Ontario

2017 Long-Term Energy Plan

Part 1 – Policy and Program Initiatives

Ministry of Energy
Date: July 26, 2017

Minister

Deputy Minister

Agenda for Discussion

1. Introduction and Overview of Request
2. Process and Timelines
3. Key Policy and Program Initiatives
4. Implementation Directives and Plans
5. Proposed LTEP Frequency Regulation
6. Communications Roll-out
7. Next Steps
8. Proposed Cabinet Minute

Appendices (in separate documents):

- Appendix 1: Details on Policy and Program Initiatives
- Appendix 2: Report Back on Climate Change Action Plan (CCAP) Initiatives

1. INTRODUCTION AND OVERVIEW OF REQUEST

Introduction

- The Long-Term Energy Plan (LTEP) is the energy sector's roadmap. It includes 20-year outlooks and identifies initiatives to position the energy sector for the future.
- The Province previously released LTEPs in 2010 and 2013.
- Recent changes mean the 2017 LTEP differs from the previous two iterations in a number of ways:
  - Development of the 2017 LTEP followed a new process, updated through *the Energy Statute Law Amendment Act, 2016.*
  - The LTEP process in the Electricity Act, 1998 identifies three tools for creating and implementing the LTEP: the LTEP document, implementation directives, and implementation plans.
    - 2017 LTEP sets out the government's policy goals and objectives, leaving the Independent Electricity System Operator (IESO) and Ontario Energy Board (OEB) flexibility to implement the plan.
  - The 2017 LTEP broadens its focus to include the fuels sector, in addition to electricity.

Where We Are

- Ontario has made significant investments in its electricity generation, transmission and distribution infrastructure over the last decade.
- Thanks to these investments, the province has a reliable electricity system that is 90% greenhouse gas (GHG) emissions free, providing a foundation for supporting the electrification of vehicles and transit.
- Now that investments have been made, the Province is renewing its focus on helping Ontarians and their families.

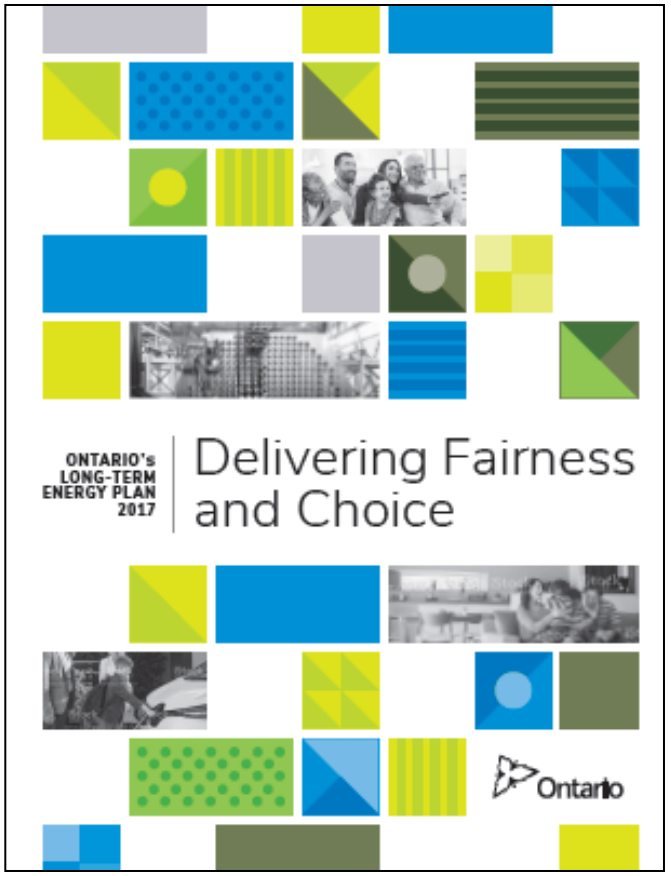
Ontario Electricity GHG Emissions

  - The government shifted costs to the tax base, and through the Fair Hydro Act is lowering bills by an average of 25%, and will ensure that electricity rates won't rise by more than the rate of inflation for four years.
  - Lower-income Ontarians and those living in eligible rural and northern communities are receiving even greater reductions, as much as 40 to 50%.

- Ontario is also adjusting to a rapidly changing energy future. Smart grid investments will support new technologies, creating a more cost-effective and reliable system.
- The 2017 LTEP, *Delivering Fairness and Choice,* focuses on the consumer and positions Ontario's energy system for the future.

2017 LTEP: Delivering Fairness and Choice

- The 2017 LTEP, *Delivering Fairness and Choice,* focuses on the energy consumer, positions the sector for the future and builds off LTEP 2013's success.
- The plan focuses on the energy consumer by highlighting initiatives that:
  - Reduce energy costs;
  - Improve the performance and accountability of the sector; and
  - Give consumers more choice in their pricing plans and how they participate in the energy sector.
- The 2017 LTEP also highlights initiatives that will modernize the energy system and support provincial climate change objectives.
- The plan builds off important elements of the 2013 LTEP:
  - Reaffirming Ontario's commitment to Conservation ;
  - Support the involvement of Indigenous communities in the energy sector; and
  - Recognizing regional priorities.



OVERVIEW OF REQUEST

- The Ministry of Energy has prepared the following for Cabinet approval:
    1. 2017 Long-Term Energy Plan (2017 LTEP) initiatives;
    2. Policy objectives for an implementation directive to the Independent Electricity System Operator (IESO);
    3. Policy objectives for an implementation directive to the Ontario Energy Board (OEB); and
    4. Policy objectives for an amending directive to the OEB.
- The Ministry of Energy will return to Cabinet in August 2017 for Cabinet approval on the modelling outlooks for the 2017 LTEP.

