

# Market Rule Amendment Submission

This form is used to request an amendment to, or clarification of, the *Market Rules*. Please complete the first four parts of this form and submit the completed form by email or fax to the following:

Email Address: <u>Rule.Amendments@theIMO.com</u> Fax No.: (416) 506-2847 Attention: Market Rules Group **Subject:** *Market Rule Amendment Submission* 

All information submitted in this process will be used by the *IMO* solely in support of its obligations under the *Electricity Act, 1998*, the *Ontario Energy Board Act, 1998*, the *Market Rules* and associated policies, standards and procedures and its licence. All submitted information will be assigned the *confidentiality classification* of "public" upon receipt. You should be aware that the *IMO* will *publish* this *amendment submission* if the *Technical Panel* determines it warrants consideration and may invite public comment.

Terms and acronyms used in this Form that are italicized have the meanings ascribed thereto in Chapter 11 of the *Market Rules*.

# PART 1 – SUBMITTER'S INFORMATION

Please enter contact information in full

Name: IMO Staff		
(if applicable) <i>Market Participant /</i> <i>Metering Service Provider</i> No. <sup>1</sup> :	Market Participant Class:	
Telephone: 416 506-2801	Fax: 416 506-2847	

Email Address: rule.amendments@theimo.com

# PART 2 – MARKET RULE AMENDMENT SUBMISSION INFORMATION

Subject: Day-Ahead Market				
Title: Day-Ahead Market and Real-Time Market Integration				
Nature of request (please indicate with X):AlterationDeletionAdditionClarification				
Chapter: 7	Appendix:	Sections:		
Sub-sections proposed for amending/clarifying : Various				

<sup>&</sup>lt;sup>1</sup> This number is a maximum of 12 characters and does not include any spaces or underscore.

Provide a brief description of the issue and reason for the proposed amendment. If possible, provide a qualitative and quantitative assessment of the impacts of the issue on you and the *IMO-administered markets*. Include the Chapter and Section number of the relevant market rules.

In consultation with market participants and other stakeholders, the IMO has developed a high level design of a day-ahead market (DAM)<sup>1</sup>. The IMO Board has endorsed proceeding with the development of a day-ahead market and has directed the IMO to proceed with the detailed design and market rule amendments for the DAM consistent with the high-level design. Market rule amendments are needed to specify the integration of the day-ahead market with the existing real-time market. The following is a brief summary of the required integration. The Day-Ahead Market Real-Time Market Integration design document<sup>2</sup> provides further details.

Generation facilities and import transactions that receive a financially binding schedule in the DAM are expected, but not required, to meet that schedule for the dispatch day. Market participants can "buyout" of their day-ahead market financially binding schedule (i.e. not inject the schedule quantity and effectively buy the replacement energy from the real-time market) provided that the IMO determines that there will be no adverse impact on the reliable operation of the IMO-controlled grid as a result. The IMO assesses the reliability of dispatch day operation on the basis that those financially binding schedules will be met. Pre-dispatch and real-time scheduling activities for the dispatch day should also be conducted on the basis of those schedules being met and on the basis of the corresponding dispatch data for those facilities so that there is consistency among the DAM, pre-dispatch and real-time reliability evaluations for the dispatch day. This requires the transfer and translation of DAM dispatch data are transferred and translated should be codified in the market rules to establish transparency and accountability in regards to the transfer and translation.

Additional restrictions are required on market participant changes to dispatch data after the data has been transferred and translated from the DAM to the real-time market so that the IMO can assess impact on reliability of such changes. The IMO would only disallow changes for reliability reasons. The additional restrictions and the IMO authorities also need to be codified to establish transparency and accountability.

The IMO is obligated under NERC Policy 9 to share results of its security analysis for a dispatch day with other reliability coordinators by 16:00 EST of the pre-dispatch day. This requirement, along with the need for the initial pre-dispatch schedule to reflect DAM results, will affect the timing of the first publication of the pre-dispatch run and the timing of other IMO produced reports.

The material changes in regards to real-time market operation and processes with the introduction of the DAM are as follows:

Dispatch Data for Generation Facilities (e.g. offers; schedules and forecasts of energy production)

<sup>&</sup>lt;sup>1</sup> High Level Design Strawman can be found at:

http://www.theimo.com/imoweb/pubs/consult/mep/DAM\_WG\_Strawman-4\_0.pdf

<sup>&</sup>lt;sup>2</sup> Detailed design document for DAM RTM Integration can be found at:

 $http://www.theimo.com/imoweb/pubs/consult/mep/dam_wg_IMO_DES_0015\_DAM_RTM_Integration_1.pdf$ 

