MEETING NOTE

NAME OF ORGANIZATION: Alectra Utilities

DATE/TIME OF MEETING: Wednesday, November 29, 2017

LOCATION OF MEETING: TBD

PURPOSE: Alectra Utilities has requested a meeting with the Deputy Minister of Energy to discuss Distributed Energy Resource (DER) integration and Alectra's position on Virtual Net Metering (VNM).

ATTENDEES:

Alectra Utilities
Brian Bentz, CEO, Alectra Utilities
Tamar Heisler, Director, Government and Industry Relations, Alectra Utilities

Ministry of Energy
Serge Imbrogno, Deputy Minister
Kaili Sermat-Harding, Assistant Deputy Minister, Conservation and Renewable Energy Division

LAST MEETING: The Deputy Minister and Brian Bentz last met in September at Queen's Park at which time it was proposed they would reconvene.

AGENDA/KEY ISSUES:

1. DER Integration
2. Alectra's position on VNM
3. Ontario Fair Hydro Plan Dynamic Message
4. Alectra-Guelph Merger
5. Green Ontario Fund

NOTES ON AGENDA ITEMS:

1. DER Integration

- Alectra is focused on modifying their business model and providing new solutions for customers, including DER. Alectra's opinion is that there are regulatory/policy barriers for LDCs which prevent them from being able to accomplish this transition. The Ministry's grid modernization vision in the Long-Term Energy Plan seeks to overcome many of the barriers that inhibit LDCs from making non-traditional investments, like DER.

<u>Suggested Response:</u>

- Modernization and innovation are key themes in the LTEP, with a goal of using new technologies and processes to create greater efficiency, reduce costs, and provide customers more choice.

- The LTEP also focuses on empowering the OEB with a mandate to facilitate modernization of LDC business models and regulatory frameworks.

- Alectra has been an excellent partner for the Smart Grid Fund. Not only has the utility provided a testing ground for new technologies, it's played a key creative role in designing new solutions and exploring unconventional ways to solve problems on the grid.

- **Question:** Are there specific types of investments that you feel Alectra is unable to currently make because of the barriers you've identified? Or, do all DER present challenges?

- **Question:** What interactions has Alectra had with the OEB on these topics?

- **Question:** A big part of innovation in Ontario is addressing the barriers standing in its way. What could we do with the Smart Grid Fund to address some of the non-regulatory barriers to innovation?

Background:

- Brian Bentz wrote to Minister Thibeault in August 2017. The letter discusses Alectra's perspective on DERs and identifies a number of ongoing government initiatives that either directly or indirectly considers the opportunity for DERs in Ontario, including: net metering regulatory reform, regional planning and the IESO's Market Renewal project. Alectra also discusses their view of the existing pieces of the regulatory framework that impact the deployment of DER in Ontario and how these might be modified to better enable that deployment.

- The deployment of LDC owned DER in Ontario is seen by Alectra as being dependent on addressing certain real or perceived regulatory and market barriers, including:
    - Creating markets for services provided by DER;
    - Enabling revenue decoupling;
    - Clarifying rate recovery for DER; and
    - Incorporating DER as Non-Wires Alternatives (NWAs) within the Regional Planning process and Distribution System Plans (DSP)

- Creating Markets for Services Provided by DER
    - IESO's Market Renewal initiative proposes to introduce an incremental capacity auction that would allow non-traditional resources (such as

demand response and distributed energy resources) to compete with existing assets, with the most cost-effective resources winning out.

- Revenue Decoupling
    - Revenue decoupling is an OEB rate design initiative that predated Renewed Regulatory Framework for Electricity (RRFE) (now known as "Rate Design for Electricity Distributors"). The OEB has completed its Rate Design for residential customers and is moving residential customers to a fixed monthly rate design (the majority, including Alectra, by 2019).
    - Rate design for commercial and industrial customers is still in progress, with a report from the Board expected to be the next step in the process. Further consultation would likely occur based on that report.
    - These rate designs provide more revenue certainty for LDCs and therefore would likely provide incentive for LDCs to allow more DER proliferation without concerns for revenue erosion or unfair cost allocation.
    - While the Ministry is setting LTEP expectations that the OEB facilitate the modernization of the utility business, ultimately rate design policy is a core OEB responsibility.

