

NETWORK NEWS

Keeping members of the IESO's Central/GTA Regional Electricity Network plugged in

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So much about planning to meet future electricity needs is driven by local views on priorities, issues and concerns in each region. This first issue of the Network News for the Central/GTA Regional Electricity Network highlights what the IESO has heard from the networks and how it plans to use that information to move this network forward.

Supporting communities: setting the stage for the future of the IESO's regional networks



When I'm not working from home during a pandemic, my work normally takes me on the road across the province. From Attawapiskat and Kenora to Ottawa and Timmins to Niagara and Windsor, I have the privilege of meeting those who are directly impacted by the work we do at the IESO, whether it is supporting and encouraging local energy solutions to hearing about issues and concerns that need to be addressed as part of the regional and provincial planning process.

Last year, I heard a consistent message around our need to engage in every municipality, First Nation community, village and hamlet I visited.

You told me that you wanted to be more engaged with us. You wanted to stay in touch. And you said that working with us is important.

It is for us too. Your perspective is a critical part of the decision-making process as we plan for the energy future of this province.

As a way to get and stay connected, the IESO launched regional electricity networks across Ontario late last year. The forum held this past February was a time to get to know each other with a view to understanding what you want from your network and what is important in your communities. We provided information about the IESO and how we want to work with you. We heard that you want to talk about how the electrification of home heating and transportation, new urban growth and development, and how municipal plans to address climate change will impact our electrical system. You also expressed interest in learning more about the best and most cost-effective ways to meet regional electrical demand.

This information is helpful for us to know how you want to move forward with your network. Your interests and concerns are the foundation for our future discussions. These topics will be top of mind for us as we reach out to you on issues concerning your network and will be considered for discussion at our next network forum.

COVID-19 has changed the way we are currently doing business but not our commitment to engaging. We hope you enjoy this first issue of Network News, which enables us to stay in touch and focus on what's important to you in the central/GTA region. This newsletter also provides a great opportunity for us to report back on those issues about which you wanted to learn more.

Terry Young
Vice President, Policy, Engagement and Innovation, IESO

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Coronavirus (COVID-19) Update

As the COVID-19 pandemic evolves, the IESO is mindful that communities across the province are adapting to new realities.

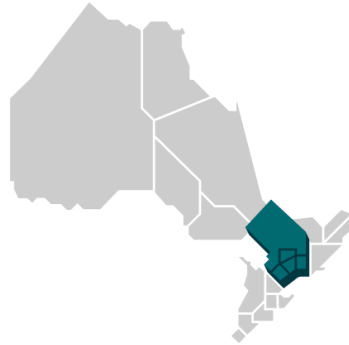
To support Ontarians in this time of uncertainty, the IESO continues to ensure electricity is available when and where it is needed. The IESO has taken actions to ensure the health and safety of employees and stakeholders in order to support its continued work. All engagement activity has been moved online to accommodate this period and provide flexibility for those in new working environments. The IESO values the cooperation and partnership of its stakeholders during this time.

Get Engaged

If you have ideas or feedback for Network News or about your regional network, please let us know. Email us at communityengagement@ieso.ca.

Planning to meet regional electricity needs in Central/GTA

While Ontario has enough electricity capacity to meet broader provincial needs, the IESO also works at the local level to ensure that there will be enough available resources to meet local needs in the most cost-effective way over the next 20 years. Regional electricity planning is guided by conversations with local communities and stakeholders about current and future local needs and priorities. These conversations are reflected in the solutions that the IESO and its planning partners recommend to meet those electricity needs. Having this dialogue is key to ensuring that the IESO makes informed decisions that optimally address local, regional and provincial needs.



There are 21 electricity planning regions in five geographic areas throughout Ontario (NW, NE, SW, Central/GTA and East). Each of these regions goes through a formal planning process at least once every five years, though at different times. The process unfolds differently each time depending on the region's unique needs and concerns.

