## **ELECTRICITY INDUSTRY ACT**

# ELECTRICITY INDUSTRY (WHOLESALE ELECTRICITY MARKET) REGULATIONS 2004

### WHOLESALE ELECTRICITY MARKET RULES

# Power System Operation Procedure: Monitoring and Reporting Protocol

Commencement:

This Market Procedure is to have effect from 8:00am (WST) on the same date as the Wholesale Electricity Market Rule, in which this Procedure is made in accordance with, commences.

Version histor	У
21 September 2006	Power System Operation Procedure (Market Procedure) for Monitoring and Reporting Protocol
12 September 2009 System Management amended changes to the procedure resulting from Procedure Change Proposal PPCL 0012	

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#### 1. MONITORING AND REPORTING PROTOCOL

The Power System Operation Procedure: Monitoring and Reporting Protocol ('Procedure') details procedures that System Management must follow to monitor Rule Participant's compliance with Market Rules and the Power System Operation Procedures, and to provide information about breaches, or other information the IMO may request, to the IMO.

#### 2. RELATIONSHIP WITH MARKET RULES

- 1. This Procedure has been developed in accordance with, and should be read in conjunction with clauses 2.13 and 2.15 of the Wholesale Electricity Market (WEM) Rules (Market Rules).
- References to particular Market Rules within the Procedure in bold and square brackets [MR XX] are current as at 1 <u>December 2010</u>. These references are included for convenience only, and are not part of this Procedure.
- 3. In performing its functions under the Market Rules, System Management may be required to disclose certain information to Market Participants and Network Operators. In selecting the information that may be disclosed, System Management will utilise best endeavours and act in good faith to disclose only the information reasonably required by the application of the Market Rules.

3. SCOPE

This Procedure details the processes that System Management will follow to monitor Rule Participant's compliance with Market Rules and the Power System Operation Procedures, and to provide information about breaches, or other information the IMO may request, to the IMO.

#### 4. ASSOCIATED PROCEDURES AND OPERATING STANDARDS

While there are no Power System Operation Procedures directly associated with this Procedure, the monitoring activities described in this procedure should be read in conjunction with other Power System Operation Procedures.

#### 5. MONITORING COMPLIANCE OF MARKET PARTICIPANTS

- 1. The requirements for System Management to monitor and report Rule Participants behaviour within respective Tolerance Range and Facility Tolerance Ranges, as applicable, are specified in the Market Rules [MR 2.13.6, MR 2.13.6A, MR 2.13.6B, MR 2.13.6C].
- 2. Specific Market Rules that must be monitored by System Management are specified in the Market Rules [MR 2.13.9]. To the extent that specific monitoring activities in this Procedure are inconsistent with the Market Rules, the Market Rules prevail.

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- Appendix 1 of this Procedure lists clauses specified in the Market Rules [MR 2.13.9]. Appendix 1 summarises the compliance requirements and lists the primary mechanisms by which System Management will monitor compliance of Rule Participants.
- 4. System Management may provide information to Market Participants relating to compliance issues. In no way does this provision of this information, or lack thereof, obviate a Market Participant from complying with the Market Rules or Power System Operation Procedures.

#### 5.1 GENERAL MONITORING PROCESSES

- 1. Where possible, System Management will use automated methods to determine compliance.
- System Management will utilise information methods including, but not limited to:
  - a. communication to System Management;
  - b. SCADA:
  - c. information provided by the IMO including Standing Data and Resource Plans; and
  - d. outage information.
- 3. In determining whether a given activity is in accordance with the Market Rules, System Management may request further information from Market Participants.

