



## Market Rule Amendment Proposal

### PART 1 – MARKET RULE INFORMATION

<b>Identification No.:</b> MR-00220-R00	
<b>Subject:</b> System Operations and Physical Markets	
<b>Title:</b> Hour-Ahead Dispatchable Loads - Definitions	
<b>Nature of proposal</b> (please indicate with X): <input checked="" type="checkbox"/> Alteration <input type="checkbox"/> Deletion <input type="checkbox"/> Addition	
<b>Chapter:</b> 11	<b>Appendix:</b>
<b>Sections:</b>	
<b>Sub-sections proposed for amending:</b>	

### PART 2 – PROPOSAL HISTORY

Version	Reason for Issuing	Version Date
1.0	Technical Panel (TP 122) Review	13 March 2003
2.0	Technical Panel (TP 123) Review	26 March 2003
3.0	Incorporate Technical Panel comments and post for stakeholder review and written comment	7 April 2003
4.0	Submit for Technical Panel consideration and vote	16 April 2003
5.0	Recommended by Technical Panel and Submitted to IMO Board for approval	22 April 2003
6.0	Approved by IMO Board	2 May 2003

**Approved Amendment *Publication Date:* 7 May 2003**

**Approved Amendment *Effective Date:* 4 June 2003**

### PART 3 – EXPLANATION FOR PROPOSED AMENDMENT

Provide a brief description of the following:

- The reason for the proposed amendment and the impact on the *IMO-administered markets* if the amendment is not made
- Alternative solutions considered
- The proposed amendment, how the amendment addresses the above reason and impact of the proposed amendment on the *IMO-administered markets*.

These market rule amendments propose the introduction of the hour-ahead dispatchable load mechanism as a means to increase the amount of price responsive loads within the *IMO-administered markets*. These loads would also afford the participating loads a measure of price certainty.

Since market commencement, a number of issues have been identified regarding the *IMO-administered markets*, including:

- The obligations imposed on, and provisions for, dispatchable loads are not compatible with the operational characteristics of the majority of loads in the *IMO-administered markets* that might otherwise be willing to have their operations respond to (near) real-time market price for electricity. For example, most loads cannot respond to 5-minute dispatch instructions due to physical process requirements and limitations. In addition, loads can generally better predict how much they can reduce their consumption if they shut down part of their process rather than predict how much the rest of their facility will consume.
- There are times when pre-dispatch prices do not provide a reasonable indication of real-time prices. Ontario loads are therefore not able to rely on pre-dispatch price signals in order to make necessary business decisions whether or not to change consumption in response to price. This phenomena currently results in a reduction in overall price responsiveness within the *IMO-administered market*.
- In tight supply-demand situations, Ontario is heavily reliant on imports of energy to meet domestic demands. The level of imports has reached as high as 4000 MW an hour. Although competition does exist in the import market, more domestic competition against imports is judged to be of benefit to the market, especially in times of either tight supply-demand or high market prices.

Ontario load customers have advised the *IMO* that the introduction of an Hour-Ahead Dispatchable Load mechanism, as defined in these market rule amendments, would help address the above three issues.

This mechanism is intended to provide a transparent and predictable incentive to participating loads to reduce their energy withdrawals. These reductions would be scheduled on the basis of pre-dispatch prices and be reflected in the applicable pre-dispatch and real-time schedules and prices. This mechanism would provide a guarantee of price certainty for verifiable reductions in energy withdrawals that would not have occurred otherwise.

The Hour-Ahead Dispatchable Load mechanism would have the following main features:

- Market participants would register their applicable facility as an hour-ahead dispatchable load facility. The technical and metering requirements for a registered hour-ahead dispatchable load facility would be the same as for a registered non-dispatchable load facility. (refer to MR-00220-R01).
- Participants would be able to submit offers to reduce consumption for the registered hour-ahead

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dispatchable load facility. These offers would be comprised of price-quantity pairs. Each price-quantity pair would indicate the consumption reduction that would be effected at the specified price if dispatched. (refer to MR-00220-R03)

- Participants would be obligated to keep their offers up to date and in keeping with the capability of their facility, in accordance with the existing applicable market rules regarding dispatch data. Participants would be able to make revisions to dispatch data for an hour-ahead dispatchable load without restriction up to three hours ahead of the dispatch hour. (refer to MR-00220-R02)
- Hour-Ahead Dispatchable Loads would be eligible to submit offers into the energy market. They would not be eligible to make offers into the operating reserve market. Providing operating reserve requires real-time dispatch capability and hour-ahead dispatchable loads are not dispatchable in real-time. For the same reason, an hour-ahead dispatchable load facility cannot also be a 5-minute dispatchable load facility. (refer to MR-00220-R01)
- Valid offers from hour-ahead dispatchable loads will be evaluated in the pre-dispatch timeframe only. Hour-ahead dispatchable loads shall be selected and scheduled for a given dispatch hour on the basis of the pre-dispatch schedule and price three hours ahead of that dispatch hour. (refer to MR-00220-R06)
- If an hour-ahead dispatchable load facility is selected and scheduled to reduce consumption for the dispatch hour, the IMO will send that schedule to the affected market participant. This schedule shall be a dispatch instruction. (refer to MR-00220-R06-R07)
- The IMO shall reduce the pre-dispatch schedule market demand in the applicable hours by the aggregate amount of hour-ahead dispatchable load reductions. (refer to MR-00220-R05)
- Upon receipt of a dispatch instruction, the market participant shall be obligated to reduce its consumption at the facility by the amount and for the hour specified in the dispatch instruction. The participant would be obligated to achieve the scheduled reduction by the start of the applicable dispatch hour. (refer to MR-00220-R08)
- If the real-time HOEP in the dispatch hour turns out to be less than the offer price of a scheduled hour-ahead dispatchable load facility, the IMO shall make an settlement amount payment to the applicable market participant for the difference between the accepted offer price and HOEP. This Hour-Ahead Dispatchable Load Guarantee (HADLOG) is intended to compensate the load for reducing its energy consumption on the basis of the pre-dispatch price when the real-time price was such that the load would not have reduced its consumption. (refer to MR-00220-R10 & R12)
- The loads will also be settled for their actual consumption at HOEP. (refer to MR-00220-R11)
- Compliance with dispatch instructions will be assessed by the IMO after the fact, through the use of revenue or operational telemetry, if available, or through some other methodology. Compliance would be determined against the baseline profile of energy withdrawals established for the facility. The IMO and the market participant must agree on the methodology of measuring the energy withdrawal and the baseline for compliance purposes as pre-conditions for the market participant to be able to register its facility as an hour-ahead dispatchable load. If found to be non-compliant and an HADLOG was paid, the IMO will “claw back” that portion of the HADLOG such that only the actual reduction attracts a HADLOG payment. (refer to MR-00220-R14)
- The IMO would be able to restrict the number of facilities that can register as hour-ahead

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dispatchable loads, and the IMO would be able to suspend or restrict the operation of the market rules regarding hour-ahead dispatchable loads. The need for these restrictions is to recognize the implementation issues that may arise (refer to R01 and R17). The need for the ability to suspend operation is to address any unforeseen adverse impacts on the market or reliability (refer to R01).

These specific amendments in MR-00220-R00 establish the following definitions for use throughout the market rules:

- Hour-Ahead Dispatchable Load, specifying that this term refers to a facility, and describing in general terms the nature of this type of facility.
- A revision to the definition of “offer” to reflect that an offer from an hour-ahead dispatchable load is an offer to reduce energy withdrawals rather than an offer to provide a commodity. This change will allow the use of the term “offer” in regards to hour-ahead dispatchable loads.
- Hour-Ahead Dispatchable Load Baseline defined as the profile of energy withdrawals for the hour-ahead dispatchable load that would be expected to have occurred absent any IMO dispatch instruction to reduce energy withdrawals. It is this baseline, developed and updated in accordance with the applicable market manual and agreed to by the IMO and the market participant, that would be used as the benchmark to determine if the hour-ahead dispatchable load actually reduced its energy withdrawals in accordance with a dispatch instruction.

