

Notes from the 47th Meeting of the Market Pricing Working Group

Thursday February 7th, 2008 8:30 a.m. – 1:00 p.m.

Toronto Congress Centre, 655 Dixon Road, Toronto

FINAL

Attendees

<u>Name</u>	<u>Company</u>	<u>Name</u>	<u>Company</u>
Abdelnour, Francois	IVACO	Berry, Scott	IESO
Bell, Brian	Ontario Power Generation	Boudreau, John	IESO
Belleavance, Eric	Hydro-Quebec	Chase, Maia	IESO
Bellissimo, Vittoria	Ontario Power Authority	Greenberg, Jessica	IESO
Cary, Rob (teleconference)	Sithe Power; Cardinal Power	Jaipargas, Angeli	IESO
Degelman, Cara	Abitibi Consolidated	MacKenzie, John	IESO
Dumais, Dan	Xtrata Nickel	Maria, Gamal	IESO
Ecelbarger, Carl	Hydro-Quebec	Ng, Hok	IESO
Erickson, Tracy	Brookfield Power	Peerbocus, Nash	IESO
Hunt, Robert	Optimal Technologies	Rivard, Brian	IESO
Hunter, Kelly (teleconference)	Manitoba Hydro	Robitaille, Dave	IESO
Kelly, Brian	TransCanada Energy	Savage, Jessica	IESO
Lapierre, Dan	Brookfield Power		
Loughren, Chris	Bruce Power		
Lung, Gene	Direct Energy		
Kerr, Paul	Shell Energy		
Mei, Sam	AMPCO		
Selesse, Stephanie	Brookfield Power		
Thoma, Tony	Wescast Industries		

Please refer to documents for each agenda item for this meeting, published on the IESO public web-site at the following location:

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

Item #1: Administration

a. Review Notes from December 6th, 2007 Meeting (MPWG 46)

Member Questions, Comments and Discussion

- None.

Next steps

- IESO to post meeting notes as final.

b. Review of Action Items

- Action items 43-2

Brian Rivard (IESO) presented a summary of the discussion with the MPWG member regarding the “weighting” of options within a cost-benefit analysis. The members concern was that impacts on uplifts, and not just energy prices, should be considered within a cost-benefit analysis. The IESO confirmed that impacts on uplifts are part of the cost-benefit analysis.

Member Questions, Comments and Discussion

- None.

Next steps

- Action item 43-2 closed.

c. Updates

Brian Rivard (IESO) provided the following updates:

- **Issue #16: Review of Nodal Pricing**

The IESO advised that work on this issue was on hold and that an update to that effect would be published that day. Refer to the following document published on the IESO web site:

http://www.ieso.ca/imoweb/pubs/consult/mep2/MPWG-20080207-Issue_16_update.pdf

Member Questions, Comments and Discussion

- A generator questioned that given Issue #16 was on hold, was it appropriate for the IESO to have addressing Issue #40 (Nodal Pricing for Import and Export Transactions) as a priority for 2008. He also noted that the IESO had made a commitment to the Inter-jurisdictional Trading Standing Committee to publish nodal prices for the intertie points.

The IESO responded that publication of nodal prices for the intertie points is expected to start in March 2008, with Baseline 19.0.

- **Day-Ahead Forecast of Real-Time HOEP – Stakeholder Engagement Plan SE-58**
There was an IESO-stakeholder meeting on February 5th, 2008 regarding this issue. The IESO intends to publish a preliminary position paper on February 14th, 2008, incorporating stakeholder feedback from the February 5th meeting. The next IESO-stakeholder meeting on this issue may be held after the MPWG meeting on March 6th, 2008.

Member Questions, Comments and Discussion

- None.
- **Negative Market prices – February 6th, 2008**
There were negative HOEPs during the evening hours of Wednesday February 6th, 2008. The IESO was investigating the cause and whether administration of prices would be required.

Member Questions, Comments and Discussion

- None.

