

Draft Based on Draft Materials 2017 Long-Term Energy Plan

Cabinet July 26, 2017	TB/MBC TBC	LRC / Cabinet August TBC	Public Release TBC
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This government's commitment

“Building on the processes and principles used in the 2010 and 2013 plans and the new legislation, work with partner agencies and energy sector agencies to consult with consumers and stakeholders, and engage with Indigenous communities to develop Ontario’s next Long-Term Energy Plan (LTEP) to be released in 2017”

Minister of Energy Mandate Letter, September 2016.

SUMMARY OF PROPOSAL

The Ministry of Energy (ENERGY) is seeking policy approval of the components for Ontario’s next Long-Term Energy Plan (LTEP). The province has previously released 2 LTEPs in 2010 and 2013, and LTEP 2017 will follow new principles enshrined in the *Electricity Act, 1998* through amendments in 2016. LTEPs generally identify the needs for investments over the shorter term, while broadly mapping out the direction of the energy sector over a 20 year timeframe.

The Ministry undertook extensive stakeholder and partner engagement over the fall-winter 2016 to inform the development of the LTEP, including 17 public and stakeholder sessions and 17 Indigenous engagement sessions.

The 2017 LTEP will include several “outlooks” which will chart the current state of the energy sector and projections to 2035. The 2017 LTEP will also highlight various key policy initiatives which are intended to send clear signals to the public, partners, and sector participants regarding the province’s direction for the energy sector. The Ministry is proposing the following chapters to organize the key initiatives:

- A. Ensuring Affordable and Accessible Energy
- B. Flexible Energy System
- C. Improving Value and Performance for Consumers
- D. Conservation
- E. Preparing for the Future/Innovation

- F. Responding to the Climate Change Challenge
- G. Supporting Indigenous Capacity and Leadership
- H. Regional Priorities

The Ministry is proposing to have the 2017 LTEP highlight the work being done to deliver cost savings for Ontarians, provide enhanced customer choice, continuous improvement on reliability and emissions and burden reductions, maintaining flexibility given significant uncertainty, as well as to signal a shift towards a more outcomes focused approach to energy planning and procurement in the province.

What is the expected cost to government?

The majority of initiatives contained in the proposed LTEP are either anticipated to be funded from internal allocations, are already funded by the rate base, or program development is at early stages and cost information is not apparent. Two program proposals have immediate costs outside of current allocations that have not been accounted for in the fiscal plan. If policy approval is provided, ENERGY will seek TB/MBC approval in summer 2017 for:

- \$60 million over five years to renew the Smart Grid Fund
- \$10 million for a pilot International Demonstration Fund

How will the changes be communicated?

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

Commented [HT1]: Needs review by CO comms

CABINET OFFICE ANALYSIS

Introduction:

The Ministry of Energy (ENERGY) is seeking approval of the components for Ontario's next Long-Term Energy Plan (LTEP). The province has previously released 2 LTEPs in 2010 and 2013, and LTEP 2017 will follow new principles enshrined in the *Electricity Act, 1998* through amendments in 2016. LTEPs generally identify the needs for investments over the shorter term, while broadly mapping out the direction of the energy sector over a 20 year timeframe.

It is anticipated that there will be increased public interest in the 2017 LTEP over previous plans given the connection to the province's climate change commitments, and the profile of energy affordability concerns which led to the development of Ontario's Fair Hydro Plan (OFHP) for July 1, 2017.