OVERVIEW OF REQUEST (cont.)

- The Ministry of Energy is seeking Cabinet approval to proceed to LRC in Fall 2017 with proposed legislative amendments to enable the province-wide implementation of Green Button and the expansion of Ontario's Net Metering initiative.

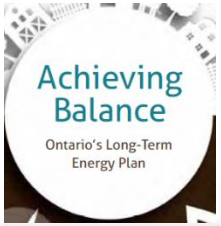
- The Ministry of Energy is seeking Cabinet approval to proceed to TB/MBC for approval of:
  - $60 million over five years to renew the Smart Grid Fund; and
  - $10 million for pilot International Energy Demonstration Fund.

- The Ministry of Energy will seek LRC approval for
  - Approval of regulation that outlines the frequency of future LTEP's (August 2017)

- The Ministry of Energy is reporting back to Cabinet on several initiatives included in the Climate Change Action Plan minute: Green Button implementation, social benchmarking portal, and Energy Efficiency Standards for Drinking Water and Waste Water Treatment Plants (Details in the Report-Back appendix).

2. PROCESS AND TIMELINES

2013 LTEP – Achievements



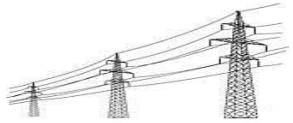
LTEP 2013 Released **Dec. 2013**

Coal Phase-Out Coal eliminated from electricity supply mix **Apr. 2014**

SAVE ON ENERGY

Conservation Six-Year Conservation First Framework takes effect **Jan. 2015**

Regional Planning Process underway across Ontario **Jan. 2016**



Connecting First Nation Communities Watay-nikaneyap Power selected as transmitter **Jul. 2016**

DARLINGTON REFURBISHMENT

Nuclear Refurbishment Darlington Refurbishment to begin **Oct. 2016**

2014 | 2015 | 2016

Price Mitigation Industrial Conservation Initiative expanded **Apr. 2014**

Ontario Energy Reporting Website Launched **Dec. 2014**

ONTARIO ENERGY REPORT

Electricity Storage 50 MW Storage Procurement Completed **Nov. 2015**

Nuclear Refurbishment Bruce Power Refurbishment Implementation Agreement **Dec. 2015**

Renewable Energy Large Renewable Procurement I contracts offered **March 2016** FIT 4 contracts offered **June 2016**

ON-QC Electricity Trade Agreement An agreement is reached **Dec. 2016**

*Timeline includes initiatives from LTEP 2013. Does not include other recent achievements (e.g., Fair Hydro Plan)

New Energy Planning Process

- After the 2013 LTEP, the Ministry of Energy took time to reflect on its energy planning process. It determined that the process used for developing the 2010 & 2013 LTEP's should be enshrined in legislation.
- These changes were made through the *Energy Statute Law Amendment Act, 2016* which was passed in June 2016 and came into force on July 1, 2016.
- The 2017 LTEP follows this planning process:

2017 LTEP Development

- LTEP process began with IESO technical report.
- ENERGY led LTEP development, engagement, and consultations.
- ENERGY is seeking Cabinet approval on the LTEP and implementation directives.

Implementation

- IESO and OEB will develop plans for implementing LTEP objectives.
- Plans submitted to Minister of Energy for approval.

2017 LTEP – Process

Sept. 2016
Technical Reports

- IESO published its Ontario Planning Outlook (OPO) on Sept 1/16
- The Ministry published the Fuels Technical Report (FTR) on Sept 30/16

Oct. 2016 – Jan. 2017
LTEP Engagement

- Included 17 in-person sessions, 17 indigenous sessions, online tools, and *EBR* posting

Feb. 2017- June 2017
Policy Development

- Ontario's Fair Hydro Plan policies developed and announced; implementation begins
- ENERGY developed LTEP initiatives

July 26, 2017
Cabinet Approval- LTEP Initiatives

- ENERGY seeking approval on policy and program initiatives to prepare final LTEP and implementation directives

Aug. 31, 2017
Cabinet Approval- LTEP Outlooks

- ENERGY will seek Cabinet approval of supply, demand, emissions and price outlooks for inclusion in final LTEP

Sept/Oct 2017
Table LTEP

Sept/Oct 2017
Table Agency Directives

- Ministry to table LTEP document and implementation directives

Sep/Oct 2017
Publish LTEP

- Final LTEP published on Ontario.ca
- Minister issues Cabinet-approved implementation directives to IESO and OEB

Fall 2017
Legislative frameworks

- Propose legislative amendments to enable the province-wide implementation of Green Button and the expansion of Ontario's Net Metering initiative

Fall 2017
Implementation Plan Development

- IESO and OEB develop implementation plans based on directives

Dec. 2017
Implementation Plan Approval

- Implementation plans submitted to Minister of Energy for approval

LTEP Documents

- The LTEP process in the *Electricity Act, 1998* identifies three tools for creating and implementing the LTEP: the LTEP document, implementation directives, and implementation plans.
- The documents will work together to articulate objectives and identify the steps required to meet them.

