

MEETING NOTE

NAME OF ORGANIZATION:	Ontario Electricity Association (OEA)
DATE/TIME OF MEETING:	Wednesday, November 15 at 10:00 am.
LOCATION OF MEETING:	

PURPOSE:

ATTENDEES: **Minister of Energy**
Glenn Thibeault

X

LAST MEETING: Include date of last meeting, if known. (Otherwise, delete.)

ANTICIPATED AGENDA ITEMS (OR 'AGENDA' IF WE HAVE RECEIVED ONE):

1. Innovation and Grid Modernization (incl. storage, EVs, overcoming regulatory barriers).
2. LDC Business Modernization, Efficiencies and Regulatory Streamlining
3. Regional Planning
4. Review of conservation programs for First Nations and Métis
5. Climate Change Adaptation
6. Renewed Commitment to Conservation
7. Net Metering
8. Renewable Distributed Generation Program

NOTES ON AGENDA ITEMS:

1. Innovation and Grid Modernization

- The OEA is likely to indicate its support for the Ministry's innovation and grid modernization agenda in the latest LTEP

Suggested Response:

- I know the OEA membership recognizes the need for innovation to keep pace with a rapidly changing energy sector. The Ministry's Long-Term Energy Plan demonstrates our commitment to the same goal.

- **As part of our grid modernization direction, the Ministry is moving to reduce regulatory barriers that inhibit investments in innovative, cost-effective technologies – something I know your organization brought up as a priority in your LTEP submission.**
- **I would be keen to hear your perspectives on our innovation and grid modernization agenda.**

Background:

- The Ministry's approach to grid modernization – as articulated in the Long-Term Energy Plan – is to address barriers to innovation in order to create the right environment for LDCs to make the best decisions for their systems and their customers.
- In their LTEP submission, the OEA argued that “Regulatory barriers at the OEB that prevent or dissuade regulated utilities from investing in innovative technology should be removed...” These technologies include “distributed generators, energy storage, electric vehicles (EVs), micro turbines, micro CHP units, [and] control systems.”
- The OEA also submitted that “LTEP 2017 should facilitate customer choice of providers of innovative technology services/resources while enabling utilities and other providers of innovative technologies (e.g., producers, etc.) to compete for such supply to customers on a level playing field.” The Ministry is taking action through its direction to the OEB, the IESO, and forthcoming regulatory amendments to ensure that energy storage is not unfairly disadvantaged in Ontario's markets.

2. LDC Business Modernization, Efficiencies, and Regulatory Streamlining

- In its 2017 LTEP submission, the OEA advocated for regulatory streamlining and flexibility. The OEA will likely be supportive of expectations outlined in LTEP that involve regulatory flexibility to allow LDCs to expand business activities.
- The OEA has had less to say about LDC efficiencies and accountability, and may not be as enthusiastic about these initiatives. The OEA has generally focussed on regulatory efficiency and reducing regulatory costs (i.e., OEB requirements on LDCs).
- The OEA indicated in its LTEP submission that the OEB should have regard in its rate decisions to the importance of applied funding to facilitate performance in areas such as reliability, Cap and Trade integration, economic growth and affordability.

Suggested Response:

- The Ministry has heard from the OEA and other stakeholders regarding concerns about regulatory costs and burden. Through LTEP, the government has signalled it will look to the OEB to continue to promote efficiencies in its own rules and requirements so that LDCs benefit from further regulatory streamlining.
- The government also signalled through LTEP, that it expects the OEB to continue to enhance its efforts to improve the performance of LDCs through incentives for distributors to cut costs and make annual improvements to productivity and cost-efficiency and to hold distributors to account when expectations are not met.
- This includes asking the OEB to review the standards for reliability and quality of service for transmitters and distributors.
- For example, Hydro One, with 1.3 million distribution customers, currently reports system-wide averages across its large, geographically diverse service territory. We'd like to provide customers with reporting that is more meaningful to them.
- In some jurisdictions, like Michigan, customers can receive a credit if their utility fails to restore power within a specified period of time. We would like to see incentives and consequences to ensure utilities are held to account for performance.
- Ontario's energy agencies, including the OEB, have independence in fulfilling their mandates. While the Ministry has articulated expectations for a more efficient sector, it cannot direct the OEB on specific regulatory reforms.