- 1. For dispatchable generation facilities that receive a constrained or unconstrained schedule in the day-ahead market, the dispatch data submitted for that facility in the day-ahead market will be transferred and translated and used as an initial set of dispatch data for real-time market operations for that facility. As noted above, this transferal and translation is done so that pre-dispatch and real-time schedules for the dispatch day are determined on the basis of the DAM results. The transferal and translation will result in the following:
  - Any minimum generation block specified by the market participant for the generation facility will be included at a price of negative MMCP (i.e. -\$2000) so that the minimum generation block will be included in pre-dispatch and real-time schedules for the dispatch day.
  - The remaining price-quantity pairs in the DAM dispatch data will be transferred, unchanged, to real-time market dispatch data.
  - Generation facility energy ramp rates, operating reserve offers and daily energy limits will be transferred with no change to real-time market dispatch data.
  - Any DAM dispatch data for a facility transferred to real-time market dispatch data will overwrite any existing real-time dispatch data for the facility (including standing real-time market dispatch data).
- 2. For non-dispatchable generation facilities (i.e. self-scheduling, transitional scheduling and intermittent generation facilities) only the schedule (for self-scheduling and transitional scheduling generation facilities) or forecast (for intermittent generation facilities) of energy production for the dispatch day submitted by the market participant for the DAM is transferred, unchanged, to the real-time market. The transferred schedules and forecasts will also over-write any existing real-time schedule or forecast for the facility.

#### Dispatch Data for Load Facilities

Due to the number of the options available for load bidding in the DAM, there is no translation of load facility dispatch data from the DAM to the real-time market.

#### Dispatch Data for Imports and Exports

DAM dispatch data for imports and exports will be transferred, unchanged, into real-time market dispatch data. The single p-q pair for a DAM block import or block export is translated as the first of 20 p-q pairs in the real-time market dispatch data. There is no translation of any DAM schedule for an import or export into the real-time market.

Restrictions on Revisions to Real-Time Market Dispatch Data

- 1. In addition to the existing restrictions on changes to real-time market dispatch data (section 3.3 of Chapter 7 of the market rules) the following additional restrictions are required for dispatchable generation facilities that receive a schedule in the DAM,
  - A market participant may withdraw an entire offer from the real-time market with IMO approval. The IMO would approve such a withdrawal unless there would be an adverse impact on the reliable operation of the IMO-controlled grid. (Refer to discussion of withdrawal below)
  - For generators that submitted a minimum generation level in the DAM, the quantity, price and ramp rate for the offer lamination associated with that minimum generation level cannot be modified under any circumstances. This restriction does not affect the right of a market participant to take action or not follow a direction from the IMO in order or safety,

environmental, equipment damage or legal reasons;

- For all other offer laminations, the real-time market dispatch data offer price can be raised or lowered without restriction (but may be subject to market surveillance); and the total offer quantity can only be lowered below the DAM scheduled quantity with IMO approval. The IMO would approve such a change unless there would be an adverse impact on the reliable operation of the IMO-controlled grid.
- 2. For an import transaction that received a DAM schedule (NTD: this may need to be changed if property scheduling of DAM imports is permitted see above NTD):
  - The price of the real-time market offer can be changed by the market participant without restriction (but may be subject to market surveillance); and
  - The quantity of the real-time market offer can only be reduced by the market participant below the DAM scheduled quantity or be withdrawn from the market by the market participant with approval of the IMO.
- 3. No other changes to the restrictions on revisions to real-time market dispatch data are identified with respect to load facilities, non-dispatchable generation facilities, or export transactions.

### IMO Preparation and Publication of System Status Reports (SSRs)

In order to allow market participants to be aware of system conditions expected by the IMO for the dispatch day before the closing of the DAM offer/bid window, the SSR for the dispatch day that is currently published at 10:30 EST of the pre-dispatch day will be published at 9:00 EST of the dispatch day -60 minutes before the closing of the DAM offer/bid window.

Following the completion of the DAM run, a "final" SSR for the dispatch day will be published by 15:30 EST of the pre-dispatch day. This is a new reporting obligation on the IMO.

The IMO will continue to revise and re-issue SSRs for the dispatch day if there are material changes to the information in the previous SSR, as prescribed in section 12.1.1.4 and 12.1.1.5 of chapter 7.

# Changes to Timing of Pre-Dispatch Schedules

In order to incorporate the results of the DAM and translation/transferal of DAM dispatch data to the real-time market, the first release and publication of pre-dispatch schedule results for the dispatch day shall change from by 12:00 EST to by 17:00 EST of the pre-dispatch day. The IMO shall continue to revise and re-issue the pre-dispatch schedule as conditions change as currently prescribed in section 5.1.3 of chapter 7.