LTEP Document	Author	Approval
Sets out the government's goals for the energy sector and provides the narrative and rationale behind new and ongoing initiatives.	ENERGY	CABINET

Implementation Directives	Author	Approval
Articulates outcomes and provides direction to IESO and OEB for LTEP implementation LTEP. Directives are high level and provide agencies flexibility to create detailed implementation plans.	ENERGY	CABINET

Implementation Plans	Author	Approval
Outlines the steps IESO and the OEB will take to meet the directive. Plans will identify how agencies will engage with public, Indigenous communities and councils, and key stakeholders.	IESO/ OEB	MINISTER

3. KEY POLICY AND PROGRAM INITIATIVES

KEY POLICY AND PROGRAM INITIATIVES

- The following slides identify the initiatives that will be highlighted in 2017 LTEP.

- Items for Cabinet decision are under the ‘Proposed Actions’ heading in the tables to follow.

- The following slides identify all of the 2017 LTEP initiatives. (Additional details on all initiatives are included in appendix deck on Details on Policy and Program Initiatives).

- Initiatives are broken into the following sections:
  A. Ensuring Affordable and Accessible Energy
  B. Ensuring a Flexible Energy System
  C. Improving Value and Performance for Consumers
  D. Strengthening our Commitment to Energy Conservation & Efficiency
  E. Innovating to Meet the Future
  F. Responding to the Challenge of Climate Change
  G. Supporting Indigenous Capacity and Leadership
  H. Regional Priorities

A. Ensuring Affordable and Accessible Energy

Proposed Initiative (details on the following slides):

- Increased Consumer Protection

Ongoing initiatives to be profiled in 2017 LTEP:

- Ontario's Fair Hydro Plan
  - Rate Reduction via Global Adjustment (GA) Refinancing
  - Expansion of Ontario Electricity Support Program (OESP)
  - Affordability Fund
  - Enhanced Distribution Rate Protection
  - First Nations Delivery Credit
  - Expansion of Industrial Conservation Initiative (ICI)
- Natural Gas Expansion
- Gasoline Price Review
- Class A Price Mitigation

A. Ensuring Affordable and Accessible Energy

Proposed Initiative	Description	Proposed Actions
Increased Consumer Protection	Enhancing consumer protection by providing the OEB with increased regulatory authority over unit sub-meter providers (USMPs) to gain better insight into USMP costs, rates and contractual agreements with developers. USMPS are private companies that provide metering services to multi-unit residential buildings so that individual unit residents can be billed for electricity based on their individual consumption levels.	• Proclaim existing (unproclaimed) provisions under the *Ontario Energy Board Act, 1998* (OEBA) that would empower the OEB to rate regulate USMPs. • The OEB would define its process for establishing such a regulatory framework in its implementation plan. • Increasing the OEB's regulatory authority over USMPs would ensure that charges to consumers are just and reasonable and provide greater consumer protections. • Customers would benefit as information about rates would be more transparent. Market participants will see this as a more "fair" process within the industry. • There are regulatory costs associated with increasing the OEB's authority over USMPs. Those costs would be recovered from USMP customers – similar to regulatory costs related to approving rates for local distribution companies (LDCs) are recovered from LDCs customers.

B. Ensuring a Flexible Energy System

Proposed Initiatives (Details on following slides):

- East West Tie
- North West Bulk
- Bulk System Planning

Ongoing initiatives to be profiled in 2017 LTEP:

- Bending the Cost Curve through IESO's Market Renewal Initiative
- Maximizing Existing Generation Assets

B. Ensuring a Flexible Energy System

Proposed Initiative	Description	Proposed Actions
East-West Tie	Ontario named the EWT a priority through an Order-in-Council in 2016. In May 2017, the proponent, NextBridge, informed ENERGY that the estimated capital costs for the project had increased from $400 million to $740 million. The costs will become public when Nextbridge files their Leave to Construct application with the OEB.	The 2017 LTEP will note that increasing costs are a concern and Ontario will review all options to ensure that the project is built at a cost that is fair to Ontario ratepayers. The Minister will request an updated needs assessment for the project from IESO and retain the option of rescinding or amending the 2016 prioritization Order-in-Council at the time Leave to Construct is filed or at a future date.
Northwest Bulk (NWB)	Ontario named the NWB a priority in the 2013 LTEP. Hydro One, the transmitter, has indicated it needs a hand-off scope letter from IESO or a prioritization OIC to move forward.	The 2017 LTEP will outline a three-phased approach to the project, with Phase 1 (Thunder Bay to Atikokan) to come into service as soon as practical and development work to begin on Phase 2 (Atikokan to Dryden) coincident with Phase 1. The LTEP will also identify the potential for a future line from Dryden to the Manitoba border (Phase 3) to accommodate better integration of provincial electricity grids but development would not proceed until need is determined in the future.

B. Ensuring a Flexible Energy System

Proposed Initiative	Description	Proposed Actions
Bulk System Planning	A number of bulk system projects were identified in previous LTEPs, including the East West Tie, the Northwest Bulk, and the Clarington Transformer Station. Other bulk system upgrades have been identified through the regional planning process as a result of shared bulk and regional needs.	The Ministry will direct IESO to establish a formal process for planning the future of the integrated province-wide “bulk” system. A transparent process would provide the public and stakeholders with an overview of the planned and forecast transmission projects that are necessary to maintain bulk system reliability

C: Improving Value and Performance for Consumers

Proposed Initiatives (Details on following slides):

- Preserving Transmission Corridors
- Enhancing Reliability
- Competitive Transmitter Selection
- Right-sizing Assets:
- Modernizing the Utility Business
  - Enhanced regulation of LDCs
  - Improved Regulatory Efficiency
  - Bill Redesign

Ongoing initiatives to be profiled in 2017 LTEP:

- The Digital Transformation - profile initiatives that promote the use of digital information to help customers make informed decisions (e.g., Ontario Energy Report, GreenButton, etc.)