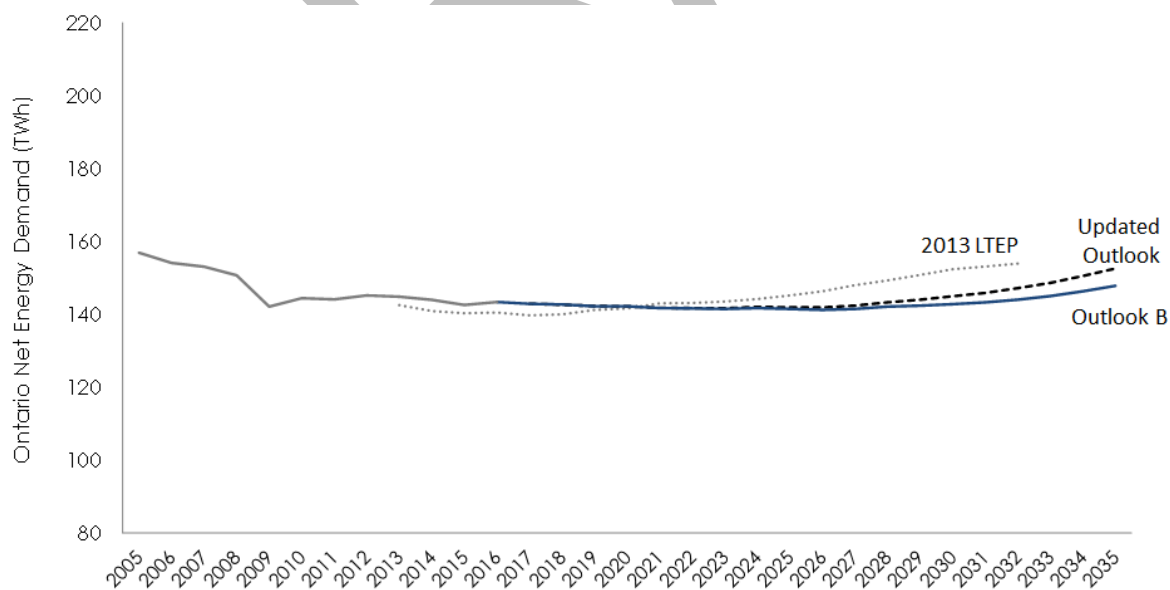
ENERGY proposes that the 2017 LTEP outline the status of the energy sector today and also contain several outlooks for the planning period ending in 2035. The 2017 LTEP will also highlight various key policy initiatives and which are intended to send clear signals to the public, partners, and sector participants regarding the province's direction for the energy sector. Some key initiatives will be ongoing work and others are new programs that the Ministry is proposing to announce through the document. The ministry's submission outlines places where it is either seeking approval to implement new programs where specific program elements are well known, as well as in other areas where the commitment is more exploratory.

Outlooks:

Prior to the LTEP engagement process in 2016, the Ministry released 2 technical documents to help guide the discussion and provide a common platform for conversations to take place: the Ontario Planning Outlook (OPO) on the electricity sector prepared by the IESO, and the Fuels Technical Report prepared by external consultant Navigant. The documents outlined the current state of the sector and also made projections to 2035 based on the best available information at the time.

The 2017 LTEP will also chart the current state of the energy sector and provide several outlooks or projections to 2035 based on updated information and changes in policy (e.g., Large Renewable Procurement II suspension, and the Ontario Fair Hydro Plan (OFHP)). Proposed outlooks include: energy consumption (by source and by sector); demand (electricity and fuels); supply (electricity); greenhouse gas (GHG) emissions (electricity and fuels); and, energy costs (total electricity system, average electricity bills, and total fuels cost).

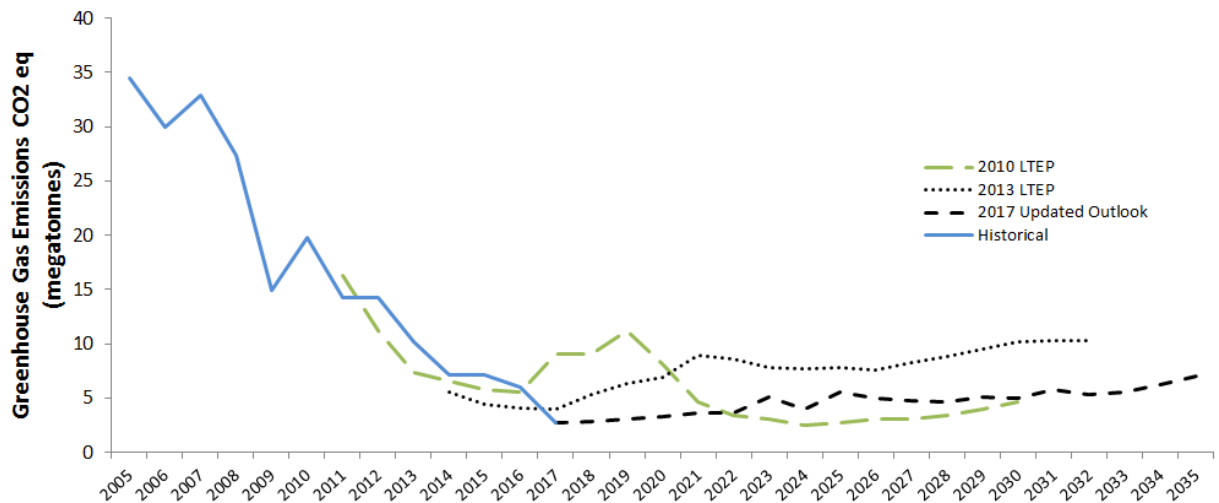
Demand



There remains significant uncertainty regarding what energy demand will be over the coming decades linked to the emergence and adoption of new technologies as well as uncertainty over industrial demand. The Ministry is proposing a less prescriptive approach

as to how future demand scenarios will be managed, which will provide greater flexibility to the IESO and OEB to make these decisions. This mitigates some of the risk of the general uncertainty as to whether demand levels will be as forecasted, or if that demand may be met by innovative technologies such as distributed generation or storage. The approach is sometimes described as a “technology neutral” where the policy framework guides certain objectives, but leaves the actual choice as to what will meet those needs open. Some in the eNGO sector may respond negatively to a technology neutral approach as it may be viewed as a backing away from renewable energy and the province’s climate commitments. Careful messaging in the 2017 LTEP will be needed to underscore the province’s continued commitment to low and zero GHG emitting technologies with positive environmental attributes in support of the CCAP objectives.

