



**Ontario Energy Board**

Commission de l'énergie de l'Ontario

# **Smart Grid Advisory Committee Meeting 1**

**July 16, 2013**

# Agenda

9:30 - 9:45	Welcome; Introductions	Board staff
9:45 - 10:30	Setting the Context: Supplemental Report & SGAC Structure and Approach	Board staff / All
10:30 - 10:45	Break	
10:45 - 12:00	Setting the Context (cont.)	All
12:00 - 12:45	Lunch (provided)	
12:45 - 2:00	Issue 1: Standard Data Access Mechanisms	All
2:00 - 2:15	Break	All
2:15 - 3:45	Issue 2: Deployment of Smart Grid Technologies	All
3:45 - 4:00	Plan for next SGAC meetings/Other business	All
4:00	Adjourn	



# Board's Approach to Smart Grid

- Minister's Directive to the Board on the development and implementation of smart grid
- Board is to provide direction to regulated entities with respect to planning and how plans will be evaluated against the directive
- Renewed Regulatory Framework for Electricity Distributors (RRFE)
- Supplemental Report on Smart Grid
  - Key conclusion: “smart grid” is the modernization of the grid

# Key Parts of RRFE

- Comprehensive approach to rate setting for distributors focused on outcomes:
  - Customer Focus, Operational effectiveness, Financial Performance, Public Policy Responsiveness
- Monitor and measure performance against defined performance outcomes
- Rate setting alternatives suited to individual utility circumstances
- Enhance asset planning based on 5 year plans

# Key Parts of the Supplemental Report on Smart Grid

- Sets out high level expectations to regulated entities for planning their systems
- Directive's objectives and RRFE outcomes aligned
- Core smart grid objectives from the Minister:
  - Customer Control
    - Engagement, education, data access
  - Power System Flexibility
    - Modeling, forecasting, monitoring, automation
  - Adaptive Infrastructure
    - Explore opportunities to embed the facilitation and recognition of innovation in the rate framework

# Key Parts of the Supplemental Report on Smart Grid

- Board to assess planned smart grid expenditures against policy objectives
  - *Efficiency, Customer value, and Reliability*
    - Core to Board's work
  - *Safety*
    - Part of good utility practice
  - *Cyber-security and Privacy*
    - Appropriate cyber-security and privacy standards being met
  - *Co-ordination and Interoperability*
    - Regional planning and interoperability as per RRFE
  - *Economic Development and Environmental Benefit*
    - Will be considered but not primary determinative criteria



## Key Parts of the Supplemental Report on Smart Grid (cont.)

- Smart Grid Advisory Committee established to provide further guidance to the Board on smart grid development and implementation

## Objectives:

- Participants of SGAC expected to:
  - Identify and provide their perspectives to the Board on current and emerging issues regarding smart grid; and
  - Consider future directions for smart grid
- The duties of the SGAC participants are solely advisory



# Advisory Committee's Role

- To provide further **guidance** to the board surrounding smart grid development
- Committee will identify:
  - The status of the continuously evolving smart grid
  - Concerns surrounding the industry
  - Regulatory barriers
  - Potential experts for sub-committees/special topics of interest
  - How to encourage innovation and the adoption of advances in the smart grid

- Membership will be more fluid and issue dependent
  - Membership of subcommittees/working groups will be supplemented with additional stakeholders when appropriate
- Experts will be brought in for insight regarding specific topics being examined by committee/subcommittees/working groups

- Meeting topics will be focused on specific issues
  - Data standards (e.g., Green Button)
  - Specific technologies (e.g., Storage & Innovation)
  - Cyber security
  - Interoperability
- Members will be asked to volunteer for subcommittees/working groups to examine specific issues and report back to the committee
  - Initial priority issues to address: Data Access, Storage, and Innovation

- Questions or comments on role or structure of SGAC?
- What is the best way to advance the issues?
- Do you have any recommendations for additional members and/or experts?
- Are there any other initial priority issues that the SGAC should be examining?

# 1. Data Access - Summary

- The emergence of standard data access mechanisms (e.g., data access protocols emerging in Ontario, monitoring standards development in other jurisdictions).
- Distributors must explore mechanisms that facilitate real time data access and behind the meter service applications
- The Board does not want to set specific standards

# 1. Data Access - Questions

- How is Electricity Data Access Project (Green Button) Working Group progressing?
- How is the SME progressing with data access?
- What data access standards exist and are probable for the future?
  - Movement towards real time data access
- What are the regulatory issues?
- What are the non-regulatory issues?
- What do other jurisdictions do?
- What role should SGAC play?

## 2. Smart Grid Technologies - Summary

- Identifying challenges and proposing solutions for deployment of smart grid technologies (e.g., storage and microgrids)
- Entities should demonstrate that investments move towards operational efficiency, improved asset management, and adopt smart grid technology
- Investments should support the evolution of the network (e.g. energy storage, interoperability, forward compatibility, electric vehicles, microgrid)

## 2. Smart Grid Technologies – Storage

- The Board has identified storage as a priority issue for the SGAC
- Work under way:
  - Ministry RFI
  - MaRS-Clean Energy Institute
- Sub-committee/working group will examine this issue: Volunteers?
- Expectation SGAC will have advice on storage for Board: Timeframe?





## 2. Smart Grid Technologies – Storage

- What are the barriers to storage technologies?
  - Technical
  - Economic
  - Institutional
  - Regulatory
- How should the benefits of storage be assessed?
- What do other jurisdictions do?
- Other issues?

## 2. Smart Grid Technologies – Innovation

- The Board intends to explore further opportunities to embed the facilitation and recognition of technological innovation in the renewed regulatory framework:
  - What direction are smart technologies heading?
  - What are the barriers to adopting innovative technologies and practices?
    - Technical
    - Economic
    - Institutional
    - Regulatory
  - What do other jurisdictions do?
  - What role should SGAC play?



- Are any issues missing?
- Are there other questions that should be posed?

- Future meeting topics
- Future meeting dates
- Arrange meetings for any other sub-committee(s)/working group(s)



# Meeting Adjourned!

