



JULY 27, 2026

South Georgian Bay/Muskoka Regional Electricity Planning

Draft Demand Forecast and Scenarios Webinar

Territory Acknowledgement

The IESO acknowledges that South Georgian Bay/Muskoka is the traditional territory of many nations including the Anishinabeg, the Haudenosaunee and the Wendat peoples, and those covered by the Robinson-Huron Treaty and the Williams Treaties signed with seven First Nations.

The IESO would also like to acknowledge all First Nations, Inuit and Métis peoples and their valuable past and present contributions to this land.

Agenda

1. Ontario's Electricity Sector and IESO's Role
2. Regional Electricity Planning Process
3. Draft Electricity Demand Forecast and Scenarios
4. Engagement and Next Steps
5. Discussion



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Powering Tomorrow.



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Summary

Regional planning has advanced in the South Georgian Bay/Muskoka electrical area to ensure a reliable supply of electricity and support local growth and economic development.

- In November 2025, the IESO hosted a public webinar to share Technical Working Group recommendations to develop a new Integrated Regional Resource Plan (IRRP).
- An IRRP looks at the unique needs of each region and considers wires and non-wires options and innovative resources to meet the needs.
- At this stage in the IRRP planning process, the Technical Working Group has developed forecast scenarios to evaluate the unique electricity needs of the region and consider a range of options and resources to meet electricity demand.
- Today, the Technical Working Group will share the regional forecast scenarios for your feedback.
- As work progresses, the IESO will share more information, answer questions and seek feedback at key milestones.

Seeking Input

Local considerations and feedback are a critical component to the development of an Integrated Regional Resource Plan (IRR). the IESO wants to understand:

- What additional information, if any, should be incorporated in the proposed scenarios? How can the proposed scenarios best capture the range and uncertainty of growth potential while informing near-term infrastructure investments?
- What areas of concern or interest about electricity should be considered as part of the planning process?
- What information is important to provide throughout the engagement? Does the proposed Engagement Plan provide sufficient scope and opportunities for input? What other engagement activities or methods should be considered?

Please submit your written comments by email to engagement@ieso.ca by August 10, 2026.



Regional Electricity Planning Process

Electricity Planning in Ontario



Provincial/Bulk System Planning

Addresses provincial electricity system needs and policy directions.

Complete: [Central-West Bulk Plan](#)

Underway: [South and Central Bulk Plan](#)



Regional Planning

Addresses local electricity system needs at the transmission system level.

Underway: [South Georgian Bay/Muskoka IRRP](#)



Distribution Planning

Addresses local electricity system needs and priorities at the distribution system level.

Led by local distribution companies.

Active South Georgian Bay/Muskoka Electricity Plans

Plan

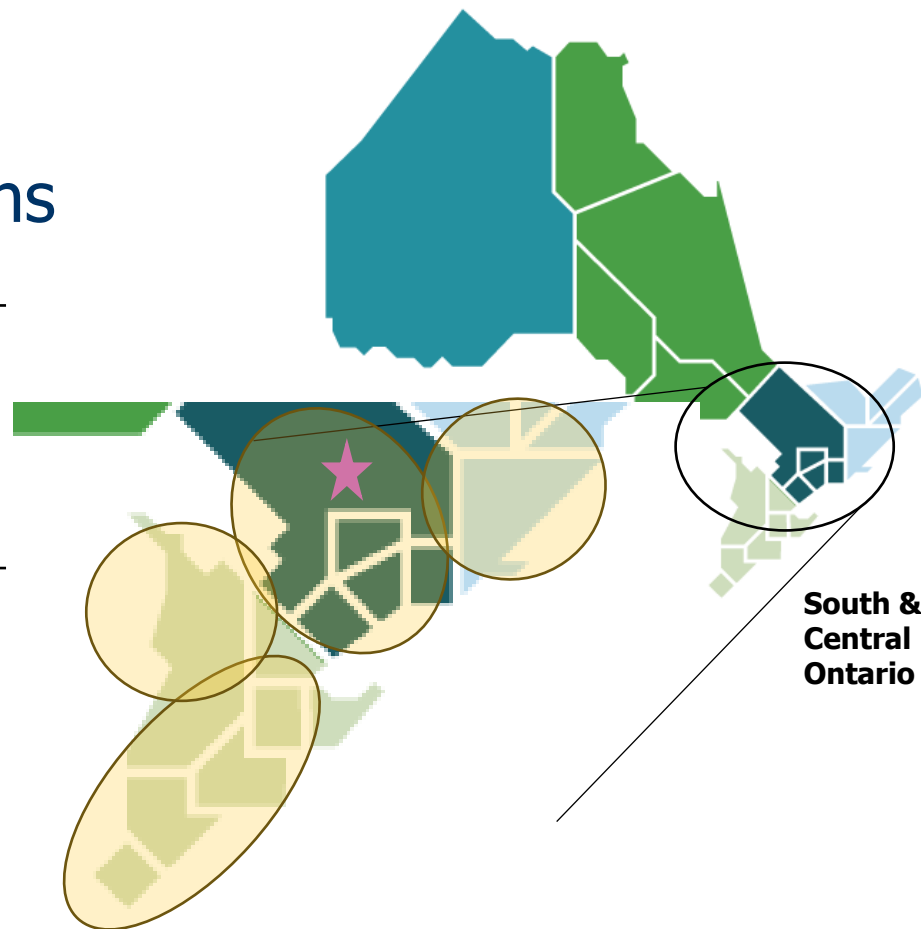
Objective(s)