Background:

- The LTEP outlines the government's expectation that the OEB continue to enhance its efforts to improve the performance of LDCs. This includes looking to the OEB to further strengthen incentives for distributors to cut costs and make annual improvements to productivity and cost-efficiency and to hold distributors to account when expectations are not met, including with respect to reliability.
- In the Minister's LTEP Implementation Directive to the OEB, the Minister directed the OEB to consider efficiency and cost-effectiveness, in addition to other principles, when regulating LDCs with its performance-based approach.
- The LTEP also acknowledged that many LDCs are already responding to the changing landscape and finding opportunities to achieve further efficiencies and savings. Many LDCs have entered into joint service agreements to improve

customer service and reduce OM&A costs; for example, GridSmart City, CLD and CHEC, and states that the government will look to the OEB to explore ways of facilitating these partnerships where they make economic sense.

- In their LTEP submission, the OEA discussed regulatory reform and suggested LTEP “should modernize Ontario’s regulatory system”. This included “reducing barriers preventing or dissuading regulated utilities from investing in innovative technology”, “expanding options for consolidation, financing, and funding of regulated utilities through appropriate regulatory incentives”, and removing red tape initiatives, such as:
 - Removing existing regulatory requirements when introducing new ones;
 - Only issuing new regulatory requirements twice per year;
 - Regulating on a less prescriptive basis;
- While OEA’s submission discussed “bending the cost curve through offering greater incentives to parties that deploy lower-cost, innovative solutions that offset higher-cost, traditional investments,” little discussion was offered about how to make LDCs more accountable if investments did not yield expected savings or how to protect rate-payers from increasing costs.

3. Regional Planning

- The OEA’s LTEP submission indicated that the LTEP should explore Ontario’s regional needs. It is likely to indicate its support for the Ministry’s review of the regional planning process, specifically better integration of community, distribution, regional and bulk planning and integration of non-wires alternatives.

Suggested Response:

- **I know the OEA membership recognizes the need for integrated planning.**
- **Since 2013, the IESO and utilities have engaged communities in a formalized regional planning process. The first round of planning has recently been completed and we now have an opportunity to look at the challenges and opportunities.**
- **For example, non-wires solutions can offset the cost of transmission and distribution infrastructure, and we’ve asked both the Board and the IESO to look at reforms that can help ensure utilities are incented to implement the optimal investment planning decisions.**
- **The review will also look at ways to better integrate regional planning with community energy planning and distribution and bulk system planning.**
- **I would be keen to hear your perspectives on how we can improve the regional planning process and better integrate planning.**

Background:

- In their LTEP submission, the OEA argued that “IESO’s OPO did not assess regional demand and potential resource needs. Therefore, LTEP 2017 should explore Ontario’s regional energy needs.”
- Regional electricity needs are assessed through the regional planning framework. The first cycle of formalized planning by the IESO has been completed in all 21 electricity regions in Ontario. Electricity needs in all regions will be reviewed every 5 years or sooner, if needed.
- The LTEP highlights that the IESO will review the regional planning process and report back with options and recommendations to address challenges and opportunities that have emerged. Through the IESO implementation directive, the Ministry has asked the IESO to specifically address: 1) barriers to cost-effective non-wires solutions and options to address barriers, including LDC capacity; 2) improving the integration of regional planning with bulk, distribution and community energy planning; 3) consider improved planning for replace of transmission assets reaching end of life; and 4) streamlining the process.

4. Review of conservation programs for First Nations and Métis

- The Long Term Energy Plan: *Delivering Fairness and Choice* commits to reviewing current conservation programs to improve their accessibility and availability for First Nations and Métis.

Suggested Response:

- **During the Long Term Energy Plan engagement sessions, we heard that conservation programs for Indigenous communities needed to be more flexible and more widely available.**
- **The LTEP commits to improving conservation programs, which includes improving the availability to communities that are served by Independent Power Authorities.**
- **Further engagement with First Nations and Métis will help to inform how the programs can be revised.**

Background:

LTEP commitments:

- As outlined in the Long Term Energy Plan (LTEP), the IESO will engage with First Nations and Métis and report back to the Province on options for improving

conservation programs and availability, including for the ten First Nations served by Independent Power Authorities: Eabametoong, Keewaywin, Muskrat Dam, Nibinamik, North Spirit Lake, Pikangikum, Poplar Hill, Wawakapewin, Wunnumin and Weenusk.