Item #2: 2008 Work Priorities and Performance Measures

Brian Rivard (IESO) led a review and discussion of the stakeholder feedback and MPWG 2008 work priorities and performance measures. Refer to the following document published on the IESO public web-site:

http://www.ieso.ca/imoweb/pubs/consult/mep2/MP_WG-20080207-Priorities-Performance-Measures.pdf

Member Questions, Comments and Discussion

- There was general discussion on the market valuation of capacity issue:
 - What type of information sessions would be appropriate for the Working Group? Concepts or specific mechanisms in other markets?
 - Is there evidence that capacity markets lead to investment?
 - Capacity markets also have reliability benefits.
 - If the IESO has no intention of supporting a market valuation of capacity, then it is a waste of time for the Working Group to have even information sessions.
- The Agency Review Panel's recommendation regarding the amalgamation of some OPA functions with the IESO adds urgency to addressing issues such as market valuation of capacity and the relationship between the HOEP and the Global Adjustment.
- The IESO also advised that:
 - the 15-minute dispatch market initiative would be the subject of a separate stakeholder engagement initiative, but the timing of that initiative is not known; and

- it is still evaluating the proposals submitted in response to the request for Proposals for Issue #39 – Inter-market Trading of Operating Reserve

Next steps:

- IESO to confirm its position on the potential development of an adequacy market mechanism as a future market development initiative. Refer to action item AI 47-1.

Item #3: Issue 9 – Peak vs. Average Pre-Dispatch Demand Forecast

Jessica Savage (IESO) gave a presentation on the preliminary efficiency analysis results for changing from peak to average demand forecast in pre-dispatch. Refer to the following presentation published on the IESO web site:

http://www.ieso.ca/imoweb/pubs/consult/mep2/MP_WG-20080207-Peak-vs-Average-PreDispatch-Demand-Forecastt.pdf

Member Questions, Comments and Discussion

- a. Members requested that the IESO address the following issues and following analysis in the further efficiency, reliability and cost-benefit analysis:
 - Demand forecast error for peak, off-peak and shoulder periods;
 - Energy market price impacts, including volatility;
 - Impact on market uplift charges e.g. CMSC, IOG;
 - Provide 5 minute price data to MPWG members;
 - Reliability impact analysis needs to be justified with rigour, and quantified;
 - Option of using peak forecast for some hours and average forecast for other hours.
- b. Members asked questions of clarification to which the IESO provided the following answers:
 - The IESO forecasts the peak demand and so measures of IESO performance in demand forecasting should be on comparing forecast peak demand to the actual peak demand.
- c. An intertie trader suggested that given the analysis to date shows efficiency gains for every hour, but one, and that the IESO forecast of peak and average appear to be reasonably on target, there is no need for further analysis. The IESO should make the change to using average demand forecast in pre-dispatch.

The IESO responded that it is prudent to make a decision with as much knowledge as practicable regarding (i) the full market efficiency impacts incorporating export response, (ii) reliability impacts, and (iii) wealth transfers including market price impacts. Making a decision on the basis of only the preliminary analysis may result in unforeseen, unintended adverse consequences.

Next steps:

- IESO to conduct phase 2 of efficiency analysis and present results to MPWG meeting March 6th, 2008.

Item #4: Issue #38: Treatment of Shared Activation of Reserve (SAR)

Hok Ng and Brian Rivard (IESO) presented the price impact analysis results and IESO recommendation. Refer to the following document published on the IESO web site:

http://www.ieso.ca/imoweb/pubs/consult/mep2/MP_WG-20080207-Shared-Activation-Reserve.pdf

Member Questions, Comments and Discussion

- a. Members asked a number of clarification questions to which the IESO made the following responses:
 - When SAR is activated, domestic operating reserve would also have been activated, based on offer prices.
 - If SAR is not available, the IESO would activate only domestic operating reserve to address the contingency.
 - The IESO did not examine the delta between the three-hour ahead pre-dispatch price and the HOEP with the change to the SAR treatment. However, the IESO did not think that the delta would be that much different than the delta between the actual HOEP and the simulated HOEP.
 - The interval market clearing price (MCP) changes would be greater than the identified HOEP changes, as SAR can only be activated for 30 minutes or less and HOEP is the average of the MCP's in the hour.
 - The estimated implementation cost was for an automated solution. There is a possible interim manual solution that would have little or no cost.
 - There is a market cost of return of SAR as inadvertent energy.
- b. A consumer noted that the simulated energy price for three occasions of SAR activation were above the strike price for an OPA demand response program.
- c. An intertie trader noted that SAR was not dispatched on the basis of economics and was used because it was free. He also asserted that using an annual average HOEP impact was not appropriate, as any change would be greatly diminished by the large annual energy consumption. The specific hours in which price changes would materialize as a result of the change to the treatment of SAR could be significant to the economic livelihood of a peaking generator.
- d. Consumers generally stated that it was not appropriate to make the proposed change to the treatment of SAR when Ontario receives SAR without making a comparable change when Ontario provides SAR and emergency energy.
- e. The IESO clarified its recommendation as follows:
 - There are price fidelity benefits to changing the treatment of the receipt of SAR;