South and Central Bulk Plan

Review the sufficiency of the bulk transmission network given future growth in electrical demand, and key changes to system generation, such as new nuclear.

South Georgian Bay/Muskoka Regional Plan

Consider forecast growth (economic development, electrification, and population) to determine electricity needs at the regional level and recommend solutions (i.e. wire and non-wire options), to ensure a reliable supply of electricity over the next 20 years.



Technical Working Group

Team Lead,
System Operator

- Independent Electricity System Operator

Lead Transmitter

- Hydro One Networks Inc. (Transmission)

Local Distribution
Companies

- Hydro One Distribution
- Alectra Utilities Inc.
- InnPower
- Orangeville Hydro
- Elexicon Energy
- Lakeland Power
- EPCOR Electricity Distribution Ontario Inc.
- Newmarket-Tay Power Distribution Ltd.
- Wasaga Distribution Inc.

South Georgian Bay/Muskoka Regional Planning

- Regional plans are developed by a Technical Working Group, which is composed of the IESO, local distribution companies, and the transmitter.
- Given the anticipated demand growth, integrated regional resource planning has been advanced in this area to ensure a reliable supply of electricity to support local growth and economic development.



Electricity Planning in South Georgian Bay/Muskoka

In May 2022, the IESO conducted regional planning for two sub-regions in the SGBM region:

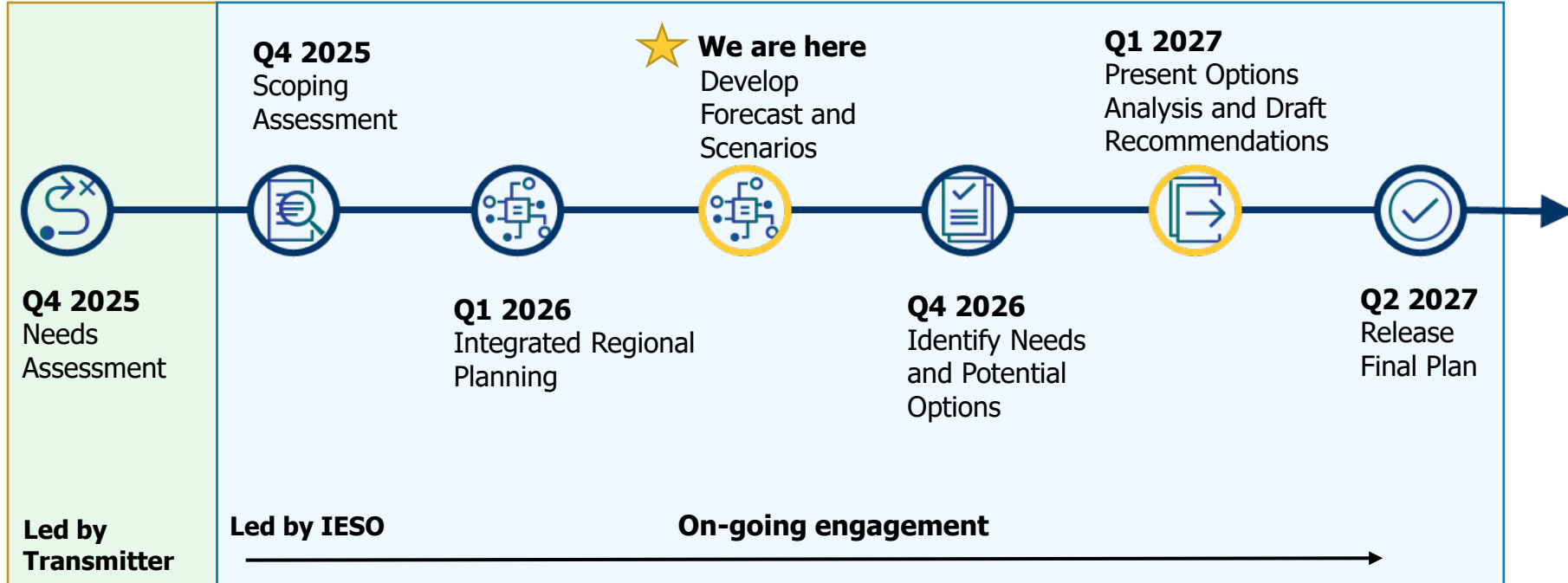
- Barrie/Innisfil IRRP, and
- Parry Sound/Muskoka IRRP

