generation project and could support future offshore wind and other renewables, and that its added connection capacity will benefit both the Port Lands and broader city needs. • Environmental Defence and OCEC argue the preferred option will create an overreliance on large-scale nuclear supply that is unavailable in the near term and expensive. • Harout Manougian wondered if the third supply options should also consider feasibility of connecting Port Lands to the Niagara region. • Mark Freeman expresses concern over reliance on American nuclear technology, advocating instead for a stronger focus on local resources. • OCAA believes the HVDC underwater line would be beneficial if it were used to transport renewable power to Toronto. • SCAN is concerned that connecting to SMR technology will increase Canadian dependence on the U.S. • TEECC is concerned the preferred option is risky due to untested SMRs and dependency on enriched uranium from the U.S. • TERRE is concerned the third supply line is connected to costly and untested SMRs, and gas-fired electricity production.	Thank you for this feedback. Ontario's bulk electricity system comprises of transmission lines that traverse the province, connecting a diversified supply mix including nuclear, hydro, natural gas, solar, wind, biofuel, and batteries, to where the electricity is needed. The third supply line into downtown Toronto will connect the city to the provincial grid which is supplied by a diverse mix of resources. The line will bring power from various resources including expanding the capacity to accommodate new generation in eastern Ontario. The IESO did not study a third supply line extending west to Niagara region. The IESO understands that we are currently experiencing a rapidly evolving trade environment and is adhering to procurement policies as laid out by the Ontario government.

Feedback / Common Themes	IESO Response
Stakeholders provided feedback on the analysis of the preferred option, including: • Environmental Defence urges the IESO to clearly demonstrate how the proposed transmission line supports the phaseout of the Portlands gas plant, model its integration with offshore wind and DERs, align it with a broader decarbonization roadmap, and ensure it does not delay near-term investments in solar, storage, and energy efficiency. • OCEC stated the IESO should demonstrate how this line will support the phase out of PEC. • TERRE is interested to see how alternative options such as DERs, energy efficiency and eDSM to achieve 900MWs could be achieved for comparison to the third supply line.	Thank you for these inquiries. Electricity needs across the city were determined based on the forecast scenarios, including through a scenario looking at the long-term impacts on Toronto without PEC, after its contract expiry in 2034. This scenario aligns with the City of Toronto's policy position on Portlands Energy Centre (PEC) by assessing the impact of the loss of supply on the local system and understanding the potential solutions and timing that may need to be pursued to ensure a reliable and affordable supply of power for local reliability. Given PEC's contribution to local reliability, the IRRP technical studies confirmed that a transmission reinforcement would be needed to accommodate a future without PEC and must be in place before the facility can retire. The IRRP is not making a specific recommendation concerning PEC, as PEC is a provincial resource that contributes to provincial resource adequacy as well as local system reliability. However, an objective of the IRRP is to create the enabling conditions that will allow for local reliability determined by reliability standards and planning criteria that have been established for the North American power system, to be maintained without PEC in-service. In addition, while local reliance on PEC will be reduced once the third line is in place, it may still be needed to meet the provincial grid's peak needs into the 2030s. The Toronto IRRP is focused on local supply and does not address matters of provincial supply.In sum, the IESO's recommendations to meet the needs in Toronto are a mix of incremental eDSM, battery storage and transmission system upgrades, including a third supply line into Toronto to supply the forecasted load growth, while also providing broader provincial benefits and improved system resilience.

Feedback / Common Themes	IESO Response
The Mississaugas of the Credit First Nation (MSIFN) communicates that the preferred underwater cable route crosses unceded Michi Saagiig territory, triggering the Duty to Consult and Accommodate (DTCA) as it could disturb sensitive aquatic ecosystems, cultural sites, and traditional harvesting areas. MSIFN raise concerns about cumulative impacts from multiple projects, potential disruption to intergenerational cultural practices, and call for meaningful participation in decision-making and economic opportunities, and government-to-government relationship. They also recommend a federal impact assessment designation and detailed marine studies to ensure environmental protection and respect for Indigenous rights. The MCFN noted that they hold unceded Aboriginal title to the Rouge Valley, where the proposed project is located. They also emphasized that they are the treaty rights holders of the lands, which may be adversely affected by the proposed activities. MCFN outline concerns that the preferred underwater cable route does not include consideration of environmental, archaeological, or Indigenous rights-related impacts.	Thank you for this feedback. The IESO recognizes and respects treaty rights. The scope of an IRRP is to identify potential investments in transmission and/or distribution infrastructure required to meet the electricity needs of a region over the next 20 years. The Duty to Consult is delegated to the proponent after a proponent is selected by the Ministry of Energy and Mines. Following the delegation letter, consultation will begin with the potentially impacted First Nations. The proponent is also responsible for conducting an Environmental Assessment as part of the project development process. If the project meets criteria under the Impact Assessment Act, a federal impact assessment may be triggered.
NextEra Canada provided technical considerations for the IESO on third supply line options.	Thank you for this information, the IESO will consider this in the finalization of the IRRP recommendations and next steps.
Participants provided feedback on the next steps for third supply line, including: • City of Toronto acknowledges that the transmitter will lead environmental assessments and expects early identification of underwater and landfall constraints—such as ecological, recreational, and infrastructure impacts—and advocates that clear mapping will support City coordination	Thank you for this suggestion for future engagement opportunities with impacted stakeholders and communities to ensure alignment and tactics for conflict mitigation.