- Rate Recovery for DER
    - It appears that Alectra's main concern is whether these DER assets may be included as rate recoverable assets. Alectra contends that "LDCs are uniquely positioned to accelerate DER investment through integration with rate-based assets…" and states that "…OEB should be encouraged…to develop rate-making options that fairly allocate costs of DER investments among benefitting customers…"
    - While the Ministry is setting LTEP expectations that the OEB facilitate the modernization of the utility business, ultimately the determination of appropriate costs and the appropriate allocation of those costs to customers are core functions of the OEB. The OEB has initiated consultations to consider these questions, including the on-going Regional Planning and Cost Allocation Review.
    - In LTEP the Ministry will be encouraging the OEB to ensure its regulatory processes are streamlined to help LDCs meet expectations. The Ministry will also state a desire of LDCs to partner with each other to realize efficiency and productivity improvements.
    - If Alectra wishes to gain further clarity on the OEB's position on rate recovery DER ownership, it still may include its proposal within DSP. It may also trigger a hearing under section 71(4) of the *Ontario Energy Board Act*, which allows LDCs to engage in non-distribution activities with Board approval.

- Incorporating DER as NWAs within the Regional Planning Process and DSP
    - Regional Planning
        - Regional planning is an essential link between how broader and more localized planning activities work together. Local solutions

such as distributed energy resources can be economic in some applications, for instance, where there is slow growth, high local avoided costs and sufficient lead time to ramp up.

    - Now that the first cycle of regional planning has been completed, the Province is directing the IESO, through the LTEP Implementation Directive to review the regional planning process and report back with options and recommendations to address the challenges and opportunities that have emerged. This includes identifying barriers to the implementation of cost effective non-wires solutions such as conservation and demand management and distributed energy resources, and provide options to address any such barriers, including potential legislative or regulatory changes, as well as options to address local distribution company capacity.

  - Distribution System Plans
    - Requirement for DSP is part of the RRFE. This is an OEB policy.
    - DSP plans are for distribution system assets, including those assets required to connect DERs.
    - Alectra appears to be raising the issue of LDC owned DERs. This issue likely transcends the concept of DSP:
      - What is appropriately considered a distribution asset and is allowed to be rate-based; and
      - How to appropriately triage the connection of DERs (LDC owned vs non-LDC owned) to assure equal access.

- Grid modernization and LTEP
  - A key theme of the 2017 LTEP is grid modernization: overcoming barriers that can prevent the electricity sector from considering and deploying new, cost-effective technologies and alternatives to traditional assets, such as DERs. In doing so, the Ministry aims to create the right environment for utilities to pursue business and system modernization where it results in greater efficiency, reduces costs, and provides customers with more choice.
  - The Ministry has made a number of commitments in the next LTEP to address these barriers. One such commitment is a signal to the OEB to establish a common cost-benefit analysis framework for grid modernizing technologies, including DERs. Alectra stated the need for such a framework in its letter of August 14, 2017 to the Minister.
  - Other actions include:
    - Addressing discrete regulatory and market barriers that inhibit the uptake of energy storage, which is a type of DER;
    - Utility participation in residential smart charging, which may be controlled and used in a manner similar to a DER;
    - Encouraging the adoption of non-wires solutions among Ontario's distribution companies – such as DERs – which can allow utilities to manage their systems better and encourage customer choice;

        - Allowing utilities to make investments in DER and use those assets participate in IESO markets with the aim of reducing costs to ratepayers; and,
        - Encourage opportunities for utilities to partner with their customers on DER projects to address system needs.

- Smart Grid Fund
    - The Smart Grid Fund is being renewed and enhanced to help address non-regulatory barriers to technological innovation on the distribution system. At the same time, it will continue to focus on encouraging domestic jobs and growth through the creation of intellectual property in Ontario and continuing to push commercialization as a key performance metric.
    - Alectra Utilities and its predecessor LDCs have been important partners in several Smart Grid Fund projects. They are also active on the IESO Conservation Fund, federal innovation programs, and the OEB RPP Roadmap pilot projects. As such, the utility has set itself apart as one of the most innovative and experimental utilities in the province.
    - Given its experience with a range of cutting edge technologies, the Ministry regularly engages with Alectra staff to seek input and advice on policy development and program design. In particular, Alectra is seeking to develop a blockchain-enabled transactive system that enables households to provide grid-balancing services.
    - This expertise could support the Ministry's commitment to explore these types of transactive energy platforms, which are highlighted in the LTEP as an opportunity for innovation in Ontario.

