Eastern Ontario Bulk Plan Backgrounder

To ensure a reliable electricity system that is prepared to support growing demand driven by economic growth and electrification, the IESO analyzed the high-voltage transmission system in eastern Ontario. The study explored transmission needs across the region and included detailed assessments of the Ottawa and Belleville areas, connection of potential future generation resources, and interconnections with neighbouring jurisdictions.

Strengthening the Electricity Grid

The IESO is recommending transmission infrastructure reinforcements in eastern Ontario to advance in two stages, making investments that are essential today while preserving options for additional investments that will only be made when needed.

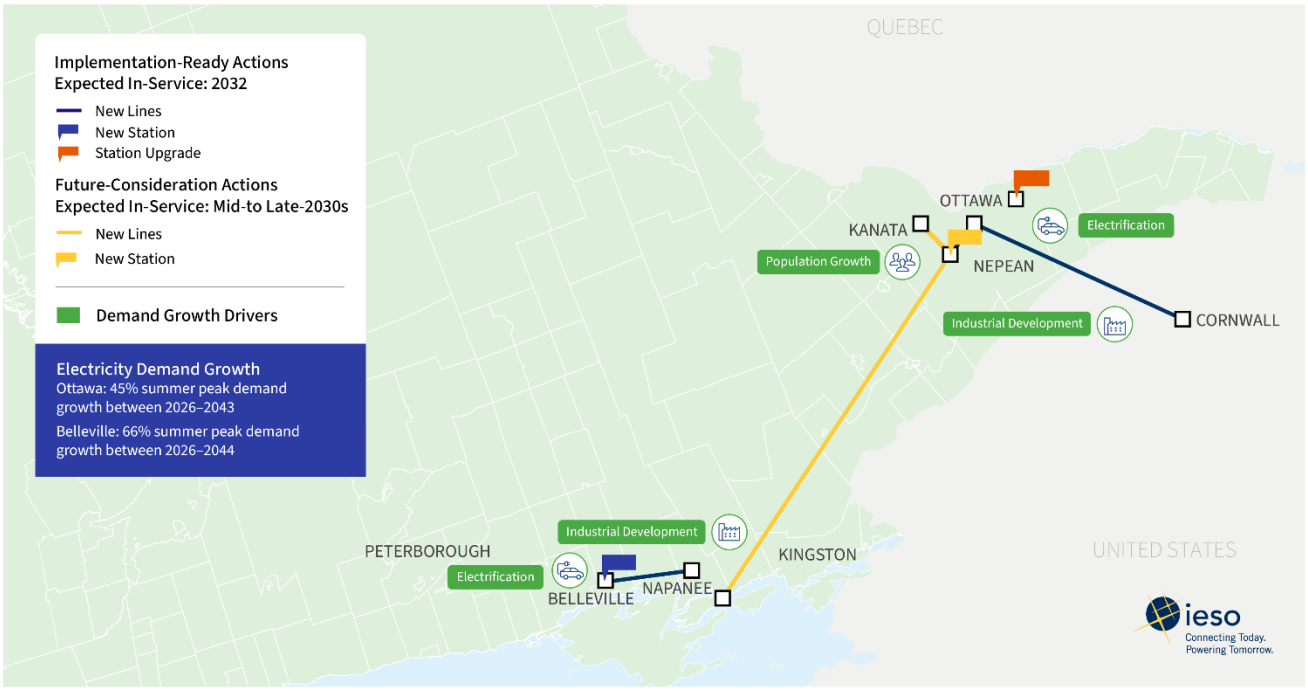
Implementation-ready actions are infrastructure investments that should be initiated immediately to be in-service by the early-2030s, given typical development timeframes. This will meet the needs of communities and businesses in the area based on plans shared with the IESO through its engagements.

Future-consideration actions are potential reinforcements associated with longer-term demand growth, future generation development, and evolving policy direction. These actions should only proceed should conditions evolve beyond what implementation-ready actions address — preserving flexibility and managing ratepayer risk. The IESO will continue to monitor system conditions and trigger the development of these reinforcements as needed.

Benefits

- ✓ **Supports economic development and electrification**: more electricity to meet residential and industrial demand growth throughout eastern Ontario.
- ✓ **Strengthens the grid**: improves supply diversity and reliability into Ottawa and bolsters the St. Lawrence-area transmission system.
- ✓ **Reduces congestion and costs**: more efficient flow of electricity in the Ottawa and Belleville regions minimizes bottlenecks and lowers overall system costs.
- ✓ **More opportunities**: an expanded grid allows more communities throughout eastern Ontario to host new supply resources and enables longer-term resource integration.
- ✓ **Provides flexibility**: reinforcements support both future domestic demand growth and export opportunities to neighbouring jurisdictions.

Eastern Ontario Bulk Plan Overview



Transmission line routes are illustrative and not final. Demand drivers indicate general areas of potential growth.

Next Steps

- Once a transmitter for a project is determined, it assumes responsibility for the project, advances environmental assessments, engages with municipalities and Indigenous communities, and develops potential route options for the transmission line.
- As the regulator, the Ontario Energy Board reviews the project to confirm that the proposed investment is needed, is in the public interest, and has met all applicable regulatory requirements and commitments.
- Once regulatory approvals are obtained, the transmitter proceeds with construction of the new transmission line.
- After the line is energized and placed into service, the transmitter owns, operates, and maintains the asset, while the IESO manages and directs its flow of electricity as part of the province's transmission system.

Other Area Activities

- Targeted energy efficiency in Ottawa and a new eastern Ontario transmission line from Oshawa to Peterborough, expected to be in-service by 2029, will ensure reliability in the Peterborough to Quinte West area over the next 20 years as recommended in the 2022 Gatineau Corridor End-of-Life Study.
- Recently launched or completed Integrated Regional Resource Plans in eastern Ontario that complement this bulk plan: Greater Ottawa; Peterborough to Kingston; St. Lawrence; Renfrew.
- Recommendations from recent Integrated Regional Resource Plans include replacement of aging transmission assets and transformer station upgrades to enhance reliability, additional energy efficiency measures to optimize existing system capacity, and continued monitoring of demand growth to align infrastructure investments with actual system needs.
- Balancing the needs and risks of ratepayers and suppliers, the IESO's competitive procurements align electricity resources with the system's evolving needs, ensuring the continued availability of electricity from various sources to maintain the reliability, sustainability, and affordability of Ontario's electricity system.
- Twelve new generation and storage projects located in eastern Ontario have been selected as part of the IESO's competitive procurements since 2023, adding 1,800 MW of additional capacity to Ontario's electricity grid.
- Energy efficiency continues to be a valuable resource for communities — homes and facilities — to lower costs through Save on Energy programs, rebates, and incentives.