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*Hour-ahead dispatchable load means a facility that is subject to dispatch by the IMO and in respect of which an offer for reduction in energy withdrawals in a given dispatch hour is selected or set based on the price of energy in the applicable pre-dispatch schedule for that dispatch hour;*

*offer* means a statement of the quantities of a commodity that a seller will provide at different *market prices* for that commodity in the *real-time market* or the *procurement market* *or, in the case of an offer related to an hour-ahead dispatchable load, a statement of the energy withdrawals at the facility that the market participant will reduce at different prices in the applicable pre-dispatch schedule;*

*hour-ahead dispatchable load baseline means the profile of energy withdrawals for an hour-ahead dispatchable load determined in accordance with the applicable market manual and that identifies the energy withdrawals that would otherwise have been expected to occur absent an IMO dispatch instruction to the hour-ahead dispatchable load to reduce its energy withdrawals;*

**PART 5 – IMO BOARD COMMENTS**





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### PART 1 – MARKET RULE INFORMATION

<b>Identification No.: MR-00220-R01</b>	
<b>Subject: System Operations and Physical Markets</b>	
<b>Title: Hour-Ahead Dispatchable Loads – Facility Registration</b>	
<b>Nature of proposal (please indicate with X):</b> ___ Alteration ___ Deletion <u>X</u> Addition	
<b>Chapter: 7</b>	<b>Appendix:</b>
<b>Sections: 2.2</b>	
<b>Sub-sections proposed for amending: 2.2.3.8 (new); 2.2.6.9 (new) and 2.2.24 (new)</b>	

### PART 2 – PROPOSAL HISTORY – REFER TO MR-00220-R00

Version	Reason for Issuing	Version Date

**Approved Amendment *Publication* Date:**

**Approved Amendment *Effective* Date:**

### PART 3 – EXPLANATION FOR PROPOSED AMENDMENT

Provide a brief description of the following:

- The reason for the proposed amendment and the impact on the *IMO-administered markets* if the amendment is not made
- Alternative solutions considered
- The proposed amendment, how the amendment addresses the above reason and impact of the proposed amendment on the *IMO-administered markets*.

Refer to MR-00220-R00.

These rule amendments detail the facility registration requirements for an hour-ahead dispatchable load. In addition to the existing facility registration requirements, the following new provisions apply specifically to an hour-ahead dispatchable load.

Section 2.2.3.8 (new): this section prescribes that if the IMO and the applying market participant cannot agree on the methodology of determining compliance with dispatch instructions issued to the facility, the IMO is not obligated to register the facility as an hour-ahead dispatchable load. This condition is necessary because it will likely be necessary to use different methodologies to assess a given facility's compliance with dispatch instructions. The IMO believes such flexibility in the methodology of determining compliance is appropriate in order to reduce costs to market participants wishing to register their facility as an hour-ahead dispatchable load i.e. the applying market participant may not need to install the metering typically used in monitoring compliance. Such flexibility could remove a potential barrier to a market participant wishing to become an hour-ahead dispatchable load. The IMO preferred methodologies would be first, revenue metering registered with the IMO for the load being reduced, and second, operational metering on the load being reduced. This type of metering may not exist for some potential hour-ahead dispatchable loads. Some other methodology would then need to be agreed upon by the IMO and the applying market participant.

Section 2.2.3A (new): permits the IMO to restrict the number of facilities that can register as hour-ahead dispatchable loads in recognition of the limitations that may arise from the manual processes that are to be used to implement this mechanism.

Section 2.2.3B(new) permits the IMO to suspend the operation of the market rules applicable to hour-ahead dispatchable loads if their application has an adverse impact on the *IMO-administered markets* or the reliable operation of the *IMO-controlled grid*. This authority is judged to be necessary in order to address concerns that this mechanism would be implemented untested in regards to its impacts, and that there may unforeseen consequences to its implementation. In order to safeguard market participants interests, the IMO would be obligated to report such action promptly to market participants and to the IMO Board, with reasons.

Section 2.2.6.9 (new): specifies that in order to register as an hour-ahead dispatchable load facility, the market participant must certify that the facility has a dispatchable capacity of at least 1 MW, consistent with the requirements for other dispatchable facilities. This section also specifies that the market participant must provide metering or other information that would be used in the determination of the means of measuring compliance with dispatch instructions i.e. measurement of energy reduction and baseline. This section also permits hour-ahead dispatchable load to be aggregated, like any other registered facilities, provided they meet the applicable market rules requirements. It should be noted that wholesale consumers have the obligation under section 3.5.1.2 of chapter 3 of “promptly informing the *IMO* of any change or anticipated change in the status of any *facility* or equipment that it operates and that is under the *dispatch* control of the *IMO* as described in these *market rules* or of any other



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change or anticipated change in its *facilities* or equipment that could have a material effect on the *IMO-controlled grid* or the operation of the *IMO-administered markets*". This obligation would also apply to the HADL market participant in that they would be obligated to keep the IMO informed of any change that would impact the participant's hour-ahead dispatchable load baseline.

Section 2.2.24 (new): Two restrictions are placed on the registration of hour-ahead dispatchable loads; namely, they can only participate in the energy market and they cannot also be a 5-minute dispatchable load facility. These facilities cannot participate in the operating reserve market as they are not dispatchable in real-time, a capability that is necessary in order to provide operating reserve. The restriction on also not being a 5-minute dispatchable load is necessary to attract additional price-responsive loads other than those that are currently or intending to be 5-minute dispatchable.

**PART 4 – PROPOSED AMENDMENT****2.2 Registered Facilities**

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2.2.3 The *IMO* shall approve an application for registration of a *facility* or *boundary entity* as a *registered facility* if:

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2.2.3.6 the applying *market participant* certifies to the *IMO* in writing that all of the *facilities* and equipment to which its application for registration relates complies with the requirements identified in any applicable *preliminary assessment* or *system impact assessment* associated with that *market participant's facilities* or equipment; ~~and~~

2.2.3.7 the applying *market participant* certifies to the *IMO* that all of the *facilities* and equipment to which its application for registration relates does not differ materially from the configuration or technical parameters that were used by the *IMO* as the basis for which it issued any applicable approvals for such new or modified *connection* in accordance with section 6.1.14 to 6.1.18 of Chapter 4, unless the ~~applicable~~ applicable *market participant* or *connection applicant* has obtained the approval of the *IMO* for the change in configuration or technical parameter in accordance with section 6.1.22 of Chapter 4; ~~and-~~ and-

2.2.3.8 subject to sections 2.2.3A and 2.2.3B, in the case of a *facility* wishing to register as an *hour-ahead dispatchable load*, ~~that~~ the *IMO* and the applying *market participant* agree on the methodology of determining compliance with *dispatch instructions* for that *facility*, including the

means of measuring the actual reduction in energy withdrawals as well as the hour-ahead dispatchable load baseline.

2.2.3A The IMO may restrict the number of facilities that can be registered at any point in time as hour-ahead dispatchable loads.

2.2.3B The IMO may suspend the operation of the market rules applicable to hour-ahead dispatchable loads, if the operation has an adverse impact on the IMO-administered markets or the reliable operation of the IMO-controlled grid. The IMO shall promptly notify market participants and the IMO Board of such action with reasons.

2.2.6 Where the facility sought to be registered is within the IMO control area, the information required for registration as a registered facility shall, subject to any lesser requirements that may be published by the IMO in respect of the information required for registration of a given class or size of facility, include, but not be limited to:

2.2.6.9 for a facility that will be subject to the IMO's dispatch instructions as an hour-ahead dispatchable load, certification that the facility has a minimum dispatchable load capacity of 1 MW and information regarding the methodology of determining compliance with dispatch instructions, including the means of measuring the actual reduction in energy withdrawals as well as the hour-ahead dispatchable load baseline. Individual facilities or units may be aggregated to meet this minimum capacity requirement if they meet the aggregation requirements of section 2.3.

2.2.24 An hour-ahead dispatchable load shall only be registered to participate in the energy market. An hour-ahead dispatchable load shall not be also registered as a dispatchable load facility.

