JULY 10, 2025

Toronto Regional Electricity Planning

Webinar #3 - Options Screening



Traditional Territory Acknowledgement

The IESO acknowledges that Toronto is the traditional territory of many nations, including the Mississaugas of the Credit, the Anishnabeg, the Haudenosaunee and the Wendat peoples, and is now home to many diverse First Nations, Inuit and Métis peoples.

We also acknowledge that Toronto is covered by Treaty 13 signed with the Mississaugas of the Credit First Nation, and the Williams Treaties signed with seven First Nations.



Agenda

- 1. Traditional Territory Acknowledgement
- 2. Ontario's Electricity Sector and the IESO's Role
- 3. Recap: Overview of Demand Forecasts, Electricity Needs and Feedback Received
- 4. Preliminary Wire and Non-Wire Options Screening and How Feedback was Considered
- 5. Electricity DSM Framework and Program Opportunities
- 6. Next Steps & Discussion





We work with:



How We Got Here

Electricity planning for the City of Toronto has been a priority for provincial and municipal governments for the past several years. The IESO is leading the development of the Plan that will provide affordable and reliable energy to the City for generations. Feedback and insights are critical and have been considered at each milestone to inform the Plan.

Timeline of Events:

March 2023	July 2023	April 2024	December 2024	June 2025	July 2025
Toronto IRRP launches	Ministry of Energy releases "Powering Ontario's Growth ¹ "; incl. future transmission to City	IRRP demand forecasts released and feedback sought; Ministry releases statement the IESO will lay out plan for more energy infrastructure ²	IRRP electricity needs shared and L-APS introduced; feedback sought	Minister Lecce and Mayor Chow announce third supply line into City	IRRP options screening results, preliminary transmission options; feedback sought
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¹ <u>Powering Ontario's Growth</u>, p. 70;

2 Ontario and Toronto Planning for the City's Growing Electricity Needs | Ontario Newsroo



Executive Summary

- Significant electricity demand growth is expected in Toronto by 2044, driven by urban development, economic development, and electrification of transit and buildings.
- Electricity system needs have been identified including, several existing transmission stations and lines that will reach capacity due to electricity demand growth. Further analysis demonstrates that a reduced reliance on the locally sited Portlands Energy Centre (PEC) would create an immediate capacity gap that would need to be replaced to ensure a reliable supply of energy to the City is maintained.
- At this phase of the Plan, wire options have been screened-in as a solution to meet needs, while non-wire
 options (i.e., energy efficiency and distributed energy resources), have been screened-in <u>in combination</u> with
 wire options.
- The IESO has identified wire options across Toronto and will continue to study complementary non-wire
 options to address electricity needs. This includes the three transmission options that have been identified as
 a potential third supply line into Toronto that could support growth and a future with a reduced reliance on
 PEC.
- Today we are seeking your feedback on the screened-in options, and the preliminary transmission wire options, including the potential third line of supply in Toronto, to help inform the Plan.



Seeking Input

Today the IESO is seeking your feedback on the following components of the Plan:

- Perspectives regarding the options screening results.
- Perspectives regarding how screened-in options could meet needs to inform upcoming milestone.
- Perspectives on preliminary wire options.
- Additional information that should be provided in future engagements to help understand perspectives and insights.

IESO welcomes written feedback until July 25, 2025. Please submit feedback to <u>engagement@ieso.ca</u>.



Recap: Overview of Demand Forecasts, Electricity Needs and Feedback Received



Electricity Planning in Ontario*

Provincial/Bulk System Planning

Addresses provincial electricity system needs and policy directions.

Underway: South and Central Bulk Study

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Regional Planning

Addresses local electricity system needs at the transmission system level.

Underway: Toronto Regional Plan Addresses local electricity system needs and priorities at the distribution system level.

Distribution

Planning

Led by local distribution companies.



