

Minutes of Meeting

Date held: December 2, 2009	Time held: 10:00 AM	Location held: Conference call
Invited/Attended	Company Name	Attendance Status (A)ttended; (R)egrets; (S)ubstitute
Baldwin, Ted	Greenfield Energy Centre LP	A
Baxter, Bruce	Toromont Cat power Systems	A
Bell, Brian	Ontario Power Generation	A
Bourgault, Andre	General Electric	A
Burkom, Jack	Brookfield Renewable Power	A
Cary, Rob	Sithe	A
Danai, Behnam	Open Access Technology International Inc.	A
Haggerty, Dennis	Erie Shores Wind Farm	A
Harwood, Shane	Sithe Global	A
Hayden, Dan	Capital Power Corporation for Kingsbridge Wind Farm	A
Heaton, Randy	TransCanada Energy	A
Helbronner, Valerie	Torys LLP	A
Ince, Mark	Direct Energy	A
Kelly, Brian	TransCanada Energy Limited	A
Kerr, Paul	Shell Energy	A
Kogan, Ilya	General Electric	A
Kuber, Kathryn	Ministry of Energy and Infrastructure	A
Levy, Tom	Canadian Wind Energy Association	A
Lorenz, Jamie	Capital Power Corporation for Kingsbridge Wind Farm	A
Loughren, Chris	Bruce Power	A
Man, Ron	Capital Power Corporation for Kingsbridge Wind Farm	A
MacKenzie, John	OPA	A
McLeod, Ron	AbitibiBowater	A
McMillan, Brian	Greater Sudbury Hydro	A
Medley, Jill	OPA	A
Moazami, Andre	OneLine Engineering	A
Pakela, Gregory	DTE Energy	A
Penn, Richard	Greenfield Energy Centre LP	A

Date held: December 2, 2009	Time held: 10:00 AM	Location held: Conference call
Invited/Attended	Company Name	Attendance Status (A)ttended; (R)egrets; (S)ubstitute
Peterson, David	Ontario Power Generation	A
Rangooni, Justin	Canadian Wind Energy Association	A
Rioux, Jason	Portlands Energy Centre	A
Roberti, Rob	Macquarie Capital Funds Canada Ltd.	A
Rosenthal, Jeff	Brookfield Renewable Power	A
Shewchuk, Jason	Capital Power Corporation for Kingsbridge Wind Farm	A
Storey, Jane	Ontario Sustainable Energy Association	A
Velinor, Pietra	Orangeville Hydro	A
Windsor, John	Emera Energy (Greenfield)	A
IESO Representatives		
Chung, Jo	IESO	A
Drake, Gordon	IESO	A
Finkbeiner, Darren	IESO	A
Huber, Devon	IESO	A
Leckey, Jane	IESO	A
Romeo, Rick	IESO	A
Savage, Jessica	IESO	A
Springgay, Guy	IESO	A
Tang, Jessica	IESO	A
Other representatives from the following companies:		
	EO Electric	
	Wind Prospect	
	Gilead Power	
	Rankin Construction	
	Core Energy	
Scribe: <i>Devon Huber</i>		
Please report any corrections, additions or deletions to devon.huber@ieso.ca .		

All meeting material is available on the IESO web site at: [SE-57 Embedded and Renewable Generation \(including periods of surplus baseload generation\)](#)

Agenda Item #1 Administration

Darren Finkbeiner welcomed the group and summarized the issues covered under SE-57.

a. Review Agenda

The agenda was approved with no changes.

Agenda Item #2 Centralized Wind Forecasting

Devon Huber of the IESO presented a status update on centralized wind forecasting. He stated that the IESO is moving forward with a production-based funding model. In response to a question about the funding model, IESO staff clarified that costs for centralized forecasting would be recovered from the generators who use the service, i.e. wind generators. Devon concluded by noting that a project plan on centralized wind forecasting will be presented in early 2010 for stakeholder feedback.

Agenda Item #3 FIT Dispatch & Operability

Darren Finkbeiner provided a brief update on FIT contract clauses that relate to dispatch. He informed the group that all wind farms 5MW or greater with FIT contracts may be entitled to additional contract payments under surplus baseload conditions (SBG). These resources will be exposed to negative prices in the real-time market but will be kept whole if the FIT criteria are met and they respond to dispatch instructions. The purpose of these clauses is to incent participants to follow dispatch instructions and promote efficient market outcomes.

Gordon Drake of the IESO presented an overview of FIT dispatch and operability.

Member Questions, Comments and Discussions

The following questions, along with the response, were asked regarding the presentation:

- Will the IESO be revising market rules regarding the dispatch of existing wind generators?
Existing market rules will be revised to address dispatch clauses in OPA FIT contracts. The IESO is not currently targeting changes to the dispatch rules for existing wind resources, although this could be revisited at a later date.
- What price will the IESO use as the trigger for sending a dispatch instruction to a FIT resource during SBG?
A decision has yet to be made; the IESO is still reviewing the pros and cons of using a pre-dispatch price signal versus a real-time price signal.
- Is output from a wind generator a binary decision, i.e. on or off, or does a wind generator have some control over its output?
It depends on the size of the facility and the level of sophistication of its control systems.