**PART 5 – IMO BOARD COMMENTS**




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## Market Rule Amendment Proposal

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### PART 1 – MARKET RULE INFORMATION

<b>Identification No.:</b> MR-00220-R02	
<b>Subject:</b> System Operations and Physical Markets	
<b>Title:</b> Hour-Ahead Dispatchable Loads – Dispatch Data Submissions	
<b>Nature of proposal</b> (please indicate with X): <input checked="" type="checkbox"/> Alteration <input type="checkbox"/> Deletion <input type="checkbox"/> Addition	
<b>Chapter:</b> 7	<b>Appendix:</b>
<b>Sections:</b> 3.3	
<b>Sub-sections proposed for amending:</b> 3.3.3 – 3.3.5A	

### PART 2 – PROPOSAL HISTORY

Version	Reason for Issuing	Version Date

**Approved Amendment *Publication* Date:**

**Approved Amendment *Effective* Date:**

**PART 3 – EXPLANATION FOR PROPOSED AMENDMENT**

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Refer to MR-00220-R00.

These amendments prescribe the time limits for a registered market participant to make revisions to dispatch data submitted for an hour-ahead dispatchable load. It should be noted that all the existing market rules regarding revisions to dispatch data would apply to dispatch data submitted for an hour-ahead dispatchable load e.g. requirement to keep dispatch data up to date and consistent with the operational capabilities of the facility.

Section 3.3.4A (new): The registered market participants will be able to submit revised dispatch data for an hour-ahead dispatchable load without restriction up to 3 hours ahead of the dispatch hour. It is the 3-hour-ahead pre-dispatch schedule that establishes the schedule for any hour-ahead dispatchable load reductions for the dispatch hour. Allowing unrestricted changes up to 3 hours ahead of the dispatch hour is intended to provide maximum flexibility to the registered market participant in revising their dispatch data in response to market and facility conditions. The 3-hour ahead pre-dispatch schedule is proposed as the basis for the scheduling of hour-ahead dispatchable loads so as to minimize the impact on interchange scheduling coordination activities with neighbouring control areas.

Section 3.3.5 (revised): After the 3-hour time period, the registered market participant would require IMO approval for any change to dispatch data. This restriction is analogous to the existing restriction on changes to other dispatch data within 2-hours of the dispatch hour for other dispatchable facilities.

The total effect of these changes is that unrestricted changes to dispatch data are possible up to three hours ahead of the dispatch hour, and IMO approval is required for changes thereafter. Hour-ahead dispatchable loads would not have a “4-2 hour restricted window” comparable to other dispatchable facilities.

Consequential changes are necessary to other provisions in section 3.3 in order to establish that the new section 3.3.4A has precedence over the existing provisions regarding submission of revised dispatch data in relation to hour-ahead dispatchable loads.

**PART 4 – PROPOSED AMENDMENT****3.3 Dispatch Data Submissions**

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- 3.3.3 Subject to section 3.3.4A, aA registered market participant may submit revised *dispatch data* with respect to any *dispatch hour* without restriction until 4 hours prior to the beginning of that *dispatch hour*.
- 3.3.4 Subject to section 3.3.4A, a A-registered market participant may submit revised *dispatch data* with respect to any *dispatch hour* until 2 hours prior to that *dispatch hour* provided that no price, quantity or ramp quantity and ramp up/down values may, without authorisation from the *IMO*, be changed by more than the greater of (i) 10 percent of the value that was current 4 hours prior to the *dispatch hour* and (ii) such absolute amount as may be determined by the *IMO*. Without limiting the generality of section 3.2.2 of Chapter 3, the *IMO* may refer to the *market surveillance panel* any larger revision of *dispatch data* submitted within 4 hours of the *dispatch hour* to which such *dispatch data* apply.
- 3.3.4A A registered market participant may submit revised *dispatch data* for an *hour-ahead dispatchable load* with respect to any *dispatch hour*, without restriction, until 3 hours prior to that *dispatch hour*.
- 3.3.5 Except as permitted by sections 3.3.8, 3.3.9.2 and 3.3.11, no *registered market participant* may, without the approval of the *IMO*, submit revised *dispatch data* with respect to any *dispatch hour* within 2 hours of that *dispatch hour* or, in the case of an *hour-ahead dispatchable load*, within 3 hours of that *dispatch hour*.

## PART 5 – IMO BOARD COMMENTS

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## Market Rule Amendment Proposal

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### PART 1 – MARKET RULE INFORMATION

<b>Identification No.: MR-00220-R03</b>	
<b>Subject: System Operations and Physical Markets</b>	
<b>Title: Hour-Ahead Dispatchable Loads – Form of Dispatch Data</b>	
<b>Nature of proposal (please indicate with X): <u> X </u> Alteration <u> </u> Deletion <u> </u> Addition</b>	
<b>Chapter: 7</b>	<b>Appendix:</b>
<b>Sections: 3.4</b>	
<b>Sub-sections proposed for amending: 3.4.1.2a (new); 3.4.3; 3.4.5</b>	

### PART 2 – PROPOSAL HISTORY – REFER TO MR-00220-R00

Version	Reason for Issuing	Version Date

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### PART 3 – EXPLANATION FOR PROPOSED AMENDMENT

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Refer to MR-00220-R00.

These amendments prescribe the form and nature of the dispatch data to be submitted on behalf of an hour-ahead dispatchable load.

Section 3.4.1.2A (new): The amendments in these sections specify that the nature of the offers from an hour-ahead dispatchable load is an offer to reduce energy withdrawals.

Section 3.4.3.1A (new): This section specifies the price and associated quantity in a price-quantity pair from an hour-ahead dispatchable load consistent with the nature of these offers as offers to reduce consumption.

Section 3.4.5 (revised): this section specifies that an hour-ahead dispatchable load must specify a market price at which it would be willing to reduce its energy consumption by the total capacity amount offered. This is a requirement comparable to one placed on 5-minute dispatchable loads.

### PART 4 – PROPOSED AMENDMENT

## 3.4 The Form of Dispatch Data

3.4.1 *Dispatch data* shall relate to a specified *dispatch hour* of the *dispatch day* and to a specified *registered facility*, shall comply with the applicable provisions of this section and sections 3.5 to 3.9 and shall take one of the following forms:

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3.4.1.2A for an hour-ahead dispatchable load, an offer to reduce its energy withdrawals from the energy market. Offers accepted result in reductions in purchases in the energy market only to the extent that, for the registered market participant submitting such offers, the total value of the remaining energy taken from the energy market is greater than the total value of physical bilateral contract quantities notified to the IMO in respect of that registered market participant pursuant to Chapter 8;

.....



3.4.3 Each *offer* or *bid* for any *physical service* shall contain prices, each with an associated quantity. A price and the associated quantity in an *offer* or *bid* is a *price-quantity pair* and shall comply with sections 3.5 and 3.6 and the following:

3.4.3.1 subject to section 3.4.3.1A, the quantity in any *price-quantity pair*, other than in the first *price-quantity pair*, shall be a cumulative quantity representing the maximum quantity the *registered market participant* is offering to sell or bidding to buy, respectively, at the associated price in the *price-quantity pair*;

3.4.3.1A for an offer for an hour-ahead dispatchable load, the quantity in any price-quantity pair, other than in the first price-quantity pair, shall be a cumulative quantity representing the maximum quantity by which the registered market participant is offering to reduce its energy withdrawals at the associated price in the price-quantity pair;

3.4.3.2 in any *offer*, the price in each *price-quantity pair* must not decrease as the associated quantity increases; and

3.4.3.3 in any *bid*, the price in each *price-quantity pair* must not increase as the associated quantity increases.

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3.4.5 Every submission of *dispatch data* with respect to a *dispatchable load facility* or an hour-ahead dispatchable load shall specify a *market price of energy*, in \$/MWh, at and above which the *IMO* may instruct the *facility* to reduce its *energy withdrawals* either to zero, in the case of a dispatchable load facility, or by the total offered quantity, in the case of an hour-ahead dispatchable load. Such price shall not be greater than *MMCP*.

