

IESO Implementation Plan

Proposed IESO Activities, Engagement Scope and Timelines

On October 26, the Ministry of Energy released the Long Term Energy Plan as well as an Implementation Direction to the IESO. The [Implementation Direction](#) contains specific directed initiatives for the IESO to report back to the Minister of Energy - this formally starts the development of the IESO's Implementation Plan, which is due to the Minister of Energy by January 31, 2018 and subject to the Minister's approval.

The IESO is engaging stakeholders, communities, and First Nations and Métis from the beginning to ensure that initiatives are developed collectively by all impacted parties. This includes initial engagement on the Implementation Plan to develop and deliver on each initiative. Feedback on specific activities is out-of-scope at this time. (Engagements specific to each initiative will launch once the Implementation Plan has been developed, submitted, and approved by the Minister.)

This document is to guide the initial engagement on the Implementation Plan and seeks feedback on the following:

- The overall approach to its Implementation Plan (e.g. will the proposed activities effectively respond to the directive or are other activities required)
- Priority/timeline for responding to the directive initiatives

Questions to consider when reviewing this document:

- Is an adequate and efficient scope of activities proposed to meet the implementation directive?
- Are there other factors (e.g. additional external initiatives) that should be considered in the design of the timeline of activities?
- Is the relative priority of the engagement schedule achievable?

The Directive Items are listed below and grouped under the following three themes:

1. Supporting Indigenous Capacity and Leadership
2. Encouraging an Innovative Sector
3. Delivering A Flexible and Efficient System

1. Supporting Indigenous Capacity and Leadership

DIRECTIVE ITEM	DELIVERABLE	IESO ACTIVITIES	AREAS OF ENGAGEMENT
(1.1) First Nations/Métis Energy Support Programs	Review and propose options to improve First Nations and Métis energy support programs	<ul style="list-style-type: none"> • Various engagement sessions with First Nations and Métis (<i>Note: engagement is underway</i>) • A review of learnings taken from the Indigenous Energy Symposium and feedback collected through various engagement activities • Opportunity to provide input into proposed options 	<ul style="list-style-type: none"> • The need for re-alignment or expansion of programs to meet the needs and interests of First Nations and Métis • Improving the application process of existing Energy Support Programs for First Nations and Métis • Supporting the implementation of Indigenous community energy plans
(1.2) First Nations/Métis Conservation Programs	Report on options to improve conservation programs, and access to programs, for First Nations and Métis	<ul style="list-style-type: none"> • Various engagement sessions with First Nations and Métis (<i>Note: engagement is already underway</i>) • A review of feedback collected through engagement activities • Review of existing and historical programs and results • Review of Aboriginal Community Energy Plans • Opportunity to provide input into draft report 	<ul style="list-style-type: none"> • Underlying electricity and energy efficiency related issues in on-reserve First Nation communities • Opportunities for technologies or processes that would support energy efficiency for First Nations and Métis • Gaps in program design or delivery for existing conservation programs • Options for programs for off reserve First Nation and Métis peoples

2. Encouraging an Innovative Sector

DIRECTIVE ITEM	DELIVERABLE	IESO ACTIVITIES	AREAS OF ENGAGEMENT
(2.1) Renewable Distributed Generation Demo Program	Develop a program for innovative renewable distributed generation projects to demonstrate enhanced system integration and deployment potential, specifically for providing local and/or bulk system level value	<ul style="list-style-type: none"> • Provide a review of DER demonstration projects in Ontario • Provide a review of demonstration/pilot program best practices • Identify 3-5 topics to investigate through the program (e.g. virtual net metering) • Develop a program design, including process and funding agreement 	<ul style="list-style-type: none"> • Topics/areas of investigation/demonstration through the program • Program design, processes and funding agreement
(2.2) Energy Storage Obstacles	Coordinate with the OEB to review market rules, industry codes, and regulations, to identify potential obstacles to fair competition for energy storage in the delivery of services and, where appropriate, propose mitigation strategies	<ul style="list-style-type: none"> • Conduct a jurisdictional review to determine how barriers to energy storage are being addressed in other jurisdictions • Develop a set of principles to help guide the assessment of the appropriateness of potential obstacles • Identify potential obstacles to the fair competition of energy storage resources • Determine which of the potential obstacles are inappropriate and develop mitigating strategies accordingly 	<ul style="list-style-type: none"> • The development of principles to help guide the assessment of the appropriateness of potential obstacles • The identification of potential obstacles within the current Market Rules, industry codes, or regulations to ensure none are missed
(2.3) Hydrogen Electricity System Benefits	Identify options for pilot projects that evaluate the electricity system benefits, costs and GHG emission reductions of using electricity to create hydrogen	<ul style="list-style-type: none"> • Undertaking market research on the opportunities for power-to-gas, including a review of the respective regulatory requirements. • Develop a Request for Expression of Interest (RFEI) regarding the operational effectiveness of power-to-gas • As applicable, identify potential pilot project initiatives to demonstrate, test, and evaluate the opportunity for power-to-gas applications 	<ul style="list-style-type: none"> • Development of RFEI for potential opportunities for power-to-gas applications • Recommendations for the development of pilot project(s), as applicable

