

Ontario Smart Grid Forum

Ontario Smart Grid Forum Notes of Meeting

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

Forum Members Attending:

Paul Murphy	IESO (Chair)
Wayne Smith	Hydro One
Don Tench	IESO
Jim Huntingdon	Niagara-on-the-Lake Hydro
David McFadden	Ontario Centres of Excellence
Dan McGillivray	Ontario Centres of Excellence
Brian Hewson	Ontario Energy Board
Jon Norman	Ontario Ministry of Energy and Infrastructure
Mario Chiarelli	Ontario Power Authority (for Paul Shervill)
Craig Martin	TransCanada
Jatin Nathwani	University of Waterloo
Michael Angemeer	Veridian Corporation

Working Group Members Attending:

Raed Abdullah	Hydro Ottawa (by telephone)
Edward Arlitt	IESO
John Mulrooney	PowerStream
Joshua Wong	Toronto Hydro
Jerry Chwang	Ontario Ministry of Energy and Infrastructure
Usman Syed	Ontario Ministry of Energy and Infrastructure

NOTE 1: These minutes are appended with a cumulative list of outstanding and closed Forum Action Items.

NOTE 2: This meeting was followed by a joint meeting of the Smart Grid Forum and the Corporate Partners Committee (see separate minutes for details)

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

The Chair (Paul Murphy, IESO) welcomed Forum members and at the outset of the meeting it was indicated that Paul Shervill (Ontario Power Authority – not present) would be retiring before the next Forum meeting. On behalf of the Forum the Chair thanked Paul Shervill for his contributions through Mr. Mario Chiarelli who was attending on his behalf at today's meeting.

Jatin Nathwani (University of Waterloo) requested, and it was agreed, to allocate time to briefly discuss an additional business item at the end of the agenda.

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Agenda Item # 1 – Minutes of previous meetings:

Minutes of the May 17th meeting of the Smart Grid Forum:

The minutes of the May 17th meeting were accepted as final with the following amendment: The first bullet under the heading “Slides 18 to 22” on page 4 would be amended such that the sentence reads as follows:

“The high-level smart grid principles developed by the Forum that may be adopted by the Ontario Government will be binding on the OEB.”

Minutes of the June 8th meeting of the Smart Grid Forum:

The draft minutes of the June 8th meeting of the Forum were tabled with an **ACTION ITEM** to provide comments by **July 16th**. In addition the following amendment was proposed to the second bullet under the heading “Q: How do we use the cost discussion to advance our objectives?” on page 3 so that the sentence reads as follows:

“FIT and microFIT programs are forcing LDCs to incur costs, but it is not fair to levy all of this on the local ratepayer.”

Agenda Item # 2: OEA Smart Grid Forum Corporate Partners Committee

Ontario Energy Association (<http://www.energyontario.ca/>).

(See also, draft *Terms of Reference* of the Corporate Partners Committee and minutes of the July 13th Joint meeting of the Smart Grid Forum and Corporate Partners Committee)

The group began by reviewing the draft Terms of Reference for the Corporate Partners Committee and identified two potential amendments which are reflected in the minutes of the July 13th joint meeting of the Smart Grid Forum and Corporate Partners Committee and were adopted in that latter meeting.

Paul Murphy discussed the potential interface between the Corporate Partners Committee and the Forum and suggested that perhaps the Corporate Partners Committee should designate a member of their Committee to represent them at each Forum meeting. No objections were raised to this suggestion.

The Forum then discussed the agenda item regarding “measurement of success” of smart grid efforts, which was slated for discussion in the upcoming afternoon joint meeting with the Corporate Partners Committee. During this discussion some of the success factors and comments raised by Forum members included:

- Development of the Ontario economy and “exportable expertise”
- Metrics for levels of customer value, research and development and exports should be added
- We should develop a model of an ideal outcome for the sector over the next decade
- System reliability is also a candidate for a success factor that should be tracked and monitored. This is a growing concern about this within Toronto’s business community in particular. It was noted that the quantification of reliability helps build the overall smart grid business case.
- A member posed the question as to what type of model should be adopted. In particular is it a smart grid built entirely upon Ontario-based technologies and services, and if so how does this balance against the cost effectiveness metric?

