Ontario Smart Grid Forum

Ontario's Smart Grid Forum
Notes of Meeting

Date: **Monday, January 18, 2010**
Time: 09:00 to 13:00
Location: IESO Minto Plaza Office, Main Boardroom
655 Bay Street, Suite 410
Toronto, ON

Forum Members Attending:

Keith Major	Bentall LP
David Collie	Electrical Safety Authority
Wayne Smith	Hydro One
Norm Fraser	Hydro Ottawa
Paul Murphy	IESO
Don Tench	IESO
Jon Norman	Ministry of Energy and Infrastructure
Brian Hewson	Ontario Energy Board
Dan McGillivray	Ontario Centres of Excellence
Paul Shervill	Ontario Power Authority
Ivano Labricciosa	Toronto Hydro
Jatin Nathwani	University of Waterloo
Michael Angemeer	Veridian Corporation

Working Group Members Attending:

David Curtis	Hydro One
Joshua Wong	Toronto Hydro
Raed Abdullah	Hydro Ottawa (by telephone)

Other attendees:

Edward Arlitt	IESO
Jerry Chwang	Ministry of Energy and Infrastructure
Usman Syed	Ministry of Energy and Infrastructure (by telephone)
Annamaria Cross	Ministry of Energy and Infrastructure (by telephone)

09:00 – call to order, attendance, and confirmation of the agenda

The Chair proposed, and it was agreed, that Agenda item # 2 (review consensus summary of SGF feedback to policy roadmap) and Agenda Item # 3 (continuing discussion of policy roadmap with Ministry of Energy and Infrastructure) would be combined into a unified discussion item.

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Minutes of the December 14th meeting of the Smart Grid Forum:

Action Item: In light of the fact that the draft minutes of the December 14th meeting of the Smart Grid Forum were only recently circulated, members were asked to submit any proposed amendments to the minutes by **Monday, January 25th**.

Agenda Items # 2 and 3: MEI presentation - "Developing the Smart Grid Plan"

Jon Norman presented a revised slide deck entitled "*Developing the Smart Grid Plan*" reflecting previous feedback from the SGF following the December 14th meeting and subsequent meetings of the Ministry of Energy and Infrastructure (MEI) working group. Prior to the presentation, Jon provided some context and introductory remarks regarding the slides and the development of the roadmap. At present, the roadmap is attempting to draw out a common vision of the smart grid – as opposed to prescriptive polices. Jon also mentioned that there is a growing recognition of local differences as well. This roadmap should, among other things, focus on the role of the various organizations involved and aid their guidance with respect to smart grids.

During the presentation there was extensive discussion at various slides.

Slide 3 – "Broad Principles of Smart Grid":

Sub-principle: "Customer Value"

- It was generally agreed, that a concept of Customer Value was indeed an important one that spanned the three *Green Energy Act* (GEA) focus areas.
- There was extensive discussion of the meaning of the term, "value." A member pointed out that the notion of "value" can certainly extend beyond economic and financial costs to broader societal value.
- After extensive discussion of various members' views of the overall breadth of what "value" means as a matter of principle, the group generally believed that the definition of this term needs to be more precisely defined and in particular, to clarify whether or not it encompassed societal value.

Sub-principle: "Coordination"

- There was some anecdotal discussion of various members' experiences in regards to previous coordination efforts such as smart metering. These members generally felt that some degree of coordination yields value to the industry in terms of achieving economies-of-scale. A member pointed out that the key challenge here is to identify the types of procurements where such coordination should be applied.
- A member raised the question whether or not the OEB or some other party should have overall responsibility for coordination of large-scale smart grid procurements.
- Another member pointed out that too much coordination brings the risk of slowing down those distributors that have the ability to move faster than others.
- Another member suggested that there should be a regional planning model.

- The group generally agreed that coordination should focus on encouraging and assisting coordination across the distribution sector – as opposed to prescriptive measures.

Sub-principle: "Interoperability"

- There was extensive discussion over the semantics of the slide and particularly, the meaning of "interoperability" and consequently, what the scope of this principle was intended to be.
- The group generally agreed that this definition needs to be more concise and it was suggested that the MEI bring it in line with the definition of "interoperability" being applied by various standards organizations such as the National Institute of Standards and Technology (NIST).
- {NOTE: The official NIST definition of Interoperability is as follows*:*

  Interoperability: *The capability of two or more networks, systems, devices, applications, or components to exchange and readily use information—securely, effectively, and with little or no inconvenience to the user.*[20] *The Smart Grid will be a system of interoperable systems. That is, different systems will be able to exchange meaningful, actionable information. The systems will share a common meaning of the exchanged information, and this information will elicit agreed-upon types of response. The reliability, fidelity, and security of information exchanges between and among Smart Grid systems must achieve requisite performance levels*.}

Sub-principle: "Security and Privacy"

- The group immediately deliberated on whether or not the topics of "security" and "privacy" should be separated and agreed that this would be the right approach.
- On the topic of privacy, there was extensive debate on appropriate principles and it was noted that customer privacy generally needs to be balanced against the considerations of having an open and competitive market for various smart grid products and services. At one point, it was suggested that perhaps the Privacy Commissioner of Ontario should be directly consulted on this matter. It was also pointed out that the Privacy Commissioner of Ontario has been lending her expertise to various smart grid consultations in the U.S. as well.
- On the topic of security, it was generally agreed that security principles need to be extended to the vendor community providing smart grid products and services in addition to licenced entities.

Sub-principle: "Safety"

- One member suggested that various "intelligent devices" could provide an positive or negative contribution to overall safety depending on how effectively they were regulated.
- Another member pointed out that regulation needs to keep pace with technological change and cited issues around Compact Fluorescent Light bulbs (CFLs) as an example
- Another member recognized that any safety principle will ultimately run-up against an overall risk management exercise.

