MDP\_MAN\_0004





Independent Electricity Market Operator

# **Market Manual 4: Market Operations**

# Part 4.0: Market Operations Overview

Issue 9.0

This manual provides market participants with an overview of the procedures contained in the "Operations Manual" and the timelines for IMO and market participants actions related to those procedures.

Public

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## **Document Change History**

## **Related Documents**

Document ID	Document Title	

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# **Table of Changes**

Reference	Description of Change	
Section 3, Figure 3-2	The unrestricted window for submission of dispatch data was corrected to agree with current data submission timeline of 2 hours prior to the dispatch hour.	
Section 3, Figure 3-3	Amended note regarding publishing timeline for Transmission Rights Auction results as follows; Removed reference to "usually within 2 hours of the bid window closing".	

# 1. Market Manual

The *market manuals* consolidate the market procedures and associated forms, standards, and policies that define certain elements relating to the operation of the *IMO-administered markets*. Market procedures provide more detailed descriptions of the requirements for various activities than is specified in the "Market Rules". Where there is a discrepancy between the requirements in a document within a *market manual* and the "Market Rules", the "Market Rules" shall prevail. Standards and policies appended to, or referenced in, these procedures provide a supporting framework.

- End of Section -

# 2. About This Manual

This document is Volume 4.0 of the *market manuals*, and provides an overview of "Market Manual 4: Market Operations".

Document ID	Part No.	Name of Procedure Document	
MDP_MAN_0004	4.0	Market Operations Overview	
MDP_PRO_0026	4.1	Submission of Offers and Bids in the Energy Forward Market (EFM) – (deferred)	
MDP_PRO_0027	4.2	Submission of Dispatch Data in the Real-Time Energy and Operating Reserve Markets	
IMP_PRO_0034	4.3	Real-Time Scheduling of the Physical Markets	
MDP_PRO_0029	4.4	Transmission Rights Auction	
MDP_PRO_0030	4.5	Market Suspension and Resumption	
MDP_PRO_0028	4.6	Submission of Offers in the Capacity Reserve Market (CRM) – (deferred)	

The "Market Operations Manual" is composed of the following document set:

## 2.1 Purpose

The "Market Operations Manual" is designed to provide *market participants* with a brief overview of the various *IMO-administered markets* and the specific steps to be followed when submitting *offers* and *bids* within each market, as well as providing schedules and forecasts of *energy* for the Real-Time *Energy Markets*. In addition, the interactions between the *IMO* and *market participants* in the event of a market suspension and subsequent resumption are provided.

# 2.2 Scope

This manual is intended to provide *market participants* with a summary of the steps and interfaces between *market participants*, the *IMO*, and other parties in the area of market operations. Procedural work flows and steps described in component parts of the "Market Operations Manual" serve as a roadmap for *market participants* and the *IMO*, and reflect the requirements set out in the "Market Rules", and applicable *IMO* policies and standards.

The information provided in the "Market Operations Manual" is not intended for use as training material for *market participants* with regard to the above-referenced procedures.

## 2.3 Who Should Use This Manual

The "Market Operations Manual" is intended for *market participants* in the following roles:

- *Market participants* submitting *dispatch data* in the Real-Time Energy (RTE) and *Operating Reserve Markets* including:
  - *Generators* having dispatchable *generation facilities* that are responsible for:
    - submitting *offers* for *energy* and *operating reserves* for registered facilities in the RTE and OR Markets in the required timeframe;
    - making corrections required by the *IMO* to invalid *dispatch data* in the required timeframe;
    - making revisions to *dispatch data*, if desired, within the required timeframe;
    - accepting and following *dispatch instructions* based on the *real-time schedule*; and
    - notifying the *IMO* when it is not possible to follow these *dispatch instructions*.
  - Generators having self-scheduling generation facilities that are responsible for:
    - submitting *self-schedules* of *energy* to be provided to the RTE markets;
    - making corrections required by the *IMO* to invalid *dispatch data* in the required timeframe; and
    - making revisions to *dispatch data*, if desired, within the required timeframe.
  - Generators having intermittent generation facilities that are responsible for:
    - submitting a forecast of energy to be provided to the RTE Markets;
    - making corrections required by the *IMO* to invalid *dispatch data* in the required timeframe; and
    - making revisions to *dispatch data*, if desired, within the required timeframe.
  - *Dispatchable Loads* that are responsible for:
    - submitting *bids* for energy and *offers* for *operating reserves* for registered facilities in the RTE and *operating reserve* markets in the required timeframe;
    - making corrections required by the *IMO* to invalid *dispatch data* in the required timeframe;
    - making revisions to *dispatch data*, if desired, within the required timeframe;
    - accepting and following *dispatch instructions* based on the *real-time schedule*; and
    - notifying the *IMO* when it is not possible to follow these *dispatch instructions*.