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- The Corporate Partners Committee should actively critique the work and viewpoints of the Forum – as opposed to simply showcasing the products and services of individual members of the Committee, which could pose a potential conflict of interest.
- A member raised the question whether or not the Forum and the Corporate Partners Committee could be a centre-point of a new Ontario export products - namely our collective smart grid expertise coupled with Ontario-based technological solutions.

The question was raised as to whether or not the Corporate Partners Committee should be bound to the objectives and scope of the Forum, and on this point it was generally agreed that yes it should. No objections were raised to this proposition.

Agenda Item # 3: Report Back From the Working Group: Potential Impact of Smart Grid on Rates

(see also, SGF Support Presentation)

Edward Arlitt (IESO Staff) presented the report back from the Working Group. As indicated in the supporting presentation, the Working Group largely devoted its most recent meeting to the action item previously assigned to it by the Forum. Namely to develop an updated smart grid cost estimation model. During the discussion of the work and proposed work plan (see presentation) a number of comments were made by Forum members as follows:

- Forum members generally liked the approach of linking potential benefits of the smart grid to the associated cost components.
- The Working Group will largely be tied up in this effort for the remainder of the year, if it proceeds along the lines proposed. Several members expressed concerns about this, as there will likely be other topics the Working Group will need to address during this timeframe. Several members suggested that this effort needs to be simplified in order to prevent it from becoming a full-blown cost benefit analysis. In this sense, the effort should be re-scaled such that it doesn't completely utilize the Working Group's time between now and the end of the year.
- A lot of what constitutes the "smart grid" is part of the utility's normal capital cost planning cycle.
- A member expressed concerns over potential errors in the estimates and their impact on the Forum's credibility. While some members agreed with this point discussion on this point however, did not cause the Forum to question the underlying need for conducting this work.

ACTION ITEM: The Working Group should move forward with its smart grid cost analysis using readily available data such that an interim estimate could be ready for use by Ministry of Energy and Infrastructure by September 1st.

Agenda Item # 4: Theme Topic Discussion: "Behind-the-Meter"

(see also, presentation for this agenda item)

Edward Arlitt (IESO Staff) presented a revised and updated slide deck on behind-the-meter smart grid issues, originally presented at the May 17th Forum meeting.

A discussion arose around the topic of consumer education and whether or not this is a public sector concern in regards to the smart grid. A Forum member suggested that the upcoming effort is very

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different than what was required for the Smart Metering Initiative and suggested that a lot of private sector providers of products and services will largely bear this new responsibility.

At slide # 6 (“the growing topic map”), the Forum reviewed a list of demand-response related, behind-the-meter topics that the Working Group has previously identified for the Forum’s future consideration.

- Security of individual customers and of the smart grid (a future Theme Topic for the Forum)
- Residential Customer Education
- Avoiding adverse or under-utilized technological selection

Forum members generally agreed that this is a good list of topics, but a member also pointed out that it is the Forum’s mandate to identify gaps and issues in these areas, but not necessarily become actively involved in the underlying activities.

Other Business:

Jatin Nathwani (University of Waterloo) announced the formal opening the University of Waterloo, Energy Research Centre on Friday, October 1st and encouraged Forum members to participate. Details to follow.

Next Meeting:

Tuesday, August 10th, 2010 – morning. (details to follow).

13:00 – Adjournment.