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## Market Rule Amendment Proposal

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### PART 1 – MARKET RULE INFORMATION

<b>Identification No.: MR-00220-R04</b>	
<b>Subject: System Operations and Physical Markets</b>	
<b>Title: Hour-Ahead Dispatchable Loads – Energy Offers and Energy Bids</b>	
<b>Nature of proposal (please indicate with X): <u> X </u> Alteration <u> </u> Deletion <u> </u> Addition</b>	
<b>Chapter: 7</b>	<b>Appendix:</b>
<b>Sections: 3.5</b>	
<b>Sub-sections proposed for amending: 3.5.3</b>	

### PART 2 – PROPOSAL HISTORY – REFER TO MR-00220-R00

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### PART 3 – EXPLANATION FOR PROPOSED AMENDMENT

Provide a brief description of the following:

- The reason for the proposed amendment and the impact on the *IMO-administered markets* if the amendment is not made
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- The proposed amendment, how the amendment addresses the above reason and impact of the proposed amendment on the *IMO-administered markets*.

Refer to MR-00220-R00.

This amendment specifies the number and nature of price-quantity pairs that can be used in dispatch data for an hour-ahead dispatchable load.

Section 3.5.3 (revised): these amendments allow up to 4 price quantity pairs for an hour-ahead dispatchable load offer, and specify that the quantities in these offers must be in whole MW. These provisions are intended to balance simplicity in IMO implementation and flexibility for the market participant. In other respects, there is no difference in the form of dispatch data for an hour-ahead dispatchable load.

Applying similar requirements on energy offers for hour-ahead dispatchable loads as exist for offers or bids from other dispatchable facilities would also increase the registered market participant's familiarity with the use of dispatch data. Such knowledge and familiarity would be beneficial to that registered market participant should they decide to become a 5-minute dispatchable load in the future.

### PART 4 – PROPOSED AMENDMENT

## 3.5 Energy Offers and Energy Bids

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3.5.3 Each *energy offer* or *energy bid* must contain at least 2 and -, except for an *energy offer for an hour-ahead dispatchable load*, may contain up to 20 *price-quantity pairs* for each *dispatch hour*. Each *energy offer for an hour-ahead dispatchable load* may contain up to 4 *price-quantity pairs* for each *dispatch hour*. The price in each such *price-quantity pair* shall be not more than the *Maximum Market Clearing Price* or *MMCP* and not less than the negative *Maximum Market Clearing Price* or negative *MMCP* and shall be expressed in dollars and whole cents per MWh. The quantity in each such *price-quantity pair* shall:

3.5.3.1 in the case of a *registered facility* other than a *boundary entity* or an *hour-ahead dispatchable load*, be expressed in MW (or MWh/hour) to one decimal place and shall not be less than 0.0 MW (or 0.0 MWh/hour); or

3.5.3.2 in the case of a *registered facility* that is a *boundary entity* or an *hour-ahead dispatchable load*, be expressed in whole MW (or MWh/hour) and shall not be less than 0 MW (or 0 MWh/hour).

The quantity in the first *price-quantity pair* shall be 0.0 MW (or 0.0 MWh/hour) or 0 MW (or 0 MWh/hour) as applicable. The price in the second *price-quantity pair* shall be the same as the price in the first *price-quantity pair*.

#### PART 5 – IMO BOARD COMMENTS






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## Market Rule Amendment Proposal

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### PART 1 – MARKET RULE INFORMATION

<b>Identification No.: MR-00220-R05</b>	
<b>Subject: System Operations and Physical Markets</b>	
<b>Title: Hour-Ahead Dispatchable Loads – Information Used to Determine Pre-Dispatch Schedules</b>	
<b>Nature of proposal (please indicate with X): <u> X </u> Alteration <u> </u> Deletion <u> </u> Addition</b>	
<b>Chapter: 7</b>	<b>Appendix:</b>
<b>Sections: 5.2</b>	
<b>Sub-sections proposed for amending: 5.2.1.2</b>	

### PART 2 – PROPOSAL HISTORY – REFER TO MR-00220-R00

Version	Reason for Issuing	Version Date

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**PART 3 – EXPLANATION FOR PROPOSED AMENDMENT**

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Refer to MR-00220-R00.

Section 5.2.1.2 (revised): This amendment obligates the IMO, when determining a pre-dispatch schedule and prices, to adjust the non-dispatchable load forecast for a given dispatch hour by any reduction scheduled for hour-ahead dispatchable loads for that hour. This amendment will ensure that the impact of the energy withdrawal reductions of hour-ahead dispatchable loads will be realized in the applicable pre-dispatch schedules and prices. This is necessary to ensure that the hour-ahead dispatchable loads are incorporated into the market in a transparent manner.

**PART 4 – PROPOSED AMENDMENT****5.2 Information Used to Determine Pre-dispatch Schedules**

- 5.2.1 The *IMO* shall use the following information for determining and updating the *pre-dispatch schedule* in accordance with section 5.3, using in each case the most current valid information:
- 5.2.1.1 dispatch data submitted by registered market participants;
  - 5.2.1.2 the *IMO*'s own forecasts of *non-dispatchable load*, [adjusted using applicable amounts determined pursuant to section 5.6.1](#), and of generation by *intermittent generators, transitional scheduling generators and self-scheduling generation facilities*;
  - 5.2.1.3 the *transmission system* information provided by each *transmitter* pursuant to section 3.9;
  - 5.2.1.4 the amount and location of *contracted ancillary services* under contract to the *IMO*;
  - 5.2.1.5 the expected initial loading of each generator and *dispatchable load*, as determined based on the most current *pre-dispatch schedule* or, if applicable, *real-time schedule*; and
  - 5.2.1.6 such other available information as the *IMO* determines appropriate.



**PART 5 – IMO BOARD COMMENTS**






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## Market Rule Amendment Proposal

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### PART 1 – MARKET RULE INFORMATION

<b>Identification No.:</b> MR-00220-R06	
<b>Subject:</b> System Operations and Physical Markets	
<b>Title:</b> Hour-Ahead Dispatchable Loads – Scheduling of Hour-Ahead Dispatchable Loads	
<b>Nature of proposal</b> (please indicate with X): ___ Alteration ___ Deletion <u>X</u> Addition	
<b>Chapter:</b> 7	<b>Appendix:</b>
<b>Sections:</b> 5.6 (new)	
<b>Sub-sections proposed for amending:</b> 5.6.1 (new); 5.6.2 (new)	

### PART 2 – PROPOSAL HISTORY – REFER TO MR-00220-R00

Version	Reason for Issuing	Version Date

**Approved Amendment *Publication* Date:**

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**PART 3 – EXPLANATION FOR PROPOSED AMENDMENT**

Provide a brief description of the following:

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Refer to MR-00220-R00.

This new section 5.6 prescribes that the IMO will schedule reductions in energy withdrawals from hour-ahead dispatchable loads for a given hour if the price determined for that hour in the pre-dispatch schedule 3-hours ahead of that hour exceeds the offer price. The IMO is also obligated to notify, as soon as practicable but no later than 2 hours ahead of the hour, the market participant of the scheduled reduction for the applicable hour-ahead dispatchable load. These timelines are intended to give maximum possible notice to the market participant of the scheduled reduction.

Details on the notification methodology would be specified in the applicable market manual.

**PART 4 – PROPOSED AMENDMENT**

## **5.6 Scheduling of Hour-Ahead Dispatchable Loads**

5.6.1 At the time of the determination of the *pre-dispatch schedule* three hours before the *dispatch hour*, the *IMO* shall, on the basis of the *projected energy market price* for that *dispatch hour* as determined in such *pre-dispatch schedule*, determine the aggregate reduction in *energy* withdrawals for all *hour-ahead dispatchable loads* for which *dispatch data* has been submitted for that *dispatch hour*.

5.6.2 The *IMO* shall, as soon as practicable but no later than two hours before the applicable *dispatch hour*, notify the *registered market participant* for an *hour-ahead dispatchable load* for which the *IMO* has determined a reduction in *energy* withdrawals pursuant to section 5.6.1, the amount of that reduction for that *facility*.

