

Notes from the 44th Meeting of the Market Pricing Working Group

Thursday August 23, 2007 8:30 a.m. – 2:00 p.m.

Park Plaza Hotel, Carlson Court, Toronto

FINAL

Attendees:

| <u>Name</u> | <u>Company</u> | <u>Name</u> | <u>Company</u> |
|----------------------------------|---------------------------------|--|----------------|
| Abdelnour, Francois | IVACO | Boudreau, John | IESO |
| Bell, Brian | Ontario Power Generation | Chandler, Harry | IESO |
| Bellissimo, Vittoria | Ontario Power Authority | Chase, Maia | IESO |
| Cambell, Neil (agenda item 7) | Market Surveillance Panel | Clement, Anthony | IESO |
| Cary, Rob | Sithe Power; Cardinal Power | Finkbeiner, Darren (agenda items 1-3) | IESO |
| Dade, Christine | Direct Energy | Greenberg, Jessica | IESO |
| Degelman, Cara | Abitibi Consolidated | Kozlik, Ken (agenda items 1-3) | IESO |
| Duzy, Margaret | TransCanada Energy | Lubek, Jack (agenda item 7) | IESO |
| Ecelbarger, Carl | Hydro Quebec Energy Services | MacKenzie, John | IESO |
| Erickson, Tracy | Brookfield Power | Penn, Richard (agenda item 7) | IESO |
| Hassan, Fred | Power Workers Union | Rivard, Brian (agenda items 1-2) | IESO |
| Hunt, Robert | Optimal Technologies | Savage, Jessica | IESO |
| Kerr, Paul | Coral Energy | Sivasundaram, Lavan | IESO |
| Kuriychuk, Mike | Pathchoice Energy Consulting | | |
| Lapierre, Dan | Brookfield Power | | |
| Leung, Linda | Ontario Power Generation | | |
| Lung, Gene (teleconference) | Direct Energy | | |
| Seless, Stephanie | Brookfield Power | | |
| Thoma, Tony | Wescast Industries | | |

Item #1: Administration

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.

a. Review Notes from July 19th, 2007 Meeting

Member Questions, Comments and Discussion

- An action items was added (refer to AI 43-2) on the IESO to follow-up with MPWG member regarding “weighting” of options that impact price versus uplifts within a cost-benefit analysis.
- At the request of MPWG members, the IESO will present information regarding the OPA demand response programs and integration into the IESO-administered markets and IESO-controlled grid at the next MPWG meeting (September 27th, 2007). Refer to Action Item AI 44-1.

Next steps

- IESO to revise notes and post as final

b. Review of Action Items

Action item 43-1 closed: refer to discussion under agenda item 4(a).

Action item 38-2 closed. MPWG member from Ontario Power Generation stated that the efficiency analysis proposal for Issue 9 (Pre-dispatch Peak vs. Average Demand forecast) as presented at the July 19th, 2007 MPWG meeting addressed his concerns.

c. Updates

Ken Kozlik (IESO) provided the following updates:

• Ramp Rate Multiplier Issue

The AMPCO appeal to the Ontario Divisional Court was withdrawn. The IESO will be implementing the 3x energy ramp rate multiplier in interval 1 of hour-ending 1 on September 12, 2007, coincident with the release of the market baseline 18.0.

• Day Ahead Mechanisms

The IESO made a presentation to the Stakeholder Advisory Committee on August 22nd, 2007 on day-ahead mechanism options. MPWG members were encouraged to provide feedback on the options to Ken Kozlik or Bill Wilbur of the IESO

• Administrative Pricing Reporting

The MPWG was provided with the IESO response to the request for additional information and performance measures related to administrative pricing.

Member Questions, Comments and Discussion

- The IESO response does not address the underlying issues raised: the lack of transparency regarding the causes of administrative pricing events and IESO action to correct those causes. There is an apparent increase in administrative pricing events in the past six months.
- The IESO will 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 (refer to action item AI 44-2).

Item #2: Operating Reserve Initiatives Resulting from NPCC Changes: MR-00332 Reducing 10-minute Synchronized Reserve Requirement

Brian Rivard (IESO) led a discussion of the IESO response to stakeholder written comments, additional cost-benefit analysis and IESO recommendation. Refer to the following documents published on the IESO public web-site:

http://www.ieso.ca/imoweb/pubs/consult/se37/se37-IESO_reply_to_comments_on_MR-00332_CBA-tracked_changes.pdf

http://www.ieso.ca/imoweb/pubs/consult/mep2/MP_WG-20070823_MR-00332-R00_Amendment_Proposal_v4_0.pdf

Member Questions, Comments and Discussion

- a. Is there a reliability impact of reducing the 10-minute synchronized reserve requirement by 100 MW sufficient to offset the expected efficiency benefits of \$20000 per year?