3. Delivering a Flexible and Efficient System

DIRECTIVE ITEM	DELIVERABLE	IESO ACTIVITIES	AREAS OF ENGAGEMENT
(3.1) Bulk System Planning Process	Develop a formal integrated bulk system planning process	<ul style="list-style-type: none"> • Review current bulk system planning process • Conduct a jurisdictional review • Explore ways of co-ordinating how needs on the bulk system are identified • Explore ways of identifying and evaluating solutions to meet needs • Explore possible mechanisms for implementing the solutions in the bulk system plan (e.g. through the markets, RFP etc.) • Determine what information the IESO should provide to the market place on plans that it has developed and how often 	<ul style="list-style-type: none"> • Design of the process • Co-ordination with other planning processes, including Regional Planning, and the Long Term Energy Plan • How and when stakeholders and communities are incorporated in a bulk system planning process (e.g. on needs, decision criteria, and solutions)
(3.1) End-of-life Transmission Assets	Develop approach to replacing transmission assets at end of life	<ul style="list-style-type: none"> • Complete a jurisdictional review • Work with Transmitters and LDC's to outline existing processes and constraints related to identifying end-of-life assets • Jointly with Transmitters and LDCs, develop a process for obtaining and screening end of life information in a timely manner • Work with the OEB to address any changes required to the regulatory framework 	<ul style="list-style-type: none"> • Developing a process for identifying assets reaching end-of-life • Extending the planning horizon on sustainment investments from the current 3-5 year period to at least a 10 year horizon • Developing a set of criteria for screening the identified end-of-life assets for opportunities to better align with future power system and market conditions through more comprehensive and transparent long-term planning

<p>(3.2) Transmission Procurement Process</p>	<p>Develop a competitive transmitter selection or transmission procurement process</p>	<ul style="list-style-type: none"> • Select pilot projects, either generic or specific, that will guide the development of the process • Complete a jurisdictional review • Review the legal and regulatory context to determine policy, legislative, and/or regulatory changes that may be required • Design the various steps in the process, including qualification requirements, bid selection criteria and procurement timelines • Prepare all of the relevant procurement documents 	<ul style="list-style-type: none"> • The design of the process (e.g. timelines, qualification requirements, bid evaluation criteria) • Options for Indigenous Community participation • How and when stakeholders and communities are incorporated in the procurement process
<p>(3.3) Regional Planning Process</p>	<p>Review and report on the regional planning process, taking into account lessons learned, and provide options and recommendations</p>	<ul style="list-style-type: none"> • Review the existing regulatory framework and regional planning process, gather information from stakeholders and conduct jurisdictional reviews • Work with the OEB, Hydro One and key stakeholders to identify: <ul style="list-style-type: none"> ○ Opportunities to streamline the regional planning process ○ Opportunities to better align with other planning processes ○ Opportunities to coordinate asset end of life replacement with regional needs ○ Barriers to evaluating and implementing non-wires solutions • Brainstorm solutions and seek input from stakeholders and communities • Propose adjustments to the regional planning process and regulatory framework and develop an action plan 	<ul style="list-style-type: none"> • Barriers to the implementation of cost effective non-wires solutions • Effectiveness of customer, community and stakeholder engagement in the existing regional planning process • The IESO's proposed changes to the regional planning process

(3.4) Customer Reliability	Review and report on technical criteria used to assess customer reliability in order to identify and evaluate options for local area enhancements	<ul style="list-style-type: none"> • Determine the contribution of disturbances on the IESO Controlled Grid to customer reliability • Complete a jurisdictional review • Review past feedback on customer reliability from customers, communities and stakeholders. • Complete additional outreach, including on evaluation methodology • Based on feedback and information gathered, develop and evaluate alternatives, considering the cost and benefits for changes to IESO standards changes, if needed 	<ul style="list-style-type: none"> • Customer reliability delivered by the IESO-controlled grid to Ontario customers/communities/stakeholders. • Relative weighting of some attributes the IESO will be using as decision-making criteria to compare alternatives for standard development • Draft alternatives and recommendations for standard development • Other areas raised in the review
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Proposed Timeline of Engagement Activities

	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019	Q2 2019	Q3 2019	Q4 2019
1.1 First Nations/Métis Energy Support Programs									
1.2 First Nations/Métis Conservation Programs									
2.1 Renewable Distributed Generation Demo Program									
2.2 Energy Storage Obstacles									
2.3 Hydrogen Electricity System Benefits									
3.1 Bulk System Planning Process									
3.1 End-of-life Transmission Assets									
3.2 Transmission Procurement Process									
3.3 Regional Planning Process									
3.4 Customer Reliability									

	Information and Data Gathering
	Public Engagement
	Engagement Complete/ Outcomes Communicated