"Regional planning is about ensuring that the solutions recommended to address local electricity needs are coordinated with the solutions recommended to address the broader regional and provincial needs," said Ahmed Maria, Director, Transmission Planning.

For the central/GTA region, because of its expected urban growth, it will be important to identify where potential power system improvements are needed, and to explore local energy alternatives to enhance the existing system in the region.

Regional planning has identified as priority issues:

- Addressing system capacity needs in various regions arising in the long-term timeframe (in 10 years or more), especially in Toronto and York Region
- Better tracking and understanding of the potential impact of municipal climate change initiatives (e.g., electrification) on the electricity system
- Exploring potential non-wires alternatives or other local and emerging energy options to address regional needs

The following regions make up the Central/GTA network. Visit the IESO website for more information about:

- [South Georgian Bay/Muskoka](#)
- [GTA North](#)
- [GTA East](#)
- [GTA West](#)
- [Toronto](#)

Planning Ontario's electricity system

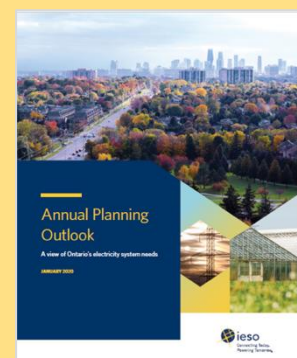
A reliable and cost-effective supply of electricity is something that impacts everyone in Ontario, no matter where you live. It is the backbone of the provincial economy.

After years of investment in new generation, Ontario is in a stable supply situation. There are enough available resources to meet provincial needs for the next decade. This puts the IESO in a secure position to explore ways to add new, innovative resources into the future electricity market.

Planning to have enough electricity to supply our province is like a moving target. So many drivers contribute to the demand for electricity and how it will be supplied. "This spring we have been experiencing decreases in electricity demand as a result of COVID-19 and balancing the output of our generators to meet the changes in demand we are seeing," said Chuck Farmer, Senior Director, Planning at the IESO.

"While there are some challenges in forecasting how demand will recover post-pandemic, we continue to move forward and investigate other options and new opportunities that are potentially more cost effective further support the reliability of the system," said Farmer.

[Infographic showing how COVID-19 has impacted electricity use in Ontario.](#)



[Annual Planning Outlook, January 2020](#)

Grid Innovation Fund: Powering ideas to shape our future

The IESO's Grid Innovation Fund supports and harnesses sector innovation like the integration of distributed energy resources (DERs) such as energy storage and electric vehicles. The purpose is to address community choice and local needs as well as achieve savings by either enabling greater competition in the marketplace or helping consumers manage their energy choices.



"The Grid Innovation Fund is key to the IESO's ability to understand, evaluate and prepare for the changes, challenges and opportunities facing Ontario's electricity system ensuring an affordable and reliable electricity system now and into the future," explained Katherine Sparkes, Director, Innovation, Research and Development at the IESO.

The Fund invests in projects of up to three years in length, and finances as much as 75 percent of the cost depending on the type of project. Since 2005, more than 200 innovative energy projects across the province have received support through the Fund.

For example, a Grid Innovation Fund-supported project at York University is looking at the impact of adopting full battery-based electric transit systems. This almost-completed investigation aims to develop the engineering tools required for studying the impacts of adopting full battery-based public transit and school buses on utility grids. These tools will be used to quantify the impact of implementing electric bus systems on local distribution networks and bulk electricity system. It will also identify and evaluate the potential energy conservation barriers and technical best practices for efficient electrification of transit bus fleets in Ontario.

Projects like these have the potential to spur regulatory changes that reduce electricity system strain, improve customer energy savings, and provide benefits to business. They may also help to enhance Ontario's electricity market by identifying possible solutions to break down some of the barriers to the participation of new technologies or business models.