IESO response: There is no reliability impact of reducing the 10-minute synchronized reserve requirement by 100 MW relative to the existing reduction of the 10-minute non-synchronized reserve requirement. From a reliability perspective, the IESO believes there is no difference between 10-minute synchronized and 10-minute non-synchronized reserve. The previous draft of the MR-00332 cost-benefit analysis was incorrect in that it had assumed that the NPCC reliability analysis was measuring the impact of reducing the 10-minute synchronized reserve requirement by 100 MW relative to the existing reduction of the 10-minute non-synchronized reserve requirement. The NPCC analysis in fact was assessing the impact of reducing the 10-minute synchronized reserve requirement by 100 MW relative to no reduction of any part of the 10-minute reserve requirement.

NPCC is considering whether synchronized reserve is required at all. NPCC action on this request and any resulting changes will follow the normal and potentially lengthy NPCC processes for analysis, consideration, decision and implementation.

- b. A generator noted that with this change, the total 10-minute reserve requirement will become binding rather than the 10-minute synchronized reserve requirement. The value and need for 10-minute synchronized reserve is now in question.
- c. A generator asked what would be the market impact of eliminating the 10-minute synchronized reserve requirement?

IESO response: the impact would depend on the revised NPCC requirement e.g. it may be that the NPCC standard would eliminate the requirement for only certain periods.

- d. A consumer asked what Ontario generators currently provide 10-minute synchronized reserve?

IESO response: nearly all Ontario generators are capable of providing and registered to provide 10-minute synchronized reserve.

Next steps:

- Technical Panel review and discussion of the August 15th published materials at the Panel meeting on August 28th, 2007. The Panel will be asked to vote to recommend MR-00332 to the IESO Board.
- At its meeting on August 28th, 2007, the Technical Panel will also be reviewing market rule amendment submission MR-00333-Q00 (Permitting Dispatchable Loads to Provide 10-minute Synchronized operating Reserve). The Panel will be asked to determine whether the submission warrants consideration.
- IESO to provide plan/schedule for addressing the “Exporting Operating Reserve Initiative” at next Working Group meeting (27 Sep 07). Refer to action Item 44-3.

Item #3: Shared Activation of Reserve

Darren Finkbeiner (IESO) gave a presentation on the existing Shared Activation of Reserve (SAR) program and practices. Refer to the presentation and other material published on the IESO web site at the following links:

http://www.ieso.ca/imoweb/pubs/consult/mep2/MP_WG-20070823_Presentation-Shared_Activation_of_Reserve_SAR.pdf

http://www.ieso.ca/imoweb/pubs/consult/mep2/MP_WG-20070823-SAR_Extract_from_MSP_Report-May06-Oct06.pdf

Member Questions, Comments and Discussion

- a. Members asked a number of clarification questions, to which the IESO made the following responses:
- Although Quebec could participate in the NPCC SAR program, it has chosen not to.
 - The IESO has used SAR for reasons other than a generation contingency ≥ 500 MW. For example, the IESO has used SAR to correct significant ACE deviations resulting from multiple contingencies, not necessarily generation related.
 - The single largest contingencies for the other jurisdictions participating in SAR are: New England ~ 1200 MW; New York ~ 1000 MW; PJM ~ 1200 MW.
 - There is no NPCC standard on SAR availability. However, SAR has always been available and delivered when requested by Ontario or other jurisdictions.
 - Following a contingency, the IESO restores the operating reserve requirement when the ACE has been restored to zero or pre-contingency values, not when the IESO starts ramping out SAR.
 - The energy flows associated with SAR are real and immediate. When Ontario suffers a generation contingency ≥ 500 MW, all synchronized generators in the eastern interconnection see a reduced frequency and automatically respond.
 - The Net Intertie Scheduling limit (NISL) is not binding on SAR activations. However there are Tie-Line Inrush Limits that may be binding.
 - The IESO does not reserve inertia capacity for potential SAR activations.
- b. A consumer asked what are the impacts on dispatchable loads of the use and payback of SAR?