C: Improving Value and Performance for Consumers

Proposed Initiative	Description	Proposed Actions
Preserving Transmission Corridors	The IESO has identified the need for new transmission to supply portions of the Regions of Halton, Peel and York and estimates it could cost at least an extra $1 billion to build underground transmission lines later, if an overhead transmission corridor is not reserved before the area develops.	The LTEP will detail the need for a new transmission line through the Northwest Greater Toronto Area and highlight the need to protect the corridor for the line.
Enhancing Reliability	While Ontario's transmitters and distributors must adhere to a range of standards and requirements to ensure the safety and stability of the electricity grid, improvements can be made.	The LTEP will detail the government's policy objectives for utility reliability and quality of service and will direct the OEB and IESO to review reliability standards.
Competitive Transmitter Selection	Increasing competition in transmission projects where practical will ensure Ontario ratepayers get the best value from potential investments in the system.	The Minister will direct the IESO to develop a competitive transmission selection or procurement process and identify potential pilot projects.
Right-sizing Assets	When transmitters and distributors replace aging equipment, they can increase efficiency by "right-sizing" the replacements, ensuring the new investments match current demand and requirements.	The Minister will direct the IESO and the OEB to take a coordinated, long-term approach when addressing the need to replace end-of-life assets.

C: Improving Value and Performance for Consumers

Proposed Initiative	Description	Proposed Actions
Enhanced Regulation of LDCs	Create a regulatory environment that better replicates the pressures and incentives of a competitive market, whereby utilities are motivated to be more proactive, innovative, cost effective and less risk averse in the delivery of electricity service which responds to their customers' needs and expectations.	Direct the OEB to amend regulatory framework to drive efficiency and continuous improvement including leveraging existing tools such as the LDC Performance Scorecard. Create a future where customers get better service at lower cost.
Improved Regulatory Efficiency	Direct the OEB to review regulatory requirements to ensure that it minimizes regulatory burden.	Require a cost/benefit assessment of regulatory requirements. Identify opportunities to eliminate unnecessary regulatory costs that are putting upward pressure on LDC operating expenses.
Bill Redesign	Redesign electricity bills, with a goal to refresh the regulatory framework to improve the value of the bill to consumers across the province.	Convene a Working Group in August Introduce regulatory amendments to simplify bill presentment in late Fall/Winter 2017.

D: Strengthening our Commitment to Energy Conservation & Efficiency

Proposed Initiatives (Details on following slides):

- Behind the Meter Generation (BMG)
- In Front of the Meter Conservation (IFMC)
- Green Button Standard

Climate Change Action Plan (CCAP) Report Back Items (Details in appendix: Report Back on Climate Change Action Plan Initiatives):

- Green Button Standard
- Social Benchmarking
- Waste Water and Drinking Water Treatment Plants

D: Strengthening our Commitment to Energy Conservation & Efficiency

Ongoing initiatives to be profiled in 2017 LTEP:

- Energy Efficiency Standards
- Electricity Conservation Target
- Evolution of Demand Response
- Alignment and Collaboration Within and Between Conservation Programs
- Smart Thermostat Incentive Programs
- Green Investment Fund – Home Energy Audit and Retrofit Programs
- Investor Confidence Project

Details are provided in the Appendix: Details on Policy and Program Initiatives

D: Conservation

Proposed Initiative	Description	Proposed Actions
Behind the Meter Generation (BMG)	BMG projects are eligible to receive incentives through the Conservation First Framework (CFF) and the Industrial Accelerator Program (IAP). Many of the projects use a fossil fuel like natural gas as an energy source and, while reducing demand on the grid, result in a net increase in GHG emissions.	Effective July 1, 2018, IESO will cease accepting incentive project applications for BMG projects that use supplied fossil fuels. BMG projects using recovered and renewable waste energy will continue to be eligible.
In Front of the Meter Conservation (IFMC)	IFMC technologies are deployed on the distribution system and provide electricity savings and peak reductions to customers behind the meter. Examples include technologies that reduce line losses and optimize voltage levels.	Encourage IFMC projects by allowing electricity distributors to count the electricity savings resulting from IFMC technology deployments, paid for through distribution rates, towards their electricity savings targets, under the 2015-2020 CFF. OEB will examine and identify steps for pursuing opportunities for cost-effective modernization of the electricity system, including energy efficiency measures on the distribution system.
Green Button Standard	Green Button is a data standard that can empower households and businesses with access to data on their energy and water consumption. The 2016 CCAP committed to expand the Green Button program province-wide to help conserve energy and water.	LTEP to reaffirm Ontario's commitment to expanding Green Button province-wide and indicate government's intent to bring forward amending legislation in Fall 2017 to mandate Green Button for electricity and natural gas distributors.

E: Innovating to Meet the Future

Proposed Initiatives (Details on following slides):

- Grid Modernization
- Renew Smart Grid Fund
- Energy Storage
- Electric Mobility
- International Energy Demonstration Fund
- Expanding Net Metering
- Smart Renewable Distributed Generation

Ongoing initiatives to be profiled in 2017 LTEP:

- Exporting Ontario's energy expertise.
- Regulated Price Plan (RPP) pilots by the OEB.
- Nuclear Innovation