Background on Electricity Planning in Toronto

- Regional planning has been on-going in Toronto and across Ontario to address electricity needs.
- The recommendations from the previous regional planning cycles included transmission infrastructure reinforcements, transmission refurbishments and geotargeted energy efficiency.
- These investments have ensured new customers can connect to the system, reliability criteria are met or exceeded, electricity supply remains diversified, and the renewal of aging infrastructure.
- Continued growth requires additional planning. In parallel with the Toronto regional plan, a coordinated study of the bulk transmission system is underway for South and Central Ontario.
 - The study focuses on understanding the sufficiency of the bulk transmission system to enable future growth in electrical demand, decrease reliance on local natural gas-fired generation, and enable large scale new generation, such as the connection of small modular reactors at Darlington.



Regional Planning Timeline



*Per the Integrated Energy Plan (p.71), the Minister has directed the IESO to report back in August 2025 on one recommendation.



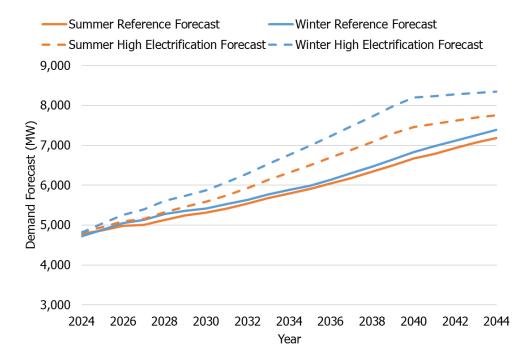
Components of a Regional Plan

Potential Needs Recommendations **Demand Forecast** Solutions Based on an assessment of What kinds of wires potential options, What needs are what recommended How much power is and non-wires emerging in the actions will ensure a needed over the solutions can meet region that need to reliable and planning timeframe? the future needs for be addressed? the region? adequate electricity supply for the region over the long-term?



Recap: Final Toronto Demand Forecasts

- In Toronto, demand could grow by 70% to 100% by 2044 based on both forecasts – Ontario electricity demand could grow by 75% by 2050.
- Growth is primarily driven by urban development, electrification, and economic growth.
- The growing demand for electricity results in significant electricity infrastructure impacts, which will require comprehensive solutions, including wire and non-wire solutions.



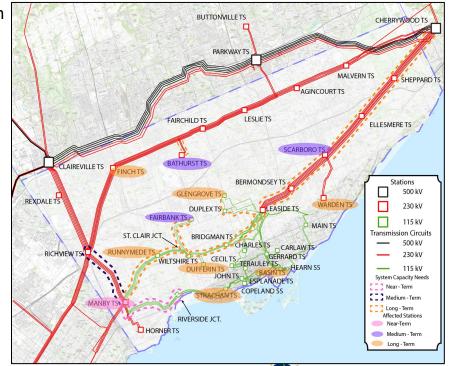


Recap: Electricity Needs in Toronto

Based on forecasted growth, the following needs have been identified:

Timing	Impacted Equipment
Near-term	1 Station 2 Circuits
Medium-term	3 Stations 1 Circuit
Long-term	7 Stations 9 Circuits

For these needs, Portlands Energy Centre is assumed to remain in service to understand needs required due to forecasted growth and electrification.





Recap: Reducing Reliance on PEC – Needs Summary

- The Technical Working Group is evaluating a scenario to understand options and timing to reduce reliance on Portlands Energy Centre (PEC) that will ensure a continued reliable and affordable supply of power to the City of Toronto.
- Needs will be seen on the system as soon as PEC retires. By 2035, there will be a local capacity need of ~480 MW, growing to ~1,300 MW by the late 2040s due to growing demand.
- Reducing reliance on PEC amid growing demand for electricity introduces large scale needs and will require large scale solutions such as the recently announced third line of supply into the City.



Themes of Feedback Received from the Toronto Needs Webinar

Key Areas of Feedback Received:

- Community feedback to incorporate decarbonization plans, including the phase out of Portlands Energy Centre (PEC) and no natural gas generation in the IRRP
- Strong **community preference for inclusion of non-wire alternatives** as solutions in the IRRP to meet needs
- Request that **offshore wind generation be reconsidered** as an option in the IRRP analysis

The IESO has considered all feedback received. Today's presentation we will walk you through the results of the options screening and share in more detail how the feedback has been considered in the options analysis.