Existing conservation programs available to Indigenous communities:

- The First Nation Conservation Program (FNCP) is an existing program administered by Hydro One that provides home energy assessments and the installation of measures such as programmable thermostats, ENERGY STAR appliances and weatherization measures, at no costs to residents.
 - The FNCP is available only to First Nations served by Hydro One. Communities served by other Local Distribution Companies and Independent Power Authorities are not eligible.
 - The FNCP replaces the former Aboriginal Conservation Program administered by the IESO. Communities who accessed the former Aboriginal Conservation are not eligible for the FNCP, regardless of the success of the extent of program penetration in the community.
- The Save on Energy Home Assistance Program, delivered by Local Distribution Companies, is available across the province to income-eligible homeowners and tenants to improve the energy efficiency of their homes through free home upgrades such as power pars, energy saving light bulbs, low flow showerheads and energy-efficient appliances. Eligible Indigenous home owners can access this program, however the kinds of supports offered –for example, coupons for certain stores- may not be practicable for people living in more remote areas of the province.

5. Climate Change Adaptation

- LTEP 2017 includes a number of initiatives to strengthen the energy sector's capacity to adapt to climate change, which is in line with the government's overall goal to "integrate climate change mitigation and adaptation considerations into government decision-making and infrastructure planning."
- LTEP initiatives focus in particular on
 - Building capacity in the energy distribution sector
 - Providing greater certainty about how rate-regulated utilities should integrate adaptation measures into their business planning

Suggested Response:

- **The LTEP highlights the leadership that some Ontario LDCs have shown on climate change adaptation.**

- **Building on these accomplishments, Ontario will strengthen the ability of the energy industry to prepare for the effects of climate change and integrate its impacts into operational and infrastructure planning by supporting:**
 - **A knowledge platform to share information, approaches and best practices – among utilities and with other partners, including municipalities and agencies.**
 - **A vulnerability assessment of the energy distribution sector so utilities can develop state-of-the-art strategies to manage risk. This will complement the vulnerability assessment done of the transmission system in 2015.**
 - **Guidance from the OEB on how utilities can cost-effectively integrating climate change adaptation into their planning and operations.**
 - **The IESO will also ensure that climate change adaptation is considered and integrated into the bulk system and regional planning processes.**
- **Questions:**
 - **Do these priorities align with the OEA’s understanding of what is needed on climate change adaptation?**
 - **Has the OEA previously participated in work on adaptation in the energy sector?**
 - **Would the OEA be interested in participating in and contributing to the knowledge platform? Who would be the best point of contact?**

Background:

- Current research in the field indicates that there is need for a more systematic integration of adaptation into energy planning. The energy distribution sector in particular has been identified as requiring coordinated adaptation activity.
- Small and medium size electrical utilities, in particular, may face challenges to integrate climate change into their planning activities.
- The Auditor General (2016 report, with reference to electricity distribution), the Environmental Commissioner (2017) and others have similarly called for systematic action on adaptation.
- As better climate projections become available, there is a potential to integrate sound climate science into the rate-making process in a way that balances the need for long-term system resilience with the imperative to contain system costs.
 - Adaptation actions may be appropriate in the form of traditional assets or non-wires solutions.
 - Adaptation measures should address infrastructure enhancements as well as operational response improvements to extreme weather events.

6. Renewed Commitment to Conservation

- OEA may have questions about conservation policy initiatives included in the 2017 LTEP (e.g. In Front of the Meter Conservation (IFMC); phasing out of incentives for Combined Heat and Power (CHP) projects; and Green Button), the integration of existing conservation programs and new GreenON programs.