E: Innovating to Meet the Future

Proposed Initiative	Description	Proposed Actions
Grid Modernization	LTEP will articulate the government's vision for distribution grid modernization: the creation of an environment that enables the a modern, digital grid for Ontarians by removing the barriers to innovation.	Provide direction to OEB to address regulatory and cultural barriers in order to encourage innovation, optimal utility investment, and customer choice.
Renew Smart Grid Fund	The SGF has helped many innovators become successful companies. However, barriers prevent local adoption, and there are ways for Ontario to help the energy innovation sector to grow and mature.	Renew the SGF with an expanded scope and more targeted investments in innovative solutions that support grid modernization. $60 million from the tax-base over 5 years.
Energy Storage	Energy storage has enormous potential to improve how electricity grids work. Ontario has taken prudent steps to test this technology, and will now focus on removing barriers to the integration of storage.	Update market and regulatory rules so storage can be introduced onto the grid where it makes technological and economic sense.
Electric Mobility	Electric mobility will have an impact on electricity grids. There are steps we can take to ensure that those impacts are positive, and that we optimize the integration of electric mobility in Ontario.	Remove barriers to investing in cost-effective EV charging, launch overnight charging program focused on EV data collection while meeting CCAP goals, develop an EV integration roadmap, and work with partners to share EV information and data.

E: Innovating to Meet the Future

Proposed Initiative	Description	Proposed Actions
International Energy Demonstration Fund	The proposed fund would support Ontario energy companies (e.g., renewables, smart grid etc.) by way of demonstration projects located in international jurisdictions.	Proposal is for a $10 million (tax base) pilot program to fund 5-10 high-value demonstration projects and assess the impact on exports and company growth. Ministry will report to TB/MBC in summer 2017 for necessary approvals.
Expanding Net Metering	Expanding net metering to include third-party ownership and operation of renewable energy facilities will give electricity customers more choices for generating their own clean power and offsetting their electricity bills. Enabling and supporting virtual net metering demonstration projects will inform future net metering policy, and examine opportunities for those consumers who cannot host their own generation system to participate in net metering.	Expand and enhance Ontario's net metering framework, including enabling third-party ownership and related consumer protection measures, and allowing for virtual net metering demonstration projects. Work with the IESO to support the deployment of near-term virtual net metering demonstration projects.
Smart Renewable Distributed Generation (DG)	Deployment of renewable DG systems that are strategically located and paired with other distributed energy resources and smart grid technologies will demonstrate their value to customers and the grid and inform future policy and regulatory treatment.	Work with the IESO to develop a funding program to support the strategic deployment of innovative renewable DG projects.

F: Responding to the Challenge of Climate Change

Proposed Initiatives (Details on following slides):

- Climate Change Adaptation

Ongoing initiatives to be profiled in 2017 LTEP:

- Shifting to Renewable Natural Gas
- Shifting to Lower Carbon Transportation Fuels
- Heating and Cooling with Renewable Energy Technologies
- District Heating and Cooling
- Near and Net Zero Carbon Buildings

F: Responding to the Challenge of Climate Change

Proposed Initiative	Description	Proposed Actions
Climate Change Adaptation	LTEP will strengthen the ability of the energy sector to plan for and adapt to the impacts of climate change.	ENERGY and agencies will meet with utilities and other stakeholders to share best practices to build capacity. ENERGY will support development of a climate change vulnerability assessment of the distribution sector. OEB will provide guidance to utilities on approaches for integrating cost-effective opportunities for adaptation into their operations and planning processes. IESO will consider adaptation in its bulk and regional planning processes.

G: Supporting Indigenous Capacity and Leadership

Proposed Initiatives (Details on following slides):

- Evolve Indigenous Conservation Programs
- Evolve Indigenous Support Programs
- Outreach to Indigenous Communities

Ongoing initiatives to be profiled in 2017 LTEP:

- Affordability Initiatives
- Off-grid Communities
- Access to Financing

G: Supporting Indigenous Capacity and Leadership

Proposed Initiative	Description	Proposed Actions
Evolve Indigenous Conservation Programs	Conservation programs for address a wide range of issues raised during 2017 LTEP engagements and other interactions with First Nations and Métis, including energy affordability, community energy plan implementation, and the need for increased human resource capacity.	In alignment with the Mid-Term Review of the CFF and IAP and informed by engagement with Indigenous communities, the IESO will prepare a report on options to improve conservation programs for First Nations and Métis, based on an assessment of programs offered under the CFF and Demand Side Management Framework, as well as energy support programs.
Evolve Indigenous Support Programs	Revise existing IESO Indigenous support programs to better align with current energy sector opportunities and community needs, as well as leverage investments already made under the ACEP program.	IESO to review and propose options to improve energy support programs, including options for supporting energy plan implementation, which could include small-scale renewables, conservation and other community-scale energy opportunities.
Outreach to Indigenous Communities	Indigenous communities and groups have indicated a desire for ongoing engagement with the Ministry of Energy on energy issues.	The Ministry of Energy will increase outreach to Indigenous communities and organizations to better align policy development with local and regional needs. This includes outreach to Indigenous communities between LTEPs to update on progress and to seek ongoing feedback.

H. Regional Priorities

Proposed Initiatives (Details on following slides):

- Regional Economic Development
- Regional Planning Review

H. Regional Priorities

Proposed Initiative	Description	Proposed Actions
Regional Economic Development	Through consultations and engagement sessions in support of the development of the 2017 LTEP, many communities highlighted that regional differences in electricity infrastructure are hindering economic development.	The Ministry is proposing to indicate in LTEP that it will explore ways to use federal and provincial infrastructure and economic development funding to support electricity transmission and distribution infrastructure that supports regional economic development. Reasonable certainty with respect to availability of a funding source or program is necessary as such a statement would raise stakeholder expectations.
Regional Planning Review	Over the past three years, the electricity needs of all 21 of Ontario's electricity planning regions have been evaluated, marking the completion of a full cycle of regional planning assessments. The completion of the first cycle provides an opportunity to review the process to address lessons learned.	Direct IESO to review the regional planning process and report back with options and recommendations to address the challenges and opportunities that have emerged, including addressing barriers to cost-effective non-wires solutions, such as demand response and distribution energy resources; integrating bulk, regional, distribution system and community energy planning; streamlining the regional planning process; and integrating the regional planning process with the need to right-size assets reaching end of life.