Preliminary Wire and Non-Wire Options Screening



How Options are Determined

A combination of wire and non-wire options may be needed to address the needs, and as part of the planning process, the IESO will:

- **1. Screen options** to address the region's near, medium and long-term electricity needs, including:
 - Traditional wires option to supply local area
 - Non-wires alternatives (NWAs), such as transmission-connected generation or energy storage, demand-side management, distributed generation or demand response
- 2. Complete a detailed analysis of screened-in options to recommend solutions to meet needs.

3. Recommend options that address firm growth and consider potential growth to meet needs and ensure we can act quickly in the future when higher growth materializes.

At each milestone, the IESO will seek community feedback to enhance development and evaluation of options before making a final recommendation.



Screening Steps for Options

1. Type of Need

Evaluate the compatibility of the need with different solution options, based on technical requirements and compliance with established reliability standards and criteria for the electricity grid: e.g., capacity, load security, restoration, etc. 2. Characteristics of the Need

Assess compatible solution options against the traits and characteristics of the needs: e.g., size/magnitude, timing, duration, seasonality, and coincidence broader system/provincial needs.

3. Additional Considerations

Take into account local factors that may require further analysis of non-wire alternatives, even if earlier steps haven't identified nonwires alternatives as suitable.



Screening Results – Western Toronto (1/2)

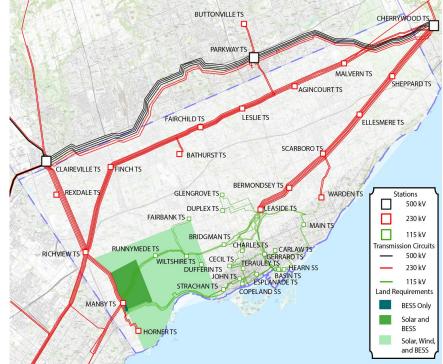
Need Type	Screened In for further detailed evaluation	Screened Out to solely meet the need(s)
Supply Capacity Ability of the system to supply power through the transmission lines to a local area.	 Wires (such as upgrading existing lines) Battery Storage Wires plus integrated approaches including battery storage, energy efficiency, distributed energy resources* 	 Transmission connected generation such as wind generation, and wind and/or solar + battery storage Gas generation
Station Capacity Ability of a station to deliver power from the grid down to the distribution system.	 Wires Wires plus integrated approaches including energy efficiency, distributed energy resources* 	 Transmission connected generation such as wind generation, and wind and/or solar + battery storage Gas generation



Screening Results - Western Toronto (2/2)

Transmission connected renewable generation was screened out to solely meet the station and system capacity needs, due to:

- Western Toronto has shown significant summer and winter needs. Therefore, solar-only resources solutions are ruled out.
- Wind-only solutions are screened-out due to variability and reliability concerns.
- Combination of solar, wind, and batteries would have large land requirements and, therefore, are screened out for further consideration.





Screening Results - Northern Toronto (1/2)

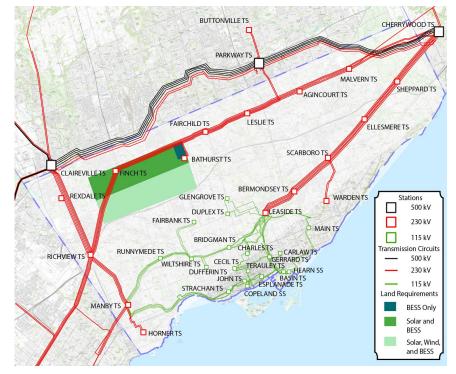
Need Type	Screened in for further detailed evaluation	Screened out to solely meet the need(s)	
Supply Capacity Ability of the system to supply power through the transmission lines to a local area	 Wires Wires plus integrated approaches including energy efficiency, distributed energy resources* 	 Transmission connected generation such as wind generation, solar generation, and wind and/or solar + battery storage Gas generation 	
Station Capacity Ability of a station to deliver power from the grid down to the distribution system	 Wires (such as new stations) Wires plus integrated approaches including energy efficiency, distributed energy resources* 	 Transmission connected generation such as wind generation, solar generation, and wind and/or solar + battery storage Gas generation 	



