

LTEP Summary

The 2017 Long-Term Energy Plan (LTEP), *Delivering Fairness and Choice*, was released on October 26, 2017. This plan, along with the accompanying Implementation Directives to the IESO and OEB, are guiding documents for electricity sector policy for the coming years.

Below is a summary of the 2017 LTEP, with a key focus on initiatives that relate to the IESO.

Chapter 1: Ensuring Affordable and Accessible Energy

- Residential electricity prices included in the 2017 LTEP are forecast to remain below prices included in the 2013 LTEP. This is driven by the Ontario Fair Hydro Plan, removing costs from the electricity system, the anticipated benefits of Market Renewal initiatives, and more efficient consumption of electricity. The outlook for electricity prices for large industrial consumers reflects average increases in line with inflation over the forecast period.

Chapter 2: Ensuring a Flexible Energy System

- Ontario is moving away from relying on long-term electricity contracts and is enhancing its market-based approach. The IESO's Market Renewal Program will transform Ontario's wholesale electricity markets and ultimately result in a more competitive marketplace.
- Market Renewal is expected to be designed to meet system needs, reduce ratepayer costs, and, in line with the province's Climate Change Action Plan, reduce GHG emissions.
- Based on the 2017 LTEP demand outlook, no major expansion of the province's transmission system is expected beyond projects that are already planned or under development.
- The IESO will be required to establish a formal process for bulk system planning, as outlined in the IESO's Implementation Directive. This process is expected to outline a coordinated, cost-effective, long-term approach to replacing transmission assets at end of life, in order to better align investments with power system and market conditions and needs.
- Many existing resources are expected to operate beyond their planned contract life, limiting future cost increases by maximizing their use. Market Renewal is expected to play a key role in maximizing value from existing assets.
- The IESO will continue to manage the [REDACTED] contract and monitor costs underlying the refurbishment and ongoing operation of the [REDACTED] reactors.

Chapter 3: Innovating to Meet the Future

- The government will expand and enhance net-metering through legislative and regulatory amendments that would allow third-party providers to own and operate net-metered renewable generation systems. Legislative and regulatory amendments will also be proposed to enable the deployment of demonstration projects for virtual net-metering.
- As outlined in the IESO's Implementation Directive, a program will be developed to help support a number of innovative renewable distributed generation demonstration projects, paired with distributed energy resources and smart-grid technologies, as well as virtual net-metering demonstration projects.
- With respect to addressing barriers for energy storage, the government is updating regulations, including addressing how the Global Adjustment is charged for storage projects. Additionally, through the Implementation Directive, the IESO, in coordination with the OEB, will be tasked with reviewing market rules, industry codes and regulations, in order to identify potential obstacles to fair competition for energy storage.

- Market Renewal is also expected to spur innovation in Ontario's electricity sector. Market Renewal will create a more dynamic market where all resources, including new technologies, have the opportunity to compete alongside traditional forms of supply.
- The IESO, through the Implementation Directive, will evaluate the development of a pilot project that explores the electricity system benefits and GHG emission reductions from the use of electricity to create hydrogen.

Chapter 4: Improving Value and Performance for Consumers

- The government will look to the OEB to review the standards for reliability and quality of service for transmitters and distributors and to provide options to improve those standards. The IESO will also be tasked with reviewing and reporting on its technical criteria used to assess customer reliability in order to identify and evaluate options for enhancements. Further details are outlined in the Implementation Directive.
- The province is promoting improved access to data to help consumers view and understand the information they need to make decisions on their energy use. The IESO Smart Metering Entity is leading a project that will support more rigorous analysis of consumption data across the province.
- The government is working with both the IESO and OEB to ensure that cyber security is being addressed in the electricity system and that there is appropriate regulatory oversight to mitigate cyber risks and threats.
- The Energy Statute Law Amendment Act, 2016 enabled the IESO to use a competitive process to select proponents to develop and construct new transmission lines in Ontario. As part of the Implementation Directive, the IESO will be tasked with developing the process for the competitive selection or procurement of transmission and identifying possible pilot projects.
- Through the Implementation Directive, the IESO and OEB will be asked to promote a coordinated, streamlined and longer-term approach to the replacement of transmission and distribution assets reaching end of life.
- A new transmission corridor is needed in the northwest Greater Toronto Area given the size of the forecasted growth. Further studies, involving the IESO, will identify the specific route.

Chapter 5: Strengthening Our Commitment to Energy Conservation and Efficiency

- The province will continue to use conservation programs and improved energy efficiency standards to meet its long-term target of saving 30 TWh of electricity by 2032. The government, working with the IESO, will continue to assess the achievable potential for energy conservation, consider initiatives under Ontario's Climate Change Action Plan, and explore option to enhance the value of the existing investments in conservation.
- The IESO is currently conducting a mid-term review of the 2015-2020 Conservation First Framework and the Industrial Accelerator Program. The review will look at how the programs are meeting custom needs, distributor budgets and targets for conservation savings, and coordination with the Province's climate change objectives, including Green Ontario Fund programs. The mid-term review will also look at how conservation programs can better meet the needs of local and regional electricity planning.
- Moving forward, demand response capacity realized each year will depend on system needs and the competitiveness of demand response with other resources. No specific demand response target was identified in the LTEP.
- The government's August 2017 direction enables the IESO to design and deliver, with the support of the Green Ontario Fund, a province-wide rebate program for smart thermostats.

- The government, working with the IESO and OEB, will allow distributors to use the electricity savings from In-Front of the Meter (IFMC) Conservation measures to meet their targets for electricity savings under the 2015 to 2020 Conservation First Framework. IFMC project costs will continue to be funded through distribution rates, and subject to the OEB's review process.
- Beginning July 1, 2018, combined heat and power projects the use supplied fossil fuels to generate electricity will no longer be eligible to apply for incentives under the Conservation First Framework or the Industrial Accelerator Program.

Chapter 6: Responding to the Challenge of Climate Change

- Both cap and trade and Market Renewal initiatives can help to ensure electricity sector emissions remain well below historical levels, while also helping to meet the government's climate change and GHG reduction commitments.
- The IESO will ensure that climate change adaptation is considered and integrated into the bulk system and regional planning process.

Chapter 7: Supporting First Nation and Métis Capacity and Leadership

- As outlined in the IESO's Implementation Directive, the IESO will provide options for improving conservation programs and their availability for First Nations and Métis, including 10 communities served by Independent Power Authorities. This work will be done in conjunction with the mid-term review.
- The IESO will Review and propose options to improve energy support programs currently offered by IESO to First Nations and Métis, with the objective of better aligning programs with community needs and interests. Further details are included in the IESO's Implementation Directive.

Chapter 8: Supporting Regional Solutions and Infrastructure

- Working with the IESO and OEB, the government will continue to implement the Conservation First policy in regional and local energy planning processes.
- Now that the first cycle of regional planning has been completed, the government is directing the IESO to review the regional planning process and report back with options and recommendation to address the challenges and opportunities that have emerged.