GHG Emissions



While the electricity sector chart outlines the significant reductions in GHG emissions from the sector since 2005, it also outlines a net increase in emissions from the sector by 2035 [TBC]. This will likely be viewed as inconsistent with the province’s climate change objectives. The increase is mitigated in part by the fact that the increased demand projected by 2035 is largely tied to projected increase uptake of electric vehicles (EVs), which in turn results in an overall net decrease emissions from the energy sector by 2035 [TBC].

Average Electricity Bills

INSERT CHART

It is anticipated that the projection of average consumer costs will generate significant media and public attention in light of the government refinancing a portion of the Global Adjustment (GA) as part of the OFHP. This attention will likely be increased due to the media focus on Cabinet submission obtained by the Toronto Star that contained one earlier estimate of possible long-term bill impacts if the GA refinancing went ahead. Since this time the Ministry has been working on other ways to take costs out of the system and have made some proposals for approval in this submission. However, while some reductions from other initiatives are accounted for in the proposed figure (e.g., Market Renewal), others require

implementation over a longer time horizon, and while they are expected to have positive impacts on system costs it is difficult to ascribe firm dollar projections for the purposes of modelling long-term outlooks [TBC].

Key Policy Initiatives

The Ministry is proposing the following chapters to organize the key initiatives. Please refer to Appendix A for a summary of approvals being sought in this submission.

A. Ensuring Affordable and Accessible Energy

The Ministry plans to profile existing initiatives related to the OFHP, the OEB's ongoing Gasoline price review, increasing consumer protection for customers serviced by Unit Sub Meter Providers (USMPs), natural gas expansion to increase customer choice, and the work of the Greenstone Electricity Supply Working Group. In addition to the initiatives highlighted under this section, other chapters in the LTEP contain initiatives that are expected to lead to efficiencies and reduce overall system costs, which in turn will result in reduced costs for consumers (e.g., Market Renewal is captured in "Flexible Energy System" and OEB regulatory burden review is captured in "Improving Value and Performance for Customer's").

B. Flexible Energy System

East West Tie

The EWT is an approximately 400 km, 230 kV transmission line paralleling an existing line between Wawa and Thunder Bay. The proponent, Nextbridge, was selected through a competitive process run by the OEB. Ontario declared the construction of the EWT a priority project in 2016. In May 2017, NextBridge informed ENERGY that the estimated capital costs for the EWT had increased from its initial 2011 estimate of \$400 million to \$740 million. The Ministry is proposing that when NextBridge files a Leave to Construct application, the Minister will respond to increased costs with a request for an updated need assessment from IESO. ENERGY proposes that the LTEP emphasize Ontario's focus on making the electricity system more cost-effective.

Northwest Bulk (NWB)

The NWB Project, a reinforcement of the 230 kV system from Thunder Bay to Dryden, was named as a priority in the 2013 LTEP and Hydro One was designated as the transmitter. The Ministry is proposing to outline a phased development approach, including the possibility of a phase from Dryden to the Manitoba border. The language in the LTEP would serve as a signal that Ontario is interested in inter-jurisdictional energy trade where it provides benefit to Ontario.

Bulk Planning

To address the need for increased transparency and better integrated planning of the "bulk" system (i.e., transmission infrastructure of 230kV or 500kV), the Ministry is proposing to direct the IESO to establish a new formal planning process. IESO would be directed to include consultation with stakeholders and communities in the development of the new process, and it is expected that the process will also help to level the playing field for when a competitive transmission development process is established.

Profiled Ongoing Initiatives:

The Ministry is also planning to highlight ongoing work related to the IESO's Market Renewal program to modernize and redesign the province's wholesale electricity markets, the benefits and impacts of the cap and trade program, and maximizing the value of existing generation assets. The Ministry received policy approval to direct the IESO to undertake market renewal through LTEP under the OFHP submission as the initiative is expected to have potentially result in significant cost savings to the system. Current estimates range between \$2.2B to \$5.2B (net present value) of savings over a 10 year period, with benefits expected to grow significantly over time.

Highlighting the desire to maximize the benefits from existing assets makes prudent sense generally, but will also function to emphasize the need to continue to benefit from the generating assets captured by the Clean Energy Costs (i.e., renewables and some natural gas) under the *Ontario Fair Hydro Plan Act, 2017* (OFHPA). Under the GA refinancing mechanism under the OFHPA, there is a need to benefit from these assets for a period beyond their existing contract's as costs of the assets are not being amortized over the life of the assets as opposed to the typical 20 year contract term. The LTEP will also reaffirm the provinces commitment to the nuclear refurbishment projects with appropriate oversight and value for money caveats in place (i.e., offramps).

