

MEETING NOTE

NAME OF ORGANIZATION: Ontario Electricity Association (OEA)

DATE/TIME OF MEETING: Thursday, March 1, 2018

LOCATION OF MEETING: 900 Bay, 4th floor Hearst Block

PURPOSE:

ATTENDEES: **Ministry of Energy**
Chief of Staff, Mike Feenstra

OEA
Vince Brescia, President and CEO
Roy Hrab, Director of Policy

LAST MEETING: Minister Thibeault met with the OEA on November 15th, 2017.

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

1. Innovation and Grid Modernization (incl. storage, EVs, overcoming regulatory barriers).
2. Renewed Smart Grid Fund
3. LDC Business Modernization, Efficiencies and Regulatory Streamlining
4. OEB Modernization Panel & OEA Energy Platform
5. Review of conservation programs for First Nations and Métis
6. Climate Change Adaptation
7. Conservation Programs and Low-carbon technology/GreenON Programs
8. Enhancements to Ontario's Net Metering Regulatory Framework
9. Renewable Distributed Generation Projects, including Virtual Net Metering Demonstration Projects

NOTES ON AGENDA ITEMS:

1. Innovation and Grid Modernization

- The OEB and IESO both released their implementation plans in response to the Ministry's 2017 Long-Term Energy Plan (LTEP) Directive. The OEA will likely want to broadly discuss the plans in relation to the Ministry's innovation and grid modernization agenda.

Suggested Response:

- **I know the OEA membership recognizes the need for innovation to keep pace with a rapidly changing energy sector.**
- **As part of our grid modernization direction in the LTEP, the Ministry is moving to reduce regulatory barriers that inhibit investments in innovative technologies such as distributed energy resources (DERs), EVs, and energy storage – something I know your organization brought up as a priority in your Energy Platform.**
- **As you know, the Ontario Energy Board (OEB) and Independent Electricity System Operator (IESO) are addressing barriers to a distributed energy future in their Long-Term Energy Plan (LTEP) implementation plans.**
- **The implementation plans call for public consultations by the IESO in 2018 and the OEB in 2019. What issues do you intend to raise during these stakeholder activities?**

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.
- The OEB has identified a number of work streams to address barriers to grid modernization and innovation in their LTEP implementation plan. As part of this work, the OEB has appointed an Advisory Committee on Innovation, which will help identify action items and regulatory priorities to be considered by the OEB that can encourage greater innovation by regulated utilities.
- The Advisory Committee on Innovation will feed into the OEB's broader efforts to enable distributed energy resources (DER). This effort should identify potential regulatory reforms to assess and allocate the value DER appropriately.
- The IESO has also identified three work streams to promote innovation in Ontario's energy sector in their LTEP implementation plan. They include:
 - Develop a program to support a select number of innovative renewable distributed generation demonstration projects in order to gain direct experience with integration of distributed energy resources, refine methodologies for assessing value streams, and to inform the evolution of grid systems, processes, and practices;

- Identify potential obstacles to fair competition for energy storage with other technologies in the delivery of services and, where appropriate, propose mitigation strategies; and,
- Identify options for pilot projects that evaluate the electricity system benefits, costs and greenhouse gas emission reductions of using electricity to create hydrogen.
- The OEA has expressed interest in LDC investments in EV technologies. The OEB has been directed to facilitate investments in technologies such as residential smart chargers that would avoid more costly system upgrades. For example, LDCs may be able to more cost-effectively invest in and manage EV chargers instead of upgrading a local transformer.

In their implementation plan, the IESO committed to working with the OEB, storage providers, and other interested parties to further identify obstacles to energy storage and propose mitigation strategies to overcome those barriers.

2. Renewed Smart Grid Fund

- The Ministry is preparing to launch the fourth round of the Smart Grid Fund (SGF). OEA members – particularly LDCs – have been active participants in the SGF so far and will be interested to learn details on the renewed program.

Suggested Response

- **In the LTEP, the Ministry announced a renewed SGF to meet the need for continued investment in cost-effective smart grid deployment and address non-regulatory barriers to smart grid integration.**
- **The Ministry will announce a new call for applications in the coming days as the first phase of the 4th round of SGF funding this month, which will support shovel-ready technologies that promote the digitization of Ontario's distribution grids.**
- **I am pleased that this call will provide support for LDC deployment of maturing, grid modernizing technologies.**
- **We will also launch a Phase 2 of the renewed SGF in April 2018. This call will be broader in scope with the aim of advancing grid modernization.**

Background:

- This call for applications is the first phase of the 4th round of SGF funding, and will support shovel-ready technologies that promote the digitization of Ontario's distribution grids. Phase 2 of Round 4 will launch in April, giving eligible applicants more time to complete their applications.
- The call in March will support two types of projects: demonstration projects by organizations that seek to commercialize new and innovative smart grid technologies, and deployment projects that help Ontario's utilities to acquire and install grid modernizing solutions. Only LDCs will be able to apply for deployment funding.
- The goals of the renewed SGF include:
 - Address barriers to grid modernization through targeted funding for LDCs that will help address barriers to grid modernization in Ontario, and reduce risk and uncertainty in smart grid deployments;
 - Advancing Ontario's innovation economy through open and targeted calls for technology demonstrations that will create jobs and economic development opportunities for innovators with an Ontario presence that are seeking to commercialize and export smart grid technologies; and,
 - Positioning Ontario at the forefront of smart grid through supporting the demonstration of the innovative utility business models, emerging smart grid technologies, and other initiatives that both respond to changes in the sector and have the potential for generating value for Ontario's utilities and ratepayers.
- The Smart Grid Fund was launched in 2011 to support innovation in Ontario's energy sector. Through three successive calls for applications, the Smart Grid Fund has supported 37 projects, directly created nearly 800 jobs, and led to nearly \$200 million in total sector investments in grid modernizing technologies.

3. 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.**
- **We expect the OEB to consult and work collaboratively with utilities to achieve the goals set out in the LTEP and LTEP implementation plan.**
- **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 than 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.

4. OEB Modernization Panel & OEA Energy Platform

- The OEA met with the panel chair on January 18, 2018 to introduce themselves, their role in the sector and their thoughts on areas of focus for the panel.
- The OEA is supportive of the panel and issued a press release on December 18, 2017 congratulating the Ministry of Energy for launching the OEB Panel.

Suggested Response:

- **The Ministry appreciates OEA’s attendance at the introductory meeting with the Panel chair. The Ministry thanks the OEA for the materials provided and its initial thoughts on opportunities of improvement for the OEB.**
- **As the Panel undertakes its review, the OEA will be formally engaged by the Panel in future stages of the stakeholder outreach process. At which point, the OEA will be given an opportunity to provide further input on a more formal setting. We hope that the OEA continues to stay engaged with the Panel and keep providing feedback as requested.**
- **The Ministry understands the importance of confidentiality and requests the OEA to continue to work with ministry staff and the panel on this matter.**

Background:

- The Minister of Energy announced the OEB Modernization Review Panel on December 14, 2017, with a mandate to explore how the OEB should be modernized in its role and structure.

- The Panel will operate for one year and within that time-frame will deliver a formal report with recommendations. The report will be public. The Panel's recommendations, while reflecting the independence of the Panel's opinions, will be informed through stakeholder consultations and independent research.
- The OEA has been advocating for an examination of the governance of Ontario's energy sector. The OEA recently released a report (November 2017) on the governance of energy decisions in Ontario and proposed solutions to improve it. This report was authored by George Vegh of McCarthy Tetrault, a prominent lawyer in the energy space.
 - The main conclusion in the report is that agencies in Ontario's Energy sector largely implement government policy and communications goals. It claims that agencies are often the partner and implementer of government decision-making rather than providing a fact-based constraint on government decision-making.
 - The report calls for reform in the OEB with respect to governance, transparency of decision-making and better cost benefit analysis of non-adjudicative decisions. The report also urges that the OEB be held accountable for its decision making in the sector.
- Main issues raised by the OEA in their initial meeting with Richard Dicerri were in line with the OEA's "Energy Platform". The "Energy Platform" aims to provide elected officials with recommendations on how to optimize energy policy to the benefit of Ontario energy consumers. Recommendations in the platform are as follows:
 - **Reform the Governance of Energy Planning:** The OEA believes that the OEB has a suboptimal relationship with the Ministry and a suboptimal board structure. The OEA requests more transparency around how decisions are made and, how OEB allocates and spends its resources.
 - **Optimize the use of Energy Infrastructure:** The OEA would like the OEB to be more supportive of the integration of distributed energy resources and other innovative technologies. The OEA would like better coordination between the existing electricity and natural gas assets to keep energy costs low.
 - **Lead Regulatory Evolution:** It is not clear based on current measures how the OEB compares to other regulators and whether the right metrics are being used to evaluate the OEB's performance. The OEA suggests a formal review of the Ontario regulatory framework, development of better performance metrics and reporting, and better stakeholder engagement prior to the introduction of new rules or legislation.
- The OEA has expressed concern that providing information to the Panel may affect the relationship of its members with the OEB should the information become public.

5. 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.

6. 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.

7. Conservation Programs and Low-carbon technology/GreenON Programs

The OEA is advocating for Ontario's electricity and natural gas utilities to play a leadership role in conservation, because significant investments have been made and utilities have a proven track record in delivering value to their customers (OEA 2017 Energy Platform).