Screening Results - Northern Toronto (2/2)

Transmission connected renewable generation was screened out to solely meet the station and system capacity needs, due to:

- Northern Toronto has shown significant summer and winter needs. Therefore, solar-only resources solutions are ruled out.
- Wind-only solutions are screened-out due to variability and reliability concerns.
- BESS-only is not suitable as this is a new community that needs infrastructure.
- Combination of solar, wind, and batteries would have large land requirements and, therefore, are screened out for further consideration.





Screening Results - Eastern Toronto (1/2)

Need Type	Screened in for further detailed evaluation	Screened out to solely meet the need(s)	
Supply Capacity Ability of the system to supply power through the transmission lines to a local area.	 Wires (such as new transmission lines) Wires plus integrated approaches including battery storage, energy efficiency, distributed energy resources* 	 Transmission connected generation such as wind generation, solar generation, and wind and/or solar + battery storage Gas generation 	
Station Capacity Ability of a station to deliver power from the grid down to the distribution system.	 Wires (such as new or expanded stations) Wires plus integrated approaches including district energy, energy efficiency, distributed energy resources* 	 Transmission connected generation such as wind generation, solar generation, and wind and/or solar + battery storage Gas generation 	

*Distributed resources: generate energy, store energy, or control load and that are connected directly to a local distribution system.

Connecting Today. Powering Tomorrow.

Screening Results - Eastern Toronto (2/2)

Transmission connected renewable generation was screened out to solely meet the station and system capacity needs, due to:

- Eastern Toronto has significant summer and winter needs, especially without PEC. Therefore, solaronly resources solutions are ruled out.
- Wind-only solutions are screened-out due to variability and reliability concerns.
- BESS-only is not suitable due to large land use requirements.
- Combination of solar, wind, and batteries would have large land requirements and, therefore, are screened out for further consideration.





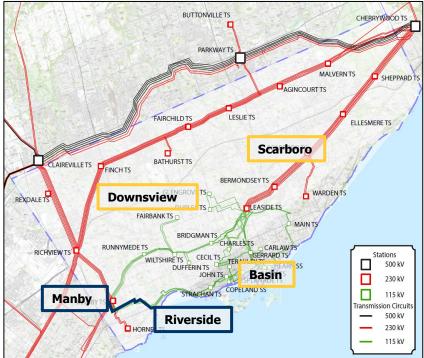
Identified Wire Options

To enable more housing, economic development, decarbonization, additional wire options have been identified:

- Upgrades to existing lines in the Manby to Riverside corridor*
- Build a new transformer station (Downsview TS)*
- Expand the existing Scarboro TS
- Expand the existing Basin TS or build new station
- Third supply line (more details on next slide)

Wires options will continue to be evaluated in combination with non-wires options (including energy efficiency, battery storage, distributed energy resources).

Detailed evaluation of all screened-in options will be completed over the coming weeks and shared during an upcoming engagement.





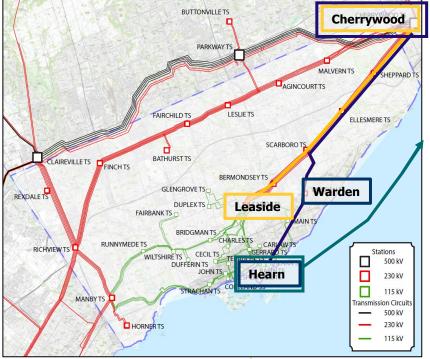
Third Supply Line Into Toronto

Given the growing electricity demand, and consideration to reduce reliance on PEC, a third transmission supply line will be required.