The IRRPs recommended near-term actions for new transformer infrastructure and upgrades, long-term monitoring of demand growth and electrification trends, and emphasized the importance of implementing energy efficiency and conservation measures to defer future needs.

Over the ongoing 18-month period, the South Georgian Bay/Muskoka IRRP will develop and recommend an integrated plan to meet the needs of the region. The IRRP will:

- Update the 20-year electricity demand forecast, and include a low-growth and a high-growth scenario
- Assess the adequacy of electricity supply
- Evaluate opportunities for cost-effective non-wires alternatives (NWAs) and wires options to address the needs identified

Regional Planning Milestones



Components of a Regional Plan



Demand Forecast

How much power is needed over the planning timeframe?

Needs

What needs are emerging in the region that need to be addressed?

Potential Solutions

What kinds of solutions can meet the future needs for the region?

Recommendations

Based on an assessment of potential options, what recommended actions will ensure a reliable and adequate electricity supply for the region over the long-term?



Draft Electricity Demand Forecast and Scenarios

Local Planning Drivers

Important considerations that influence the load forecasts:



Municipal/regional growth plans



Climate change action plans



Community energy plans



Business plans of major electricity consumers or large projects



Distributed energy resources/energy projects

Local Distribution Companies incorporate these drivers into the electricity demand forecast.

Developing the Demand Forecasts

Local distribution companies are the main source for the demand forecasts:

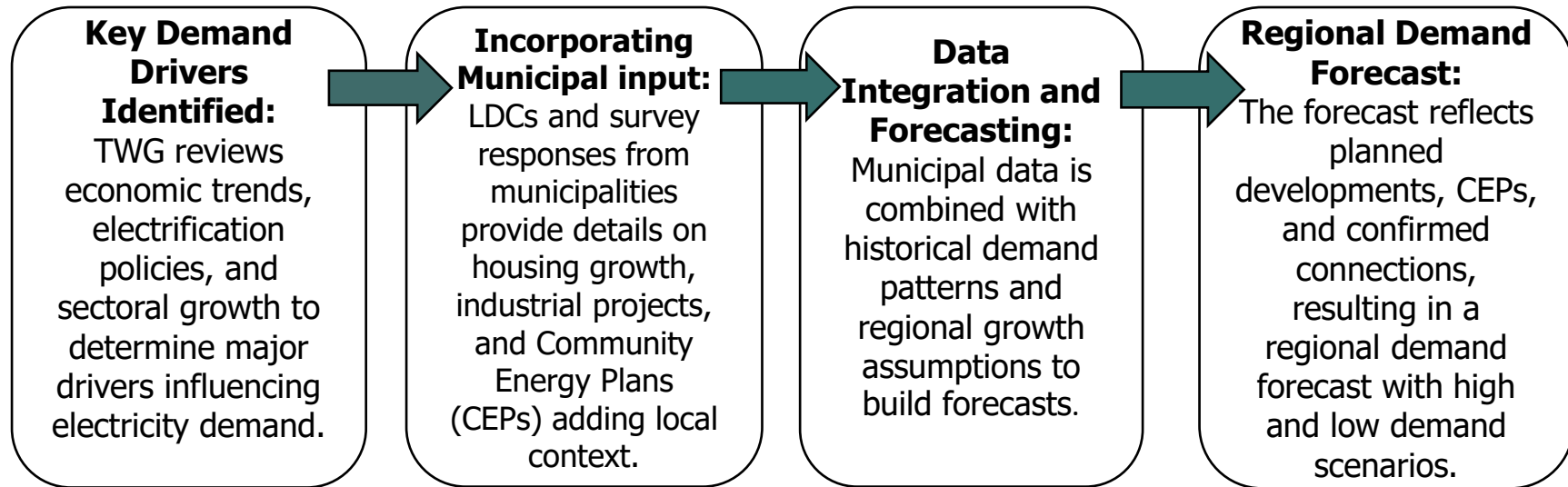
- Provides summer and winter demand forecasts for each station their areas are supplied from,
- Incorporates municipal/regional growth plans, climate change action plans, community energy plans, business plans of major electricity consumers or large projects into their forecasts, and
- Establishes forecasting assumptions based on customer growth plans.