C. Improving Value and Performance for Consumers

Preserving Transmission Corridors

The IESO has identified the need for a new transmission line through the Northwest Greater Toronto Area Integrated Regional Resource Plan (2015) to supply portions of the Regions of Halton, Peel and York. Demand forecasts were developed by IESO based on population and employment forecasts included in Ontario's Growth Plan for the Greater Golden Horseshoe. The ministry has identified transmission as the most cost effective and technically feasible options and are proposing to highlight the need to protect corridor lands for a new transmission line in the Northwest GTA in the LTEP.

Commented [HT2]: Energy, do you have proposed mechanism for holding the lands? New powers? Working with partner ministries?

Enhancing Reliability

The ministry is proposing to have the IESO and OEB review the standards for reliability and quality of service for transmitters and distributors and highlight the province's policy objectives for reliability and quality in the LTEP. ENERGY plans to establish new reliability metrics and standards, reporting and response requirements for LDCs, as well as a new incentive and compliance promotion framework to enhance system reliability and customer satisfaction.

Commented [HT3]: Energy: please provide some examples of the current standards in Ontario. Hard to make the jurisdictional scan meaningful without this information.

Competitive Transmitter Selection

The ministry is proposing to enhance competition in the transmission sector by directing the IESO to develop a competitive selection and procurement process, and identifying possible pilots for its use. The results of the pilots would then be used to refine the parameters of a more general selection and procurement process. It is the hope that greater competition will reduce costs in the development of new transmission and provide benefits to ratepayers.

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. This could mean upgrading pieces of equipment in communities with growing demand, or downgrading or removing the equipment if demand has dropped. The ministry is proposing to provide a policy statement through LTEP supporting “right-sizing” transmission and distribution assets at end of life and to have the Minister direct IESO and the OEB to take a coordinated, long-term approach when addressing the need to replace these assets. To enhance coordination and value for money, there is a need to integrate considerations of asset end of life and right-sizing into electricity planning initiatives such as regional planning or the proposed integrated bulk system planning.

Modernizing the Utility Business

The ministry is proposing to undertake a process to review the regulatory framework for electricity bills and redesign and realign the requirements to increase transparency, reduce burden on LDCs, and prepare for a transition to digital billing. ENERGY would convene a working group of LDCs and relevant stakeholders to advise on the redesign process and report back to LRC and Cabinet in fall/winter 2017 with proposed regulatory amendments.

ENERGY is also proposing to direct the OEB to strengthen utility accountability and find ways to mitigate costs for consumers. It is intended that this would help create a regulatory environment which 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.

The Digital Transformation

The ministry is proposing to also highlight through LTEP the government’s continued commitment to improve the ways that people can use data to make decisions about their energy use (e.g., Ontario Energy Report, Green Button etc.).

D. Conservation

Behind the Meter Generation (BMG):

BMG projects, according to current conservation and demand management (CDM) program rules include Combined Heat and Power (CHP) and Waste Energy Recovery (WER), are eligible to receive incentives through the Conservation First Framework (CFF) and the Industrial Accelerator Program (IAP). Many of these projects use Natural Gas as an energy source and therefore, while reducing demand on the grid, result in a net increase in GHG emissions. The ministry is proposing to change the program rules to have the IESO stop accepting application that result in a net increase of GHG emissions. To give time for LDCs and stakeholders to adjust, it is proposed that the regulations would come into effect July 1, 2018 which result in the majority of the existing project applications proceeding.

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. The ministry is proposing to encourage greater efficiency by allowing efficiency savings from IFMC technologies to count towards their electricity savings targets under the Conservation First Framework, and by directing the OEB to explore ways to further encourage energy efficiency 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. ENERGY is proposing to proceed with the development of the legislative and regulatory framework in the Fall 2017/Winter 2018 to mandate a province wide Green Button for electricity and natural gas distributors, and voluntary implementation for water distributors utilities. A voluntary framework for water utilities is recommended due to reduced cost effectiveness of the program for this sector.

Demand Response (DR):

2013 LTEP stated that Ontario will aim to use DR to meet 10% of peak demand by 2025 (equivalent to ~2,400 MW under 2013 LTEP forecast conditions). This target includes peak reductions from a variety of initiatives, including the Industrial Conservation Initiative (ICI), Time-of-Use (TOU) rates, DR auction and DR pilots. While significant progress towards this target has been made, ENERGY is proposing to eliminate the 10% target so as to not constrain the percentage achievable through DR and prepare for it to be rolled into a general capacity auction. The IESO is planning to implement a general capacity auction through which DR resources will compete with traditional generation resources and would be procured if cost-competitive with other offers.