Three transmission options have been identified. Each option has been defined to minimize land-use impacts by using existing infrastructure corridors, underground segments, or underwater routes:

- 1. An overland route from Cherrywood TS to Leaside TS in Toronto, highlighted in yellow on map.
- 2. A mix of overland and underground route segments from Cherrywood TS to the Port Lands in Toronto, highlighted in blue on the map.
- 3. A submarine route from Bowmanville SS or Cherrywood TS to the Port Lands in Toronto, highlighted in teal on the map.

Complementary non-wires solutions continue to be studied.





Coordination with the South and Central Bulk Study

- The IESO initiated a South and Central Bulk Study to enable growth in demand, clean supply, and future generation connections such as new nuclear, while managing space constraints for new infrastructure. The focus of the South and Central Bulk Study is at the bulk transmission level.
- The South and Central Bulk Study is integrated with active regional plans that address regional capacity needs. Regional needs can trigger requirements for bulk system upgrades and bulk plans can impact needs and options considered in regional plans.
- Coordination between the South and Central Bulk Study and the Toronto regional plan is required to integrate options to enable growth and deliver new clean supply, including:
 - Connection of the Small Modular Reactor (SMR) project at Darlington nuclear generation station (Bowmanville) into the GTA.
 - Examining possible new bulk routes into the GTA to enable load growth, including third supply line into Toronto.
- The <u>South and Central Bulk Study</u> is on-going. A final report will be released by the end of the 2025. To say informed, please subscribe to the IESO Bulletin by visiting <u>www.ieso.ca/subscribe</u>.



How Options Feedback has been Considered (1/3)

Key Areas of Feedback	Incorporating Feedback/Considering Feedback
Solar generation on buildings and parking lots	 The IESO has screened-in solar generation as a distributed energy resource to help meet the needs within an integrated approach. As transmission connected solar generation is an intermittent resource and the electricity needs are seasonal, solar alone cannot reliably meet the needs as a standalone solution. The IESO and the OEB are conducting a DER Compensation Study to help inform compensation mechanisms for efficient deployment and participation of DERs in Ontario's electricity system. More details to come.
A future without natural gas generation and the phase out of Portlands Energy Centre	 The IESO has identified three transmission options to reduce reliance on the 550 MW Portlands Energy Centre while continuing to cater for the growing demand in Toronto. The IESO will report back to the Minister in August on a recommendation for a third line of supply. The IESO has screened-out future new gas generation in response to community preference.
Reconsider the inclusion of offshore wind as an option	 Given the provincial moratorium, the IESO determined that it was not appropriate to further consider off-shore wind. The IESO evaluated onshore wind and determined that transmission connected wind-only solutions in Toronto are not feasible given the significant amount of space it would require.



How Options Feedback has been Considered (2/3)

Key Areas of Feedback	Incorporating Feedback/Considering Feedback
Enhance energy efficiency in the City to reduce demand	 Energy efficiency has been screened-in for all needs as part of an integrated approach to meet needs. Since 2011, 6TWh of energy savings and 800 MW of peak demand savings have been realized in the City of Toronto. Building on this success, a new 12-year Electricity Demand Side Management Framework (eDSM) has been launched with new programs and savings targets, supported with an \$10.9b budget to help customers reduce their demand. Programs include incentives for new measures including rooftop solar, heat pumps, demand response programs and more. 2025-2027 budget of \$1.8B with target of 4.6 TWh and 900 MW of savings. The incremental energy savings from the new eDSM Framework and the L-APS will be considered in the upcoming options analysis milestone.
Significant amounts of demand can be met with distributed energy resources (DERs)	 Within an integrated approach, DERs have been screened-in with wires solutions to meet the needs. The IESO and Toronto Hydro are undertaking the L-APS to better understand the amount of achievable behind-the-meter DER. More information will be provided at an upcoming engagement.



