Meeting Summary

OEB Smart Grid Advisory Committee

Meeting Date: March 4, 2014 **Time:** 9:30 am – 4:00 pm

Location: OEB Offices, 2300 Yonge Street

The Meeting Summary provides a high level review of the presentations and discussions at the Smart Grid Advisory Committee. The summary captures the discussion and any conclusions or recommendations by the Committee. Agendas, presentations and meeting summaries are available on the OEB's website under Smart Grid Advisory Committee.

Meeting Agenda

1. Introduction
2. Discussion of the Storage Working Group Group's Observations and Recommendations
3. Discussion of the Low Volume Data Access Working Group's Observations and Recommendations

1. Storage Working Group Report Discussion

- Committee members discussed the draft regulatory barriers document developed by the Storage Working Group
- The context of the recommendations was set out. It was emphasised that the barriers and scenarios discussed in the document were not meant to be exhaustive and that many of the recommendations would be informed by the initial 50MW procurement contemplated in the Long Term Energy Plan. The experience and information gained from the procurement is important because project proponents and other sector agents will be participating in an environment they are not accustomed too/ have never participated in before.
- The Committee was led through the seven scenarios set out in the document.
    - Clarifications were sought on some of the scenarios (e.g., net metering v. pure load displacement) and the potential for hybrid scenarios.

    - Are we better off separating known and unknown services?
        - Concern over intermingling ancillary/non-ancillary services?
        - Definitional complexities should be defined and dealt with in contracts to avoid any confusion/uncertainty
- The Committee was led through the seven scenarios and the identified regulatory barriers
    - For the initial procurement, charge-related barriers (e.g., global adjustment costs) expected to be overcome through terms of compensation in contract
    - Some barriers may be dealt with in the short-term (e.g., clarification of any licensing requirements)
    - Longer-term solutions will need to be informed by the procurements (e.g., extent to which certain charges may be barriers in certain scenarios)
    - How to treat standalone/stand-by charges for load displacement scenario?
        - Working Group to assess stand-by charge issue
    - Need more clarity on recommendations to exempt certain scenarios from certain charges
        - Are the blanket exemptions, or would charges apply on net energy (i.e., energy not re-injected)?
        - Discussion of benefits of falling under certain scenarios, will some commercial customers try to take advantage of falling into certain scenarios to not have to pay charges?
            - Need to ensure regulations prevent gaming the system
        - Working Group to clarify exemptions re: energy charges
- Is it the role of the working group to look into pilots into more detail?
- How should the working group come forward with suggestions on different types of technologies?
- What is the information utilities should be gathering? (e.g., How are the utilities systems going to be impacted?)
    - This should be part of the procurement (e.g., metrics in the contract)
    - IESO and OPA would complement SGAC report with any initial lessons about regulatory barriers from Phase I of the 50MW procurement.
    - Utilities with storage pilots expected to share experience as well

Action item: Working group to clarify recommendations to exempt certain scenarios from certain charges and examine standby charges.

2. Low Volume Customer Near Real Time Data Access Working Group Discussion

Committee members discussed the draft regulatory barriers document developed by the Low Volume Real time Data Access Working Group. The discussion is broken down by the questions posed in the document.

- Board expects utilities to facilitate real time data access to AMI systems.
    - Maybe there is a better way to go about it that does not involve the distributor and/or meter?
    - There should be opportunities for customers to get access to data on their consumption.

What avenues are available for the delivery of near real time data today?

- Working group has said LDCs don't have to do anything with their AMI systems because there are already technologies?
    - What options are vendor specific proprietary solutions?
    - Options 4 and 5 may provide a more standardized interface.
- If interoperability is important we need to have something customers can rely on with different types of services or appliances.
- Need a table that explains the value of each option, the purpose it serves, and its limitations.
- Need to come to a standard if you want to move things forward
    - Do we work with larger agencies in order to standardize?
- What side of the meter is the Board interested in?
    - LDCs like the idea of the meter being the demarcation point.
- Consider implications for large consumers since they are facing similar barriers to small consumers.
- Have to worry about adoption of technology, if a consumer has to hire an electrician to install a CT they may potentially not do it, but if the technology is already on the meter we do not have to worry about this.

What is an appropriate definition of near real time data?

- Table 1: if there is some way to tie in refresh rate, latency, etc. to achieve these certain values it provides a clearer picture for a utility as to why they should try and achieve this.
    - Look at time breaks and determine what applications need more granular refresh rates.

- Where do we need to draw the line as to what's acceptable for utility involvement what isn't (i.e., behind-the-meter)?
- Milton hydro deploying updates at a millisecond level. But they are using CT based technology.

What value does near real-time data provide to the electricity system?

- Should add to last paragraph of page 4 customers do have the tools but lack engagement, communication, and education to utilize these tools.
- Large opportunity to target low income customers.
- Who is the right customer to be informed?
- Is there an element of retailer or marketer to be introduced here?
- Do we have all critical success factors?
    - Is security implied on point 4 of page 4? Are we implying that in home access is secure?
- In terms of external factors, should demand response be listed as a factor?

Are changes needed to the Ontario Energy Board's regulatory instruments needed to account for near real time data access in Ontario? Why?

- Safety aspect of consumers using CTs.
    - Technologies exist but you want consumers to be aware of safety aspects.
    - Behind-the-meter installations can be done, but it wouldn't be the utility doing it.
- Do you force a standard today that may or may not be a standard?
- If distributors have a fragmented approach customers will pay the price (buy smart technology in one area that is not useful in another area).
- Maybe we should be identifying the one or two things we don't want to have happen?
- Are there some red flags that need to be watched so that we don't end up with fragmented approaches?
- We should pay attention to what is happening with the US market if we choose a product that ends up getting dropped because another product is more predominant in the US.
- Add into the report what is the current state of technology adoption in the US
- Even within zigbee standards there are nuanced extensions that conflict with LDC systems.
    - May want to bring in external experts to discuss more advanced topics.

Action items: Working Group to (1) review Table 1 and identify what, if anything, needs to be standardized to get value and what does not; (2) introduce the five technology options into Table 1 and discuss value and limitations.