4. Implementation Directives and Plans

4. Implementation Directives

- Ministry is seeking Cabinet approval to develop implementation directives to the IESO and OEB. The directives will request the agencies submit implementation plans for Minister's approval by December 31, 2017.
- The directives are intended to be high-level, allowing the agencies to determine the specific initiatives to meet 2017 LTEP objectives and would be released simultaneously with the release of the LTEP document.
- The directives only cover new initiatives that fall within IESO and OEB mandates. This means not all 2017 LTEP policies are covered in the directives.
- The directives require the IESO and OEB to engage with stakeholders, Indigenous communities and the public on their implementation plans as required.
- The following slides identify the objectives the Ministry plans to include in the directives.

Sep/Oct 2017

Minister of Energy issues Cabinet-approved directives to IESO and OEB.

Directives require implementation plans be submitted by Dec. 31/17

Fall 2017

IESO and OEB develop implementation plans to meet requirements of directives.

IESO and OEB engage on the plan as required.

December 31, 2017

Implementation plans submitted to Minister of Energy for approval.

Ministry of Energy expects plans to be approved by end of 2017

IESO Implementation Directive

- The IESO directive includes the following items:

1. **Support Indigenous Capacity and Leadership**
   - Report on options to improve conservation programs for First Nations and Métis.
   - Evolve support programs offered to Indigenous communities and organizations to better align with community needs and interests.

2. **Encourage an Innovative Sector**
   - Assess system impacts of increased net metering and identify opportunities to enhance local and system value of distributed energy resources under net metering framework.
   - Develop a program that supports the strategic deployment of distributed energy resources.
   - Work with OEB to identify barriers to entry for storage facilities and identify appropriate mitigation strategies.

3. **Deliver a Flexible and Efficient System**
   - Develop a formal bulk system planning process. Process will consider a coordinated approach to replacing transmission assets at end of life.
   - Develop a competitive transmitter selection or procurement process. Identify specific pilot projects to be used to develop the competitive transmitter process.
   - Review the regional electricity planning process and report back with options to address challenges and opportunities.
   - Review the technical criteria used to assess customer reliability for the purposes of identifying and evaluating the need for and effectiveness of local area enhancements.

IESO Amending Direction

- Some 2017 LTEP policy initiatives require amendments to previous directions to the IESO. Prior to the LTEP release, the Minister of Energy will issue an amending direction to the IESO, which requires Minister of Energy approval, to achieve the following objectives:

1. **Behind the Meter Generation Policy (Conservation program alignment with climate change goals)**
    - Effective July 1, 2018, exclude BMG generation projects that use supplied fossil fuels as a primary fuel source from eligible conservation and demand management (CDM) activities.

2. **In-Front of the Meter Conservation**
    - Allow reduced electricity consumption resulting from any measures a distributor uses to maximize the efficiency of its new or existing distribution system infrastructure to count towards a Distributor's CDM Target, to be recovered through the Distributor's rate application.
    - Require the IESO and OEB to annually report on the verified CDM results of distribution system energy efficiency.

3. **Indigenous programs**
    - Various changes to past directives to make language consistent with current policy.

OEB Implementation Directive

- The OEB directive includes the following themes:

1. Delivering Efficiency and Value

- OEB to examine opportunities to strengthen utility accountability an reporting related to service issues including reliability.
- Examine cost effectiveness of modernizing and removing barriers in Ontario's electricity sector including in front of the meter conservation and non-wires solutions (conservation and demand response, distributed generation).
- On receipt of recommendations from the IESO, Identify steps to implement changes to improve utility regional planning processes.
- Identify steps for encouraging a coordinated approach to replacing transmission and distribution assets at end of life.

2. Ensuring Affordable and Accessible Energy

- OEB to examine tools to mitigate costs for ratepayers.
- Protect consumer in the natural gas sector.
- Reduce costs and find efficiencies in the distribution sector.
- Strengthen consumer protection related to unit sub-meter providers.

OEB Implementation Directive- con't

- The OEB directive includes the following themes:

3. Enhancing Commitment to Energy Conservation and Efficiency

- OEB to move forward with regulated price plan roadmap and consider pricing structures that give consumers control and be able to respond to pricing signals.
- Enhance energy literacy in the energy sector.

4. Responding to Climate Change Challenge

- OEB to provide guidance to utilities on approaches for integrating cost effective opportunities for climate change adaptation.

5. Encouraging an Innovative Sector

- OEB to work with utilities for encouraging a culture of innovation in the distribution sector and provide opportunities for utilities to raise profile of their modernization and innovation plans.

OEB Amending Directive

- Some LTEP policy initiatives require amendments to previous directions to the OEB. Prior to the 2017 LTEP release, the Minister of Energy will issue an amending directive to the OEB to achieve the following objectives.
- The directives are intended to be high-level, allowing the agencies to determine the specific initiatives to meet LTEP objectives and would be released simultaneously with the release of the LTEP document. The directives only cover new initiatives that fall within IESO and OEB mandates.