How Options Feedback has been Considered (3/3)

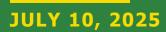
Key Areas of Feedback	Incorporating Feedback/Considering Feedback
Utility scale and residential battery storage can complement existing resources to meet demand	• Wires in combination with utility scale battery storage has been screened-in and will be further evaluated. However, transmission connected generation has been screened-out. Further, a combination of transmission connected solar and wind generation, and battery storage have been screened-out due to large land requirements and the need profile cannot be resolved by these NWAs.
	 Utility scale battery energy storage has been screened-in to meet the needs in Western Toronto and will be analysed further at the next milestone.
	 Residential battery storage potential is being studied in the L-APS. More information will be shared during an upcoming engagement.
Reduce demand through District Energy	 The IESO is engaging with energy service providers and the City of Toronto to understand potential for district energy systems within the City and will include learnings in the options analysis.



Next Steps for the Detailed Analysis of Options

Considerations	Key Details
Technical Feasibility	The Technical Working Group will screen all options, including wires and non-wires alternatives, with respect to established criteria and guidelines (e.g., <u>ORTAC</u> , <u>Guide to</u> <u>Assessing Non-Wires Alternatives</u> , etc.). Only options that can meet technical criteria will be considered further.
Economics	All technically feasible options are assessed for their cost-effectiveness. Typically, the options with the lowest net present value of annual net consumer costs are usually selected as the preferred recommendations in IRRPs. Preferred options that have similar economic performance would be subject to other considerations before arriving at a recommendation.
30 , Timing	The IRRP recommendations will depend on timing of need and lead time of most appropriate solution. E.g., energy efficiency programs can be implemented quickly, while transmission reinforcement projects require 7-10 years.
Community Considerations	Community preferences and feedback regarding potential options, for example resiliency.





Save on Energy Programs in Toronto

Evelyn Lundhild Senior Manager, Demand Side Management



About Save on Energy

- Delivered by the IESO, Save on Energy is Ontario's trusted source for energy-efficiency programs, education and awareness.
- Save on Energy has been delivering energyefficiency programs to help Ontarians reduce their electricity costs and reduce demand on the province's electricity grid since 2011.
- Save on Energy programs, tools, product advice and purchasing guides help consumers use energy more wisely, save money and increase their home comfort.







14+ Years of the Save on Energy Brand



19.5 TWh of energy saved since 2011 – This is equivalent to powering a city the size of Ottawa for more than two years.



Over 80 million energy efficient actions undertaken – includes products installed, purchased, or recycled through programs



Since 2011, customers in **Toronto** have received over \$400M in incentives from Save On Energy Programs and generated more than **6TWh** of energy savings and 800 MW of peak demand savings



Save on Energy has proudly provided energy efficiency opportunities to all Ontarians to help them better manage their electricity use.





eDSM Framework for 2025 to 2036

- New **\$10.9 billion**, **12-year** funding commitment from the Ontario government beginning January 2025
- **Flexibility** to adapt over time via rolling three-year program plans; first plan budget is \$1.8B with target of 4.6 TWh and 900 MW of savings for 2025-2027
- **Program expansion** for residential and business offerings
- New programming and offers
 - Home Renovation Savings program, jointly delivered with Enbridge Gas
 - Expanding **Peak Perks** to small businesses;
 - Installation of **solar PV systems** for businesses
- Funding to LDCs on an opt-in basis to support customer participation
- **Beneficial electrification measures** to promote the use of electricity to improve energy affordability, expand customer choice and reduce emissions in Ontario, while minimizing impacts to the electricity system.



Save on Energy programs for business

Save on Energy's business programs provide incentives to help Ontario businesses of all sizes implement retrofits and other energy-efficiency projects to lower their energy costs, including:

- Small Business Program
- Retrofit Program
- Instant Discounts Program
- Strategic Energy Management Program
- Existing Building Commissioning Program
- Energy Performance Program
- Industrial Energy Efficiency Program



Sign up for our quarterly business newsletter at https://www.saveonenergy.ca/en/Manage -your-subscriptions

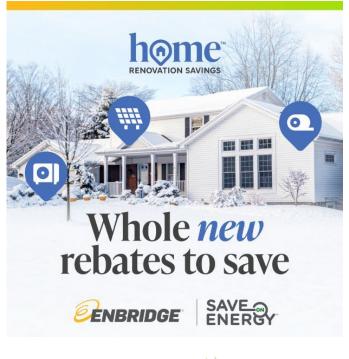




Save on Energy Programs for Residential customers

- Home Renovation Savings Program
 offers rebates to homeowners on energy
 efficient upgrades
- Peak Perks* allows IESO to adjust smart thermostats for short periods on very hot summer days
- Energy Affordability Program provides support for income-eligible customers to receive no-cost energy upgrades

*Peak Perks has over 40,000 participants in Toronto







Next Steps & Discussion



Ongoing Engagement

Your input plays an important role in developing the electricity plan.