**PART 5 – IMO BOARD COMMENTS**






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## Market Rule Amendment Proposal

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### PART 1 – MARKET RULE INFORMATION

<b>Identification No.:</b> MR-00220-R07	
<b>Subject:</b> System Operations and Physical Markets	
<b>Title:</b> Hour-Ahead Dispatchable Loads – Purpose and Timing of Dispatch Instructions	
<b>Nature of proposal</b> (please indicate with X): ___ Alteration ___ Deletion <u> X </u> Addition	
<b>Chapter:</b> 7	<b>Appendix:</b>
<b>Sections:</b> 7.1	
<b>Sub-sections proposed for amending:</b> 7.1.3D (new); 7.1.3E (new)	

### PART 2 – PROPOSAL HISTORY – REFER TO MR-00220-R07

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**PART 3 – EXPLANATION FOR PROPOSED AMENDMENT**

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Refer to MR-00220-R00.

Section 7.1.3D (new): This section defines as dispatch instructions the schedules determined by the IMO and subsequently sent to the market participant as prescribed in the new section 5.6 (refer to R06). Therefore, all rules regarding dispatch instructions, including compliance, would apply to these hour-ahead dispatchable load schedules.

The IMO shall issue these dispatch instructions using the systems and protocols defined in the applicable market manual. This is consistent with the issuance of other types of dispatch instructions.

The IMO would also be obligated to record and time-stamp these dispatch instructions similar to the requirements for other dispatch instructions.

Section 7.1.3E (new): This section obligates the market participant to acknowledge receipt of the dispatch instruction for the hour-ahead dispatchable load. This obligation is consistent with the acknowledgement obligation of other market participants upon receipt of dispatch instructions. It is also proposed that the market participant notify the IMO if the participant intends to reduce its energy withdrawals at a time earlier than scheduled or for a time period longer than scheduled. An early reduction or a longer reduction may be of some benefit to the participant, depending on their circumstances. The IMO needs to be aware of this eventuality so that it anticipates that change in market demand and take action accordingly. This notice will also help in the compliance assessment.

The market participant would acknowledge receipt of the dispatch instruction using the systems and protocols and within the time specified in the applicable market manual. This is consistent with the market participant acknowledgement of other types of dispatch instructions.

**PART 4 – PROPOSED AMENDMENT****7.1 Purpose and Timing of Dispatch Instructions**

.....

7.1.3D The IMO shall issue dispatch instructions for each hour-ahead dispatchable load for which a dispatch instruction is required when the IMO notifies the registered market participant pursuant to section 5.6.2. The IMO shall:

7.1.3D.1 issue such dispatch instructions using the systems and protocols defined in the applicable market manual; and



7.1.3D.2 record and time-stamp all such *dispatch instructions*, store such records for at least seven years and make such records available for the purposes of audit and dispute resolution in accordance with these *market rules*.

7.1.3E Each *registered market participant* shall acknowledge the receipt of each *dispatch instruction* issued to it in accordance with section 7.1.3D in respect of each of its *hour-ahead dispatchable loads* using the systems and protocols defined in the applicable *market manual* and within the time required by such *market manual*. If the *registered market participant* intends to reduce its *energy* withdrawals at a time earlier than scheduled or for a time longer than scheduled, the *registered market participant* shall so inform the *IMO* as soon as practicable.

**PART 5 – IMO BOARD COMMENTS**






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## Market Rule Amendment Proposal

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### PART 1 – MARKET RULE INFORMATION

<b>Identification No.: MR-00220-R08</b>	
<b>Subject: System Operations and Physical Markets</b>	
<b>Title: Hour-Ahead Dispatchable Loads – The Content of Dispatch Instructions</b>	
<b>Nature of proposal</b> (please indicate with X): <u> X </u> <b>Alteration</b> <u> </u> <b>Deletion</b> <u> </u> <b>Addition</b>	
<b>Chapter: 7</b>	<b>Appendix:</b>
<b>Sections: 7.3</b>	
<b>Sub-sections proposed for amending: 7.3.1; 7.3.2; 7.3.6 (new)</b>	

<b>PART 2 – PROPOSAL HISTORY – REFER TO MR-00220-R00</b>		
<b>Version</b>	<b>Reason for Issuing</b>	<b>Version Date</b>

**Approved Amendment *Publication Date*:**

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### PART 3 – EXPLANATION FOR PROPOSED AMENDMENT

Provide a brief description of the following:

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Refer to MR-00220-R00

Section 7.3.6 (new): This amendment specifies that the dispatch instructions issued to an hour-ahead dispatchable load will specify that the facility must reduce its energy withdrawals by the scheduled amount by the start of the dispatch hour. This timing is proposed so as to reduce the impact on other domestic resources having to adjust to accommodate the change in withdrawals. Hour-ahead dispatchable loads are given approximately two hours notice of the schedule. It is expected that with that notice, the facilities will be able to achieve the full scheduled reduction by the start of the hour.

Other revisions are required in this section in order to exclude dispatch instructions issued to hour-ahead dispatchable loads from those provisions that do not apply e.g. provision applicable to 5-minute dispatchable facilities.

### PART 4 – PROPOSED AMENDMENT

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## 7.3 The Content of Dispatch Instructions

7.3.1 The *IMO* shall, subject to section 7.1.1A, issue *dispatch instructions* for each *dispatch interval* to each *registered facility* that is a not a *boundary entity* or an *hour-ahead dispatchable load*, indicating for that *dispatch interval*:

7.3.1.1 the rate at which *energy* is to be injected into or withdrawn from the *IMO-controlled grid* (in MW) at the end of the *dispatch interval*;

7.3.1.2 the amount of each class of *operating reserve* that is to be in a condition to respond to a *dispatch instruction* issued pursuant to section 7.4.3 calling for additional *energy* production; and

7.3.1.3 the amount of *reactive support* and *regulation* that is to be provided under *contracted ancillary service* contracts or *reliability must-run contracts* or as a consequence of any requirement to provide same which derives from the application of these *market rules*.

- 7.3.2 The *dispatch instructions* for any *registered facility* that is not a *boundary entity* shall:
- 7.3.2.1 be consistent with the current operating status of that *registered facility* and with any operational constraints described in the most recent *dispatch data* submitted by the *registered market participant* for that *registered facility*;
  - 7.3.2.2 be used by the *IMO* for the purpose of declaring the *registered facility* as non-conforming in accordance with section 7.5.4; and
  - 7.3.2.3 in the case of a *registered facility* that is not an *hour-ahead dispatchable load* and subject to Appendix 7.6, be used in the *IMO settlement process* for determining any *settlement amounts* for congestion management pursuant to section 3.5 of Chapter 9.
- 7.3.3 [Intentionally left blank]
- 7.3.4 The *IMO* shall issue *dispatch instructions* for each *dispatch hour* to each *registered facility* that is a *boundary entity*, indicating for that *dispatch hour*:
- 7.3.4.1 the rate at which *energy* is to be injected into or withdrawn from the *IMO-controlled grid* (in minutes) from the specified *inertie zone*, which rate shall be consistent with all relevant *reliability standards*;
  - 7.3.4.2 the amount of each class of *operating reserve* that is scheduled and the ramp rates associated with the *energy* if called on; and
  - 7.3.4.3 the amount of *reactive support* and *regulation* that is to be provided under *reliability must-run contracts* or as a consequence of any requirement to provide same which derives from the application of these *market rules*.
- 7.3.5 The *dispatch instructions* for any *registered facility* that is a *boundary entity* shall:
- 7.3.5.1 be consistent with the current *dispatch data* for that *registered facility* and with any *interconnection* limitations associated with the *registered facility*; and
  - 7.3.5.2 be used in the *IMO settlement process* for determining any *settlement amounts* for congestion management pursuant to section 3.5 of Chapter 9.
- 7.3.6 The *dispatch instruction* for any *hour-ahead dispatchable load* for a given *dispatch hour* shall specify that the *hour-ahead dispatchable load* shall reduce its *energy withdrawals* by the full amount scheduled by the start of that *dispatch hour*.