# 5.2 INITIAL DETERMINATION AND SUBSEQUENT ANNUAL REVIEW OF TOLERANCE RANGE AND RELEVANT FACILITY TOLERANCE RANGES

- The requirements System Management must adhere to when determining a
  monitoring Tolerance Range to apply to all Facilities for the purposes of
  System Management's reporting of alleged breaches of clause 7.10.1 and
  clause 3.21 are stipulated in the Market Rules. [MR 2.13.6D]
- System Management must consult with Rule Participants prior to setting the Tolerance Range. [MR 2.13.6D] System Management may initiate consultation through displaying suggested Tolerance Range(s) for public comments for six weeks on either the System Management website or the IMO website, whichever source is suitable at the time. System Management may provide response to each issue raised in submissions received from Rule Participants via the nominated consultation medium.
- System Management may determine a real time Tolerance Range and an expost Tolerance Range to apply to all facilities. System Management must consider the following elements:
  - a. the variability of generation/load movement in aggregate on:
    - (i) the power system at any point in time; and
    - (ii) the overall effect on system frequency;
  - b. the Load Following requirement;
  - c. Facility ramping behaviours;
  - d. the proportion of Facilities required to comply with Resource Plans synchronised on the system during an average Trading Day; and

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- e. any other factors which may influence real time operation of the Power System. [MR 2.13.6K]
- 4. At least 14 Business Days prior to the date from which a change to the Tolerance Range becomes effective, System Management must submit to the IMO for publication on the Market Web Site:
  - a. all submissions received from Rule Participants;
  - b. the Tolerance Range:
  - c. an effective date for the commencement of the Tolerance Range. [MR 2.13.6D],
  - Where appropriate, System Management may provide responses to each issue raised in the submissions received from Rule Participants.
- 5. In instances where either System Management or a Market Participant does not believe the Tolerance Range determined in section 5.2.3 is suitable for a particular facility, a Market Participant is required to submit an application via email to System Management stating the reasons why a Tolerance Range is less suitable for the particular facility concerned. System Management may, in accordance with section 5.2.6, determine a specific Facility Tolerance Range. This Facility Tolerance Range will apply to a specific generation Facility in place of the Tolerance Range.
- 6. The circumstances by which System Management may exercise its discretion to determine a specific Facility Tolerance Range include:
  - a. first time entry of small loads into the SWIS;
  - b. generators with excessively variable output; or
  - c. any other exceptional circumstances which System Management considers reasonable.
- 7. System Management must consult with the Market Participants prior to determining a Facility Tolerance Range [MR 2.13.6E]. System Management may initiate consultation through displaying suggested Facility Tolerance Range(s) for public comment for six weeks on either the System Management website or the IMO website, whichever source is suitable at the time. System Management may provide response to each issue raised in submissions received from Market Participants via the nominated consultation medium.
- 8. System Management may determine a specific real time Facility Tolerance Range and an ex-post Facility Tolerance Range to apply to a specific generation Facility, System Management must consider the following elements:
  - a. the variability of generation/load movement on the power system at any point in time;
  - b. individual Facility ramping behaviour;
  - c. the proportion of Facilities required to comply with Resource Plans synchronised on the system during an average Trading Day;
  - d. Standing Data and any operating constraints on the Market Participant's Facility of which System Management is aware; and
  - e. any other factors which may influence the real time operation of the Power System. [MR 2.13.6K]

- 9. At least 14 Business Days prior to the date from which a change to the Facility Tolerance Range becomes effective, System Management must submit to the IMO for publication on the Market Web Site:
  - a. the reasons for System Management's decision;
  - b. any submissions received from Market Participants;
  - c. the applicable Facility Tolerance Range; and
  - d. an effective date for the commencement of the applicable Facility Tolerance Range. [MR 2.13.6E]
  - Where appropriate, System Management may provide responses to each issue raised in the submissions received from Market Participants.
- 10. As required by the Market Rules [MR 2.13.6G], System Management must review the Tolerance Range and all Facility Tolerance Ranges at least annually. System Management may initiate consultation through displaying suggested Tolerance Range(s) or Facility Tolerance Range(s), as applicable, for public comment for six weeks on either the System Management website or the IMO website, whichever source is suitable at the time. System Management may provide response to each issue raised in submissions received from Market Participants via the nominated consultation medium.
- 11. Following a review, System Management may vary the Tolerance Range or Facility Tolerance Range [MR 2.13.6G]. Varied Tolerance Range and Facility Tolerance Ranges are effective from the date published by the IMO in accordance with the Market Rules [MR 2.13.6D] and MR 2.13.6E].
- 12. Where the IMO gives a direction to System Management to vary a Facility
  Tolerance Range in accordance with the Market Rules [MR 2.13.6H], that
  direction will apply until the Facility Tolerance Range is varied with clause
  2.13.6G of the Market Rules [MR 2.13.6I].