Participate in upcoming public webinars



Subscribe to receive updates on the IESO <u>website</u> -> select Toronto Region



Follow the Toronto regional planning activities online



Visit the PoweringGTA.ca website to learn more about active regional plans in the GTA





The IESO will continue to engage and inform. Participants can expect to hear from the IESO at these milestones:

	Toronto IRRP	Local Achievable Potential Study (L-APS)
Q2 2025	Written feedback due July 25	
Q3 2025	 Share the options analysis and draft recommendations¹ in public engagement webinar with an opportunity to provide feedback. Report back to Ministry on recommendation for third supply line. 	 Draft L-APS study results will be shared in a separate public webinar with an opportunity to provide feedback.
Q4 2025	 IRRP report will be completed and published on the <u>Toronto Regional Planning website</u>. 	 Final L-APS study results will be completed and published on <u>Toronto Regional Planning website</u>.

¹Presented information will be in line with <u>Guide to Assessing Non-Wires Alternatives</u> and <u>Regional Planning Information and Data Guideline</u>



Discussion

Regional Planning:

- Perspectives regarding the options screening results.
- Perspectives regarding how screened-in options could meet needs to inform upcoming milestone.
- Perspectives on identified preliminary wire options.
- Additional information that should be provided in future engagements to help understand perspectives and insights.

The IESO welcomes written feedback until July 25, 2025. Please submit feedback to <u>engagement@ieso.ca</u> using the feedback form.



Appendix



Key Takeaways

- A new transmission line into Eastern Toronto is needed given the timing and magnitude of electricity supply needed, and three potential options are being proposed for feedback; other transmission upgrades are also needed.
- Energy efficiency and small-scale resources like solar and storage are screened in, and could help defer some infrastructure investments and contribute to reducing reliance on Portland's gas facility.
- The Technical Working Group is evaluating a scenario to understand options and timing to reduce reliance on Portlands Energy Centre (PEC) that will ensure a continued reliable and affordable supply of power to the City of Toronto. Due to the unique role it plays maintaining the reliability of Toronto's electricity system it will continue to be in-service until such time other solutions are in place.
- Both wires and integrated approaches, including battery storage, energy efficiency, distributed energy resources, and district energy systems are screened in to meet identified needs.
- Off-shore wind has not been considered due to the provincial moratorium.



Toronto Regional Planning Working Group

Team Lead, Independent Electricity System System Operator Operator Hydro One Networks Inc. Lead (Transmission) Transmitter Local Distribution Toronto Hydro Electric Systems Limited Company



Recap: Electricity Needs in Toronto Details

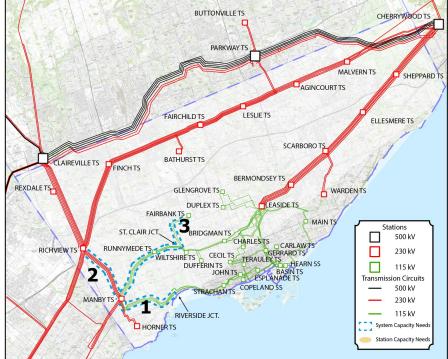
- Each area of the City has its own unique needs, which are detailed in the appendix.
 - The growing demand for electricity results in **significant electricity infrastructure needs**, which will require innovative solutions, including large scale wires and non-wires solutions.
- The **timing of the needs varies from near to long-term**, and Western Toronto is the only area with short-term needs.
 - The high electrification forecast accelerates both the timing and magnitude of certain capacity requirements in parts of Western and Eastern Toronto.
 - Reducing reliance on Portlands Energy Center will lead to larger supply needs in Eastern Toronto.
- Given the medium to long-term timing, certain **options can be recommended in the report and further refined over the next planning cycles** as growth materializes.
- There is **work underway by Hydro One and through energy efficiency measures to address the nearterm needs.** As part of the IRRP, the Technical Working Group is developing a plan, that will be informed by feedback, to maintain reliability as demand continues to grow.