Suggested Response:

- **The 2017 LTEP reaffirms the government's commitment to Conservation First, including by profiling the success and continued availability of conservation programs, as well as new initiatives:**
 - Incentives for CHP projects that use supplied fossil fuels are being phased out to help meet Ontario's climate change goals. We welcome the OEA's thoughts on how to further promote behind the meter waste energy recovery projects, which continue to be eligible conservation measures.
 - Promoting energy efficiency on the distribution system, by allowing distribution-rate funded In Front of the Meter Conservation (IFMC) project electricity savings to count towards LDC conservation and demand management (CDM) targets under the 2015-2020 Conservation First Framework. We encourage the OEA to promote this opportunity to its members.
 - Moving forward with province-wide implementation of Green Button. We are planning to post a Green Button regulatory proposal on the Environmental and Regulatory registries for public comment this fall. . We would encourage the OEA and its members to provide feedback on the proposal.

Green Ontario Fund

- **ENERGY is working with MOECC and our agencies to ensure the new programs under the Green Ontario Fund build on the success of the province's existing energy efficiency programs.**
- **I encourage OEA to bring forward opportunities to align with GreenON programs and Climate Change Action Plan programs through the IESO's Mid-Term Review process, and to the Green Ontario Fund.**

Background:

Conservation - CHP

- Beginning July 1, 2018, proponents will no longer be eligible to apply for incentives for CHP projects that use supplied fossil fuels to generate electricity under the Conservation First Framework or the Industrial Accelerator Program.

- The IESO determined that natural gas-fired CHP projects on average result in GHG emissions that are over four times the marginal GHG emissions rate of the electricity system.
- Behind the meter waste energy recovery projects will continue to be eligible, as will renewable energy projects, including those paired with energy storage systems.
- The July 1, 2018 deadline to submit an application is intended to allow businesses currently planning CHP projects to work with their utility or the IESO to submit an incentive application. Once an incentive application has been submitted, it will go through the IESO's regular review and approvals process.
- Those projects that are already in-service, under contract, or have submitted an incentive application will not be affected by this policy decision.

Conservation – IFMC

- In Front of the Meter Conservation (IFMC) technologies reduce line losses and optimize voltage levels. LDCs deploy them on the distribution system to save electricity and reduce peak demand for customers behind the meter.
- The policy announced through the 2017 LTEP encourages LDCs to make their distribution systems more energy efficient through IFMC projects.
- LDCs would need to apply for distribution-rate recovery of IFMC project costs and resubmit their CDM Plans to the IESO indicating that they will be undertaking IFMC projects to help meet their targets.
 - The IESO will issue additional guidance directly to LDCs.

Conservation – Green Button

- Green Button is a data standard that can empower households and businesses with access to their utility data (i.e. Download My Data) and allow them to authorize the automatic, secure transfer of their own data from their utility to apps of their choice (i.e. Connect My Data).
- In 2016, the Ministry of Energy consulted on a proposal to require Ontario's electricity, natural gas and water utilities to implement Green Button, and completed a cost-benefit analysis.
- The 2016-2020 Climate Change Action Plan committed to expand the Green Button program province-wide.

- In the 2017 LTEP, Ontario reaffirmed its commitment to expand Green Button province wide and announced its intention to propose legislation that would, if passed, allow Ontario to require electricity and natural gas utilities to implement Green Button Download My Data and Connect My Data.

Green Ontario Fund

- On August 4, 2017, ENERGY issued an amending direction to the March 31, 2014 Minister's direction establishing the CFF to enable IESO to enter into an agreement with MOECC to support the design and delivery of GreenON programs.
- The Green Ontario Fund (GreenON.ca) website and GreenON Installations Program were launched on August 30, 2017.
 - The Green Ontario Fund website is a one-stop shop for homes and businesses to programs and rebates to reduce energy costs and greenhouse gas emissions, including providing information on the suite of existing conservation and energy efficiency programs.
 - Upon launch, the website began accepting applications for the new GreenON Installations (free smart thermostats) program.
 - Other proposed offerings include: a province-wide smart thermostat rebate program; low carbon technology incentives for homes and multi-unit residential buildings, as well as for small and medium sized businesses; a direct install program for small and medium sized businesses; and programs targeting on-reserve Indigenous customers and low-income customers.

7. Net Metering

- ENERGY may be asked for an update on plans to further enhance Ontario's net metering regulatory framework.