Commented [HT4]: I had thought the timing on this was for 2024 anyway? Is there a need to eliminate the target given the participation on the auction is still a number of years away?

Profiled Ongoing Initiatives:

The Ministry also plans to highlight ongoing work on the alignment of various conservation programs, alignment of smart thermostat incentive programs, the home energy audit and retrofit program through the Green Investment Fund, and the Investor Confidence Project.

Commented [HT5]: All of these have proposed action in the deck. Do they need policy approvals?

E. Preparing for the Future/Innovation

Grid Modernization:

Ontario has made important investments in grid modernization such as smart meters. ENERGY proposes that the 2017 LTEP articulate the government's vision for distribution grid modernization: the creation of an environment that enables the a modern, digital grid for Ontarians. The Ministry proposes to direct the OEB to address regulatory and cultural barriers in order to encourage innovation, optimal utility investment, and customer choice. For example, options include:

- Ensuring that LDCs are able to earn a rate-on-return on all assets that bring value to ratepayers, not just poles and wires; and

- Direct utilities to create plans that articulate how they intend to cost-effectively modernize their grids and promote innovation within their operations.

Renew Smart Grid Fund (SGF):

The Ministry is proposing to renew the SGF with an investment of \$60M over 5 years. The SGF has helped many innovators become successful international companies. However there are still barriers to domestic integration of these solutions, and the Ministry recommends that a renewed SGF will be an important piece to overcome barriers to modernization. ENERGY proposes that the 2017 LTEP highlight a renewed SGF with an expanded scope and more targeted investments in innovative solutions that support grid modernization. The Ministry will report to TB/MBC in summer 2017 for necessary approvals.

Energy Storage:

The Ministry is proposing to amend the regulatory framework for energy storage to remove unfair market and regulatory barriers to allow for storage to compete against other assets in future service procurements and general capacity auctions envisioned under market renewal. Actions include:

- Amending regulations to address the “double counting” issue with GA;
- Directing the OEB to investigate similar issue with network charges to storage facilities; and
- Directing the IESO to review the application of charges for the wholesale market.

Electric Mobility:

Fuel switching, including promotion of EVs, was an important commitment under CCAP to drive down GHG emissions from the transportation sector. However, electrification of vehicles and transit will have an impact on electricity grids. The Ministry is proposing that the 2017 LTEP support a deliberate transition to a low-emission transportation economy by actions including: removing regulatory barriers; developing a vehicle-grid integration road map, and facilitating information sharing between government and utilities.

International Demonstration Fund:

The ministry is proposing pilot International Energy Demonstration Fund of \$10M in 2017/18 to fund 5-10 high-value projects and assess the impact on exports and company growth. Program rules would be developed to give priority to Ontario-based project costs to maximize provincial benefit. Stakeholders have indicated a gap in provincial and federal energy innovation programming as they do not typically consider international projects to be in scope. The Ministry will report to TB/MBC in summer 2017 for necessary approvals.

Expanding Net Metering:

ENERGY is proposing to expand and enhance Ontario’s net metering framework to enable third-party ownership and related consumer protection measures, and to allow for virtual net

metering demonstration projects, and to develop and propose necessary legislative and regulatory amendments, together with other instruments as appropriate. Third-party Ownership and Virtual Net Metering emerged during stakeholder consultations for recent updates as two potential areas for further enhancements. The Ministry advises that the program changes as currently envisioned would have a negligible impact on electricity rates. There has been increased interest in net metering given the Feed-in Tariff (FIT) and microFIT procurement programs winding down in 2017. Implementation of the program changes requires legislative and regulatory changes which ENERGY proposes to bring forward for approvals this fall.

Smart Renewable Distributed Generation:

Renewable distributed generation (DG) and other distributed energy resources (DERs) are becoming more widely adopted in Ontario and have the potential to provide added value to customers and utilities. The Ministry is proposing to work with the IESO to develop a program to support the strategic deployment of innovative renewable DG projects.

Profiled Ongoing Initiatives:

The Ministry is also proposing the ongoing work related to exporting Ontario's energy expertise, OEB Regulated Price Plan (RPP) pilot projects to provide greater choice in time of use billing practices for consumers, and promoting and exporting Ontario's nuclear innovation.

F. Responding to the Climate Change Challenge

Climate Change Adaptation:

The ministry is proposing to undertake a province wide energy distribution vulnerability assessment funded by government revenues to reduce the cost of utilities developing detailed risk analyses and action plans at the local level. In addition, ENERGY is proposing to support a number of actions related to climate change adaptation through collaboration and dialogue with agencies, stakeholders, and utilities, as well as providing direction to the OEB and IESO on integrating climate adaptation into advice provided to utilities as well as planning processes.