At least once a year, the [Grid Innovation Fund](#) issues an open call for proposals to pilot, and in some cases develop, innovative technologies, practices, services, research, and programs that present a significant opportunity for ratepayer savings, either directly by enabling customers to better manage their own electricity use, or indirectly by reducing the costs associated with maintaining a reliable electricity system.

A tale of two regions: Tailoring energy solutions to address community growth

With Ontario's electricity situation generally considered stable and secure for the next decade, there is an opportunity today to explore other options for the future and work with communities to strengthen the resilience and reliability of the grid while accommodating local needs.

Great examples are happening in two different, though geographically close, parts of the province. In York Region, just north of Toronto, a place where growth in the next 10 years is expected to exceed capabilities, the IESO plans to pilot a local electricity market.

This pilot will test how local generation can help reduce costs, provide affordable alternatives to building new transmission infrastructure and better accommodate community choice.

A different situation is unfolding in southwestern Ontario, where significant growth in electricity demand is currently challenging existing electricity infrastructure. In the Windsor-Essex region, the need for more capacity is urgent. Along with other businesses in the area, new and expanded greenhouses are contributing to electricity demand that is expected to double over the next five years.

A targeted call for proposals to support the testing and implementation of solutions to cost-effectively reduce electricity demand from indoor agricultural facilities during local and provincial peak period recently closed.

Read more about the York Region local electricity market and the agriculture issues in SW Ontario on the [IESO website](#).

What's next for this network?

"This first issue of Network News wraps up the launch of the regional electricity networks, and we are excited about what's coming next," said Susan Harrison, Supervisor, Regional & Community Engagement.

"Soon you will be hearing more about engagement opportunities to connect with us and other members of your network on issues and opportunities specific to your region. As well, we look forward to continued discussions through regional planning activities," she explained.

The networks demonstrate the IESO's commitment to understanding the needs of Ontario's communities through open and transparent conversations and information sharing with all those interested in learning about and shaping the future of electricity in the province, their region or their community. The final report of the 2019/2020 Regional Forums is [online](#).



WANT TO KNOW MORE?

There are many ways to stay up to date on what's happening at the IESO and learn more about Ontario's electricity system, including:

- [Power Perspectives](#) – A publication that highlights the people and their stories that are behind the IESO initiatives
- [Powering Tomorrow](#) online – A section of the website that is focused on the future and innovation
- Information on [IESO Indigenous Relations](#) including conservation programming and long-term planning
- Powering Tomorrow podcast – Subscribe to the podcast on [Spotify](#), [Google Play](#) and [Apple Podcasts](#) or listen from the IESO website
- [Innovation Roadmap](#) – The IESO's leadership plan for sector innovation
- Social media – Follow the IESO on [Twitter](#), [Facebook](#) and [LinkedIn](#)
- [White paper](#) exploring the expanded participation of distributed energy resources in the electricity market.
- Information about Ontario's [regional electricity planning process](#)
- IESO Bulletin and regional updates – [Subscribe online](#)
- [IESO videos](#) on [what is an electricity market](#), [market renewal](#), [what is capacity and energy](#), [innovations in energy to power tomorrow](#)
- For more information on the IESO's Save on Energy programs please visit [SaveOnEnergy.ca](#)

We want to hear from you. Please provide input ...

If you have anything you want to share, please do not hesitate to get in touch about:

- Ideas for newsletter articles
- What's happening in your community
- Issues to be addressed by your network
- Specific areas of interest
- Your concerns about local regional or community planning
- Any other electricity matter

You can reach us at communityengagement@ieso.ca.

Not a Central/GTA Regional Electricity Network member?

The networks are an opportunity for community members to hear first-hand about issues or innovations impacting Ontario's electricity sector and to provide input into future electricity planning.

The networks reflect the unique needs and characteristics of each region and bring together individuals and organizations with an enduring interest in local, regional and provincial electricity issues. Members have an opportunity to discuss and be informed about local electricity issues and help to drive solutions to meet future electricity needs.

It's easy to register. It's all online. Visit the [IESO website](#) for more information.

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