- ENERGY is also working with the IESO to develop a program which will support a select a number of innovative renewable distributed generation (DG) demonstration projects, strategically located and paired with other DER and smart grid technologies, including virtual net metering demonstration projects.
    - These demonstration projects will help to inform the value of DG and DER to customers and the grid, inform future grid modernization and net metering policies, guide the treatment of renewable DG by regulators and energy markets, and steer further integration of these resources into Ontario's energy system.

2. Alectra's Position on VNM

- Alectra is likely interested in pursuing virtual net metering (VNM) projects either as aggregated small scale projects (similar to the Power House pilot project) or involving a large single generation facility and multiple customers.

<u>Suggested Response:</u>

- **Question:** What business models or opportunities is Alectra investigating that would incorporate virtual net metering?

- **Question:** Is Alectra currently considering VNM projects, or other innovative renewable distributed generation projects, in the context of the program ENERGY is developing with the IESO?

- **Question:** Beyond restrictions within Ontario's net metering regulation, what barriers exist for Alectra in pursuing VNM?

<u>Background:</u>

- VNM is a billing arrangement allowing customers who may not be able to install their own on-site renewable energy systems to participate in renewable energy projects located off-site. The electricity conveyed into the grid from the off-site renewable energy system creates credits, which can be used by participating customers to offset charges on their electricity bills.

- ENERGY has introduced legislation to amend the *Ontario Energy Board Act, 1998* (OEBA) to enable regulations to be passed that will allow VNM demonstration projects, under certain conditions:
    - LDC must support, or be involved with, the demonstration project.
    - Demonstration project must be connected to the distribution system.
    - Demonstration project must value credits for exported generation using only volumetric charges (i.e. similarly to how export credits are valued currently for traditional net metering).
    - Demonstration projects must be pursued as a part of a funding program being developed by ENERGY and the IESO as a part of the 2017 LTEP.

- ENERGY is also amending the OEBA to enable the passing of regulations to allow Third Party Ownership (TPO) of net metering facilities.
    - Eligibility of third-party ownership of net metering facilities under the net metering regulation would allow third parties (who are not the customer) to own and operate renewable generation facilities (e.g. solar panels installed on a customer's roof) to sell power to the customer, who is participating in a net metering agreement with their LDC.
    - The customer would self-consume a portion of the electricity and receive credits on their electricity bill for any extra electricity conveyed into the grid.

- ENERGY expects to introduce regulatory proposals to enable VNM and TPO by the end of November 2017.
    - These proposals will be posted publicly for a 45 day comment period.
    - ENERGY is targeting July 2, 2018 for regulations to come into force.

- ENERGY is working with the IESO to develop a program which will support a select a number of innovative renewable distributed generation demonstration projects, strategically located and paired with other DER and smart grid technologies, as well as virtual net metering demonstration projects.
  - Details on timing of program development and application periods are expected to be communicated in the IESO's LTEP Implementation Plan – due to be released by January 31, 2018.
  - Details on eligibility and program requirements are expected to be released during public consultation on the program.

3. Ontario Fair Hydro Plan Dynamic Message

- The Ministry is bringing forward regulatory amendments to require LDCs to provide consumers with their exact Fair Hydro Plan savings on their bill, beginning in Q1 2018.

Suggested Response

- **Early indications from Hydro One are that consumers greatly appreciate having this information contained on their bill. We look forward to LDCs implementing this information displayed in Q1 2018.**

- **I understand Alectra's concerns regarding implementation as you seek to integrate the legacy systems of your founding utilities. Our regulations will include the ability to petition the Minister for a technical exemption to the requirements, and if passed, we can continue the discussion.**

- **This is the first step of the Ministry's commitment in LTEP to re-design the electricity invoice, with further regulatory amendments coming in Q1 2018. We appreciate Alectra's support in our bill re-design working group.**

Background

- The Ministry's regulatory registry posting for the dynamic message amendments included details on how LDCs will be expected to calculate the savings. It includes:
  - Savings related to the re-financing of the Global Adjustment, including savings in the Delivery line associated with line losses.
  - Savings from the Rural or Remote Rate Protection Program, the Distribution Rate Protection program, and the First Nations Delivery Credit (all unapplicable to Alectra)
  - Savings from the shifting of costs of social programs to the taxbase.
  - The 8% provincial rebate
  - Any reduction in HST payments as a result of overall lowered bills.

- Hydro One has been providing this calculation on their customers' bills since July 2017 and have found it has been well-received. Hydro One reports it has facilitated better customer engagements through their call centre.