Suggested Response:

- **The ministry is pleased at the progress the electric and natural gas utilities are making to achieve their energy savings targets under the Conservation First Framework and the Demand Side Management Framework, and overall commitment to conservation programming in the province.**
- **The 2017 Long-Term Energy Plan (LTEP) reaffirms Ontario's commitment to Conservation First, to improve affordability and choice for people, businesses and communities, and to co-ordinate its conservation programs with Ontario's climate change objectives.**
 - **Would the OEA like to share any comments on the conservation aspects of the 2017 LTEP?**

- **ENERGY is working with the Ministry of the Environment and Climate Change, the Integrated Electricity System Operator, and the Green Ontario Fund to explore how to further integrate conservation and low-carbon technology programs for both electricity and fuels – to expand the offering for customers and offer a simple, one-window approach, where appropriate.**
 - **Has the OEA brought forward partnership opportunities to the IESO, MOECC and/ or the Green Ontario Fund for consideration?**

Background:

- The 2015 to 2020 CFF has given the flexibility to distributors to design and deliver local and regional Conservation and Demand Management (CDM) programs that meet their customer needs.
- Recognizing the opportunity to improve the availability of programs for customers, on December 16, 2016 the Minister of Energy issued direction to the IESO to require province-wide CDM programs to be delivered in each distributor service area.
- To date, LDCs have achieved more than half of the 7 TWh CFF electricity savings target, and the CFF is on track to exceed the target by 12% (based on IESO forecasts included in Q4 2017 results).
- The 2015-2020 DSM Framework supports the delivery of natural gas conservation and energy efficiency programs and aligns these programs with electricity conservation programs delivered under the CFF to enable greater collaboration of conservation efforts among electricity and natural gas utilities.
- The IESO is also a partner in the delivery of certain Green Ontario Fund programs to help promote an efficient and customer-focused approach and minimize duplication with existing programs.

Mid-Term Reviews

- The IESO and OEB were directed to work with distributors to complete formal mid-term reviews of the 2015-2020 CFF and DSM Framework by June and December, 2018 (respectively).
 - The OEB was originally directed to complete the report by June 1, 2018, but requested more time to help the Board and the natural gas utilities acquire data and complete analysis.
- Going forward, the IESO and the Ontario Energy Board (OEB) are planning to conduct an integrated electricity and natural gas conservation APS to be completed by June 2019, to identify and quantify energy savings (electricity and natural gas),

GHG emission reductions and associated costs from demand side resources for the period from 2019-2038. The APS informs energy efficiency programming and energy planning.

- An APS Advisory Group is being established. It will consist of at least 12 members, including LDCs, natural gas utilities, consumers and/or associations, consultants, service providers/delivery agents.

Integration of existing electricity and natural gas conservation programs and low-carbon technology programs

- In June 2016, the ministry directed the IESO to design, fund and deliver a province-wide whole home pilot for the residential sector. Launched in May 2017, the IESO's Whole Home Pilot is an important development in the design and delivery of residential conservation programs.
 - The pilot builds on the existing home energy audit and retrofit programs delivered by Enbridge Gas Distribution and Union Gas. These programs, originally funded through the Demand Side Management (DSM) Framework, were expanded in October 2016 across the province and to homes heated by natural gas, propane, oil and wood through funding from the Green Investment Fund (cap and trade revenues).
 - The IESO's electricity Whole Home Pilot is testing the integration of electricity saving measures in the gas utility-delivered home energy audit and retrofit programs, including measures tailored for electrically-heated homes.
- On August 4, 2017, the Minister of 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 or the Green Ontario Fund 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.
- Residential GreenON programs launched and supported by the IESO include:
 - GreenON Installations (free smart thermostat installation and home energy review) – currently closed and may reopen later in 2018)
 - GreenON Home Energy Expert
 - CFF-GreenON Province-Wide Smart Thermostat \$100 Rebate
 - GreenON (low-carbon technology) Rebates
- GreenON has also launched GreenON Industries for large emitters (this program delivered by the Ontario Centres of Excellence).
- Other proposed offerings include: low-carbon technology incentives for multi-unit residential buildings, as well as for small and medium sized commercial businesses;

a direct install program for small and medium sized businesses; and programs targeting on-reserve Indigenous customers and low-income customers.

8. Enhancements to Ontario's Net Metering Regulatory Framework

OEA has been supportive of the Ministry of Energy's proposed changes to Ontario's net metering regulatory framework

OEA provided feedback on proposed changes to the net metering regulatory framework posted on the Environmental and Regulatory Registries.