Recap: Western Toronto Supply Needs - Reference Forecast

Chart shows the need date and size for each impacted corridor:

			Need Size		
	Impacted Need Equipment Date		5 Years from Need Date	10 Years from Need Date	
1	Manby TS x Riverside Jct. *	Short-term	30 MW	60 MW	
1	Manby TS x Riverside Jct. *	Short-term	70 MW	100 MW	
2	Richview TS to Manby TS	Medium- term	20 MW	170 MW	
3	St. Clair Jct. x Fairbank TS	Long-term	20 MW	40 MW	





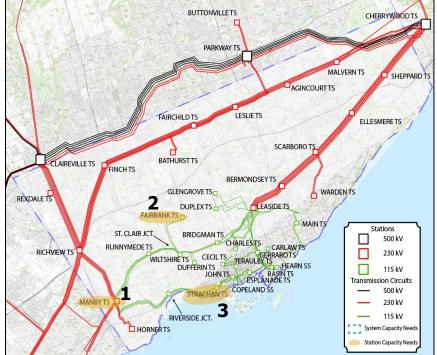
*Different circuits within the same corridor.

Recap: Western Toronto Station Needs – Reference Forecast

Chart shows the need date and size for each impacted station:

			Need Size		
	Impacted Equipment	Need Date	5 Years from Need Date	10 Years from Need Date	
1	Manby West TS*	Short-term	30 MW	60 MW	
2	Fairbank TS	Medium- term	10 MW	30 MW	
3	Strachan TS	Long-term	10 MW	N/A	
1	Manby East TS*	Long-term	N/A	N/A	

*Different equipment within the same station.





Recap: Northern Toronto Needs

TS to the medium-term and increase the need size, while the rest of the need timing remains unchanged.



System Capacity Needs

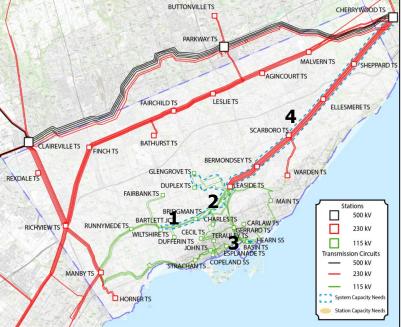
Station Capacity Needs

HORNERTS

Recap: Eastern Toronto Supply Needs – Reference Forecast

Chart shows the need date and size for each impacted corridor:

			Need Size		
	Impacted Equipment	Need Date	5 Years from Need Date	10 Years from Need Date	
1	Bridgman TS x Barlett JCT	Long-term	20 MW	N/A	CLAIREVILLE T
2	Leaside TS x Bridgman TS*	Long-term	20 MW	40 MW	REXDALE TS
2	Leaside TS x Bridgman TS*	Long-term	50 MW	N/A	RICHVIEW TS
3	Hearn SS x Basin TS	Long-term	80 MW	N/A	мат
4	Leaside TS x Cherrywood TS	Long-term	190 MW	330 MW	MA



ieso Connecting Today. Powering Tomorrow.

*Different circuits within the same corridor.

Recap: Eastern Toronto Station Needs – Reference Forecast

Chart shows the need date and size for each impacted station:

			Need Size		
	Impacted Equipment	Need Date	5 Years from Need Date	10 Years from Need Date	
1	Scarboro TS	Medium- term	130 MW	150 MW	
2	Glengrove TS	Long-term	20 MW	N/A	
3	Warden TS	Long-term	20 MW	40 MW	
4	Dufferin TS	Long-term	30 MW	N/A	
5	Basin TS	Long-term	50 MW	100 MW	