Suggested Response:

- **We are continuing to enhance Ontario's net metering framework, giving customers new ways to participate in renewable energy generation while also reducing their electricity bills.**
- **The government intends to bring forward proposed legislative and regulatory amendments that, if passed, would enable third party providers to own and operate net-metered systems.**
 - **Under the province's current net metering framework, a homeowner or business must own the net metered system which generates**

electricity for their self-consumption, meaning that the consumer and generator are one in the same.

- **Allowing third-party ownership of net metered systems can support greater customer choice in generating renewable energy.**
- **Furthermore, ENERGY will be proposing legislative and regulatory amendments that would enable the deployment of virtual net metering demonstration projects that will be selected through the renewable distributed generation program (see below for more details).**
 - **We are taking a measured approach, allowing for innovative projects to proceed while also not binding LDCs to offer virtual net metering.**
- **Feedback from LDCs helped to inform our policy direction.**
- **The Ministry aims to have the updated net metering framework in place in 2018.**
- **We plan to post the regulatory proposals for the enhancements to Ontario's net metering framework through the Environmental Bill of Rights and Regulatory Registries this fall. I encourage you to take the opportunity to review these proposals at that time and share your feedback on the proposed measures.**

Background:

- In December 2016, the Ministry initiated stakeholder and Indigenous engagement activities on potential updates related to third-party ownership (TPO). Outreach included meetings with an advisory working group, a public webinar, a questionnaire to collect written feedback, and targeted meetings with key stakeholder groups.
- The 2017 LTEP commits to enhancing Ontario's net metering framework through legislative and regulatory amendments to enable TPO arrangements while ensuring consumer protection measures are in place.
- Status and next steps of legislative and regulatory amendments:
 - Legislative amendments to the *Ontario Energy Board Act, 1998* are required to expand regulation-making authority under the net metering regulation (O. Reg. 541/05: Net Metering). Amendments are expected to be introduced in November 2017.
 - The Ministry is planning to post a regulatory proposal on the Environmental Bill of Rights Registry and the Regulatory Registry for public comment following introduction of the proposed legislative amendments.

Time of Use Compensation for Net-Metered Customers

- ENERGY is considering the costs and benefits of enabling Time of Use (TOU) settlement for net-metered customers in Ontario. Net-metered customers are currently settled using tiered rates due to limitations with the province's Meter Data Management and Repository (MDM/R).
- ENERGY has issued a survey to all LDCs to collect data on the costs and benefits of implementing TOU settlement and is also currently engaged with the IESO Smart Metering Entity (SME) to determine the costs of upgrades to the MDMR. The survey period has now closed and 27 responses were received, including from Alectra Utilities, Hydro One Networks, and Toronto Hydro.

The cost-benefit analysis is expected to conclude by the end of 2017 after which policy recommendations will be made on whether to proceed with implementing TOU settlement for net-metered customers.

8. Renewable Distributed Generation Program

- ENERGY may be asked to provide more detail on 2017 LTEP commitments to a renewable distributed generation program.

Suggested Response:

- **The Ministry will be working with the IESO to develop an innovative renewable distributed generation program, which will include support for virtual net metering demonstration projects**
- **The program will support a select number of innovative renewable distributed generation projects, strategically located and paired with other distributed energy resources.**
- **As part of this program, we intend to select and deploy virtual net metering projects**
 - **Feedback from LDCs helped to inform our policy direction on this.**
 - **We are taking a measured approach, allowing for innovative projects to proceed while also not binding LDCs to offer virtual net metering.**
- **Demonstration projects will help us gain practical experience and insight into the value that distributed energy resources can offer, such as reducing load on the electricity system and providing services to the bulk system and local grids.**

With the potential for greater proliferation of distributed energy resources, this program will help to inform future grid modernization and net metering policies, as well as enable innovative customer-utility relationships.