IESO response: When Ontario receives SAR, it reduces the need to activate operating reserve from Ontario resources. This reduces energy and uplift costs to Ontario consumers at the time of the contingency. There is no cost for SAR at the time of activation. When SAR is “repaid”, it is returned in kind as inadvertent energy which does place upward pressure on energy prices at the time of repayment.

When IESO provides SAR, it places upward pressure on energy price. When it is repaid to Ontario as inadvertent energy, it places downward pressure on price.

- c. A generator noted that other jurisdictions use “market-based” solutions to address contingencies e.g. recall capacity. Ontario should develop and use such solutions rather than out-of-market measures such as SAR.
- d. Several Working Group members requested that the IESO report on the use and impact of SAR and inadvertent energy: e.g. frequency, MW, peak vs off-peak, criteria for pay-back, price impacts.

Next steps:

- The IESO will report on the use and impact of SAR and inadvertent energy. Refer to action item AI 44-4.

Item #4: Review of Outstanding Issues – Issue 5, 11, 30, 33

John MacKenzie (IESO) made a presentation on the review of these four outstanding issues and action item 43-1. Refer to the presentation and other documents published on the IESO web site at the following links:

http://www.ieso.ca/imoweb/pubs/consult/mep2/MP_WG-20070823-Presentation_Issues_5_11_30_33.pdf

http://www.ieso.ca/imoweb/pubs/consult/mep2/MP_WG-20070823-Presentation_Issues_5_11_30_33.pdf

http://www.ieso.ca/imoweb/pubs/consult/mep2/MP_WG-20070719-Issue%2005-V2.pdf

http://www.ieso.ca/imoweb/pubs/consult/mep2/MP_WG-20070719-Issue_11-V2.pdf

http://www.ieso.ca/imoweb/pubs/consult/mep2/MP_WG-20070719_Issue%2030-V2.pdf

http://www.ieso.ca/imoweb/pubs/consult/mep2/MP_WG-20070719_issue33-V2.pdf

Member Questions, Comments and Discussion – Issue 5: Simultaneous Use of Ramping Generation Units for Energy and Operating Reserve and Action Item 43-1

- a. Agree to close Action Item AI 43-1
- b. Issue 5 to be kept open, with a high priority, to determine if maintaining the real-time unconstrained sequence treatment (i.e. the modified constraints in section 6.3.5B.1 and 6.3.5B.2 of Appendix 7.5) is appropriate.
- c. A generic or simplified example of the impact of the modified constraints on a single generation facility would be helpful in promoting stakeholder understanding.

Member Questions, Comments and Discussion – Issue 11: Comparing Treatment of Self-Scheduling Resources in Pre-Dispatch and Real-Time

- a. Agree to close.

Member Questions, Comments and Discussion – Issue 30: Forecast of Real-Time Price

- a. Agree to place on hold pending the results of the HOEP forecast being developed under the Day-Ahead Mechanism study.

Member Questions, Comments and Discussion – Issue 33: Rules for Determining Prices in Times of Shortage

- a. Agree to close.
- b. Retailer noted that market pricing must reflect system supply-demand conditions and must be part of the price setting mechanisms coming out of any Day-Ahead Mechanism.

Item #5: Review of Outstanding Issues – Issues 1 and 20

Jessica Greenberg (IESO) made a presentation on the proposal to close these two outstanding issues. Refer to the presentation and documents published on the IESO web site at the following links:

http://www.ieso.ca/imoweb/pubs/consult/mep2/MP_WG-20070823-Presentation_Issues_1_20.pdf

http://www.ieso.ca/imoweb/pubs/consult/mep2/MP_WG-20070823-ISSUE_01-Pre-Dispatch_Price_Uncertainty.pdf

http://www.ieso.ca/imoweb/pubs/consult/mep2/MP_WG-20070823_Issue20_Treatment_of_Imports_in_LMP.pdf

Member Questions, Comments and Discussion – Issue 1: Pre-Dispatch Price Uncertainty

- a. Generator stressed need for convergence of pre-dispatch prices to real-time prices. Such convergence would promote appropriate market responses to real-time conditions. The development of a day-ahead market or HOEP forecast may diminish the importance of pre-dispatch price to real-time price convergence, but convergence of day-ahead prices and/or pre-dispatch prices to real-time prices is necessary. Consumer also affirmed the value of generators and consumers responding to real-time prices.