In addition to LDC forecasts, the IESO:

- Accounts for impacts of existing electricity demand-side management programs, planned distributed generation, and extreme weather conditions in the electricity demand forecasts.
- Works directly with customers and industry stakeholders to create demand forecasts for large electricity customers that may seek connection on the transmission system.
- Collaborates with local distribution companies to ensure that additional insights from municipalities, customers, and other interested parties have been incorporated in the demand forecasts for the regional planning process.

Incorporating Demand Drivers into the Forecast

LDCs provide localized demand forecasts based on committed loads and serve as conduits for municipalities to communicate growth, development, and electrification plans, ensuring regional forecasts reflect local initiatives.



Forecast Scenarios

The Technical Working Group has prepared three scenarios for consideration in this IRRP.

- **Low:** A low electricity demand scenario that incorporates the risk of potential economic downturn, delayed and/or reduced growth.
- **Reference:** a demand forecast that reflects current trends and policies in electrification of transportation, space heating, industry, and other areas that impact electricity, while considering business-as-usual factors such as firm loads (current and planned), growth trends, and existing plans.
- **High:** A high electricity demand scenario that reflects a reasonable incremental increase in the foregoing trends, while incorporating potential demand growth that is less certain.

Overview of Scenario Assumptions

Reference forecast will drive firm near- and mid-term recommendations. High and low forecasts will be used to identify needs that require direct early development work, and identify sign-posts to trigger long-term investments.

Consideration	Low Scenario	Reference Forecast	High Scenario
Overview	Lower bound. Growth will likely be higher.	Reasonably certain	Higher bound. Growth will likely be lower.
Pacing	Low historical economic and demographic trends; considering municipal feedback	Existing historical socio-economic trends, high-certainty developments; considering municipal feedback	Higher historical socio-economic trends; considering municipal feedback
Impact to demand	Lower-range values based on targets or trends	Average or mid-range values based on targets or trends	Upper-range values based on targets or trends

