

Minutes of Meeting

Date held: February 21, 2013	Time held: 9:00 am – 11:00 am	Location held: Crowne Plaza, Toronto
Attended	Company Name	Attendance Status (A)ttended; (R) Registered; (S)ubstitute; (TC) Teleconference
Ahlstrom, Mark	Wind Logics	TC
Applebaum, David	NextEra Energy Resources	TC
Banack, Adam	Torys LLP	TC
Bennett, Chad	Capital Power Corporation	TC
Branam, Aron	EDP Renewables NA	TC
Brason, Tracy	Brookfield Power	TC
Bursaw, Chris	Capital Power Corporation	TC
Chee-Aloy, Jason	Power Advisory LLC	A
Chintapalli, Raj	Customized Energy Solutions	TC
Cormier, Pascal	Brookfield Power	TC
Cumming, Alison	Ontario Power Authority	A
Dawson, Marnie	TransAlta	TC
Doolittle, Robin	RBC Capital Markets	TC
Fleming, Ted	Internat Energy Solutions	TC
Fraiture, Christian	RBC Capital Markets	TC
Goldstein, Michael	Invenergy LLC	TC
Gray, Stan	Pattern Energy	TC
Hassan, Fred	Elenchus c/o Power Worker's Union	A
Jayaraman, Jay	Enbridge	A
Kalinovich, Chris	TransAlta	TC
Keller, Casey	GDF SUEZ North America	TC
Kuntz, Margaret	TransCanada	A
MacRobbie, Ian	Enbridge	A
Maddix, Melanie	Goreway Station Partnership	TC
Maksimovic, Viktor	Hydro One Networks	TC
Nollert, Beverly	Ontario Power Authority	TC
Norris, Paul	Ontario Waterpower Association	A
Pang, Cecilia	Hydro One Networks	TC
Paul, Rob	Goreway Station Partnership	TC
Perrault, Les	Digital Engineering	TC
Peterson, David	Ontario Power Generation	A
Plante, Matthieu	HQ Energy Marketing	TC
Reed, Mike	Leader Resources Services Corp.	TC
Reid, Robert	N-Sci Technologies Inc.	TC
Roberti, Rob	Capstone Infrastructure Corporation	A

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Russell, Stewart	Capital Power Corporation	TC
Samant, Sushil	Northland Power	A
Savulak, Jason	Hydro One Networks	A
Simmons, Sarah	Sussex Strategy Group	TC
Stiles, Phil	Acciona Energy North America	TC
Tang, Chi	McMaster University	A
Thomas, Joshua	NextEra Energy Resources	TC
Tinkler, Mark	Customized Energy Solutions	A
Tsopelas, Alex	Algonquin Power	TC
Turner, David	Digital Engineering	TC
Tymchak, Jill		TC
Urukov, Vlad	Ontario Power Generation	A
VanHooren, Aaron	Erie Shores Wind Farm LP	TC
Visser, Dan	Suncor Energy Products	TC
Viswanathan, Samira	Bruce Power	TC
Zadeh, Saba	Borden Ladner Gervais LLP	TC
Chung, Jo	IESO	A
Doyle, Declan	IESO	A
Drake, Gordon	IESO	A
Finkbeiner, Darren	IESO	A
Parcey, Todd	IESO	A
Shoukri, Dina	IESO	A
Scribe: Jo Chung, Market Development Please report any corrections, additions or deletions to: stakeholder.engagement@ieso.ca		

All meeting material is available on the IESO web site at:

http://www.ieso.ca/imoweb/consult/consult_se91.asp

Meeting Objectives:

The IESO will present the work completed as follow up to feedback on the Variable Generation Dispatch Detailed Design Summary, as well as seek stakeholder feedback on some of the upcoming changes to SSR/SAA reports, communication pathways for variable generator dispatch, and review upcoming stakeholder activities.

Item 1 Welcome, Review of Meeting Agenda

Declan Doyle of the IESO welcomed the attendees of SE-91. Introductory remarks were made including an overview of the agenda.

Item 2 Market Schedule and Congestion Management Settlement Credits (CMSC) Proposal

Dina Shoukri of the IESO provided an overview of the required changes in determining the market schedule and CMSC for variable generators that are registered market participants.

Member Questions, Comments and Discussion, with the IESO's response in italics:

A member asked why the IESO is proposing to use a telemetry snapshot when a variable generator is under a release notification.

The IESO responded that for a dispatch interval in which a variable generation facility is operating under a release notification, the facility has been directed to generate to the maximum output that the available fuel allows. In such a dispatch interval, the best reflection of the maximum economic capability for the facility is the telemetry snapshot. The unconstrained sequence can then schedule the variable generation facility to any amount that is less than or equal to that snapshot. Under a mandatory dispatch instruction, the five-minute forecast is used since a telemetry snapshot will no longer reflect the output capability of the facility.