Background:

- In December 2016, the Ministry initiated stakeholder and Indigenous engagement activities on virtual net metering (VNM). Outreach included meetings with an advisory working group, a public webinar, a questionnaire to collect written feedback, and targeted meetings with key stakeholder groups.
- The 2017 LTEP commits to support VNM demonstration projects through an innovative renewable distributed generation program.
- In order to operationalize innovative renewable distributed generation projects, including VNM demonstration projects, ENERGY will be working with the IESO to develop a program to support a select number of projects.
- These projects will be innovative renewable distributed generation projects paired with DERs and other Smart Grid technologies, including VNM demonstration projects.
- Several project proponents have come forward expressing interest in pursuing “community net metering” or VNM projects, that may require regulatory changes, as existing licensing requirements and regulatory frameworks may not permit the scope of activities in the proposals. The ministry is conducting legal and regulatory analysis to support planned legislative and regulatory amendments.
- Status and next steps on development of the renewable distributed generation program:
 - IESO will be working with ENERGY to develop the program, which will include support for VNM demonstration projects.
 - Details of the program parameters and process for selection of projects have not yet been developed.
 - Regulatory flexibility for VNM demonstration projects will be tied to participation in the program.
 - ENERGY and IESO intend to align program availability with regulatory in force dates of changes to the net metering framework (July 1, 2018). Application and selection process may begin earlier (Spring 2018).
 - ENERGY communicated the following program objectives to the IESO:
 - Demonstrating and quantifying impacts and value of innovative renewable distributed generation projects;
 - Informing regulatory and market design that enables deployment of value-added solutions;
 - Providing experience to LDCs, IESO and industry partners that will help inform business cases, resource planning and technical knowledge.

APPENDIX:

1. Item 1 – Background

- The Ministry has made a significant commitment to promoting cost-effective energy storage in the 2017 LTEP. The Ministry is proceeding with amendments to the Global Adjustment (GA) regulation to ensure that certain energy storage facilities are only charged GA on what energy they do not return to the grid.
- As part of a broader effort to encourage grid modernization, the Ministry highlighted its expectation that the OEB explore ways to address regulatory barriers to new technologies, including:
 - Building a stronger culture of innovation in the sector;
 - Utility participation in residential smart charging;
 - The deployment of renewable distributed generation and other distributed energy resources that provide value to customers;
 - The use of innovative, non-wires solutions that could, among other things, allow utilities to manage their systems better and encourage customer choice including the principles of efficiency and cost-effectiveness;
 - Allowing utilities to manage their systems better and encourage customer choice including the principles of efficiency and cost-effectiveness;
 - The regulatory treatment of LDC capital and operational expenditures, which can inhibit the uptake of these non-wires solutions;
 - A cost-benefit framework that provides clarity on the treatment of investments, such as those with localized costs that provide benefits to other electricity system participants (also known as the diffuse benefits issue);
 - The ability of utilities to make non-traditional distribution system investments and participate in market opportunities that would ultimately reduce ratepayers' costs associated with capital or other investments; and
 - Opportunities for utilities to partner with their customers to use in-front and behind-the-meter applications to address system needs.
- The Ministry has also directed the OEB and IESO to explore barriers to the fair treatment of energy storage in Ontario's electricity markets and recommend

remediation where required.

- The Ministry has made a significant commitment to promoting cost-effective energy storage in the 2017 LTEP. The Ministry is proceeding with amendments to the Global Adjustment (GA) regulation to ensure that certain energy storage facilities are only charged GA on what energy they do not return to the grid.
- The Ministry has also directed the OEB to explore ways to enable utility participation residential smart chargers that would avoid more costly system upgrades, will work with its partners in the energy sector and vehicle manufacturers to develop a roadmap for vehicle-grid integration that will look closely at this technology and what it could mean for Ontario.
- Finally, the LTEP commits the Ministry to a renewed Smart Grid Fund, which will focus on will focus on encouraging a culture of innovation through support for demonstration projects, technology deployments, and supporting the development of grid modernization plans. The renewed Smart Grid Fund may explore new solutions for integrating many technologies, test new business models, and how to best integrate electricity and other energy resources.

2. Item 2 – Background

- In addition to LTEP, the government also discussed its expectation for sector efficiencies in its Ontario Fair Hydro Plan announcement.
- In the March 2nd announcement, the Ministry included commitments for the OEB to undertake certain actions to find efficiencies in the distribution sector. The announcement indicated the OEB would be:
 - Encouraging shared partnerships between utilities, which would help reduce costs and encourage further innovation for small to medium-sized utilities;
 - Reviewing business cases behind its regulatory requirements to reduce red tape and eliminate costs that LDCs indicate are creating pressures on operating expenses.
 - Looking at opportunities to further drive transmitter and LDC efficiencies and productivity improvements, including the use of innovative technologies and business processes.