Sub-principle: "Economic Development"

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- The group generally recognized that the any principle providing preferential treatment to "Ontario-based" smart grid products and services could be potentially controversial.
- One member posed the question whether or not it would be acceptable (as a matter of policy) to incur some form of cost premium for Ontario based content.
- Another member asked which party would ultimately drive this policy, and on this point the group generally felt that this would largely fall on the Ontario Government to do so.
- It was also suggested that perhaps promoting Ontario smart grid industries should be treated in the realm of tax incentives for investment as opposed to a matter of rate policy.
- Jon Norman also mentioned that there was renewed interest in the $50 million Ontario Government Smart Grid Opportunities fund discussed in previous meetings of the Forum.

Sub-principle: "Societal and Environmental Policy"

- The group generally felt that modes of electrified transportation (both private and public) should be added to the scope of this principle as well.

10:50 to 11:00 – break.

Slide 4 – "Customer Control Principles":

Sub-principle: "Customer Visibility"

- The group generally agreed to this principle and noted that there is an important touch point (possibly a trade-off to a certain degree) between this principle and a customer privacy principle.

Sub-principle: "Access"

- A member suggested that this topic must be ultimately guided by government policy and that this needs to be integral to the principle itself. On this point another member suggested that adherence to government policy should be in the preamble to all of the statements of principle.
- The semantics of the term "access" was also extensively discussed among members. It was generally felt that the wording of this principle needs to be refined in order to draw a clearer distinction between this particular principle and that of "customer visibility."

Sub-principle: "Control"

- A member suggested that "control" should be extended to include real-time response at the time energy is used.
- A member noted that this principle goes hand-in-hand with customer education.
- There was some discussion of the ultimate objective of customer control – to what end exactly? The group generally felt that this objective certainly encompasses conservation, but one member suggested that this should be broadened to overall "wise use" of energy in order to encompass the broader opportunities that generation and storage might afford to a customer.
- Another member suggested that control needs to be "consumer friendly' as this prompts better participation.

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Sub-principle: "Participation in Generation"

- A member challenged why the term "cleaner sources" was included in the statement of principle. Is this principle not aimed at accommodating all forms of distributed generation?

Sub-principle: "Customer Choice"

- A member cautioned that too much choice might impede the objective of simplicity for the customer. If things are too complicated, many customers may choose to withdraw from the marketplace.
- A member questioned what exactly was meant by the use of the term "interaction" in the context of this statement. Jon suggested that this statement was largely aimed at informational interaction involving smart gird data as opposed to electrical interaction with the grid itself.
- A member suggested that this principle must include a reference to creating customer value, but another member cautioned that generally speaking the each of the principles should be self-contained and not cross-reference each other in order to avoid confusion later on, when the regulator needs to balance the various principles.

Sub-principle: "Education"

- Concerns were raised over how prescriptive this principle might be and whether or not educational requirements should be uniform across the province.
- Another member questioned how necessary an education principle is for a "willing consumer" that independently makes their own product purchase decisions.
- A member suggested shortening the statement of principle as it appeared on the slide to omit everything after the reference to conservation. Another member suggested a further amendment of adding that the desired outcome should be to increase the adoption rate of smart grid technologies and services.

Sub-principle: "Security"

- A member questioned why this principle was exclusively focused on third parties. To this it was answered that it was already assumed that licenced entities were already subject to the necessary security provisions, and that it was vitally important to extend this principle to any other parties that might affect the overall security of the smart grid.

Proposed, additional principle:

- The Chair suggested that perhaps there should be a further principle added, governing services provided to the grid by the customer.

12:00 to 12:20 - lunch break

<u>SGF Membership Update from the Chair:</u>

The Chair provided a status update on the filling of two SGF vacancies that had been discussed in previous SGF meetings:

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1) The Association of Power Producers of Ontario (APPrO) has nominated Mr. Craig Martin, a Vice-President with Trans-Canada to represent the generation sector.
2) The EDA has put forward two nominees, representing Kingston Electricity Distribution Limited, and Niagara-on-the-Lake Hydro. The EDA has further requested that both representatives be made members. On this point, the Chair proposed, and it was agreed, that the one of these nominees would be allowed to become a member and the other would act as the alternate, and it would be further allowable for both of these representatives to simultaneously attend meetings of the Forum if so desired.

Agenda Item # 4: "Smart Grid Partners Committee"

The Chair outlined the possibility of using a sub-group of members from the Canadian Electricity Association (CEA) to serve the role originally intended for the Smart Grid Partners Committee. This approach would afford several potential benefits:

- rapid established and commencement of activities;
- diminished risk of conflict of interest between the SGF and the Partners Committee; and,
- ongoing logistics of managing the meetings and activities would be handled by the CEA.

A member questioned what the barriers are for smaller, Ontario-based companies to joining this committee. On this point, a member suggested that other, smaller Ontario organizations should be approached to join this effort. The Chair noted that he has discussed this matter with the CEA chair, and that they would likely be amenable to adding additional members recommended by the SGF.

A member suggested a joint meeting with the CEA in February if possible.

The Chair posed the question to the SGF members if they were agreeable to approaching the CEA to set up the Partners Committee function in this manner. No formal vote was taken, but it was generally agreed that the Forum should proceed along these lines.

Upcoming Meetings:

- The next two meetings of the SGF are scheduled for Tuesday, February 9th and Tuesday, March 9th. In addition, it was agreed that the SGF should schedule an additional meeting falling between these two meetings. Potential dates will be circulated to the membership.

12:45 – Adjournment.

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