- There is a potentially high implementation cost (~100 k\$) for an automated solution to change the treatment of SAR;
 - Treatment of SAR and emergency energy when provided by Ontario should also be considered;
 - Given the low frequency and materiality of the potential price impacts and the high implementation costs, conducting further analysis and making any changes is a low priority.
- f. The IESO also noted that, based on the discussion, there appeared to be lack of general understanding of SAR, how and why it used and the related Market Surveillance Panel recommendation. A refresher on these points would be of benefit when the IESO returns with the analysis of the changing the treatment of SAR and emergency energy provided by Ontario.

Next steps:

- The IESO is to undertake analysis of changing the treatment of SAR and emergency energy when provided by Ontario, on a low priority basis.

Item #5: Day-Ahead Model of Real-Time HOEP

Nash Peerbocus (IESO) made a presentation on the day-ahead model that forecasts real-time HOEP and the sensitivity of the forecast to IESO demand forecast error. Refer to the following presentation published on the IESO web site:

http://www.ieso.ca/imoweb/pubs/consult/mep2/MP_WG-20080207-Day-Ahead-HOEP.pdf

Member Questions, Comments and Discussion

- a. Members asked a number of clarification questions to which the IESO made the following responses:
- The MAPEs for the New York and Michigan price forecasts were the differences between the respective day-ahead price and the average real-time price.
 - Bias of the day-ahead forecast was provided in analysis presented previously to the MPWG.
 - The reasons for different MAPEs for on-peak and off-peak are not known and require further study.
 - Through a separate stakeholder engagement process (SE-58), the IESO is gathering information and views regarding the threshold issue of whether it is appropriate that the IESO, as the market administrator, provide a market price forecast. There has been no IESO Board decision on this issue.
- b. An intertie trader asserted that having an accurate forecast on average was not as useful as being accurate when predicting 'pivot point prices' for suppliers or consumers: pivot point price is the price where a supplier would decide to start and/or a consumer would decide not to consume. Making an error in forecasting 'pivot point prices', even once,

would reduce stakeholder confidence in the forecast and reduce the usefulness of such the forecast. How will the IESO measure the value of the forecast?

The IESO responded that the value of the forecast must be from the perspective of stakeholders. The IESO was seeking advice from stakeholders on the value of the forecast, through SE-58.

- c. A generator suggested, as an alternative or in addition to the price forecast, that the IESO look into providing pre-dispatch and forecast real-time domestic supply cushion. The IESO agreed to investigate the feasibility of doing that. Refer to action item 47-2.

Next steps:

- Further work on this issue will be conducted under SE-58.

Item #6: Issue #5: Simultaneous Use of Ramping for Energy and Operating Reserve

Jessica Greenberg (IESO) made a presentation to illustrate where existing constraint equation modifications result in simultaneous use of ramping for energy and operating reserve, along with the IESO recommendation to place this issue on hold. Refer to the following documents published on the IESO web site:

http://www.ieso.ca/imoweb/pubs/consult/mep2/MP_WG-20080207-I5-Ramping-paper.pdf
http://www.ieso.ca/imoweb/pubs/consult/mep2/MP_WG-20080207-I5-Ramping-pres.pdf

Member Questions, Comments and Discussion

- An intertie trader expressed concern that the following statement in the presentation meant that no changes to market pricing were to be considered:
“Analysis of the impact of the change to 3x ramp rate multiplier is not yet complete and the IESO has committed to do analysis over the next year. It is prudent to not change any other aspect of RT pricing until that analysis is completed.”

The IESO clarified that the statement should have read “not to change any other aspect *related to ramp rate* of RT pricing until that analysis was completed”.

- A generator suggested that simplifying the description of the consequences of the existing constraint equation modifications should be considered. For example, when there was the 12x energy ramp rate multiplier, the consequences of the modification was that there was actually a 13x ramp rate multiplier. With the change to a 3x energy ramp rate multiplier, there was a actually a 4x ramp rate multiplier.
- The Working Group agreed that this issue be placed on hold pending the completion of the analysis of the impact of the change to a 3x ramp rate multiplier.

Next steps:

- IESO to update issue tracking document to change status of issue to “on hold”.