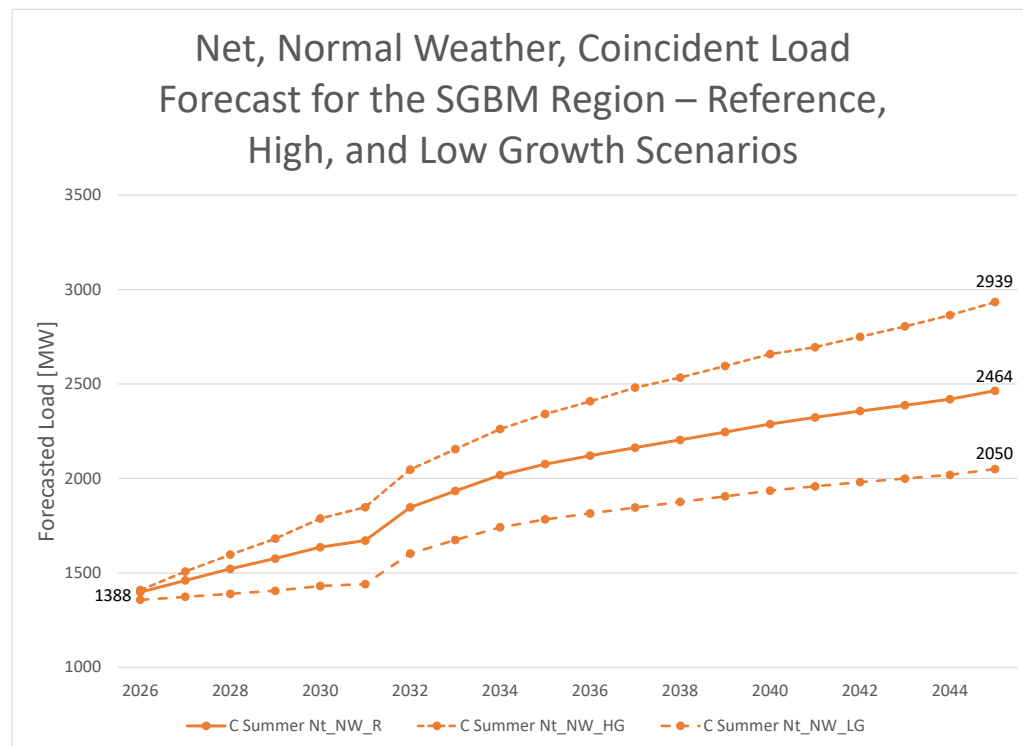
The IESO's forecast scenarios generally include large load projects based on established assessment criteria and evidence of project maturity, readiness, and likelihood of connection. For emerging large-load opportunities such as data centres, the IESO is awaiting further government direction regarding how these projects should be reflected in future planning scenarios.

Draft Summer Forecast and Scenarios

- Summer demand is forecasted to grow over 1,000 MW in the next 20 years, or 78% at an average annual growth rate of 3%
- By comparison, the current provincial growth rate is 2% (growth of 45% by 2045).

Growth is primarily driven by:

- Economic and population growth
- Transportation electrification
- Residential and commercial development
- Data centre in Barrie
- Economic development at Bradford West Gwillimbury