Feedback / Common Themes	IESO Response
and to ensure effective mitigation of conflicts.	

4. Feedback on Implementation Pathways and Next Steps for IRRP Recommendations

Feedback submissions include recommendations from the City of Toronto to create a procurement pathway for electrified, peak-shaving Thermal Energy Networks (TENs), integrate TENs into planning frameworks, and engage early on siting and environmental impacts. It seeks updates on electricity demand-side management (eDSM) and DER aggregation, and supports geo-targeted, co-designed programs to strengthen grid resilience and enable net-zero solutions. Enwave echoes this by recommending long-term contracts for district energy systems and welcomes provincial efforts to expand their role in Ontario's energy future. First Nations shared that recommendations should include explicit commitments to Indigenous equity investments. Feedback on these topics is summarized below.

Feedback / Common Themes	IESO Response
Participants provided feedback and recommendations on implementation pathways and next steps for IRRP recommendations, including: • City of Toronto urges the IESO to create a procurement pathway for electrified, peak-shaving TENs; include them in the NWA framework alongside DERs within IRRPs; and integrate them into resource adequacy. • City of Toronto looks forward to coordinating with IESO, Hydro One, and Toronto Hydro on proposed station expansions and routing to align with redevelopment plans in Downsview, Scarboro, and Basin areas. • City of Toronto supports geo-targeted programs with flexible regional incentives that reflect transmission and distribution needs, and encourages co-designed, co-funded demand-side initiatives between the IESO and local distributors to strengthen grid resilience and	Thank you for this feedback and recommendations. The Ministry of Energy and Mines recently released the province's Integrated Energy Plan (Energy for Generations) that includes direction to the IESO to identify opportunities for new and existing district energy systems. The IESO looks forward to engaging more to understand opportunities for district energy systems to support the provinces' broader electricity system needs. New targeted energy efficiency programs will be implemented through the IESO's electricity Demand Side Management Framework, and the IESO welcomes opportunities for collaboration within the parameters of the Framework. New funding has been provided to Toronto Hydro to support customers in participation in province-wide eDSM programs, and further funding will

Feedback / Common Themes	IESO Response
enable both wires and non-wires solutions for a net-zero future. • Enwave recommends the Province and the IESO create long term capacity and electricity system contracts for district energy systems and is encouraged by Minister of Energy and Mines IEP directive to expand district energy in Ontario by requesting IESO identify. opportunities for procurements and programs. • TAF recommends as the Stream 2 eDSM regulatory framework is developed, aligning IRRP recommendations with its co-funding and coordination model presents a timely opportunity to accelerate local, targeted energy efficiency initiatives. • TAF encourages the IESO to study offshore wind's potential, despite the moratorium, to meet Toronto's future electricity needs, noting that such analysis could inform provincial policy and ensure planning remains responsive to evolving system demands. • TRCA requests early engagement from the proponents implementing the projects in the Environmental Assessment process, as the proposed recommendations may intersect with TRCA regulated areas requiring permits under current legislation (including preferred third supply line route). TRCA further encourages consideration of its Voluntary Project Review service to fully leverage TRCA's capacities and expertise.	be available in future to support dedicated local programs. For other non-wire solutions, such as battery energy storage systems and DERs, these solutions could be implemented through IESO procurements or other implementation paths to be determined in collaboration with Toronto Hydro. For wire solutions (with the exception of the Third Line recommendation), Hydro One will lead the development of a Regional Infrastructure Plan, which assesses and develops a detailed plan on how wire options can be implemented. The IESO will continue to work with the Government for direction on the next steps for the Third Line Recommendation. All projects will be required to comply with federal, provincial, and municipal approvals, permits or requirements, including an Environmental Assessment, if applicable.
MSIFN notes the draft recommendations lack explicit commitments to Indigenous equity investments and/or revenue sharing, or First Nation supply-chain participations. MSIFN strongly supports integrating authentic Indigenous economic partnerships into the IRRP, including: • MSIFN recommends adapting Hydro One's equity model—offering First Nations a 50% stake in large transmission projects	The IESO believes that Indigenous engagement and economic participation is critical to the success of electricity infrastructure projects in Ontario. Equity models are outside the mandate of the IESO and the scope of the IRRP. The IESO offers funding support through the **Indigenous Energy Support Program (IESP)**. The IESP promotes broad equitable participation in Ontario's energy sector for

