Status Report prepared under clause 7.12 of the Market Rules by System Management 1 January 2013 to 31 March 2013



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1 Introduction

1.1 System Management

Western Power is established under section 4(1)(b) of the *Electricity Corporations Act 2005* and has the functions conferred under section 41 of that act.

Part 9 of the *Electricity Industry Act 2004* makes provision for a wholesale electricity market and provides for the establishment of Market Rules.

Regulation 13 of the *Electricity Industry (Wholesale Electricity Market) Regulations 2004* provides that the Market Rules may confer on an entity the function of operating the SWIS in a secure and reliable manner.

Clause 2.2 of the *Wholesale Electricity Market Amending Rules* (September 2006) (**Market Rules**) confers this responsibility upon the segregated ("ring fenced") business unit of Western Power known as System Management. Amongst these responsibilities, the functions of System Management are to:

- release information required by the Market Rules;
- monitor rule participants compliance with the Market Rules relating to Dispatch and power system security and power system reliability; and
- provide regular reports to the IMO and other market participants.

Included in the requirement to monitor and report is this Status Report, described in clause 7.12 of the Market Rules.

1.2 Status Report

Clause 7.12 requires System Management to provide a quarterly report on the performance of the market with respect to the dispatch process. The report must include details of:

- the incidence and extent of issuance of Operating Instructions and Dispatch Instructions;
- the incidence and extent of non-compliance with Operating Instructions and Dispatch Instructions;
- the incidence and reasons for the issuance of Dispatch Instructions to Balancing Facilities Out of Merit, including for the purposes of this clause, issuing Dispatch Orders to the Verve Energy Balancing Portfolio in accordance with clause 7.6.2;
- the incidence and extent of transmission constraints:
- the incidence and extent of shortfalls in Ancillary Services, involuntary curtailment of load, High Risk Operating States and Emergency Operating States;
- the incidence and reasons for the selection and use of LFAS Facilities under clause 7B.3.8.

System Management has prepared this report pursuant to its obligations under clause 7.12 of the Market Rules, for the period 1 January 2013 to 31 March 2013.

Unless otherwise specified, data contained within this report refers to trading dates and not calendar dates.

2 Issuance of Dispatch and Operating Instructions

System Management issued a total of 6491 Dispatch Instructions to Market Participants during the current reporting period.

On 5 December 2012, as part of the full transition of the Competitive Balancing and Load Following Market, System Management deployed its Real Time Dispatch Engine (RTDE).

The RTDE is an automated system configured to issue pre-interval Dispatch Instructions 10 minutes before the interval start. Intra interval Dispatch instructions may also be issued at 5 minutes past and 15 minutes into an interval with response times of 5 minutes after the issue time. The implementation of the RTDE and corresponding Dispatch cycle together with higher system loads over summer has seen an increase in the volume of Dispatch Instructions being issued since 5 December 2012.

Figure 1 below shows the number of Dispatch instructions issued by month since 1 July 2012.

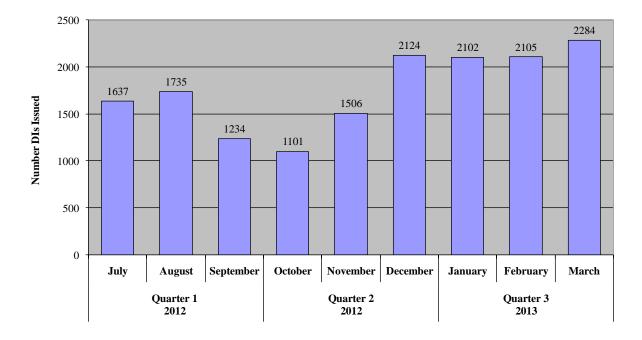


Figure 1: Dispatch Instructions per month

During the current reporting period, System Management issued a total of 71 Operating Instructions.

Under the Market Rules an Operating Instruction is required for Commissioning and Reserve Capacity Testing.

Figure 2 below shows the number of Operating Instructions issued by month since 1 July 2012.

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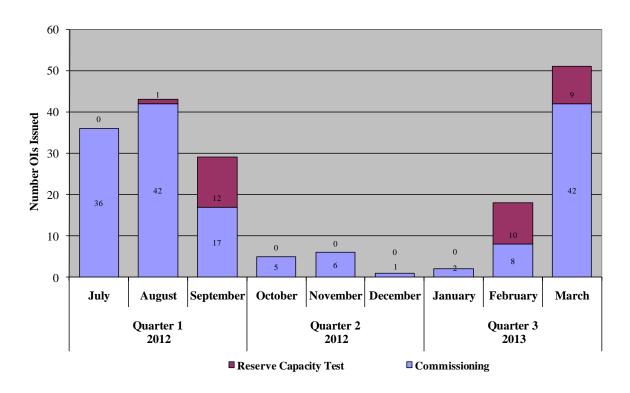


Figure 2: Operating Instructions per month

3 Non-compliance with Dispatch and Operating Instructions

In the current reporting period System Management reported 574 instances of non-compliance with Dispatch Instructions by a Market Participant at the end of their scheduled interval taking into account the Tolerance Range where applicable.