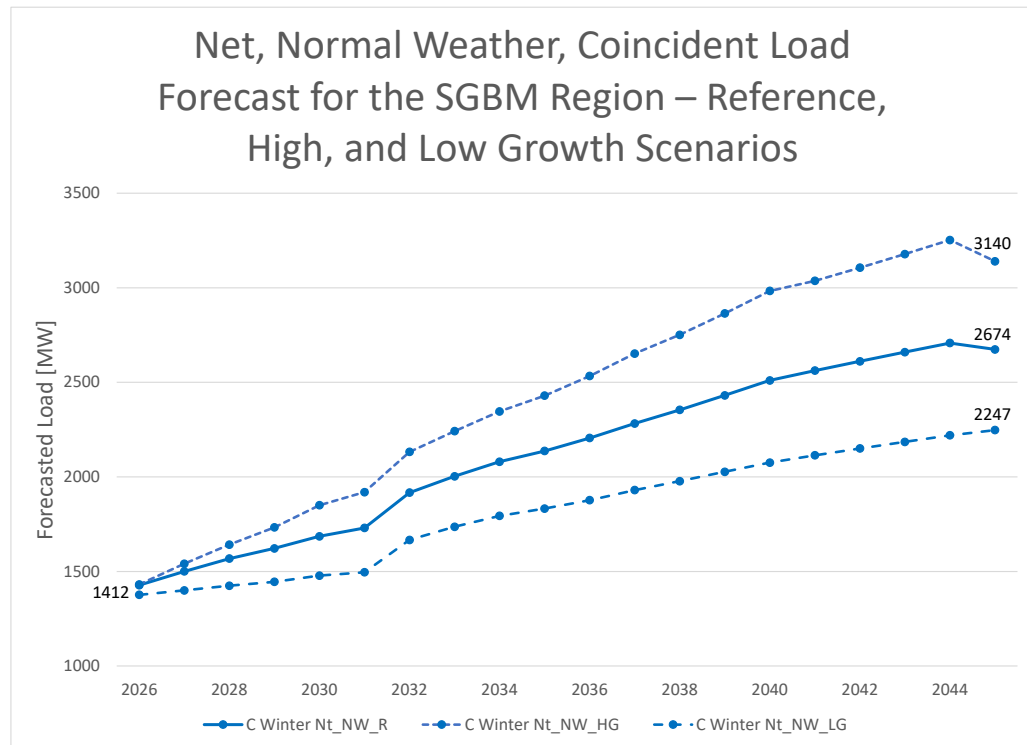


Draft Winter Forecast and Scenarios

- Winter demand is forecasted to grow by over 1,250 MW in the next 20 years, or 89% at an average annual growth rate of 3.4%
- Additional cause of growth:
Electrification of heating

In both seasons the highest forecasted growth rates are observed in Barrie – Innisfil, and Bradford West Gwillimbury areas

AREA	SUMMER	WINTER
Alliston TS, Everett TS, Orangeville TS	1.8%	2.9%
Meaford TS, Stayner TS	3.1%	2.9%
Parry Sound TS, Waubesaushene TS	2.0%	2.4%
Barrie TS, InnPower	6.3%	7.6%
Bracebridge TS, Midhurst TS, Muskoka TS, Orillia TS	2.4%	2.8%
Minden TS, Wallace TS	1.0%	1.2%
Beaverton TS, Lindsey TS	2.3%	1.8%
Bradford West Gwillimbury	Very High	Very High





Engagement and Next Steps

Energy Efficiency Opportunities

- To help meet the province's rapidly growing demand for electricity, the IESO's energy efficiency programs, through Save on Energy, has been expanded from \$1 billion over four years, to \$10.9 billion over 12 years.
- Key programs of interest to your municipality, residents and small businesses include:
 - [Peak Perks](#) – Residential and small business electricity customers with an eligible smart thermostat can be rewarded for reducing their energy use when demand for electricity is high in the summer.
 - [Home Renovation Savings](#) – Homeowners can get rebates up to 30% for home energy efficiency renovations and improvements.
 - [Retrofit](#) – Facility/building owners and lessees can get up to 50% of eligible project costs covered for targeted energy efficiency retrofits. [Learn how Lear Corporation in Ajax used the retrofit program to save on annual costs.](#)
 - [Energy Affordability Program](#) – Support for income-eligible electricity customers to better manage monthly electricity costs and increase their home comfort.
- Use the [Funding Finder](#) to easily identify which Save on Energy programs can best suit your needs.

Next Steps

The IESO will continue to engage throughout the IRRP's development. Communities can expect to hear from the IESO at these milestones:

August 10, 2026: deadline for feedback to the IESO on the draft demand forecast webinar.

Q4, 2026: Needs and options screening analysis are presented in a public engagement webinar with an opportunity to provide feedback.

Q1, 2027: Options analysis and draft recommendations are presented in a public engagement webinar with an opportunity to provide feedback.

Q2, 2027: IRRP report will be completed and published on the [engagement webpage](#)

After IRRP: Depending on the recommendations of the IRRP, the following next steps can be expected:

- For wires solutions, the transmitter will lead the development of a Regional Infrastructure Plan (RIP), which assesses and develops a detailed plan on how wire options can be implemented.
- For non-wire solutions, incremental eDSM programs would be implemented through the IESO's electricity Demand Side Management Framework.

Seeking Input

We are seeking feedback on:

Determining the electricity demand forecast and scenarios for your region

What additional information, if any, should be incorporated in the proposed scenarios? How can the proposed scenarios best capture the range and uncertainty of growth potential while informing near-term infrastructure investments?

Identifying needs to be addressed

What areas of concern or interest about electricity should be considered as part of the planning process?

Engaging with communities and interested parties

What information is important to provide throughout the engagement? Does the proposed Engagement Plan provide sufficient scope and opportunities for input? What other engagement activities or methods should be considered?

Please submit your written comments by email to engagement@ieso.ca by August 10, 2026.