This meeting was followed by a joint meeting of the Smart Grid Forum and the Corporate Partners Committee (see separate minutes for details)

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APPENDIX 'A' S.G.F. **OPEN** Action Items as of July 13, 2010

Action Item	Date Assigned	Assigned To	Target Completion	Status
The Working Group should move forward with its smart grid cost analysis using readily available data such that an interim estimate could be ready for use by Ministry of Energy and Infrastructure by September 1st.	July 13 th	Working Group	Sept. 1 st	OPEN
Report back to the Forum as to when other materials pertaining to advice to government since Fall, 2009 might be suitable for publication.	May 17 th	Jon Norman	TBD	OPEN (update provided on June 8 th .)
Jatin Nathwani to report back to the Forum on the salient points of emerging standards for Electric Vehicle charging stations in order to support a future discussion on the matter.	March 9 th , 2010	Jatin Nathwani	May 17 th	OPEN
Examine the <i>IESO Market Rules</i> from the standpoint of whether or not they present any barriers to participation of load aggregators, and scheduling service providers in the wholesale market or otherwise conflict with the smart grid interoperability framework.	Feb. 9, 2010	IESO Staff	TBD	OPEN

APPENDIX 'B' S.G.F. **CLOSED** Action Items as of July 13, 2010

Action Item	Date Assigned	Assigned To	Target Completion	Status
Working Group should commence the development of smart grid costing model	June 8 th	Working Group	TBD	CLOSED
Distributor members of the Forum should contribute their experience to the working groups examination of smart grid costs.	June 8 th	LDC Forum members	TBD	CLOSED
Report back to the Forum on potential nominations for the Corporate Partners Committee.	May 17 th	Don Tench, Gregor Robinson and Jon Norman	June 8 th	CLOSED
Forum members should familiarize themselves with the seven privacy principles which are contained in Appendix 'A' of the IPC's smart grid discussion paper entitled " <i>Smart Privacy for the Smart Grid: Embedding Privacy into the Design of Electricity Conservation November 2009</i> "	April 19 th 2010	All Forum Members	May 17 th	CLOSED
Edward Arlitt (IESO staff) to draft an outline of the 2010 Annual Report of the Ontario Smart Grid Forum for consideration by the Forum.	March 9 th , 2010	Edward Arlitt	May 17 th	CLOSED
The Working Group should map the interoperability issues screening criteria it came up with to current Ontario activities and highlight to the Forum specific topics of interest that meet the screening criteria.	April 19 th 2010	Working Group	May 17 th	Initial report made on May 17 th . Ongoing examination of this topic will continue.

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Action Item	Date Assigned	Assigned To	Target Completion	Status
The SGF Working Group should recommend smart grid interoperability standards-related issues that the Forum should focus on	March 9 th , 2010	SGF Working Group	April 19 th 2010	CLOSED
The Forum Working Group should suggest what survey questions might be posed to the CEA Corporate Partners Committee for the purposes of developing the Forum's next annual report.	March 9 th , 2010	SGF Working Group	April 19 th 2010	CLOSED
Wayne Smith to seek positive confirmation from the CEA that additional Ontario nominees for the Corporate Partners Committee will not have become full-fledged members of the CEA.	March 9 th , 2010	Wayne Smith	April 19 th 2010	CLOSED as a result of OEA proposal
Forum members were asked to make any further suggestions for additions to the list of Additional Nominations for CEA Corporate Partners Committee as soon as possible.	March 9 th , 2010 and Feb. 22 nd , 2010	Forum Members	April 19 th 2010	CLOSED as a result of OEA proposal
Forum members to review the RACI matrix in light of March 9th discussion and convey any further comments to IESO staff.	March 9 th , 2010	Forum Members	April 19 th 2010	CLOSED
The SGF Working Group should identify those principles that are truly unique to the smart grid where new roles and responsibilities might need to be defined.	March 9 th , 2010	SGF Working Group	April 19 th 2010	CLOSED
The SGF Working Group should identify those principles where it feels that that accountabilities for that topic are too diffuse (based on the entries in the RACI matrix) and make recommendations as to how this might be rectified.	March 9 th , 2010	SGF Working Group	April 19 th 2010	CLOSED
Ministry Staff and the Chair will coordinate the timing of any such communications between the Forum and the Ontario Government regarding the Smart Grid Opportunities Fund.	March 9 th , 2010	Ministry Staff and Forum Chair	April 19 th 2010	CLOSED