A member asked for clarification whether the IESO was proposing to not pay CMSC in some scenarios where there are differences in the market schedule and constrained schedule.

The IESO responded it is not proposing to change the previously discussed design for the market schedule or CMSC when a variable generator is under a mandatory dispatch instruction, but is proposing changes to the market schedule and CMSC determination when a variable generator is under a release notification. There will be some instances in which CMSC will not be calculated, specifically when a variable generation facility is operating under a release notification and updated forecast information in the unconstrained sequence relative to the constrained sequence results differing market and constrained schedules

A member asked why it is being proposed that CMSC is paid when a variable generator is under a release notification when there are no constraints on the system.

The IESO responded that while under a release notification, as developed by the constrained sequence, the unconstrained sequence may yield a market clearing price such that the generator could be producing at a price point that is lower than their offer price, and therefore it is necessary in this situation to pay CMSC in order to make the generator whole to their offer price. In the previous market schedule/CMSC design, for constrained-on events while under a release notification, generators were not going to be paid CMSC. The new proposed design pays CMSC when these constrained-on situations occur.

Item 3 Centralized Forecasts in System Status Reports (SSRs) and Security and Adequacy Assessments (SAAs)

Gordon Drake of the IESO provided a summary of the proposed changes to publish centralized forecasting information in the SSRs and SAAs.

A member asked if there were any statistics on forecast accuracy in the 3-7 day timeframe.

The IESO responded these statistics were not yet developed.

A member asked whether the forecasting information for SAAs in the 2-4 week timeframe would take into account planned outages.

The IESO responded that outages will be reflected in the reports as they already do for other types of generators.

A member asked if other generator technologies such as nuclear or hydroelectric are shown individually in the SAA/SRR reports, and if not why variable generators will be shown separately.

The IESO responded the main reason for separation of variable generators is due to the inherent variability in their fuel source, which makes it more difficult to plan operations. The goal in separating variable generation is to provide more visibility to the market.

A member asked whether for SSRs, outages for variable generators will be shown as a net reduction in energy, or if the outages will be listed.

The IESO responded outages for variable generators will be an input to the forecasts and should be reflected in the net energy number. The centralized forecast takes into account outages to reduce expected output and is shown in the outages line and taken into account in the forecasted energy.

On slide 12 (Material Changes – cont'd), a member asked whether the republishing threshold for the SSRs of a change in VG forecast of “500MW or more affecting any 4 or more hours” was for 4 continuous hours or any 4 hours in a day.

The IESO responded the 4 hours could be any combination of 4 hours in a day which meet the 500MW threshold.

A member asked how the IESO came up with the 500MW threshold for republishing SSRs/SAAs.

The IESO responded the 500MW threshold aligns with existing material change thresholds used within the IESO, and tries to balance the frequency of republished reports against the materiality of changes in variable generation forecasts relative to the size of the variable generation fleet.

A member was of the opinion that the inclusion of material changes in VG forecasts on the SSR/SAA reports would be useful to the marketplace, and asked how this information would be useful to variable generators.

The IESO responded variable generators would likely benefit most from their private, individual forecast reports versus the information on SSR/SSAs which provides information for other market participants to plan their operations.

Item 4 Communication Pathways for Variable Generator Dispatch

Gordon Drake of the IESO provided an overview of the challenges of establishing dedicated communication lines for variable generators, as well as the proposed internet-based solution.

A member asked why the market rules true-up for the market schedule and CMSC will not be part of MR-00381.

The IESO responded that in the past, market rule true-up packages such as those for EDAC have been assigned new file numbers.

A member asked whether the IESO plans to use the same internet-based communications pathway for non-variable generators.

The IESO responded that it would consider expanding the internet-based solution to other types of dispatchable generators if the solution works well for variable generators. The IESO is always looking for ways to contain costs to ratepayers while meeting reliability.

A member asked whether the internet-based solution was applicable to all variable generators, including those with control centres in Ontario.

The IESO confirmed the internet-based solution is for all variable generators, whether connecting within or outside Ontario.

A member asked what level of reliability the IESO needed/was looking for with the internet-based solution, noting that internet service providers (ISPs) can go down.

The IESO responded that dedicated lines can go down as well, and that evidence suggests that the reliability of the internet is comparable to those of dedicated lines.

A member asked what the lead time was for setting up an internet-based connection.

The IESO responded that establishing a dedicated line can take a few months, compared to a much shorter lead time for an internet-based connection.

Another member commented that the IESO should not underestimate the amount of time required to set-up an internet based connection, noting it takes time to get through internal firewalls, etc.