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 website → select South Georgian Bay/Muskoka



Follow the South Georgian Bay/Muskoka regional planning activities online

Thank You

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CONTACT

- ✓ IndigenousRelations@ieso.ca
- ✓ CommunityEngagement@ieso.ca

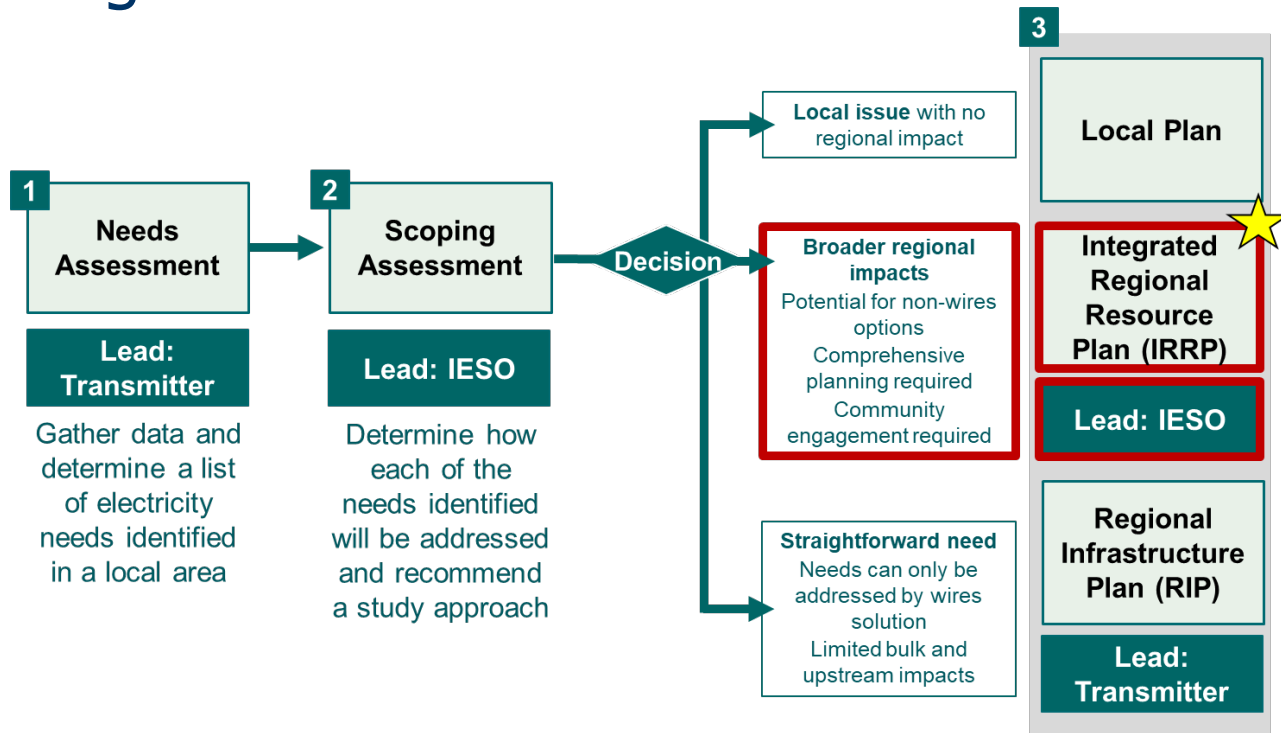
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Appendix

Determining the Need for an IRRP



Electricity Investment Costs

Cost allocation for transmission investment is set by the Ontario Energy Board (OEB), using two key principles:

- Approved projects have to be “just and reasonable”
 - Reference forecasts are based on firm load forecasts to guide near- to medium-term investments, while additional growth scenarios are considered conditionally to avoid unnecessary costs for customers until demand materializes.
- Benefactor pays approach
 - Costs for dedicated connection facilities are paid by the connecting customer, while costs for shared network facilities are allocated across all ratepayers.

Through regional planning, the IESO forecasts future electricity demand, identifies regional needs, and compares potential solutions to recommend timely actions that deliver reliable, sustainable, and cost-effective electricity for the long term.

Identifying Needs

Once the electricity demand forecast has been created, the IESO conducts an assessment to determine needs. Generally, needs studied in this process fall under the following categories:

- **Station capacity:** Ability of a station to deliver power from the grid down to the distribution systems.
- **Supply capacity:** Ability of the system to supply power through the transmission lines to a local area.
- **Asset replacement:** Station or transmission equipment has reached end of life.
- **Load restoration:** Ability of the system to restore power after select contingencies.
- **Load supply security:** Maximum amount of power that can be lost during select contingencies.