Feedback / Common Themes	IESO Response
• Extension of economic reconciliation to equity in substations and transmission refurbishments, allocate equity opportunities for Michi Saagiig businesses for DER integrations and BESS, and prioritize energy efficiency funding for First Nation-owned businesses The Mississaugas of the Credit First Nation notes that the right to economic opportunity, including involvement in the Energy Sector, is a Treaty Right. In order to achieve its objective of economic reconciliation and inclusion of First Nation communities in the Energy Sector, IESO must commit to adopting a treaty-forward approach to the development of energy projects within the Province of Ontario. In regard to the Toronto Integrated Regional Resource Plan ("IRRP"), this would include: • MCFN equity participation (50%), as the only First Nation partner, in energy projects developed within MCFN Treaty Territory, as per recommendations contained within the plan. • Implementation of a procurement policy which recognizes the right to economic opportunity as a Treaty Right and provides priority for MCFN as the Treaty holder for energy projects developed within MCFN Treaty Territory, as per recommendations contained within the plan.	Indigenous communities and organizations by supporting community capacity building, including energy planning and energy infrastructure development, as well as the building of energy knowledge and awareness, and skills related to energy projects. The IESO Indigenous Engagement Team encourages Indigenous communities to reach out with any questions that they may have regarding the IESP at iesp@ieso.ca.

5. Feedback on IRRP Engagement Process

Feedback submissions included a range of feedback on the engagement process including participants commending the IESO for its transparency and responsiveness, while other participants criticized the lack of community inclusion and transparency. Suggestions included improving public education, sharing pros and cons of energy options, and promoting broader participation in future consultations. Participants recommend ongoing engagement through coordinated planning among the IESO, utilities, the City of Toronto,

and landowners, as well as other methods including early geotargeted outreach to address land-use issues and the creation of local partnerships. Feedback on these topics is summarized below.

Feedback / Common Themes	IESO Response
Participants provided feedback on the Toronto IRRP engagement process, including: • City of Toronto commended the IESO for its transparent planning process and its commitment to modernizing regional energy planning by incorporating municipal input. • Enwave appreciates the work the IESO team undertook to understand and consider the value of district energy in the plan, and for the opportunities to engage. • Mark Freeman commends IESO for listening and considering the perspectives shared throughout the engagement process. Suggests the IESO could do more to promote engagement broadly. • OCEC and TERRE argue the engagement process excluded the community voice, and less technical opportunities with residents should be offered. • Pollution Probe stated that the engagement lacked sufficient transparency to make adequate feedback and recommended the IESO make a commitment to transparent consultations. • TD Consultants notes the engagement process was excellent. • TEECC notes that education and knowledge of the electricity system in Ontario is key to improving engagement with the communities. • TERRE recommends all pros and cons of wire and non-wire options including costs/savings for residents, air quality, health and climate, and dependence on the U.S be shared during engagements.	Thank you for sharing this feedback and suggestions to improve engagement. Engagement is a vital part of developing an IRRP and ensuring that input from Indigenous communities, municipalities, stakeholders, and the public informs planning and supports successful implementation. The IESO's External Engagement and Indigenous Engagement Frameworks are built upon a series of key principles that value diverse perspectives and aim to build trust and understanding throughout the regional planning process. 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 planning initiatives. For example, community input has helped the IESO understand the city's growing needs including identifying major projects and policies that are driving Toronto's growing electricity demand, such as the urban development and transit expansion projects. Community input helped to shape the draft recommendations through inclusion of non-wires solutions in specific parts of the city to meaningfully address electricity needs. The IESO heard that resiliency is important, which was a key consideration in the preferred option for the third supply line to not only address the expected load growth in Toronto, but also to create a more robust and resilient grid for Toronto. To help promote the engagement process and enhance awareness/education, the IESO launched a new dedicated website, PoweringGTA.com, sharing accessible

Feedback / Common Themes	IESO Response
	information on active electricity plans across the GTA. For future regional plans, the IESO will take into consideration opportunities to host less technical webinar sessions and new ways to share information on the analysis of wire and non-wire options that describes pros and cons.