The IESO noted the member's suggestion.

A member asked (i) whether a dedicated line for a non-variable generation facility could be used for one of its variable generation facilities; (ii) whether the IESO has considered NERC CIP requirements, and (iii) whether latency would be an issue, noting latency issues a few years ago with the IESO portal.

The IESO responded that if a dedicated line is already available for a specific variable generation facility, it would be an exception and that the IESO would discuss the possibility of using it with the market participant. The internet-based solution has been developed with CIPs/cyber security requirements in mind. Regarding latency, communications infrastructure has advanced over the past few years, and testing of the internet solution has resulted in performance equivalent to dedicated lines.

Item 5 Market Participant Outreach and Readiness

Gordon Drake of the IESO provided an overview of the market participant outreach and readiness plan over the coming months.

A member asked for more details on the composition, proposed timelines for the Implementation Working Group and IT Stakeholder Consultations.

The IESO responded that training for variable generators is expected to start the end of March with further dates to be developed, and requested any feedback or suggestions from members.

The member emphasized the importance of sufficient settlements training (from a forgone energy perspective) for variable generators with simultaneous input from the OPA as well as the IESO. Another member added that given the history of discussions on forgone energy as well as other contract issues, the onus is on the OPA to acquire IESO data to settle and audit forgone energy. The variable generators that have followed SE-91 do not represent the majority of variable generators that have actually executed contracts with the OPA, and are new to the IESO markets. They will require basic training on IESO system and market operations in addition to training on variable generation dispatch mechanics and settlements. This training should start as early as possible as it will be easier for everyone if variable generators understand the forgone energy calculations early in the game, and the IESO/OPA should jointly educate variable generators.

The IESO noted the members' suggestions, and responded that training will be "from the ground up" and that there will be an outreach to have the right people in attendance (settlements people regarding forgone energy, IT staff for IT issues). The IESO added that it already has training for new market participants and that it would be a part of the outreach and readiness training.

A member asked when the centralized forecasting information on the SSRs and SSAs related to variable generators would become public.

The IESO responded it will be part of the IT/Baseline release for September, 2013.

Item 6 Next Steps

Declan Doyle of the IESO thanked all members for their participation, and reminded stakeholders to submit any comments on any of the presentations within the next two weeks to stakeholder engagement.

A member asked whether the internet-based component of the proposed market rule changes would be separate from the market schedule/CMSC true-ups under MR-00402-R00.

The IESO responded it would be under MR-00402-R01.

Action Item Summary				
#	Date	Action	Status	Comments
1	Nov 21, 2011	IESO to add to the terms of reference the issue of loss penalty factors and ensuring intra-technology equity issues will be addressed by the FPPG	Closed	Updated Terms of Reference posted on the SE-91 website.
2	Nov 21, 2011	IESO to add the link to the latest 18-month outlook in the minutes.	Closed	
3	Nov 21, 2011	IESO to add links to the SE-94 Export Service Tariff Study in the minutes.	Closed	
4	Nov 21, 2011	IESO to reflect in the Discussion Paper potential safety concerns related to dispatch for wind farm technicians who may be inside the turbine.	Closed	The IESO always considers safety concerns when dispatching resources.
5	Jan 24, 2012	IESO to provide link to report from Ontario Society of Professional Engineers (OSPE) website: Click on: "Wind and the Electrical Grid"	Closed	

Action Item Summary				
#	Date	Action	Status	Comments
6	Jan 24, 2012	IESO to include Enbridge's comments and IESO responses in the next version of the spreadsheet summarizing stakeholder comments	Closed	
7	Jan 24, 2012	IESO to make public further information on the analysis which quantifies the estimated savings of dispatching wind/solar, SBG and Ramp analysis to the extent possible (cost information on options, TWh of curtailment, physical impacts behind the study, net export information, how much curtailment is expected on a gross aggregated basis).	Closed	June 27, 2012 FPPG
8	Jun 27, 2012	IESO to provide more details and examples on the proposed mechanism of coordinating flexible nuclear and variable resources/floor prices.	Closed	Aug 8, 2012 FPPG
9	August 8	IESO to repost the IESO Response Spreadsheet and ensure all comments are visible.	Closed	August 9, 2012
10	August 8	IESO should consider posting the length and depth of Surplus Baseload Generation events.	Closed	August 9, 2012 <i>Comment sent to SE-97 Market Information</i>
11	November 9, 2012	Rob Cary & Associates to provide in writing on behalf of the RES Group a position as to whether their preference is to have the IESO Board determine floor prices for variable generators at the November 29, 2012 Board meeting or at a later session in 2013.	Closed	No comment indicated at this time.