1. Enhancements to Conservation Demand Management (CDM)

- The OEB will annually review and publish Distributor CDM programs and measures used by a Distributor to maximize the efficiency of its new or existing distribution system infrastructure where the resulting electricity reductions are counted towards the target allocated to the Distributor.
- CDM shall be considered to exclude BMG that uses fossil fuels purchased from or otherwise supplied by a third party as a primary fuel source.
- CDM shall continue to be inclusive of BMG, where the generation of electricity is primarily from heat or fuel that is a waste by-product of a facility.

5. Proposed LTEP Frequency Regulation

LTEP FREQUENCY REGULATION

- **Description:** Under the *Electricity Act, 1998,* a regulation is required that identifies how often the government will issue a Long-Term Energy Plan.
- The Ministry of Energy is proposing that an LTEP be issued at least every three years from the date of:
  - i) the Minister of Energy approving all implementation plans submitted as part of the last long-term energy plan; or
  - ii) the last long-term energy plan if no implementation plans were required as part of the last plan.
- As per the proposed regulation, the first long-term energy plan will be released, subject to Cabinet approval, within three months of the proposed regulation coming into force.
- **Timing:** A plain language posting was posted concurrently on the Regulatory Registry and the Environmental Registry on July 7, 2017 for a period of 45 days which ends on August 21.
  - EBR: http://www.ebr.gov.on.ca/ERS-WEB-External/displaynoticecontent.do?noticeId=MTMzMDgx&statusId=MjAyMTk0&language=en
  - Regulatory Registry: http://intra.regulatoryregistry.edt.gov.on.ca/registryadmin/viewPosting.do?postingId=24488
  - The Ministry will seek LRC approval of the regulation in late August, prior to the LTEP being issued.
- **Considerations:** No material considerations given the administrative nature of the proposed regulation.

6. COMMUNICATIONS ROLL-OUT

COMMUNICATIONS ROLL-OUT

Narrative:

- The 2017 LTEP delivers fairness and choice to help all Ontarians adjust to a rapidly changing energy future.
- We have invested well in our energy system and it's reliable, "green" and ready for future technical innovations.

Strategy:

- Engage in proactive media relations for the official launch day.
- Execute a multi-platform strategic communications plan.
- Leverage 2017 LTEP themes to create a strong narrative to inform longer term messaging.

Considerations:

- The launch date of the 2017 LTEP will occur September/October.
- Ontario's Fair Hydro Plan (OFHP) and rate mitigation will continue to be the focus for media.

COMMUNICATIONS ROLL-OUT

Rollout & Sustaining Activities:

- On launch day, Energy will host:
  - A technical briefing; and
  - A press conference in the media studio and pitch to media outside the Gallery.

- The Ministry will also:
  - Ensure all consultation participants are informed of the impact of their deputations including indigenous leaders.
  - Design a social media campaign (organic and paid) to target specific audiences. Elements would include video and shareables.
  - Produce customer focused collateral materials to complement the book – print and digital.

7. NEXT STEPS

NEXT STEPS

- Ministry to prepare final 2017 LTEP highlighting the initiatives in this submission.
- Ministry will return to Cabinet on August 31, 2017 to seek approval on outlooks for inclusion in the final 2017 LTEP.
- Ministry will table final 2017 LTEP and directives for Cabinet approval in September/October.

- Communications:
  - Writing and design is well underway.
  - Developing tactical digital communications and issues management plan.
  - Planning launch day events.

8. PROPOSED CABINET MINUTE

PROPOSED CABINET MINUTE

- Cabinet agreed that:

1. The Ministry of Energy (ENERGY) prepare for approval a 2017 Long Term Energy Plan (LTEP) that sets out the following goals and objectives:
   A. Ensuring affordable and accessible energy;
   B. Providing a flexible energy system;
   C. Improving value and performance for consumers;
   D. Reaffirming a commitment to conservation;
   E. Preparing for the future and innovation;
   F. Responding to the climate change challenge;
   G. Supporting Indigenous capacity and leadership; and
   H. Responding to regional priorities.
   -
2. ENERGY implement initiatives identified in the LTEP, including:
   A. Ensuring affordable and accessible energy
      i. Enhancing consumer protection by providing the Ontario Energy Board (OEB) with increased regulatory authority over unit sub-meter providers (USMPs) to gain better insight into USMP costs, rates and contractual agreements with developers. Proclaim existing (unproclaimed) provisions under the *Ontario Energy Board Act, 1998* (OEBA) that would empower the OEB to rate regulate USMPs. The OEB will define its process for establishing such a regulatory framework in its implementation plan.

Ontario

PROPOSED CABINET MINUTE

B. Providing a flexible energy system

i. Requesting an updated needs assessment for the East-West Tie from the Independent Electricity System Operator (IESO) on East West Tie and retain the option of rescinding or amending the 2016 prioritization Order-in-Council at the time Leave to Construct is filed or at a future date.

ii. Outlining a three-phased approach to the Northwest Bulk project.

iii. Directing IESO to establish a formal process for planning the future of the integrated province-wide "bulk" system.

C. Improving value and performance for consumers

i. Detailing the need for a new transmission line through the Northwest Greater Toronto Area and highlight the need to protect the corridor for the line.

ii. Detailing the government's policy objectives for utility reliability and quality of service and will direct the OEB and IESO to review reliability standards.

iii. Directing the IESO to develop a competitive transmission selection or procurement process and identify potential pilot projects.

iv. Directing the IESO and the OEB to take a coordinated, long-term approach when addressing the need to replace end-of-life assets.

v. Enhancing the regulation of LDCs by directing the OEB to amend regulatory framework to drive efficiency and continuous improvement including leveraging existing tools such as the LDC Performance Scorecard.

vi. Improving regulatory efficiency by requiring a cost/benefit assessment of regulatory requirements and identifying opportunities to eliminate unnecessary regulatory costs that are putting upward pressure on LDC operating expenses.

vii. Convening a Working Group on bill redesign and introduce regulatory amendments to simplify bill presentment in late Fall 2017/Winter 2018.

