

South and Central Bulk Plan Backgrounder

With electricity demand expected to grow and the resource supply mix changing over the coming decades, the IESO launched the South and Central Bulk Plan to identify system reinforcements needed to connect small modular reactors near the Darlington Nuclear Generating Station and potential new nuclear generation at the Bruce Power complex — while also supporting greenhouse development, industrial expansion, and increasing electrification throughout southern and central Ontario.

Strengthening the Electricity Grid

To manage ratepayer risk and preserve flexibility, the IESO recommends a staged approach to development and construction that is sequenced based on how demand forecasts, procurement outcomes, and policy decisions evolve.

Early actions were advanced in the initial stages of the South and Central Bulk Plan based on a high level of confidence in their inclusion in the final recommendations. This included:

- New transmission line from Bowmanville to the eastern portion of the Greater Toronto Area that will connect to small modular reactors and other sources of supply in eastern Ontario
- Reconductoring a line between Barrie and Orangeville
- Corridor preservation studies for potential transmission infrastructure

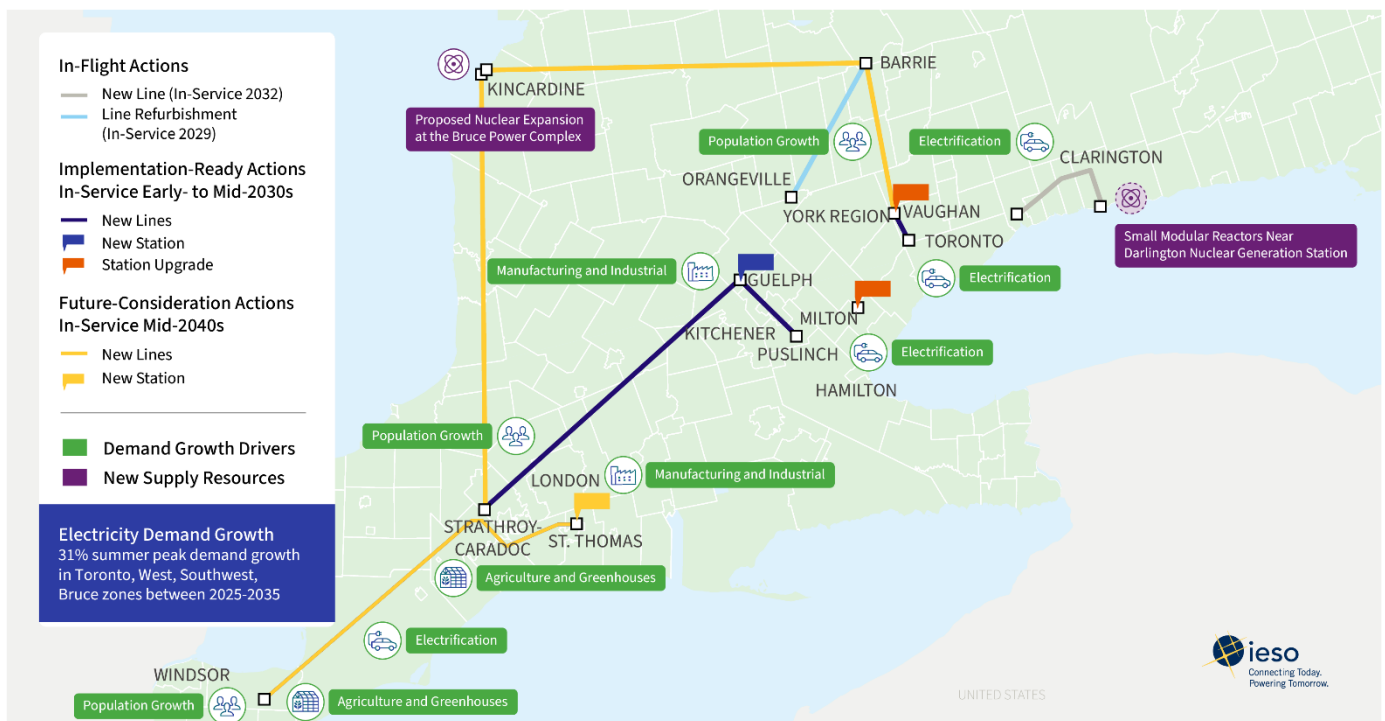
Implementation-ready actions include transmission infrastructure investments that should be initiated imminently, given typical development timeframes. This will help improve reliability and respond to community feedback the IESO received through its engagements.

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

- ✓ **New sources of generation:** enables new nuclear near Darlington Nuclear Generating Station and potential new nuclear at the Bruce Power complex to power the province.
- ✓ **Provides additional supply:** increases pathways for electricity to reach the Kitchener-Waterloo-Cambridge-Guelph region to enable urgent economic growth, electrification, and municipal development.
- ✓ **Serves growth:** supports growing demand in Windsor-Essex and the London Area from manufacturing and greenhouses, as well as northern York and Peel Regions.

South and Central 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.
- A second phase of the South and Central Bulk Plan, expected to begin in 2027, will review the longer-term needs in the 2050s, evaluating how the electricity system can continue to support growing communities and long-term economic development, as well as longer-lead time resources, such as potential new nuclear generation at the Wesleyville site near Port Hope.

Other Area Activities

- Construction of an approximate 64-kilometre-long line between Sarnia and Chatham-Kent expected to be in-service by 2028 and 120-kilometre-long line between Strathroy-Caradoc and Lakeshore expected to be in-service by 2030 as recommended in the [2021 West of London Bulk Plan](#) to support agriculture sector growth and system reliability.
- Construction of an approximate 290-kilometre-long Sudbury–Barrie Transmission Line expected to be in-service by 2032 to increase the amount of electricity travelling between northern and southern Ontario as recommended in the [2025 Northern Ontario Bulk Plan to support future resource integration and economic development](#).
- In-flight or recently completed Integrated Regional Resource Plans in southern and central Ontario that complement this bulk plan: [Kitchener-Waterloo-Cambridge-Guelph](#), [Windsor-Essex, Burlington-to-Nanticoke](#); [London Area](#); [South Georgian Bay/Muskoka](#); [GTA North \(York Region\)](#); [GTA West](#); [GTA East](#); and [Toronto](#).
- Recommendations from recently completed Integrated Regional Resource Plans include targeted energy efficiency measures to manage demand and ease pressure on the system, targeted transmission reinforcements, new and upgraded transformer stations, and a new underwater transmission line from Bowmanville to Toronto.
- 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 at the lowest cost.
- Twenty-two new generation and storage projects located in the South and Central Bulk Plan study area have been selected as part of the IESO's competitive procurements since 2023, adding nearly 2,000 MW of additional capacity to Ontario's electricity grid by 2030.
- Energy efficiency continues to be a valuable resource for communities, helping homes and facilities lower costs through [Save on Energy](#) programs, rebates, and incentives.