- Through their submission to the regulatory registry, Alectra has expressed concern that the implementation of dynamic messaging will pose risks to the integration of the legacy systems of the founding utilities (Powerstream, Hydro One Brampton, Horizon, Enersource). Specific concerns include:
    - Resourcing requirements – estimated at five months and 1600 hours
    - Risk of technical faults with integration that could lead to billing errors
    - The extension of timelines that will delay customers receiving a unified bill across Alectra's service territory.
    - Customer perception concerns as they experience a series of bill changes in quick succession.

- Alectra has noted this concern through the bill re-design working group. In the past, the Ministry included within its bill regulations the ability to petition the Minister for exemptions due to overriding technical limitations. Most recently this ability was used by Hydro Ottawa with regards to the 8% provincial rebate messaging.
    - If the proposed regulations are adopted, Alectra will have such an option available to it.

4. Alectra – Guelph Merger

- On October 18th, Alectra and Guelph Hydro announced they had begun merger negotiations.

Suggested Response

- **The Ministry is supportive of voluntary consolidation transactions where efficiencies and benefits accrue to consumers.**

- **Please keep the Ministry informed on your timeline for finalizing your negotiations and, if successful, filing your merger application with the Ontario Energy Board.**

Background

- As part of the announcement of the beginning of negotiations, Guelph Hydro indicated it expects the merger to be a downward pressure on rates, maintain the same level of services, and provide a larger dividend to the shareholder, the City of Guelph.

- The merger proposal also include transforming the Guelph Hydro office into the new Green Energy & Technology Centre, committed to helping new energy technologies move towards commercial viability.

- Guelph City Council will vote on the merger on December 13th.

- To complete a merger, the parties must files a Merger, Acquisition, Amalgamation, and Divestiture (MAAD) application with the Ontario Energy Board. The OEB is to determine if the transaction could potentially harm customers.
    - The MAAD process has been criticized by stakeholders for failing to consider potential harm beyond short-term rate freezes.
    - The OEB recently suspended the hearing into Hydro One's purchase of Orillia Power as it considers whether trends in Hydro One's distribution rates (as proposed in the 2018-2022 rate application) could harm Orillia customers.
    - Given developments in this process, it is unknown how long a MAAD review of this transaction could take.

5. Green Ontario Fund

- Alectra is interested in ENERGY's coordination with MOECC on GreenON programs as well as how ENERGY plans to manage the impact of GreenON programs on Conservation and Demand Management (CDM) programs.

Suggested Response:

- **As identified in the 2017 LTEP, ENERGY staff are working with MOECC, IESO and Green Ontario Fund to explore how to further integrate conservation and low-carbon technology programs for both electricity and fuels.**

- **The IESO's role as a partner in the delivery of certain Green Ontario Fund programs is intended to help promote an efficient and customer-focused approach and minimize duplication with existing programs.**

- **I encourage Alectra to bring forward opportunities to align conservation with GreenON programs through the IESO's Mid-Term Review process, and to the Green Ontario Fund.**

Background:

- Ontario's Climate Change Action Plan announced the province's intention to establish a "green bank" that that would work to significantly reduce greenhouse gas from energy intensive heat and cooling sources in buildings, and in goods production processes.

- The Minister of Energy wrote a letter to IESO on February 13, 2017 requesting that the IESO support the implementation and early adoption of Green Ontario Fund services.

- 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.
    - GreenON Installations: Eligible homeowners and renters with their landlord's permission can sign up for a visit from a trained technician to install, free of charge, a complimentary smart thermostat and show them how to use it.
    - An additional program, GreenON Support, is planned to launch December 2017: Based on information collected from the home by the GreenON Installations trained technician, the home's energy systems are then analyzed by a team of energy specialists who will offer a personalized follow-up on other available incentive programs to help reduce energy costs.

- The Green Ontario Fund will continue to launch new programs for homes and businesses to implement the initiatives outlined in the 2016-2020 Climate Change Action Plan.

    - Other proposed program offerings expected to be launched in late 2017 and 2018 (and included in the August 4, 2017 direction to IESO) 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 commercial businesses; a direct install program for small and medium sized businesses; and programs targeting on-reserve Indigenous customers and low-income customers.

ATTACHMENTS:

1. 2017-09-19_MC-2017-1557 Alectra re LTEP_v05
2. 2017-11-24_MC-2017-1557 Alectra Letter Analysis and Ministry Comment CRED ESP SNAP_v08
3. 201708241136 (incoming correspondence from Alectra)