Commented [HT6]: Energy, do you have a cost estimate for this work? Not flagged in TB/MBC report backs

Profiled Ongoing Initiatives:

Ongoing work related to the remote connections project, shifting to renewable natural gas and lower carbon transportation fuels, supporting a transition to heating and cooling with renewable technologies, district heating and cooling initiatives, and supporting the transition to near and net zero GHG buildings.

G. Supporting Indigenous Capacity and Leadership

Indigenous participants in engagement sessions emphasized the need for enhanced affordability supports and a desire for greater participation in the energy sector. Many First Nations also highlighted the need for program dollars to support the implementation of plans developed under the province's very successful Aboriginal Community Energy Plan (ACEP) program.

Evolve Indigenous Conservation and Support Programs:

Approval is also being sought to direct the IESO to undertake a review of Indigenous conservation programming as part of the Mid-Term Review of the CFF, as well as to reprofile an existing \$10M/year rate based funding envelope to focus on Indigenous energy programming including the development of program options for the implementation of community energy plans under ACEP.

Profiled Ongoing Initiatives:

The Ministry is proposing to profile ongoing initiatives related to electricity affordability for Indigenous communities (e.g., FNDC, OESP expansion etc.), the connection of remote communities to the provincial grid as well as the province's work to explore innovative solutions for the communities that are uneconomic to connect; and, due to changing opportunities in the sector, highlight the Ministry's plans for enhance engagement with Indigenous communities as well as further investigate innovative financing models and support tools that may help lower financing costs and stimulate more capital in the financing of Indigenous projects.

H. Regional Priorities

Regional Economic Development:

The Ministry is proposing to explore ways to use federal and provincial infrastructure and economic development funding to support electricity transmission and distribution infrastructure that supports regional economic development, and respond to regional disparities in electricity infrastructure that were highlighted during engagement with stakeholders and communities.

Regional Planning Review:

The ministry is proposing to direct the IESO to review the regional planning process and report back with options and recommendations to address challenges. It is expected that this review would dovetail with the establishment of an integrated bulk system planning process as well as work to ensure the right sizing of assets reaching end of life, both proposed in this submission.

Since 2013, an enhanced regional planning process has brought communities to the table to identify their electricity needs and develop cost-effective solutions to meet them. 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, which presents a good opportunity to review the planning process.

CCAP Report Back

ENERGY is also reporting back to Cabinet through the LTEP submission on 3 commitments under the CCAP minute: working with MOECC to develop GHG reduction standards for drinking water and wastewater treatment plants (CCAP Minute #75), implementing the Green Button province wide (CCAP Minute #76), and developing a single portal for energy related social benchmarking (CCAP Minute # 77).

Stakeholder and Partner Considerations: **UNDER DEVELOPMENT**

Commented [HT7]: Could ask Energy to fill in to a degree.

General public (including residential and small businesses) –

Large Industrial and Commercial Consumers –

Tenants –

Northern communities –

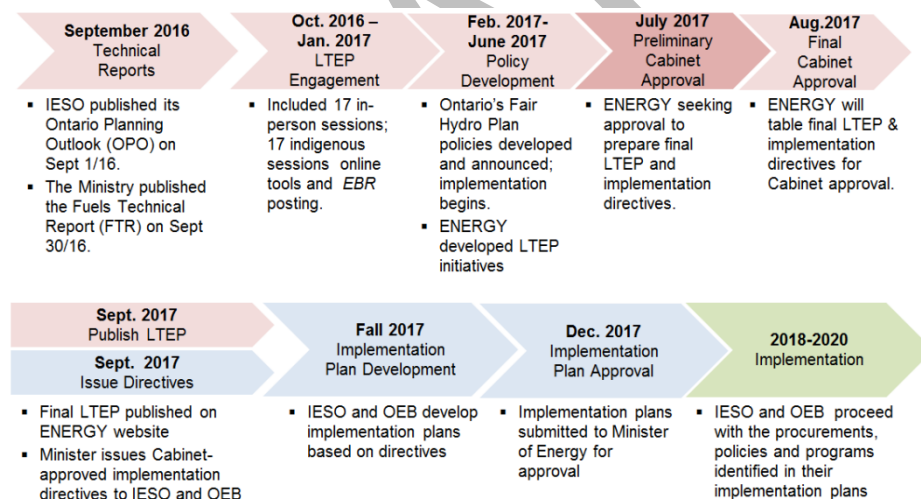
Indigenous communities –

eNGOs –

LDCs –

Delivery:

Following approval of the LTEP components, the Ministry will develop the final LTEP and OEB and IESO Implementation directives and report back to Cabinet for approval. ENERGY will also report to TB/MBC for necessary approvals of any components of the plan prior to release of the final document in late summer 2017.