Member Questions, Comments and Discussion – Issue 20: Treatment of Imports in a Congestion Pricing Regime

- a. A generator noted that it was not clear who, if anyone, in Ontario was examining locational marginal pricing (LMP). If there is no active review of LMP then it is not appropriate to close this issue. Placing this issue on hold would be more appropriate.
- b. A consumer requested that the IESO provide the working group with the scope of the LMP study being conducted under stakeholder engagement plan SE-25. Refer to Action Item AI 44-5.

Next steps

- IESO to publish draft meeting notes as soon as possible. Working Group members requested to provide any comments in addition to what is already included in the meeting notes to the IESO by September 18.

Item #6: Other Business

a. July 2007 Pricing Event Reports

Lavan Sivasundaram (IESO) presented the July 2007 pricing event reports. Refer to presentation published on IESO public web site at following link:

http://www.ieso.ca/imoweb/pubs/consult/mep2/MP_WG-20070823-July_Pricing_Events.pdf

Member Questions, Comments and Discussion

None

b. MPWG Forward Agenda

John MacKenzie (IESO) presented the MPWG Forward Agenda July 2007- June 2008. Refer to document published on IESO public web site at following link:

http://www.ieso.ca/imoweb/pubs/consult/mep2/MP_WG-20070823-MPWG_44_Forward_Agenda.pdf

Member Questions, Comments and Discussion

None.

Item #7: Market Surveillance Panel Market Monitoring Report

Dr. Neil Campbell (Chair of the Market Surveillance Panel) and IESO staff from the Market Assessment Unit (Anthony Clemente, Richard Penn, Jack Lubek) presented an overview of and detailed analysis from the most recent Market Surveillance Panel Market Monitoring Report. Refer to presentations published on the IESO public web site at the following links:

http://www.ieso.ca/imoweb/pubs/consult/mep2/MP_WG-20070828-Presentation_MSP_Report_Overview.pdf

http://www.ieso.ca/imoweb/pubs/consult/mep2/MP_WG-20070828_Presentation_MSP_Report_Detailed.pdf

Also refer to the report published on the Ontario Energy Board web site at the following link:

http://www.oeb.gov.on.ca/documents/msp/msp_report_20070810.pdf

Member Questions, Comments and Discussion

- a. In response to a number of clarification questions, Dr. Campbell and IESO staff provided the following responses:
- For each recommendation directed to the IESO, the IESO provides a formal response to the MSP. For the subject report, the IESO will present its responses to its own Board of Directors in September and publish responses.
 - Markets are not fundamentally about ‘fairness’; markets are fundamentally about “risk”. Participants are expected to assess the risk of transactions and take action they deem appropriate.
 - “Fairness” may not be the correct characterization of the Segregated Mode of Operation issue. A more correct characterization would be “consistency”.

- b. Working Group members made the following suggestions for future MSP reporting:
- Analysis of Canadian-U.S. currency exchange rate fluctuations impact on importing and exporting.
 - Development of a meaningful, consistent metric for reliability impacts.
 - Monthly or quarterly reporting so that problems can be identified and addressed earlier.
 - Market Surveillance Panel to focus on “forward looking” analysis; the IESO Market Assessment Unit to focus on “current market” analysis.

Next meeting: Thursday September 27, 2007.

Action Items

- AI 33-1: IESO to include a review of the definition of allocative and dynamic efficiencies on agenda of future MPWG meeting – preferably the November 3rd 2006 meeting.
Status: open.
- AI 34-5: IESO to report back at December MPWG meeting on peak vs average efficiencies and price impact analysis.
Status: open. Only “gross inefficiencies” analysis presented and discussed at December 2006 meeting.
- AI 36-1: IESO to determine at what level of scheduling of Control Action Operating Reserve would the IESO have reliability concerns.
Status: open.
- 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.
- AI 38-2: OPG member to discuss with IESO staff additional gross efficiencies analysis on the peak vs average demand forecast issue.
Status: closed – refer to discussion under agenda item 1(b).
- AI 43-1: IESO to provide further background information and rationale on the treatment of operating reserve and energy in the RTU sequence.
Status: closed – refer to discussion under agenda item 4(a).

- 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: open
- AI 44-1: IESO to present information regarding the OPA demand response programs and integration into the IESO-administered markets and IESO-controlled grid at the next MPWG meeting (September 27th, 2007)
Status: open
- 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
- AI 44-3: IESO to provide plan/schedule for addressing the “Exporting Operating Reserve Initiative” at next Working Group meeting (27 Sep 07).
Status: open
- AI 44-4: IESO to report on the use and impact of Shared Activation of Reserve and inadvertent energy.
Status: open
- 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