#### Market Participant Withdrawal of Offers/Bids from Real-Time Market

A market participant may, for economic or other reasons, wish to:

- In the case of a generation facility or import, withdraw from the real-time market the offer for that generation facility or import that received a DAM financially binding schedule, or
- In the case of a load facility with a non-dispatchable price responsive load component, consume more energy than specified in their DAM schedule.

A market participant must request IMO approval for such action at least two hours before the start of

the action required to meet its schedule. For a generation facility, this means two hours before the synchronization time implied by its schedule. For an import, this means two hours before the transaction was scheduled to start. For a load, this means two hours before the scheduled load reduction. This two hour notice is required to allow sufficient time for replacement resources to be scheduled if necessary.

The IMO is required to approve such a request unless there is an adverse impact on reliable operation of the IMO-controlled grid. If the withdrawal is granted, the market participant is <u>not</u> relieved of the financial obligation associated with its DAM schedule, and is also subject to recovery (i.e. claw-back) of all or part of any DAM production cost guarantee related to the facility schedule.

### IMO De-Commitment Offers/Bids from Real-Time Market

The IMO may, for reliability reasons only, direct a market participant to withdraw in the real-time market the offer for a generation facility or import that received a DAM financially binding schedule. Such IMO direction is considered a de-commitment. The IMO would be required to notify the market participant of the need for a de-commitment as soon as practicable after the IMO determines that the de-commitment is required. Facilities that are de-committed will not be subject to recovery (i.e. clawback) of any DAM production cost guarantee related to the facility schedule.

# PART 4 – PROPOSAL (BY SUBMITTER)

Provide your proposed amendment. If possible, provide suggested wording of proposed amendment.

It is proposed that the above elements of integration of the day-ahead market into the real time market be incorporated into Chapter 7 of the existing market rules rather than in the new Chapter 12 is proposed as the above actions, obligations and permissions for the IMO and the market participants relate to the pre-dispatch and real-time activities and time frames.

The following specific changes to Chapter 7 are required:

Section 3.3 – Dispatch Data Submissions

- Incorporate transferal and translation of DAM schedules and dispatch data for generation facilities that receive a DAM schedule
- Incorporate transferal of DAM dispatch data for imports and exports that receive a DAM schedule
- Identify the timing of the transferal and translation and the over-writing of existing real-time market dispatch data
- Identify additional restrictions on market participant revisions to real-time market dispatch data, including withdrawal.

Section 3.6 – Operating Reserve Offers

• Incorporate transferal of DAM dispatch data, including timing and over-writing of existing realtime market dispatch data

<u>Sections 3.7, 3.8, 3.9 – Self-Scheduling Generation Facilities, Intermittent Generation Facilities and</u> <u>Transitional Generation Facilities</u> • Incorporate transferal of DAM dispatch data, including timing and over-writing of existing realtime market dispatch data.

#### Section 3.9 – Transmission System Information

• Change timing of pre-dispatch day submissions to align with DAM timing and revised predispatch timing

#### Section 3.10 – IMO De-Commitment of Facilities (new)

• Identify conditions under which IMO may de-commit facilities

<u>Section 5.1 – Purpose and Timing of Pre-dispatch Schedules; Section 5.5 – Release of Pre-dispatch</u> <u>Schedule Information</u>

• Change timing of first release of pre-dispatch schedule to 17:00 EST.

#### Section 12.1 – IMO System Status Reports

- Change timing of 10:30 EST report to 09:00 EST
- Add new SSR report to be published at 15:30 EST

### PART 5 - FOR IMO USE ONLY

Technical Panel Decision on Rule Amendment Submission				
MR number: MR-00268				
Date submitted to Technical Panel: 14 Oct 04				
Accepted by Technical Panel as: General Urgent Minor   (please indicate with X) N/A Date: 20 Oct 04				
Criteria for acceptance: N/A				
Priority: High				
Criteria for assigning priority: N/A				
Not accepted (please indicate with X):				
Clarification/interpretation required (please indicate with X):				
Technical Panel minutes reference: IMOTP 151-1				

# PART 5 - FOR IMO USE ONLY

*Technical Panel* Comments:

**Clarification is required regarding the following points:** 

- 1. The expectation that market participants will meet their DAM schedule in real-time, but are not obligated to do so, needs to be better explained so that market participants understand what their options are regarding fulfilling their DAM schedule in real-time.
- 2. Transmitter information requirements for the real-time and day-ahead markets.

The Panel also noted that the suggested changes to the timing of the determination and release of the first pre-dispatch schedule (i.e. from 12:00 EST to 17:00 EST) was not appropriate. The release of the first pre-dispatch schedule at 17:00 EST would not allow market participants sufficient time to assess and react to the pre-dispatch results before the close of business on the pre-dispatch day.