System Management issued 23,364 one minute non-compliance notifications to Market Participants for non-compliance with Dispatch Instructions during the reporting period taking into account the Tolerance Range where applicable.

There were a total of 628 failures by a Market Participant to acknowledge a Dispatch Instruction through the Market Participant Interface.

There were a total of 30 failures by a Market Participant to acknowledge an Operating Instruction.

Figure 3¹ below provides historical non-compliance data since 1 July 2012.

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¹ The automated DI Compliance Tool for dispatch instruction compliance was deployed in August 2012 (hence no data shown for July 2012). Incremental improvements have been made to this tool since deployment. As a result the figures reported in Figure 3 differ from figures reported in the quarter 1 (July to September) and quarter 2 (November to December) MR 7.12 reports. In particular, data for DI non-acknowledgments for the period September 2012 to January 2013 was unavailable in previous reports but has since been obtained and is now included in this report in Figure 3. In addition, the quarter 1 (July to September) and quarter 2 (November to December) only captured DI non-compliance for scheduled generators. Both scheduled and intermittent generators are now included in the reported data.

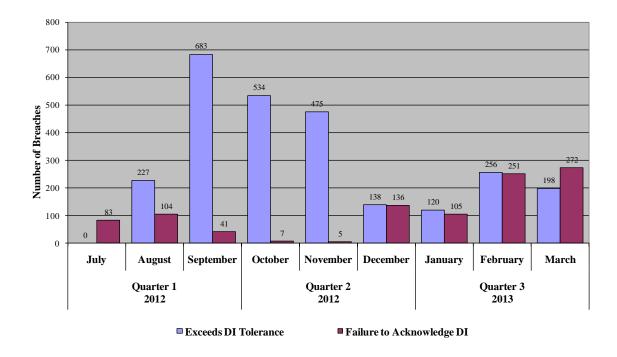


Figure 3: Dispatch Instruction non-compliance notifications (end of interval) and non-acknowledged Dispatch Instructions

4 Issuance of Dispatch Instructions to Balancing Facilities Out of Merit Order

4.1 Out of Merit instances reported to the IMO

During the reporting period System Management reported the following occasions of potential Out of Merit dispatch to the IMO:

| Date | 23 February 2013 |
|--------------------------|---|
| Interval | 10:2 |
| Details | Facility tripped resulting in a significant loss of generation (194MW). At 3.00pm the facility synchronized but an issue with System Management's RTDE resulted in a Facilities being dispatched incorrectly. To mitigate the issue verbal dispatch instructions were issued to these Facilities. |
| System Management action | Facilities were instructed to only follow and acknowledge verbal Dispatch Instructions. At 5.00pm the RTDE issues were resolved and the Facilities were instructed to resume following automated Dispatch Instructions. System Management reported this incident to the IMO. |

| Date | 26 March 2013 |
|--------------------------|---|
| Interval | 4:1 |
| Details | System Management issued a Dispatch Instruction in accordance with the BMO to a non-scheduled generator whom System Management had operational control over but System Management failed to reduce output in accordance with the Dispatch Instruction. This may have caused another facility to be Dispatched Out of Merit. |
| System Management action | System Management has implemented measures to prevent re- occurrence of this event and has reported this incident to the IMO. |

4.2 Other instances of Out of Merit dispatch

Section 5 of this report contains information pertaining to facilities that have been impacted by transmission constraints. Where a transmission constraint reported in section 5 has resulted in a facility/ies being dispatched to a position that differs from the applicable Balancing Merit Order then these instances will constitute Out of Merit dispatch. Dispatch Advisory notifications are released for these transmission constraint related instances.

Section 6 of this report describes occasions of High Risk and Emergency Operating States that have occurred during the reporting period. During elevated Operating States there may be a need to dispatch facilities Out of Merit to return the power system to a Normal Operating State where indicated in the information provided in section 6.

5 Transmission Constraints

A "transmission constraint" refers to the configuration of the transmission network that has an effect or potential effect of constraining or otherwise varying the output of a generator. The resultant situation has a generation facility decrease output, increase output, or not increase output as it would if the constraint did not exist.