Agenda Item#4 Surplus Baseload Generation

a. Peak Versus Average

Jessica Tang presented IESO actions on the use of peak versus average in demand forecasting. She informed stakeholders that a peak demand forecast will continue to be used in all ramp hours and an average demand forecast will be used in all other hours. This approach will allow the IESO to perform more detailed analysis on hours with low supply cushions and would better position the IESO to consider using an average demand forecast in all hours. The expected implementation date is December 15, 2009.

Member Questions, Comments and Discussions

The following comment and question, along with the response, were made:

- Given the changes to the generation cost guarantee programs that go into effect on December 9th, has the IESO considered delaying the implementation of an average demand forecasting during on-peak hours until January 2010? A staged implementation would allow gas generators and the market to adjust to and learn about the impacts of all the changes.

The implementation of peak forecasting is necessary to address potential surplus baseload generation periods over the coming holiday period. The IESO indicated that they considered a staged approach and sees no reason to delay the implementation of the recommended approach. A generator representative noted that SBG can persist into the on-peak periods.

- Another generator representative expressed his appreciation to the IESO for implementing this change in advance of the holiday season where SBG will likely be a concern.

b. Generation Cost Guarantees and Commissioning during SBG (MR-00363)

Jo Chung of the IESO presented proposed market rule amendments that are meant to address situations that exacerbate SBG conditions. He noted that the Technical Panel determined that the amendments warrant consideration and assigned a high priority to developing the amendments.

Member Questions, Comments and Discussions

The following questions, along with the response, were asked regarding the presentation:

- To deny starts, the IESO will be making assumptions well in advance of potential SBG conditions and closed windows. What are those assumptions?

The IESO is currently developing the process and criteria to deny (or delay) starts. Consideration will be given to export expectations, demand forecast, ramp constraints, the fraction of MGBRT that is in forecast SBG, and others. Under no circumstance would the IESO deny a start if it put reliability at risk. If a start

was denied and then a contingency occurs, the IESO would rely on Operating Reserves and other control actions to maintain system balance.

- If a start is denied, does that mean a more expensive resource will be picked up for the periods where the unit was economical?

Yes, a consequence of denying a start is the dispatch of a more expensive resource for some periods. The driver for this change is efficiency, and the longer-term costs of not denying the start, such as shutting down a nuclear unit, could be greater than the costs of dispatching a more expensive resource during the periods where the GCG start would have been the economic choice.

- Will the IESO meet with gas generators on the subject of denying starts and consider delaying this work as it is adding to an increased period of activity for these generators?

IESO staff noted that stakeholder consultation is occurring through the Technical Panel and committed to an additional stakeholder session for gas generators and other interested parties early in 2010. The IESO is targeting the February Board meeting for approval of the proposed amendments so that the processes are place for spring freshet, a known period of sustained SBG.

c. Curtailment Protocols for FIT, RES, NUG Contracts

Darren Finkbeiner discussed IESO activities related to the curtailment of NUG, RES and FIT resources. He noted that work has progressed well with the OEFC in developing short term and long term solutions to ensure the flexibility of NUG resources. He also informed stakeholders that the IESO would be working with RES resources to inform them of their existing responsibilities related to dispatch as well as the IESO's intent to enforce these responsibilities.

Member Questions, Comments and Discussions

The following questions, along with the response, were asked regarding the presentation:

- What is the mechanism for the shutdown of a NUG, who pays for it and how is it collected?
The IESO asks the OEFC to seek contract provisions for dispatch. As we understand it the OEFC negotiates with contract holders, based on technology and seasonal conditions, the cost and availability for dispatch. The OEFC settles and recovers the cost for dispatch; the costs are not recovered through the IESO-administered markets.

d. Minimum Load Management

Darren Finkbeiner discussed the communication and transparency needed between the IESO and stakeholders during periods of SBG. He specifically noted the development of a control action list for periods of SBG (similar to the control action list for under supply conditions) and information sharing as two key steps. He also noted the numerous considerations/challenges in developing procedures and protocols, but stressed the need for the IESO and participants to eliminate gross inefficiencies during periods of SBG and to work to develop "best fit" solutions.

Member Questions, Comments and Discussions

The following questions, along with the response, were asked regarding the presentation:

- What is the expected dispatch capability from wind and NUG resources?
To the extent the IESO can give insight into the amount of dispatch capability of these resources, we will provide it; as a rough estimate, the recent curtailments were 500-600 MW while summer curtailment were as much as 900MW. The availability of NUG curtailment varies with season, technical need and steam host obligations. With the wind resources we have seen more than 900 MW of output and this could translate into the same amount of curtailments depending on offer strategy. .
- Where are dispatch instructions for RES resources communicated?
RES resources, like all self-scheduling resources, receive hourly schedules (based on the pre-dispatch) through the generator specific reports. This is the current process today, but it may be revisited in the future, to avoid all wind resources shutting off or coming on all at the same time during the top of the hour. The IESO will work with existing RES resources and other intermittent resources to clarify existing responsibilities and if appropriate, to establish new dispatch procedures in future.
- In relation to market rule amendment MR-00363, what is the timing for developing the details regarding the minimum load management actions list and the criteria for determining when a GCG start would be denied under SBG conditions?
Those two bodies of work will be developed in parallel.

Note: The IESO requested that stakeholders who wish to be kept informed of SE-57 activities forward their email to stakeholder.engagement@ieso.ca.

Action Item Summary				
#	Date	Action	Status	Comments
There were no actions from this meeting.				