Risks and Considerations:

UNDER DEVELOPMENT

Linkages: **UNDER DEVELOPMENT**

Ontario's Fair Hydro Plan – **Announced March...** The OFHP initiatives will feature prominently in the province's next LTEP as well as have impacts on the province's energy planning activities for decades.

Commented [HT8]: Suggestions for what to include here welcome. I have highlighted some of the risks in the outlooks section but have not identified many for the policy section. I think there could still be some stakeholder risks highlighted and the CCAP pieces could be brought out again. Not seeing big glaring risks in the proposals generally however. Encouraging more distributed generation in the face of OFHP is one that comes to mind however

Long-term Infrastructure Plan –

Ontario's Climate Change Action Plan (CCAP) – The CCAP, released in summer 2016, reiterated the 2016 Budget commitment and stated that Ontario intends to invest in initiatives that both reduce greenhouse gas (GHG) emissions and ensure that the net impact of cap and trade would not result in an overall increase in electricity costs for commercial and industrial consumers, and that there would be a modest benefit of up to \$2 per month, on average, to residential consumers. This commitment to residential consumers was met by the January 2017 8% rebate.

The CCAP committed to a new Climate Change agency that would act as one window for the delivery of climate change-related programs (e.g., energy management programs).

The CCAP committed to “consider options for legislation/regulation change that lessen the impact on residential tenants of increased energy costs from cap and trade”. As part of the review of the Residential Tenancies Act, the Ministry of Housing is working on a proposal that will address that commitment. The proposal is expected to come to Cabinet in spring 2017.

Terms you need to know

- **Global Adjustment (GA)** – Amount that accounts for differences between the market price of electricity and rates paid to regulated and contracted generators and for conservation programs. The GA is collected from all electricity ratepayers in Ontario.
- **Local Distribution Companies (LDCs)** – Local electricity utilities, responsible for distributing power from transmission lines to people's homes (e.g., Hydro Ottawa, Toronto Hydro, etc.)
- **Regulated Price Plan (RPP)** – Since April 2005, the Ontario Energy Board (OEB) has administered an electricity price plan that provides stable and predictable electricity pricing, encourages conservation and ensures the price consumers pay for electricity better reflects the price paid to generators. This pricing plan is known as the Regulated Price Plan (RPP). About 5 million residential consumers, small businesses and farms are eligible for the RPP.
- **Ontario Power Generation (OPG)** – A business corporation owned by the province that owns and operates generation assets, including nuclear and hydro, and generates almost half of Ontario's electricity.
- **Ontario Energy Board (OEB)** – A Crown Agency that independently regulates Ontario's electricity and natural gas sectors in the public interest. Implements an open and transparent process to allow for stakeholders to comment on various items.
- **Independent Electricity System Operator (IESO)** – An independent corporation and agency of the Ministry of Energy that operates the electricity market in Ontario. Balances the supply of and demand for electricity in Ontario and then directs its flow across the province's transmission lines, including interties with other jurisdictions.
- **Unit Sub Meter Providers (USMPs)** – 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.

DRAFT

APPENDIX A: Multi-Year Action Plan

Below is an extract taken from the MYAP which demonstrates the overall strategic plan for the initiative that this policy submission supports. This excerpt represents the approved plan to date, and may not reflect the specific policy and delivery timelines identified in the Cabinet Minute above.

Milestone Legend: Ongoing Activity, Policy Approval, Delivery Milestone
Key Activity Status Legend: Heightened Management Attention Required, Management Attention Required, Monitoring, Satisfactory

MYAP Slice 2017-07-12

KEY ACTIVITIES	YEAR 1 (2014-2015)												YEAR 2 (2015-2016)												YEAR 3 (2016-2017)												YEAR 4 (2017-2018)												YEAR 5 (2018-2019)												GOVERNANCE AND RISKS												
	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M																									
15.11 Long-Term Energy Plan (LTEP) and Related Initiatives Pillar: Managing Ontario's Energy Resources																																																																									Lead: ENERGY Supporting: MOECC Risk Categories: Delivery / Operational, Stakeholder / Perception
	LTEP Progress												Sustainable - Electricity Supply ON Conservation First Agenda Conservation First Leg Intro												Province-wide consultation Home Energy - Retrofit Launch												*Approval of LTEP Public release of LTEP																								Last updated: 05-06-17												
													Unlock Value in Electricity Integrated Power Syst Planning												IESO doc. initiates planning												Quebec RFP with US States																								Increased Risk Status 												

