

Terms of Reference for the Smart Grid Advisory Committee

Background:

On February 11, 2013 the Board issued the [Supplemental Report on Smart Grid](#) (the “Supplemental Report”). In the Supplemental Report, the Board identified the need for ongoing advice regarding modernization of the grid, smart grid development, and that it would look to external parties for input. In response, the Board has formed the [Smart Grid Advisory Committee](#) (the “Committee”). Specifically, the Supplemental Report identifies the following issues for the focus of the Committee:

1. The emergence of standard data access mechanisms (e.g., data access protocols emerging in Ontario, monitoring standards development in other jurisdictions).
2. The deployment of smart grid technologies (e.g., storage and microgrids), such as identifying deployment challenges and proposing solutions.
3. Cyber-security: The development of standards and practice in this very complex field requires the continued monitoring of developments in other jurisdictions to ensure that regulated entities in Ontario are following the best practices.
4. Interoperability: The Board expects distributors to work towards development and adoption of standards through, for example, co-ordination (e.g., common technology procurement), regional planning (e.g., common communication protocols), and links with third-party providers and industry.

It is expected that new issues will arise over the course of Committee meetings.

Objectives:

The main objective of the Committee is to provide information and advice to the Board on issues related to the modernization of the network. This will be achieved by:

- Identifying emerging issues:
 - The Committee will identify emerging issues facing the development of Smart Grid within and outside of Ontario.
 - Issues are not limited to only those that fall under the Board’s jurisdiction but can include technical, regulatory, economic, and institutional issues as well.
 - The Committee will provide information about smart grid developments in other jurisdictions that may impact Ontario. This will assist the Board in

ensuring, to the extent necessary, that Ontario's smart grid development occurs in a manner consistent with practices in other jurisdictions.

- Supporting policy development:
 - The Committee will assist the staff in identifying and assessing new regulatory mechanisms governing smart grid, technological advances, and issues regarding the integration of smart grid technologies.
 - The Committee will assist the staff in understanding, and if possible, addressing, technical, regulatory, economic, and institutional questions surrounding key issues, thereby enabling the effective development and evaluation of policy options.

- Supporting the sharing of information:
 - The Committee will facilitate the exchange of pertinent information with other relevant actors within and outside of Ontario through jurisdictional reviews and inviting other organization to participate in Committee discussions.

The deliverables are:

- Recommendations produced by the Committee or working groups pertaining to specific topics (e.g. data access, emerging technologies, cyber security, or interoperability) as required; and
- Other deliverables that may be requested by the Board (e.g., presentations to the Board).

Committee Membership and Structure

Membership

The Committee should represent the full range of interests related to smart grid development in Ontario. It is also important to ensure that appropriate expertise is brought to the discussions to ensure the Board is provided with informed advice and recommendations.

Therefore the initial membership of the Committee will include: 2 consumer representatives, 9 representatives of distributors, a transmitter, 4 industry groups representatives (e.g., generation, storage, retailer), 8 technology and service vendors and representatives from government and agencies. The representation by each segment may be altered as the Committee develops and the responsibilities are changed.

Members representing each segment will be selected by the Board and may be chosen in consultation with the appropriate industry organizations. If a member is no longer employed by the organization they are representing, it is expected the organization will nominate a new member to replace them. The membership of the Committee is expected to be reviewed every two years. Members represent the views of their organizations at all Committee meetings.

A list of the initial member organizations can be seen in Appendix A.

Operation

The Committee will be expected to provide their perspectives on current and emerging issues regarding modernization of the electricity networks. Members are expected to be able to lend their technical expertise to the Committee in areas of transmission and distribution system enhancement including the integration of distributed generation, standards and interoperability among smart devices, telecommunications, cyber security, storage, and plug-in electric vehicles. The duties of the Committee and its participants are solely advisory.

Board staff will provide the Board with quarterly updates on the overall progress of the Committee, including, but not limited to, a description of activities undertaken by the Committee, identification of emerging issues and priorities, and work plan

Meetings timing and organization

The Committee is expected to meet monthly but the frequency may increase or decrease depending on the expectations of the Board and the needs of the Committee.

Board staff will chair meetings of the Committee. Board staff will arrange the facilities for hosting meetings of the Committee which will, unless otherwise notified be held at the Board's offices at 2300 Yonge Street in Toronto. Staff will be responsible for developing and maintaining a proposed work plan for the Committee.

Staff will prepare an agenda for all meetings and will in appropriate circumstances provide material to support the discussion of issues and topics. The agenda for the meetings will be decided by the Committee through its discussion and is flexible to the Committee's evolving needs. The agenda will be finalized and issued to the Committee, along with any appropriate supplementary materials, by Board Staff at least 2 business days prior to the meeting.

Committee meeting notes, reports, and presentations will be posted on the Board's website.

Working Groups

Operation

The Committee may establish a working group to develop solutions for an issue or issues that require an in-depth level of technical analysis. The objectives of the Working Group will be based on the needs of the Committee however a Working Group may identify additional areas or issues related to the topic it has been tasked to address.

Membership

Working Groups may consist of both Committee members and experts from outside the Committee who can either provide unique insight into a topic or balance the composition of the Working Group so that all stakeholders are represented. Membership in a Working Group is voluntary.

Meeting Structure

Working Groups are expected to organize their meeting structure and frequency based on timelines set by the Committee. Board Staff will provide the Working Group with meeting support through organization and facilities, as well Staff will provide for continuity with the work of the Committee.

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Appendix A

List of Member Organizations for the Smart Grid Advisory Committee

- Association of Major Power Consumers of Ontario (AMPCO)
- Association of Municipalities of Ontario (AMO)
- Bell Canada
- Building Owners and Managers Association of the Greater Toronto Area (BOMA)
- Cambridge and North Dumfries Hydro
- Canadian Solar Industries Association (CanSIA)
- Cornerstone Hydro-Electric Concepts (CHEC)
- Direct Energy
- Energate
- Enbala
- Entegrus Powerlines Inc.
- Electricity Safety Authority (ESA)
- Festival Hydro
- GE Digital Energy Smart Substations
- General Motors of Canada (part-time)
- Honeywell
- Hydro One Networks Inc.
- IBM
- Independent Electricity System Operator (IESO)
- Innisfil Hydro
- Measurement Canada
- Ministry of Energy
- Ontario Energy Storage Alliance
- Ontario Power Authority (OPA)
- Powerstream
- Soft Grid Analytics Corporation
- Telvent
- Toronto Hydro-Electric System Ltd.
- Utilities Kingston
- Veridian Connections