- Boundary Entities that are responsible for:
  - submitting and revising *offers* and *bids* for energy and *offers* for *operating reserve* in the required timeframe; and
  - following applicable interchange scheduling procedures.
- *Generators* or *Dispatchable Loads* submitting *offers* in the *Capacity Reserve Market* (CRM), when activated (currently deferred).
- Transmission Rights (TR) Participants that submit bids in the TR Market.
- *Market Participants* interfacing with the *IMO* in the event of a market suspension and subsequent resumption, including but not limited to: receiving notifications, complying with instructions, handling requests for information, and implementing corrective measures.

## 2.4 Conventions

The standard conventions followed for *market manuals* are as follows::

- The world 'shall' denotes a mandatory requirement;
- Terms and acronyms used in this *market manual* including all Parts thereto that are italicized have the meanings ascribed thereto in Chapter 11 of the "Market Rules";
- Double quotation marks are used to indicate titles of legislation, publications, forms and other documents.

Any procedure-specific convention(s) shall be identified within the procedure document itself.

- End of Section -

# 3. **Procedures Summary**

# 3.1 Interrelationship of the Procedures

Figure 3–1 shows the composition of this *market manual* and how the procedures, trigger events, and other *market manuals* interrelate.

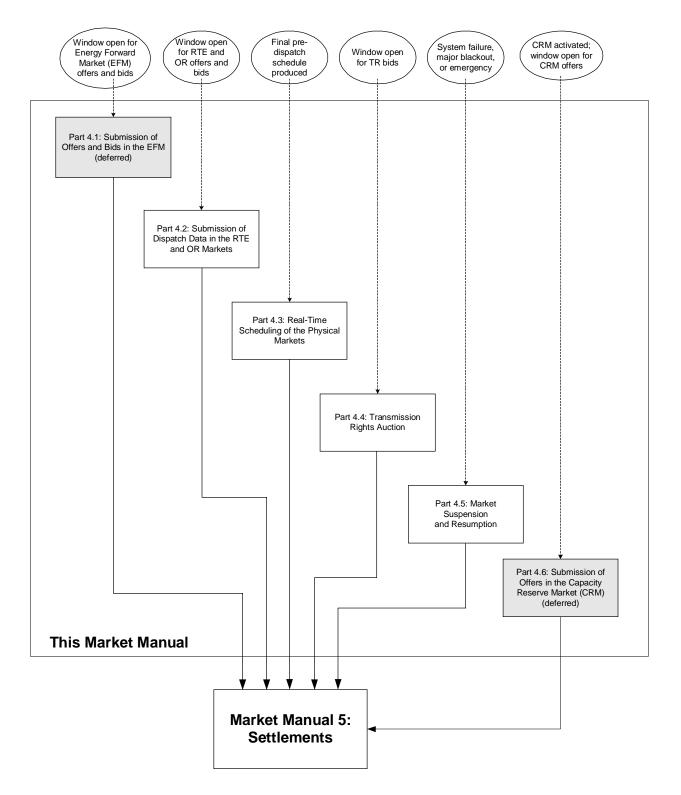


Figure 3–1: Interrelationships of the Market Operations Manual Procedures and Other Market Manuals

# 3.2 About the Procedures in This Manual

This *market manual* addresses the steps that *market participants* must take in order to submit the information required for participation in the *IMO-administered markets*, including the financial markets (*Energy Forward Market* (*EFM*) and *TR Market*), and *physical markets* (RTE and *Operating Reserve Markets* and CRM). This *market manual* also includes a procedure on market suspension and resumption, which identifies *market participant* and *IMO* actions in the event of a major system failure, blackout or other *emergency* event that results in the inability to support market operation.

Participation in the *IMO-administered markets* requires that *market participants* and the *IMO* perform certain actions within clearly defined timeframes. The timeframes for performing these actions are specified within each procedure included in this *market manual* and are summarized in the following figures (Figure 3-2 and 3-3) for convenience.

Development of procedures for the EFM and CRM has been deferred. Timelines for these procedures are not yet available.