Item # 7: Other Business

a. Members Issues

IESO requested that, unless there was an important issue to be identified and discussed, discussion of members’ issues be deferred until the next meeting in order to complete the agenda for this meeting. Members agreed.

b. Pricing Events – November and December 2007

Angeli Jaipargas (IESO) presented a summary of pricing events for November and December 2007. Refer to presentation published on IESO web site:

http://www.ieso.ca/imoweb/pubs/consult/mep2/MP_WG-20080207-Pricing-Events.pdf

Member Questions, Comments and Discussion

- An intertie trader requested that the IESO identify the specifics of the administrative pricing IESO corporate performance measure. Refer to action item AI 47-3.
- A consumer requested that the IESO report on the activation of OPA demand response programs as well as market based demand response programs. The IESO agreed to look into the feasibility of doing so. Refer to action item AI 47-4.
- Many members strongly suggested that the IESO not make major system changes at year-end. The pricing anomalies and resulting administrative pricing changes in December resulting from the change to the IESO energy management system were very disruptive to the market.

c. Review of Issues and Forward Agenda

John MacKenzie (IESO) led a discussion of the updates to the MPWG issues tracking document, recommendations to change the status and priority of certain issues and the forward agenda. Refer to the following documents published on the IESO web-site:

http://www.ieso.ca/imoweb/pubs/consult/mep2/MP_WG-20080207-Issues-Listing.pdf

http://www.ieso.ca/imoweb/pubs/consult/mep2/MP_WG-20080207-Forward-Agenda.pdf

Member Questions, Comments and Discussion

- Members requested that, if possible, the IESO advance the investigation of the legal and regulatory threshold issues related to Issue #40 (Nodal Pricing for Imports and Exports).
- Members accepted the recommended changes to the status and priority of identified issues.

Next steps:

- IESO to update issue tracking document to change status and priorities of issues as recommended.

Next meeting: Thursday March 6th, 2008.

Action Items

- AI 34-5: IESO to report back at December MPWG meeting on peak vs average efficiencies and price impact analysis.
Status: Open
Target Completion Date: April 2008
- AI 36-2: Do other electricity market and system operators use peak or average demand forecasts?
Status: open. New York ISO uses peak demand forecast. IESO is following up with other markets in the north-east. Information on the demand forecasts used for price determination is also required.
Target Completion Date: April 2008
- AI 43-2: IESO to follow-up with MPWG member regarding “weighting” of options that impact price versus uplifts within a cost-benefit analysis. Refer to discussion under agenda item #2 paragraph (a) of notes from July 19th, 2007 meeting.
Status: Closed. Refer to discussion under agenda item 1(b).
Target Completion Date: N/A
- AI 44-2: IESO to provide the following information regarding administrative pricing: refresher on current market rules and practices, data and summary of administrative pricing events and causes, IESO work programs in place to address the causes.
Status: open. IESO has instituted the reporting of administrative pricing events as part of the Monthly Pricing Events reporting.
Target Completion Date: Q4 of 2008.
- AI 44-4: IESO to report on the use and impact of Shared Activation of Reserve and inadvertent energy.
Status: closed. Refer to discussion under agenda item 4.
Target Completion Date: N/A
- AI 44-5: IESO to provide the working group with the scope of the LMP study being conducted under stakeholder engagement plan SE-25.

Status: open.

Target Completion Date: To be determined.

- AI 45-4: IESO to report back to the MPWG on the following with respect to OPA DR programs:
 1. Should expected DR3 programs activations were used to consider generator and transmission outages?
 2. What planning and real-time information regarding these programs can be made public?
 3. Can the transparency of the triggering of these programs be improved?
 4. Define the rules for open and closed notification for the DR3 program.
 5. Are market rules needed to authorize the IESO role in the OPA DR programs?
 6. Simple numerical examples of DR2 and DR3 response.

Status: open

Target Completion Date: To be determined

- AI 47-1: IESO to confirm its position on the potential development of an adequacy market mechanism as a future market development initiative.

Status: open

Target Completion Date: To be determined

- AI 47-2: IESO to investigate feasibility of providing stakeholders with pre-dispatch and forecast real-time domestic supply cushion.

Status: open

Target Completion Date: To be determined

- AI 47-3: IESO to provide MPWG with the specific corporate performance measure related to administrative pricing.

Status: open

Target Completion Date: To be determined

- AI 47-4: IESO to investigate the feasibility of reporting activations of OPA demand response programs as part of the monthly pricing event reporting.

Status: open

Target Completion Date: To be determined