**PART 5 – IMO BOARD COMMENTS**




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## Market Rule Amendment Proposal

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### PART 1 – MARKET RULE INFORMATION

<b>Identification No.: MR-00220-R09</b>	
<b>Subject: System Operations and Physical Markets</b>	
<b>Title: Hour-Ahead Dispatchable Loads – Energy Offer Information</b>	
<b>Nature of proposal (please indicate with X):</b> ___ Alteration ___ Deletion ___ <b>X</b> Addition	
<b>Chapter: 7</b>	<b>Appendix: 7.1</b>
<b>Sections: 1.3 (new)</b>	
<b>Sub-sections proposed for amending: 1.3.1 – 1.3.4 (all new)</b>	

### PART 2 – PROPOSAL HISTORY – REFER TO MR-00220-R00

Version	Reason for Issuing	Version Date

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**PART 3 – EXPLANATION FOR PROPOSED AMENDMENT**

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Refer to MR-00220-R00.

This new section specifies the information to be contained within an offer from an hour-ahead dispatchable load, in a manner similar to other energy offers and bids. No provisions are made for ramp rates, consistent with offers and bids from outside the IMO Control Area, as these loads are scheduled and are expected to ramp-in and ramp-out similar to intertie transactions. It should be noted that standing offers are not permitted for HADL due to implementation limitations. This means that an HADL market participant would need to submit offers each day for those days/hours in which it wishes to be dispatchable. Submissions could be made day-ahead or on the dispatch day.

**PART 4 – PROPOSED AMENDMENT**

## Appendix 7.1 – Energy Offer Information

.....

### 1.3 Hour-Ahead Dispatchable Load

1.3.1 Unique load identifier.

1.3.2 Contact information.

1.3.3 Hours for which *offer* applies.

1.3.4 Two to four *price-quantity pairs* for each *dispatch hour*, the final of which represents the maximum quantity of the *offer*.



**PART 5 – IMO BOARD COMMENTS**






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## Market Rule Amendment Proposal

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### PART 1 – MARKET RULE INFORMATION

<b>Identification No.: MR-00220-R10</b>	
<b>Subject: System Operations and Physical Markets</b>	
<b>Title: Hour-Ahead Dispatchable Loads – Hourly Settlement Variables and Data</b>	
<b>Nature of proposal (please indicate with X):</b> ___ Alteration ___ Deletion ___ <b>X</b> Addition	
<b>Chapter: 9</b>	<b>Appendix:</b>
<b>Sections: 3.1</b>	
<b>Sub-sections proposed for amending: 3.1.10 (new)</b>	

### PART 2 – PROPOSAL HISTORY – REFER TO MR-00220-R00

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**PART 3 – EXPLANATION FOR PROPOSED AMENDMENT**

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Refer to MR-00220-R00.

Section 3.1.10 (new): Defines two new settlement variables: HADLR (hour-ahead dispatchable load reduction) and BHA, a matrix of p-q pairs for the hour-ahead dispatchable load that would be used for hour-ahead dispatchable load settlement purposes.

**PART 4 – PROPOSED AMENDMENT****3.1 Hourly Settlement Variables and Data**

.....

3.1.10     The *IMO* shall provide the following information to the *settlement* process for each *market participant* for each *hour-ahead dispatchable load*:

$HADLR_{k,h}^m$       $\equiv$      hour-ahead dispatchable load reduction in energy withdrawals (in MWh) by market participant *k*, at delivery point *m*, in settlement hour *h*, scheduled pursuant to section 5.6 of chapter 7

BHA                  $\equiv$      a matrix of up to 4 price-quantity pairs offered by market participant *k*, at delivery point *m* in settlement hour *h*, for an hour-ahead dispatchable load as described in section 3.5.3 of chapter 7

**PART 5 – IMO BOARD COMMENTS**




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## Market Rule Amendment Proposal

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### PART 1 – MARKET RULE INFORMATION

<b>Identification No.: MR-00220-R11</b>	
<b>Subject: System Operations and Physical Markets</b>	
<b>Title: Hour-Ahead Dispatchable Loads – Hourly Settlement Amounts in the Real-Time Market</b>	
<b>Nature of proposal (please indicate with X):</b> <input checked="" type="checkbox"/> <b>Alteration</b> <input type="checkbox"/> <b>Deletion</b> <input type="checkbox"/> <b>Addition</b>	
<b>Chapter: 9</b>	<b>Appendix:</b>
<b>Sections: 3.3</b>	
<b>Sub-sections proposed for amending: 3.3.2.2</b>	

### PART 2 – PROPOSAL HISTORY – REFER TO MR-00220-R00

Version	Reason for Issuing	Version Date

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**PART 3 – EXPLANATION FOR PROPOSED AMENDMENT**

Provide a brief description of the following:

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Refer to MR-00200-R00.

Section 3.3.2 (revised): This amendment clarifies that the NEMSC for an hour ahead dispatchable load is determined on the basis of the AQEW and HOEP i.e. any actual allocated energy withdrawals of the facility are billed at HOEP, consistent with current practice.

**PART 4 – PROPOSED AMENDMENT**

### 3.3 Hourly Settlement Amounts in the Real-Time Energy Market

.....

3.3.2 For market participant  $k$ ,  $NEMSC_{k,h}$  shall be the sum, over all metering intervals  $t$  in settlement hour  $h$  and all RWMs and intertie metering points, of the settlement amounts determined for each metering interval and RWMs or intertie metering point, as follows:

3.3.2.1 in respect of a *dispatchable facility* or *intertie metering point*:

$$NEMSC_{k,h} = \sum_{t,m} (EMP_h^{mt} \times ((AQEI_{k,h}^{mt} - AQEW_{k,h}^{mt}) + \sum_{s,b} (BCQ_{s,k,h}^{mt} - BCQ_{k,b,h}^{mt})))$$

where:

$t$  = all *metering intervals* in *settlement hour*  $h$

$m$  = all *RWMs* relating to a *dispatchable facility* and all *intertie metering points*

$s$  = all *selling market participants*

$b$  = all *buying market participants*

and

3.3.2.2 in respect of a *non-dispatchable load facility, an hour-ahead dispatchable load, a self-scheduling generation facility, a transitional scheduling generator* or *intermittent generator*.

$$\text{NEMSC}_{k,h} = \text{HOEP}_h \times \sum_{t,m} (\text{AQEI}_{k,h}^{m,t} - \text{AQEW}_{k,h}^{m,t} + \sum_s \text{BCQ}_{s,k,h}^{m,t}) - \sum_{n,b,t} (\text{EMP}_h^{n,t} \times \text{BCQ}_{k,b,h}^{n,t})$$

where:

*m = all RWMs relating to a non-dispatchable load facility, an hour-ahead dispatchable load, a self-scheduling generation facility, a transitional scheduling generator or intermittent generator*

*n = all RWMs and inertia metering points*

*s = all selling market participants*

*b = all buying market participants*

*t = all metering intervals in settlement hour h*

## PART 5 – IMO BOARD COMMENTS








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## Market Rule Amendment Proposal

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### PART 1 – MARKET RULE INFORMATION

<b>Identification No.:</b> MR-00220-R12	
<b>Subject:</b> System Operations and Physical Markets	
<b>Title:</b> Hour-Ahead Dispatchable Loads – Settlement Amounts for Hour-Ahead Dispatchable Load Offer Guarantee	
<b>Nature of proposal</b> (please indicate with X): ___ Alteration ___ Deletion <u>X</u> Addition	
<b>Chapter:</b> 9	<b>Appendix:</b>
<b>Sections:</b> 4.7A (new)	
<b>Sub-sections proposed for amending:</b> 4.7A.1; 4.7A.2	

### PART 2 – PROPOSAL HISTORY – REFER TO MR-00220-R00

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**PART 3 – EXPLANATION FOR PROPOSED AMENDMENT**

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Refer to MR-00220-R00.

This new section details how the hour-ahead dispatchable load guarantee (HADLOG) will be calculated and also the conditions under which it will be applied. The calculation methodology of this guarantee is consistent with that of the Intertie Offer Guarantee i.e. the guarantee is on the basis of the net “profit or loss” when comparing the real-time price to the offer prices.

The HADLOG will be determined on an hourly resolution. However, as the calculation will be performed “off-line”, it will be calculated at the end of a monthly billing period and would appear as a non-hourly settlement amount. The “off-line” calculation will facilitate timely implementation of the hour-ahead dispatchable load mechanism.