#### 5.3 FORCED OUTAGES

- 1. The requirements for Market Participants to provide details of Forced Outages are specified in the Market Rules [MR 3.21].
- 2. System Management will determine the availability of facilities based on communications from the relevant Market Participant.
- 3. Final details of Forced Outages must be provided to System Management via SMMITS in accordance with the Market Rules [MR 3.21.7] and the PSOP: Facility Outages.
- 4. The SMMITS system will not accept Forced Outages notified outside the timeframe indicated in the Market Rules [MR 3.21.7].
- System Management will investigate any communication relating to facility availability that is not in accordance with the information contained in SMMITS as per the Market Rules [MR 3.21.7].

#### 5.4 ELECTRICITY GENERATION CORPORATION

 The requirements for the Electricity Generation Corporation (EGC) to comply with directions are specified in the Market Rules [MR 7.6A].

- 2. As required by the Market Rules [MR 7.6A.4], System Management may only consider dispatch compliance of EGC where non-compliance of a direction could endanger Power System Security.
- 3. System Management must have regard to good electricity practice in determining whether conduct could endanger Power System Security.

#### 6. SYSTEM MANAGEMENT TO SELF-MONITOR

System Management will monitor its own compliance with the Market Rules.

#### 7. STATUS REPORTS

The requirements for System Management to provide records to the IMO (Status Reports) are specified in the Market Rules [MR 3.18.17, 3.19.13, 7.12].

#### 8. INCIDENT INVESTIGATIONS

- 1. The requirements for System Management to notify the IMO of incidents in the operation of equipment are specified in the Market Rules [MR 3.8].
- 2. System Management must define and publish actions that require notification in accordance with the Market Rules [MR 3.8].
- 3. The requirements for System Management to investigate incidents are specified in the Market Rules [MR 3.8].

#### 9. ALLEGED BREACHES

- 1. Where System Management determines that there is sufficient basis for suspecting non-compliance with a Market Rule or Market Procedure, System Management is obliged to report the matter to the IMO. The requirements for System Management to allege breaches of the Market Rules or Market Procedures are specified in the Market Rules [MR 2.13.8].
- In particular, where a Tolerance Range or Facility Tolerance Range (if applicable) is determined pursuant to clause 2.13.6D or clause 2.13.6E of the Market Rules, System Management must take this into account when reporting alleged breaches to the IMO in accordance with clause 7.10.1 of the Market Rules.
- There are exceptional circumstances to which System Management is not obliged to report an alleged breach by a Market Participant in the Market Rules [MR 7.10.5A]
- 4. Before alleging a breach with the IMO, System Management may request an explanation from the relevant Market Participant.

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5.	Where the party causing the alleged breach is the IMO, System Management must report the alleged breach to the person appointed by the Minister as specified in the Market Rules [MR 2.13.8].