Participants provided feedback for consideration on future on-going engagement for Toronto regional planning, including:
 	
• City of Toronto emphasizes the need for early and ongoing engagement with stakeholders to address siting, land use compatibility, and environmental impacts of energy infrastructure. It appreciates recent collaboration with the IESO and partners, and requests updates on station-level demand-side management potential and the role of aggregated DER portfolios in supporting grid needs.
• City of Toronto further recommends coordinating:
  • An IESO, Hydro One, Toronto Hydro, City, and landowners' group to exchange design updates, construction windows, and land constraints
  • A TENS working group to develop procurement pathways and integration with planning
  • Early geotargeted engagement to uncover land-use considerations for BESS and substation upgrades
 	
Environmental Defence recommends:
 	
• IESO create local partnerships to co-develop a local decarbonization roadmap
• Create local energy engagement stream for municipalities, community groups, and DER providers
• Host public non-wires sessions
	Thank you for sharing this feedback. The IESO appreciates the recommendations on how to best continue engagement on electricity planning initiatives following the publication of the final Toronto IRRP report.
	
	New non-wire programs, or infrastructure projects resulting from the IRRP recommendations will be actioned by the responsible organization – either the IESO, Toronto Hydro or the transmitter, to develop more specific project plans to procure it, including further analysis and public engagement.
	
	New energy efficiency programs will be implemented through the IESO's electricity Demand Side Management Framework; energy storage systems and DERs could be implemented through IESO procurements or other implementation paths to be determined in collaboration with Toronto Hydro.
	
	Infrastructure projects would be undertaken by the transmitter and will be required to comply with federal, provincial, and municipal approvals, permits or requirements, including an Environmental Assessment where public consultation would help to determine exact routing.
	
	In the case of the third line of supply, the Minister will determine the next steps, which can involve how the line is procured, and the transmitter responsible for building the line will begin its own engagement process with

Feedback / Common Themes	IESO Response
• Create a public dashboard for non-wire adoption progress	impacted community members and seek the necessary regulatory and permitting approvals.

6. Local Achievable Potential Study (LAPS) Feedback

Feedback submissions included some additional commentary on the LAPS, including perceived lack of transparency and disagreement of its exclusion of distributed energy resources like Vehicle-to-Grid, and call for a more robust assessment of DERs, energy efficiency, and demand response to better reflect long-term potential. Feedback on these topics is summarized below.

Feedback / Common Themes	IESO Response
Participants provided additional feedback on the Local Achievable Potential Study, including: • Pollution Probe thought the Potential Study lacks transparency, making it difficult to validate or meaningfully engage with its findings. • Pollution Probe argues potential from economic to achievable reduces significantly due to exclusions of some DER's. For example, Pollution Probe and SCAN believe excluding Vehicle to Grid is short-sighted as it could be a contributor in the long-term. • SCAN argues the IESO has set a low ambition goal for energy savings achieved from DERs, energy efficiency, and demand response.	Thank you for this feedback. The IESO heard stakeholder feedback through this engagement process for greater transparency on the methodology and assumptions in the LAPS. The IESO responded by providing a copy of the Draft LAPS Report, links to the third-party resources used in the study, forecasting assumptions used in the LAPS, the Technical Approach Memo, IESO Avoided Costs and Marginal Resource Modelling, and the IESO 2024 eDSM Measures and Assumptions List Technical Supplement. For ease of reference, the IESO consolidated all resources into one document. The IESO welcomes input on what additional resources would be required to improve transparency. At this time, the IESO has determined not to include Vehicle-to-Grid in the LAPS given the IESO does not have confidence that V2G can be credibly modelled for the purposes of the studies with currently available information. More fundamentally, the IESO does not have confidence that a program of meaningful scale could be delivered cost-effectively in the near-term. Should the circumstances and maturity of V2G change in the future, the IESO can consider it as part of the iterative regional planning process and supplementary studies.

Feedback / Common Themes	IESO Response
	Per the new 2025 Integrated Energy Plan, the Technical Working Group (TWG) will meet annually to review regional planning updates for the region and determine if further action or planning is required to better match the pace of electricity demand growth. This activity is particularly important for high growth regions like Toronto, offering a mechanism for improved flexibility in the planning process. Should updates impacting the future inclusion/consideration V2G emerge the TWG will have the opportunity to discuss. The outcomes of the LAPS are not intended to set ambitious goals, but instead to produce estimates of the magnitude of incremental eDSM potential above and beyond what is already included in the demand forecasts. These potential electricity savings are used to inform the IRRP's recommendations for how non-wire alternatives can defer or reduce identified needs, as well as future eDSM program activities.