Appendix A: Summary Table of Policy Approvals Sought

Policy Proposal	Driver	New Gov. Costs	Leg/Reg (Y/N)
B. Flexible Energy System			
East West Tie: When NextBridge files a Leave to Construct application with new higher cost estimate, the Minister will respond to increased costs with a request for an updated need assessment from IESO.	Value for money	N	N
North West Bulk: The LTEP will outline a 3 phase approach for the project to ensure construction occurs when most needed and highlight possible future inter-jurisdictional collaboration with Manitoba.	Value for money	N	N
Bulk System Planning: The Ministry will direct IESO to establish a formal process for planning the future of the integrated province-wide “bulk” system.	Transparency, value for money	N	N
C. Improving Value and Performance for Consumers			
Preserving Transmission Corridors: 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.	Process improvements, value for money	N	N
Enhancing Reliability: 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.	Improved service	N	N
Competitive Transmitter Selection: The Minister will direct the IESO to develop a competitive transmission selection or procurement process and identify potential pilot projects.	Process improvements, value for money	N	N
Right-sizing Assets: The Minister will direct the IESO and the OEB to take a coordinated, long-term	Process improvements,	N	N

Policy Proposal	Driver	New Gov. Costs	Leg/Reg (Y/N)
approach when addressing the need to replace end-of-life assets.	value for money		
Modernizing the Utility Business: Enhanced regulation of LDCs, Improved Regulatory Efficiency, Bill redesign	Process improvements, value for money, transparency, burden reduction	N	N
D. Conservation			
Behind the meter generation (BMG): Phase out incentives for BMG projects that use supplied fossil fuels (e.g. natural gas Combined Heat and Power projects).	GHG reduction	N	N
In Front of the Meter Conservation (IFMC): Enable IFMC projects, and ask OEB to examine and identify steps for pursuing opportunities to encourage LDCs to pursue energy efficiency on the distribution system.	Efficiency, value for money	N	N
Green Button Standard: LTEP to reaffirm Ontario's commitment to expanding Green Button province-wide and indicate government's intent to bring forward amending legislation to mandate Green Button for electricity and natural gas distributors.	Education, transparency, GHG reduction	N	N
Evolution of Demand Response: Eliminate the long-term DR target of 10% of peak demand reduction by 2025 while reaffirming the commitment to evolve the DR auction into the capacity auction.	Flexibility	N	N
E. Preparing for the Future and Innovation			
Grid Modernization: Provide direction to OEB to address regulatory and cultural barriers in order to encourage innovation, optimal utility investment, and customer choice.	Process improvement, innovation	N	N
Renew Smart Grid Fund: 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.	Ec. Dev., innovation	Y	N
Energy Storage: Update market and regulatory rules so storage can be introduced onto the grid where it makes technological and economic sense.	Process improvement, GHG reduction	N	N
Electric Mobility: Remove regulatory barriers; develop vehicle-grid integration road map and facilitate information sharing between government and utilities.	Process improvement, GHG reduction, customer choice	N	N
International Demonstration Fund: Establish a \$10 million pilot program funded from the tax-base to support the demonstration of Made-in-Ontario energy technologies in markets outside of Canada.	Ec. Dev., innovation	Y	N
Expanding Net Metering: Update Ontario's net metering framework to allow third-party ownership and operation of net-metered renewable generation, and allow for virtual net metering demonstration projects.	Customer choice, supply	N	Y
Smart Renewable Distributed Generation: Work with the IESO to develop a funding program to support the strategic deployment of innovative renewable distributed generation projects that demonstrate value to customers and utilities.	Customer choice, value for money, GHG reduction, innovation, supply	N	N
F. Responding to the Climate Change Challenge			

Commented [HT9]: TBC if other conservation items under identified as ongoing require policy approvals.

Policy Proposal	Driver	New Gov. Costs	Leg/Reg (Y/N)
Climate Change Adaptation: With a focus on the energy distribution sector, Ontario will strengthen the ability of the energy industry to anticipate the effects of climate change and integrate the impacts into operational and infrastructure planning, by actions such as conducting a province-wide energy distribution vulnerability assessment.	Resilience, reliability, value for money	Y	N
G. Supporting Indigenous Capacity and Leadership			
Evolve Indigenous Conservation Programs: IESO will produce a report, informed by engagement with Indigenous communities, on options to improve conservation programs for First Nations and Métis communities.	Service improvement, GHG reductions, efficiency, value for money	N	N
Evolve Indigenous Support Programs: Evolve programs to include support for energy plan implementation, which could include small-scale renewables, conservation and other community-scale energy opportunities.	Ec.dev., Indigenous engagement, resilience,	N	N
Access to Financing: The 2017 LTEP will signal Ontario's intent to examine new financing models and support tools to help Indigenous communities fulfill their energy needs.	Ec. Dev., program improvement	N	N
H. Regional Priorities			
Regional Economic Development: The Ministry 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.	Ec. Dev., value for money	N	N
Regional Planning Review: Direct IESO to review the regional planning process.	Process improvement, value for money, transparency	N	N

Appendix B: List of Ongoing Initiatives to be Profiled in LTEP