

Market Pricing Working Group

-- DRAFT TRACKING DOCUMENT OF PRICING ISSUES AND INITIATIVES --

Version: May 25, 2004

ID	GENERAL TOPICS & "SUB-ISSUES" /INITIATIVES	DATE RAISED & DESCRIPTION	STATUS	NEXT STEPS	Intentionally Left Blank	ADDITIONAL REFERENCES
A	MARKET INFORMATION					
A.1	Pre-Dispatch Price Bandwidths	Noted in May 2003 Pricing Team Report. "Price bands" published on IMO web site to indicate sensitivity of pre-dispatch prices to changes in demand: would help participants anticipate the extent of price volatility.				http://www.theimo.com/imoweb/pubs/consult/mktOps/mo_paper_PricingIssues_20030528.pdf
A.2	Publishing Nodal Price Data	Noted in December 2003 as part of Day-Ahead Market working group historical nodal pricing analysis.	[CLOSED]	N/A		http://www.theimo.com/imoweb/marketdata/marketSummary.asp
A.3	Information to Explain Dispatch Optimization Process	Noted in May 2004 at 1 st Market Pricing working group stakeholder meeting.				
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B	MARKET CLEARING PRICE FORMULATION					
B.1	Effects of 12-times ramp rate	12-times ramp rate introduced in April 2002 to address periods of large demand change. When determining the real-time uniform market clearing price, it is assumed that dispatchable facilities have an energy ramping capability that is 12 times higher than their actual ramping capability (i.e. 60 minutes of ramping capability in a 5-minute period).	[open]	No changes to this feature have been made. Some analysis has been performed by the internal pricing team and presented at MOSC on December 3, 2003.		http://www.theimo.com/imoweb/pubs/consult/mktOps/mo_pres_PricingIssuesUpdate_2003Dec03.ppt
B.2	Simultaneous Use of Ramping Generation Units for Energy and Operating Reserve	Noted by Day-Ahead Market working group. Current algorithm will not simultaneously schedule a generating unit at its maximum ramp capability for energy and reserve. The simultaneous use of ramping and reserve would be allowed under the proposed Day-Ahead Market design.	[open]			

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B.3	Effects of Emergency Control Actions on Market Clearing Prices	Noted in May 2004 at 1 st Market Pricing working group meeting.	[open]			
B.4	Imports Setting Price in Real-Time	Noted by Day-Ahead Market working group. Imports cannot set price in the current real-time market. Imports could set real-time price in the proposed Day-Ahead Market design.	[open]			
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C	DIFFERENCE BETWEEN PRE-DISPATCH AND REAL-TIME PRICE					
C.1	Use of Peak Demand Load Forecast in Pre-Dispatch	Noted by Market Surveillance Panel				
C.2	"Over-Forecasting", especially in hours 22 through 24	Noted in Market Surveillance Panel report #2				http://www.theimo.com/imoweb/pubs/marketSurv/ms_mspReport_20030331.pdf
C.3	Comparing Treatment of Self-Scheduling Resources in Pre-Dispatch and Real-Time	Noted by Market Surveillance Panel				

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C.4	Under-commitment of Available Generation	Noted in May 2003 Pricing Team Report as Spare Generation On-Line. Insufficient amounts of available generation was being committed by participant, to address disturbances or changes in system conditions close to real-time, thereby requiring IMO to rely on out of market resources. Arises from risk of not recovering start-up and min generation costs.	[CLOSED] Implemented Generation Cost Guarantee provisions in market in August 2003. Arrangement entails guaranteed "start-up", "speed no-load", and "minimum generation" costs to eligible resources.	N/A		http://www.theimo.com/imoweb/pubs/consult/mktOps/mo_paper_PricingIssues_20030528.pdf
C.5	Impact of Out of Market Resources on the Market	Noted in May 2003 Pricing Team Report:	[open] Use of out-of-market resources integrated into pre-dispatch sequence by applying a price to each of those resources and inserting them in the market as operating reserve offers. Currently, 400MW of Control Action Operating Reserve (CAOR) is offered in the market representing load reduction that would be realized if a 3% voltage reduction was implemented. Relates to the predictable and transparent integration of out-of-market resources into the marketplace.	Dynamic scheduling of Voltage Reduction CAOR based on Primary Demand forecast; Including additional Control Actions as CAOR (i.e. not meeting 30 min. reserve requirement, emergency purchases)		
C.6	Hour(s)-Ahead Price Signal Uncertainty	Noted in May 2003 Pricing Team Report. Hour-Ahead Dispatchable load initiative raised as a way to increase the amount of price-responsive load within the IMO-administered markets, particularly in view of the limited extent to which certain loads are able to respond to five-minute dispatch instructions due to physical limitations.	[CLOSED] Hour-Ahead Dispatchable Load Offer Guarantee that would compensate load for reducing its consumption on the basis of pre-dispatch when real-time price was such that the load would not have reduced its consumption. Allows to submit offers to reduce consumption and indicate the amount of consumption reduction that would occur at a specific price if dispatched. Implemented in May 2003. Current participation consists of ~235MW.	N/A		
C.7	Restriction on Changes to Dispatch Data between 4 and 2 hours ahead of Dispatch Hour	Noted in May 2003 Pricing Team Report. Relates to increasing the ability of Market Participants to react to market or system changes occurring prior to the dispatch hour.	[CLOSED] Unrestricted changes to dispatch data up to ~2 hours ahead of dispatch hour allowed. Introduced on trial basis in 2002, implemented in June 2003.			
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D	CONGESTION PRICING					
D.1	Historical Analysis of Nodal Prices	Entails: (a) total pricing comparison - to consistently compare uniform and nodal prices and show how these prices have varied over time; (b) Spatial analysis - to show how nodal prices have varied across Ontario	Historical nodal pricing analysis performed as a part of the Day-Ahead Market Working Group in late 2003 – study spanned period of October 04 2002 to December 31 2003. Analysis undertaken to help assess what might have been the impact of nodal pricing. Results presented at various stakeholder forums and posted on IMO web.	Extend analysis to March 2004[??]		http://www.theimo.com/imoweb/pubs/consult/merge/DAM_WG_2003Dec11-NodalAnalysis.pdf
D.2	Comparison of Operating Reserve Prices in Nodal and Uniform Pricing Regimes					
D.3	Line Loss Factors	Noted during historical analysis of nodal prices.				
D.4	Treatment of Imports in a Nodal Regime	Noted during historical analysis of nodal prices.				
D.5	Time Lag Associated with Contingency Detection					
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E	CONGESTION MANAGEMENT SETTLEMENT CREDITS					
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F	IMPORTS/EXPORTS					
F.1	Reducing Frequency of Failed Intertie Transactions	Noted in May 2003 Pricing Team Report. Three avenues to reduce failed intertie transactions: 1. continued enforcement of compliance with Market Rules 2. discussing measures to better align interjurisdictional trading with neighbouring systems 3. investigating potential improvements to the bidding/offering process for exports and import	[open] 1. Market monitoring and assessment ongoing 2. Enhancements to protocol with NYISO being developed; work is ongoing with MISO to increase transmission availability and reassignment; work ongoing with PJM to address PJM ramp rate limitations 3. IMO reviewing offer/bid process and other ISO checkout processes to simplify the import/export process.			
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