Suggested Response:

- **I would like to thank the OEA for the feedback provided on the Ministry's regulatory postings.**
- **Feedback received through comments to the regulatory postings is being considered as the Ministry works to prepare the proposed regulatory updates.**
- **Pending the Government's approval, the Ministry anticipates having the updates in place in 2018.**
- **The OEB, as part of its process to assess the need for code changes and any other actions to support implementation and compliance of the new and amended regulation, would consult with distributors.**

Background:

- The 2017 LTEP, released October 26, 2017, committed to developing and proposing legislative and regulatory amendments to:
 - 1) Enable third-party ownership (TPO) of net-metered renewable generation facilities while ensuring appropriate consumer protection measures are in place; and
 - 2) Provide flexibility for distributors to enable virtual net metering (VNM) demonstration projects, via participation in a program to be administered by the Independent Electricity System Operator (IESO).
- Legislative amendments to the *Ontario Energy Board Act, 1998*, required to expand the scope of eligible net metering ownership models, were approved by Cabinet October 4, 2017, tabled on November 14, 2017 through Bill 177, *Stronger, Fairer Ontario Act (Budget Measures), 2017*, and were passed December 14, 2017.

- On November 28, 2017, ENERGY posted three regulatory proposals related to the 2017 LTEP commitments on the ER/RR. The postings were open for public comment for a 50-day period ending January 18, 2018. They are as follows:
 - Proposed Amendment of Ontario Regulation 541/05: Net Metering, or a new Regulation (To Be Determined), to be made under the Ontario Energy Board Act, 1998 to make TPO and VNM demonstration projects eligible for net metering.
 - Proposed Amendment of Ontario Regulation 389/10: (General), to be made under the Energy Consumer Protection Act, 2010, to introduce new and enhanced consumer protections that would support the introduction of third-party ownership arrangements under Ontario's net metering framework.
 - Proposed New Regulation to be made under the Electricity Act, 1998, to ensure that prescribed types of renewable energy generation facilities are sited appropriately.
- ENERGY received a total 45 stakeholder comments and submissions on the regulatory proposals, including 20 responses from industry businesses, 9 responses from industry associations (including two associations representing distributors), 5 from distributors, 4 from municipalities, 4 from individuals and one from an NGO.
- OEA's feedback on ENERGY's regulatory proposals was overall supportive, but communicated suggestions to include more clarity around sharing of customer information with third parties, LDC responsibility to connect, protections for customers when third-parties cancel contracts and how siting requirements would be administered. As well, they suggested the ministry develop educational materials.

9. Renewable Distributed Generation Projects, including Virtual Net Metering Demonstration Projects

OEA has been supportive of the Ministry of Energy's commitment to support innovative renewable distributed generation demonstration projects.

OEA can engage the IESO on the development of its innovative renewable distributed generation program, which will include support for virtual net metering demonstration projects.

Suggested Response:

- I am pleased the OEA is supportive of the Ministry's approach of exploring virtual net metering and other innovative renewable distributed generation projects through demonstration projects.
- The IESO recently released their LTEP Implementation Plan with timelines for when it will engage stakeholders on the development of the program and a first call for virtual net metering demonstration projects.
- I encourage the OEA to engage the IESO through their process to inform the development and design of the program.

Background:

- The 2017 LTEP committed to proposing legislative and regulatory changes that would enable the deployment virtual net metering (VNM) demonstration projects. The current regulatory proposal would provide electricity distributors with the flexibility to facilitate VNM arrangements for demonstration projects participating in a prescribed program.
- The OEA's feedback on ENERGY's regulatory proposals related to VNM demonstration projects was overall supportive, but emphasized the need for transparency and dissemination of learnings, as well as to consider objectives, such as deferring system upgrades, reducing emissions, and customer choice. They also suggested that facilities should manage and reconcile credit; however, this is not an approach favoured by ENERGY or other stakeholders.
- The IESO LTEP Implementation Directive instructed the IESO to: *"develop a program to support a select number of innovative renewable distributed generation demonstration projects, strategically located and paired with other distributed energy resources and smart grid technologies, as well as virtual net metering demonstration projects. The program shall be administered by the IESO, and will inform future grid modernization and net metering policies, support grid interoperability and be aligned with market renewal."*
- Timelines regarding engagement, program development, and launch are communicated in the IESO's LTEP Implementation Plan, which was released last week (February 22). Milestones indicated by the IESO for the development of the Renewable DG Demonstration Program include:
 - Q1 2018: Stakeholder engagement and introduce the first call for VNM
 - Q2 2018: Draft project documents for VNM posted
 - Q3 2018: Final VNM documents released
 - Q3-Q4 2018: VNM proposal submissions received

APPENDIX:

1. Item 1 – Innovation and Grid Modernization - 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.