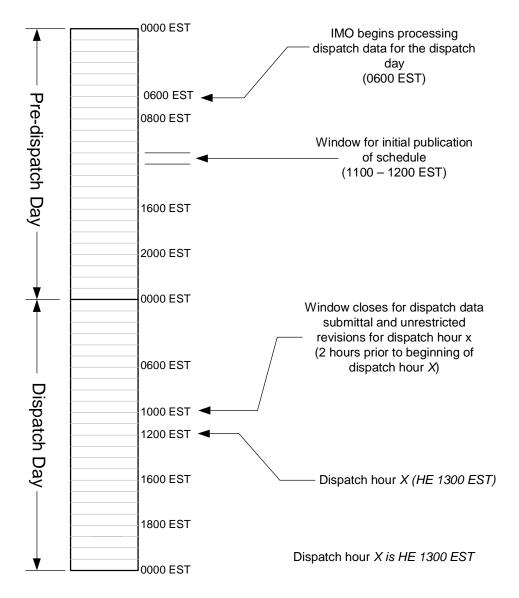


Figure 3–2: RTE and Operating Reserve Markets Data Submission Timeline

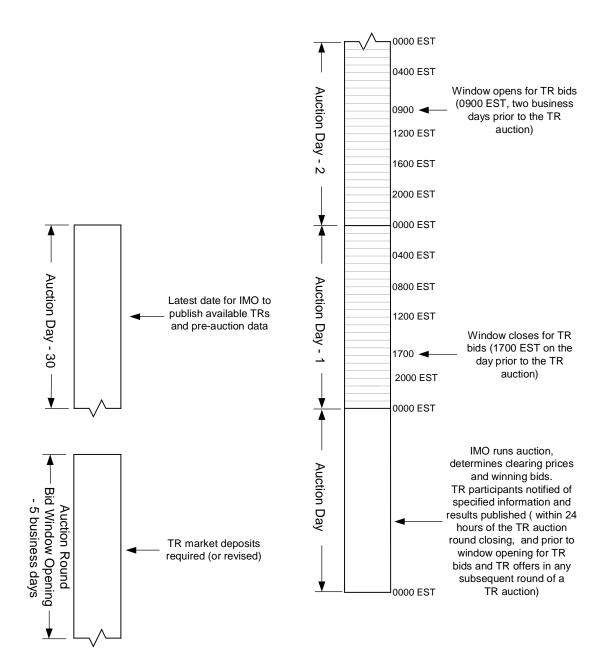


Figure 3–3: TR Market Timeline

- End of Section -

# 4. Applicability of Procedures

The table below summarizes the most common situations or events that are likely to trigger activities described in this *market manual*. To use this table, select the event that most closely matches your area of interest under the "Event" column, then refer to the appropriate procedures document listed in the "Procedure" column.

A list of all procedures documents that comprise this *market manual* is found in Section 2 of this document.

Event	Procedure	
A market participant wishes to make an offer or bid for energy or revise an offer or bid for energy in the Energy Forward Market.	Part 4.1: Submission of Offers and Bids in the Energy Forward Market (EFM) – (deferred)	
A market participant having dispatchable generation or dispatchable load wishes to make an offer or bid for energy or an offer for operating reserves or revise an offer or bid for energy or an offer for operating reserves in the real-time energy markets.	Part 4.2: Submission of Dispatch Data in the Real-Time Energy and Operating Reserve Markets	
A market participant having a self-scheduling generation facility wishes to submit a self-schedule for the real-time energy markets.		
A market participant having an intermittent generation facility wishes to provide a forecast of energy expected to be provided to the real-time energy markets.		
A market participant wishes to submit or revise an offer or bid in the real-time energy or operating reserve markets for a boundary entity.		
A market participant having dispatchable generation or dispatchable load receives dispatch instructions based on the real-time schedule determined by the IMO.	Part 4.3: Real-time Scheduling of the Physical Markets	
A registered TR participant wishes to submit a bid for TRs in an upcoming TR auction.	Part 4.4: Transmission Rights Auction	
A market participant requires information on interfacing with the IMO when a market suspension has been declared due to a systems failure, major system blackout, or other emergency.	Part 4.5: Market Suspension and Resumption	
A market participant having dispatchable generation or dispatchable load wishes to make an offer for capacity reserve when the CRM has been activated.	Part 4.6: Submission of Offers in the Capacity Reserve Market (CRM) - (deferred)	

#### Table 4–1: Events and Procedures

#### - End of Document -