## APPENDIX 1 PRIMARY MEASURES USED TO MONITOR

Clause	Description	Proposed Measures
3.4.6	Market Participants must comply with System Management directions and endeavour to assist System Management during high risk operating state.	Following a High Risk Operating State, SM will investigate the actions of all Market Participants in receipt of a direction to ensure that any directions were complied with.
3.4.8	Market Participant must immediately inform System Management if cannot comply with direction.	Monitored through compliance with directions. All such notifications will be logged, and investigated.
3.5.8	Market Participants must comply with System Management directions and endeavour to assist System Management during emergency operating state.	Monitored through compliance with directions.
3.5.10	Market Participant must immediately inform System Management if cannot comply with direction.	Monitored through compliance with directions. All such notifications will be logged, and investigated.
3.6.5	Networks must implement load shedding plans.	This will be identified through observation, and the required reporting for the Under Frequency Load Shedding Plan will be monitored.
3.6.6B	Networks must comply with manual disconnection instructions from System Management.	This will be identified through observation of SCADA data following such an instruction.
3.16.4	Market Participants must provide MT-PASA information.	Any Market Participant not providing required information will be investigated.
3.16.7	Market Participants must provide MT-PASA information.	Any Market Participant not providing required information will be investigated.
3.16.8A	Market Participants must provide additional MT-PASA information requested by System Management.	Any Market Participant not providing required information will be investigated.
3.17.5	Market Participants must provide ST-PASA information.	Any Market Participant not providing required information will be investigated.
3.17.6	Market Participants must update ST-PASA information if it changes.	SM will monitor the actual situation of facilities and will identify any anomalies with the PASA.
3.18.2(f)	Market Participant must comply with outage scheduling and approval process if Facility listed on the equipment list in 3.18.2(f)	System Management will monitor discrepancies between planned and actual outage times and report these variations as an alleged breach.
3.21A.2	Market Participant must request Commissioning Test trials from System Management.	This will be determined by observation. Any facility that should provide a plan and does not will be investigated.
3.21A.12	Market Participant must conform to the Commissioning Test plan approved by System Management.	This will be determined by observation.

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Clause	Description	Proposed Measures
3.21A.13	Market Participant must inform SM if it cannot conform to the Commissioning Test plan approved by System Management.	This will be determined by observation. Any facility that should provide such notification and does not will be investigated.
3.21B.1	Except when given a Planned Outage, a Market Participant must seek permission from System Management before putting a Scheduled Generator (holding Capacity Credits) into a state where it will take more than four hours to resynchronise the Scheduled Generator.	This will be determined by observation at the point where a Market Participant is called to dispatch their facility and is unable. Any facility that failed to provide such notification, which caused the failure to dispatch to the facility to the relevant level, will be investigated
3.21B.2	Market Participant must make request in accordance with 3.21B.1 not less than two hours prior to the facility ceasing to be able to be resynchronised within four hours, including particular information as per the Market Rules.	Notification will be logged and investigated where appropriate.
4.10.2	Market Participant who claims alternative fuel must have on site fuel or uninterruptible fuel supply.	This will be determined by observation should the IMO instruct SM.
4.25.13	Market Participant who claims alternative fuel must have on site fuel or uninterruptible fuel supply.	Subject to the IMO's instruction, this will be determined by observation by System Management
7.2.5	Each Market Generator must by 10am each day provide to System Management for each of its Intermittent Generators with capacity exceeding 10 MW its most current forecast of the MWh energy output of the Intermittent Generator in accordance with the Market Rules.	This will be determined by observation. Any facility that should provide such forecast information and does not will be investigated.
7.5.5	Market Participant can only switch fuels under certain circumstances.	Any fuel change notification will be logged and investigated where appropriate.
7.7.6 (b)	Market Participant must confirm receipt of Dispatch Instruction	This will be determined by observation.
7.10.1	Market Participant must comply with resource plan, dispatch instructions or directions from System Management.	This will be determined by observation.
7.10.3	Market Participant must inform System Management where it cannot comply.	This will be determined by observation.
7.10.6	Market Participant must comply with System Management direction to follow resource plan etc, or inform System Management if it cannot.	This will be determined by investigation following a warning issued under 7.10.5.
7.10.6A	Market Participant that cannot comply with dispatch plan must notify SM.	This will be determined by observation.
7.11.7	Market Participants and networks must comply with System Management directions in Dispatch Advisory.	This will be determined by observation.

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