PROPOSED CABINET MINUTE

D. Reaffirming a commitment to conservation

i. Effective July 1, 2018, the IESO will cease accepting incentive project applications for behind the meter generation (BMG) projects that use supplied fossil fuels. BMG projects using recovered and renewable waste energy will continue to be eligible.

ii. Encouraging In Front of the Meter (IFMC) projects by allowing electricity distributors to count the electricity savings resulting from IFMC technology deployments, paid for through distribution rates, towards their electricity savings targets, under the 2015-2020 CFF. The OEB will examine and identify steps for pursuing opportunities for cost-effective modernization of the electricity system, including energy efficiency measures on the distribution system.

iii. Bringing forward amending legislation to mandate Green Button for electricity and natural gas distributors.

E. Preparing for the future and innovation

i. Providing direction to the OEB to address regulatory and cultural barriers to grid modernization in order to encourage innovation, optimal utility investment, and customer choice.

ii. Renewing the Smart Grid Fund (SGF) with an expanded scope and more targeted investments in innovative solutions that support grid modernization. Seeking $60 million from the tax-base over 5 years for SGF.

iii. Updating market and regulatory rules so energy storage can be introduced onto the grid where it makes technological and economic sense.

iv. Removing barriers to investing in cost-effective electric vehicle (EV) charging, develop an EV integration roadmap, and work with partners to share EV information and data.

v. Developing an International Energy Demonstration Fund (IEDF) that would support Ontario energy companies by way of demonstration projects located in international jurisdictions. Seeking $10 million from the tax-base.

vi. Expanding and enhance Ontario's net metering framework, including enabling third-party ownership and related consumer protection measures, and allowing for virtual net metering demonstration projects. Work with the IESO to support the deployment of near-term virtual net metering demonstration projects.

vii. Working with the IESO to develop a funding program to support the strategic deployment of innovative renewable distributed generation projects.

PROPOSED CABINET MINUTE

F. Responding to the climate change challenge

i. ENERGY and agencies will meet with utilities and other stakeholders to share best practices to build capacity. ENERGY will support development of a climate change vulnerability assessment of the distribution sector. The OEB will provide guidance to utilities on approaches for integrating cost-effective opportunities for adaptation into their operations and planning processes. The IESO will consider adaptation in its bulk and regional planning processes.

G. Supporting Indigenous capacity and leadership

i. The IESO will prepare a report on options to improve conservation programs for First Nations and Métis, based on an assessment of programs offered under the Conservation First Framework and Demand Side Management Framework, as well as energy support programs.

ii. The IESO will review and propose options to improve Indigenous energy support programs, including options for supporting energy plan implementation, which could include small-scale renewables, conservation and other community-scale energy opportunities.

iii. Increasing outreach to Indigenous communities and organizations to better align policy development with local and regional needs. This includes outreach to Indigenous communities between LTEPs to update on progress and to seek ongoing feedback.

H. Responding to regional priorities

i. Exploring ways to use federal and provincial infrastructure and economic development funding to support electricity transmission and distribution infrastructure that supports regional economic development.

ii. Directing the IESO to review the regional planning process and report back with options and recommendations to address the challenges and opportunities that have emerged, including addressing barriers to cost-effective non-wires solutions, such as demand response and distribution energy resources; integrating bulk, regional, distribution system and community energy planning; streamlining the regional planning process; and integrating the regional planning process with the need to right-size assets reaching end of life.

PROPOSED CABINET MINUTE

3. ENERGY to prepare the following directives:
   i. Implementation directive to the IESO requiring the IESO to submit an implementation plan for approval by the Minister of Energy no later than December 31, 2017.
   ii. Implementation directive to the OEB requiring the OEB to submit an implementation plan for approval by the Minister of Energy no later than December 31, 2017.
   iii. Amending directive to the OEB amending previous directives to the OEB. The directive will support enhancements to conservation demand management.

4. ENERGY to report back to Cabinet for:
   i. Approval of the final 2017 LTEP document.
   ii. Approval of the final implementation directives to the OEB and IESO, and the amending directive to the OEB.

5. ENERGY report to Treasury Board / Management Board of Cabinet for:
   i. Up to $60M from the tax-base for the SGF.
   ii. Up to $10M from the tax-base for the IEDF.

6. ENERGY to report to Legislation and Regulations Committee to:
   i. Proclaim legislation that will empower the OEB to increase consumer protection for USMPs.
   ii. Seek approval of legislative amendments to the *Green Energy Act, 2009* and *Ontario Energy Board Act, 1998* to implement Green Button province-wide.
   iii. Amend regulations to ensure there is removal of barriers for energy storage in participating in the energy sector.
   iv. Seek approval of legislative and regulatory amendments to expand and enhance Ontario's net metering framework.
   v. Introduce regulatory amendments to simplify bill presentment.

PROPOSED CABINET MINUTE

7. ENERGY has fulfilled its requirement to report back to Cabinet on a number of CCAP initiatives: approach for establishing GHG reduction standards for drinking water and wastewater treatment plants (Minute item #75), approach for province-wide implementation of Green Button (Minute item #76), and a single portal for energy-related social benchmarking programs (Minute item #77).

8. ENERGY work with the Premier's Office and Cabinet Office on an integrated communications strategy.