The guarantee payments would be determined on the basis of scheduled reduction quantities. If it is determined through compliance monitoring that the facility did not reduce its energy withdrawals by the amount scheduled, the IMO would “clawback” an amount of the guaranty payment such that only the actual reduction would attract the guarantee payment (please refer to R14 for details of this compliance activity).

**PART 4 – PROPOSED AMENDMENT**

#### **4.7A Settlement Amounts for Hour-Ahead Dispatchable Load Offer Guarantee**

4.7A.1 A market participant for an hour-ahead dispatchable load shall receive compensation in the form of an hour-ahead dispatchable load offer guarantee, determined in accordance with section 4.7A.2, for a given dispatch hour under the following circumstances:

4.7A.1.1 the IMO issued a dispatch instruction to the registered market participant for the hour-ahead dispatchable load for the applicable settlement hour pursuant to section 7.1.3D of Chapter 7; and

4.7A.1.2 the calculation of the operating profit function defined in section 4.7A.2 determines a negative value for that hour-ahead dispatchable load scheduled to provide an energy reduction for that settlement hour.

4.7A.2 If the conditions specified in section 4.7A.1 exist, then the *IMO* shall determine the *hour-ahead dispatchable load offer guarantee* (“HADLOG<sub>k,h</sub><sup>m</sup>”) for market participant *k* at delivery point *m* for settlement hour *h* as follows:

Let  $OP(P,Q,B)$  be a profit function of Price (*P*), Quantity (*Q*) and a 4 x 2 matrix (*BHA*) of offered *price-quantity pairs* as defined in section 3.1.10 such that:

$$OP(P,Q,BHA) = P \cdot Q - \sum_{i=1}^{s^*} P_i \cdot (Q_i - Q_{i-1}) - (Q - Q_{s^*}) \cdot P_{s^*+1}$$

Where:

$s^*$  is the highest indexed row of *BHA* such that  $Q_{s^*} \leq Q \leq Q_n$  and where,  $Q_0=0$

Given the above, HADLOG<sub>k,h</sub><sup>m</sup> may be expressed as follows:

$$\text{HADLOG}_{k,h}^m \equiv \underline{(-1) \bullet \text{MIN}[0, OP(\text{HOEP}_h, \text{HADLR}_{k,h}^m, \text{BHA}) ]}$$

## PART 5 – IMO BOARD COMMENTS






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## Market Rule Amendment Proposal

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### PART 1 – MARKET RULE INFORMATION

<b>Identification No.:</b> MR-00220-R13	
<b>Subject:</b> System Operations and Physical Markets	
<b>Title:</b> Hour-Ahead Dispatchable Loads – Additional Non-Hourly Settlement Amounts	
<b>Nature of proposal</b> (please indicate with X): ___ Alteration ___ Deletion <u> X </u> Addition	
<b>Chapter:</b> 9	<b>Appendix:</b>
<b>Sections:</b> 4.8	
<b>Sub-sections proposed for amending:</b> 4.8.1.8 (new)	

### PART 2 – PROPOSAL HISTORY – REFER TO MR-00220-R00

Version	Reason for Issuing	Version Date

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**PART 3 – EXPLANATION FOR PROPOSED AMENDMENT**

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Refer to MR-00220-R00.

These amendments prescribe how the cost of HADLOG payments will be collected from market participants, and how the adjustment of those payments will be distributed to market participants.

Section 4.8.1.8 (new): This amendment proposes to recover HADLOG payments for a given monthly billing period from market participants on a pro-rata basis for that billing period. This treatment is consistent with the recovery of other non-hourly settlement amounts. This treatment is judged to be an appropriate balance between fairness in recovery of costs for the HADLOG payments from those market participants who benefited from the hour-ahead dispatchable load energy withdrawal reduction and achieving simplicity in implementation.

**PART 4 – PROPOSED AMENDMENT**

**4.8 Additional Non-Hourly Settlement Amounts**

4.8.1 The *IMO* shall, at the end of each *energy market billing period*, recover from *market participants*, on a pro-rata basis across all allocated quantities of *energy* withdrawn at all *RWMs* and *intertie metering points* during all *metering intervals* and *settlement hours* within that *energy market billing period*, the following amounts:

.....

4.8.1.6 any reimbursement paid in that *energy market billing period* by the *IMO* pursuant to section 2.1A.12.2(a); ~~and~~

4.8.1.7 any funds borrowed by the *IMO* and any associated interest costs incurred by the *IMO* in the preceding *energy market billing period* pursuant to section 6.14.5.2; ~~and~~

4.8.1.8 any compensation paid in that *energy market billing period* by the *IMO* pursuant to section 4.7A.

4.8.2 The *IMO* shall, at the end of each *energy market billing period*, distribute to *market participants*, on a pro-rata basis across all allocated quantities of *energy*

withdrawn at all *RWMs* and *intertie metering points* during all *metering intervals* and *settlement hours* within that *energy market billing period*, the following amounts:

- 4.8.2.1 any compensation received by the *IMO* for the provision of *emergency energy* pursuant to section 4.4A.1 of Chapter 5;
- 4.8.2.2 any compensation received by the *IMO* as a result of a local market power investigation as set out in sections 1.7.1 and 1.7.2 of Appendix 7.6; ~~and~~
- 4.8.2.3 any adjustments to *intertie offer guarantee settlement* credits for wheeling through transactions, in accordance with section 3.5.8.1 of Chapter 7, calculated pursuant to section 3.8A.3; and
- 4.8.2.4 any adjustment to *hour-ahead dispatchable load offer guarantee* payments calculated pursuant to section 6.2.7.6 of chapter 3.

#### PART 5 – IMO BOARD COMMENTS








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## Market Rule Amendment Proposal

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### PART 1 – MARKET RULE INFORMATION

<b>Identification No.: MR-00220-R14</b>	
<b>Subject: System Operations and Physical Markets</b>	
<b>Title: Hour-Ahead Dispatchable Loads – Compliance</b>	
<b>Nature of proposal (please indicate with X):</b> ___ Alteration ___ Deletion ___ <b>X</b> Addition	
<b>Chapter: 3</b>	<b>Appendix:</b>
<b>Sections: 6.2</b>	
<b>Sub-sections proposed for amending: 6.2.7.7 (new)</b>	

### PART 2 – PROPOSAL HISTORY – REFER TO MR-00220-R00

Version	Reason for Issuing	Version Date

**Approved Amendment *Publication* Date:**

**Approved Amendment *Effective* Date:**

**PART 3 – EXPLANATION FOR PROPOSED AMENDMENT**

Provide a brief description of the following:

- The reason for the proposed amendment and the impact on the *IMO-administered markets* if the amendment is not made
- Alternative solutions considered
- The proposed amendment, how the amendment addresses the above reason and impact of the proposed amendment on the *IMO-administered markets*.

Refer to MR-00220-R00.

This amendment proposes to allow the IMO to adjust HADLOG payments if the IMO determines that the market participant did not fully reduce its energy withdrawals as scheduled and had received a HADLOG payment for the scheduled reduction. Such an adjustment is judged necessary to protect the rest of the market from HADLOG payments for which the market did not receive a benefit i.e. HADLOG payments for an energy withdrawal reduction that did not happen.

This adjustment is proposed to be a compliance determination, rather than a settlement determination, as determining whether or not the hour-ahead dispatchable load achieved its scheduled energy withdrawal reduction is likely going to require IMO investigation and discussion with the market participant. Such a process does not lend itself to a “settlement” calculation, which are typically based solely on data and formulae. The compliance process is more suitable to this type of determination and calculation.

It should also be noted that in the event that the IMO determines that the market participant did not fully reduce its energy withdrawals as scheduled, regardless of whether or not the market participant received a HADLOG payment, that event would be subject to the existing compliance regime.

**PART 4 – PROPOSED AMENDMENT**

6.2.7 Where the *IMO* determines that a *market participant* has breached the *market rules*, the *IMO* may by order do any one or more of the following:

.....

6.2.7.5 impose financial penalties in accordance with section 6.6 indicating the time within which payment of the financial penalty must be made to the *IMO*, provided that no such penalties shall be imposed unless the *IMO* is satisfied that the breach could have been avoided by the exercise of due diligence by the *market participant* or that the *market participant* acted intentionally;~~or~~

6.2.7.6 take such other action as may be provided for in Appendix 3.1 in respect of the *market rule* that has been breached by the *market participant* or;

6.2.7.6 in the event that the breach of the *market rules* is the failure of a *registered market participant* to comply with a *dispatch instruction* to reduce its *energy* withdrawals from an *hour-ahead dispatchable load*, as determined by comparing the actual *energy* withdrawal reduction to the *hour-ahead dispatchable load's baseline*, and the *market participant* received a HADLOG payment on the basis of that scheduled reduction, calculate an downward adjustment to the HADLOG payments corresponding to that portion of the reduction amount that was scheduled but not achieved.

**PART 5 – IMO BOARD COMMENTS**






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## Market Rule Amendment Proposal

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### PART 1 – MARKET RULE INFORMATION

<b>Identification No.: MR-00220-R15</b>	
<b>Subject: System Operations and Physical Markets</b>	
<b>Title: Hour-Ahead Dispatchable Loads – Inputs to Dispatch Scheduling and Pricing Process</b>	
<b>Nature of proposal (please indicate with X): <u> X </u> Alteration <u> </u> Deletion <u> </u> Addition</b>	
<b>Chapter: 7</b>	<b>Appendix: 7.5</b>
<b>Sections: 2.2</b>	
<b>Sub-sections proposed for amending: 2.2.1.7</b>	

### PART 2 – PROPOSAL HISTORY – REFER TO MR-00220-R00

Version	Reason for Issuing	Version Date

**Approved Amendment *Publication* Date:**

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**PART 3 – EXPLANATION FOR PROPOSED AMENDMENT**

Provide a brief description of the following:

- The reason for the proposed amendment and the impact on the *IMO-administered markets* if the amendment is not made
- Alternative solutions considered
- The proposed amendment, how the amendment addresses the above reason and impact of the proposed amendment on the *IMO-administered markets*.

Refer to MR-00220-R00 and MR-00220-R05.

This amendment is consequential to the proposed requirement for the IMO to adjust its forecast of energy withdrawals by non-dispatchable loads by any scheduled reduction in energy withdrawals for hour-ahead dispatchable loads (see MR-00220-R05).

This amendment to Appendix 7.5 identifies that the forecast energy input to the dispatch scheduling and pricing process will contain those adjustments.

**PART 4 – PROPOSED AMENDMENT**

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**2.2 Inputs**

2.2.1 The required inputs to the *dispatch* scheduling and pricing process are:

.....

2.2.1.7 forecasts of *energy* expected to be withdrawn by *non-dispatchable loads* adjusted by amounts equal to the applicable scheduled energy withdrawal reductions for hour-ahead dispatchable loads;

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**PART 5 – IMO BOARD COMMENTS**




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## Market Rule Amendment Proposal

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### PART 1 – MARKET RULE INFORMATION

<b>Identification No.:</b> MR-00220-R16	
<b>Subject:</b> System Operations and Physical Markets	
<b>Title:</b> Hour-Ahead Dispatchable Loads – Compliance with Dispatch Instruction	
<b>Nature of proposal</b> (please indicate with X): ___ Alteration ___ Deletion <u> X </u> Addition	
<b>Chapter:</b> 7	<b>Appendix:</b>
<b>Sections:</b> 7.5	
<b>Sub-sections proposed for amending:</b> 7.5.4A (new)	

### PART 2 – PROPOSAL HISTORY – REFER TO MR-00220-R00

Version	Reason for Issuing	Version Date

**Approved Amendment *Publication* Date:**

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**PART 3 – EXPLANATION FOR PROPOSED AMENDMENT**

Provide a brief description of the following:

- The reason for the proposed amendment and the impact on the *IMO-administered markets* if the amendment is not made
- Alternative solutions considered
- The proposed amendment, how the amendment addresses the above reason and impact of the proposed amendment on the *IMO-administered markets*.

Refer to MR-00220-R00.

This amendment proposes to permit the IMO to declare an hour-ahead dispatchable load as non-conforming if the load's repeated failure to comply with dispatch instructions has an adverse impact on the IMO-administered markets. Once declared as non-conforming, the provisions of section 7.5.6 of chapter 7 would apply, and the facility could be treated strictly as a non-dispatchable load.

Such an authority is judged to be necessary in order to address concerns that this mechanism would be implemented untested, and that there may unforeseen consequences to its implementation. The IMO should be able to address any adverse impacts created by an individual hour-ahead dispatchable load promptly by reverting the load to be a non-dispatchable load in order to minimize those adverse impacts on the market.

**PART 4 – PROPOSED AMENDMENT****7.5 Compliance with Dispatch Instructions**

.....

7.5.4 If failure by a *registered facility*, other than a *boundary entity*, to comply with a *dispatch instruction* endangers *electricity system reliability*, the *IMO* shall declare the *registered facility* to be non-conforming and shall take any actions allowed by sections 7.5.5 to 7.5.7 or any other provisions of these *market rules* which the *IMO* determines appropriate.

7.5.4A If repeated failures by an hour-ahead dispatchable load to comply with a dispatch instruction has an adverse impact on the IMO-administered markets, the IMO shall declare the registered facility to be non-conforming and shall take any actions allowed by sections 7.5.5 to 7.5.7 or any other provisions of these market rules which the IMO determines appropriate.



**PART 5 – IMO BOARD COMMENTS**

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## Market Rule Amendment Proposal

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### PART 1 – MARKET RULE INFORMATION

<b>Identification No.: MR-00220-R17</b>	
<b>Subject: System Operations and Physical Markets</b>	
<b>Title: Hour-Ahead Dispatchable Loads – Restrict Operation of HADL Market Rules</b>	
<b>Nature of proposal (please indicate with X): ___ Alteration ___ Deletion <u> X </u> Addition</b>	
<b>Chapter: 7</b>	<b>Appendix:</b>
<b>Sections: 3.1</b>	
<b>Sub-sections proposed for amending: 3.1.3 (new)</b>	

### PART 2 – PROPOSAL HISTORY – REFER TO MR-00220-R00

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### PART 3 – EXPLANATION FOR PROPOSED AMENDMENT

Provide a brief description of the following:

- The reason for the proposed amendment and the impact on the *IMO-administered markets* if the amendment is not made
- Alternative solutions considered
- The proposed amendment, how the amendment addresses the above reason and impact of the proposed amendment on the *IMO-administered markets*.

Refer to MR-00220-R00.

This amendment proposes to permit the IMO to restrict the operation of the market rules applicable to hour-ahead dispatchable loads. The type of restriction contemplated is to allow hour-ahead dispatchable loads to submit dispatch data for a specified time e.g. hours ending 7 through 23 on business days only. Such restrictions may be appropriate depending on the number of participating loads and the IMO resources required to implement the hour-ahead dispatchable load mechanism. For example, if only a few loads participate, it may not be cost-effective for the IMO to manage a 7x24 hour-ahead dispatchable load mechanism, given that it is expected that most participating loads would only be participating on business days during “peak” hours, when prices would be higher than in “off-peak” hours or on non-business days.

### PART 4 – PROPOSED AMENDMENT

#### 3.1 Applicability of this Section

3.1.1 A *registered market participant* that intends one or more of its *registered facilities* to be eligible for *dispatch* by the *IMO* for a given *dispatch hour* of a *dispatch day* shall submit to the *IMO dispatch data* for ~~each such *registered facility* for such *dispatch hour*~~ in accordance with this section 3.

3.1.2 *Dispatch data* that are revised after initial submission as allowed under the provisions of this section 3 must satisfy all of the requirements that apply to initial *dispatch data* and shall be *dispatch data*.

3.1.3 The *IMO* may restrict the operation of the *market rules* applicable to *hour-ahead dispatchable loads*. The *IMO* shall promptly notify *market participants* of such *restrictions*, and the reasons for the *restrictions*. The *IMO* shall document any such *restrictions* in the applicable *market manual*.

**PART 5 – IMO BOARD COMMENTS**