System Management has identified 372 intervals of decreased output due to transmission constraints on ALINTA_WWF during the period as a result of transmission outages in the North Country Region. System Management released relevant Dispatch Advisory notifications throughout the period corresponding to these intervals.

6 Operating States, Shortfalls in Ancillary Services and Involuntary Curtailment of Load

6.1 High Risk Operating State

System Management called 6 High Risk Operating States during the reporting period.

| Date | 5 February 2013 |
|--------------------------|--|
| Interval/s | 17:1 - 17:2 |
| DA Number | 1363 |
| Details | Fault on the South Fremantle/Bibra Lake line at 5:11pm which caused a loss of approximately 150MW's of load and resulted in a frequency of approximately 50.32Hz. The line was restored at 5:41pm. |
| System Management action | During this time System Management dispatched as per the Balancing Merit Order. |

| Date | 22 February 2013 |
|--------------------------|--|
| Interval/s | 0:1 - 6:2 |
| DA Number | 1661 |
| Details | System Management unable to issue automated Dispatch Instructions due to issues with its RTDE. |
| System Management action | System Management issued verbal Dispatch Instructions as per the latest Balancing Merit Order |

| Date | 25 February 2013 |
|---------------------------|---|
| Interval/s | 5:1 - 7:1 |
| DA Number | 1721 |
| Details | Real time data issues rendered System Management's RTDE unavailable and System Management was unable to issue automated Dispatch Instructions |
| System Management actions | System Management issued verbal Dispatch Instructions as per the latest Balancing Merit Order |

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| Date | 1 March 2013 |
|--------------------------|--|
| Interval/s | 15:2 - 18:1 |
| DA Number | 1841 |
| Details | An intermittent fault resulted in System Management's SCADA being unavailable. |
| System Management action | System Management was required to issue manual verbal Dispatch Instructions as per the latest Balancing Merit Order. |

| Date | 14 March 2013 |
|--------------------------|---|
| Interval/s | 16:2 - 18:1 |
| DA Number | 2042 |
| Details | Faults on the transmission network as a result of storms causing possibility of involuntary load rejection. |
| System Management action | System Management dispatched as per the relevant Balancing Merit Order. |

| Date | 14 March 2013 |
|--------------------------|--|
| Interval /Time | 17:1 - 22:1 |
| DA Number | 2043 |
| Incident | Faults on the transmission network resulting in the islanding of the North Country Region. |
| System Management action | ATLINTA_WWF was constrained during intervals 21:2 and 22:1. |

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6.2 Emergency Operating State

During the reporting period, a total of one Emergency Operating State was issued.

| Date | 6 March 2013 |
|---------------------------|---|
| Interval | 14:1 - 14:1 |
| DA Number | 1942 |
| Details | Two generators at 2:07pm failed causing excessive loss of generation (approx 385MW) resulting in a frequency decline to 48.75 hertz causing involuntary load shedding. |
| System Management actions | Automatic response of on-line generation to increase output and automatic safety systems to trip load and the starting of additional generating units by System Management. The system frequency returned to the normal range of 49.8 to 50.2 hertz at 2:16pm and customer supplies were restored as generation output increased. |

Figure 4 below provides historical data for High Risk and Emergency Operating States that have occurred since 1 July 2012.

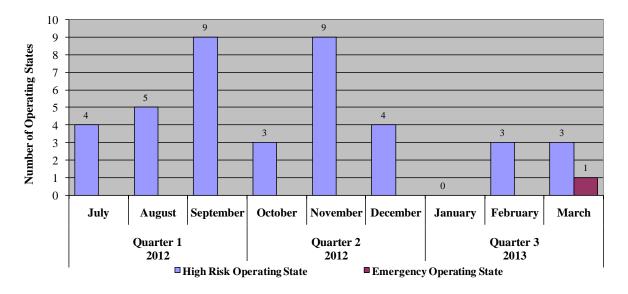


Figure 4: Number of High Risk and Emergency Operating States

6.3 Shortfalls in Ancillary Services

There were no instances of shortfalls in Ancillary Services for the period.

6.4 Involuntary curtailment of load

Refer to section 6.2. Details of the incident reported in section 6.2 have been published under Western Power's website:

http://www.westernpower.com.au/documents/retailersgenerators/systemManagement/Information_flyer_system_disturbance_6_march_2013.pdf

7 LFAS Facilities out of Merit Order

Previous to this reporting period Verve Energy was the sole provider of this service. As of 22 February 2013 Newgen Kwinana_CCG1 became a registered Load Following Ancillary Service (LFAS) Provider.

During the current reporting period there were no incidents where System Management was required to use LFAS Facilities outside of the LFAS Merit Order to operate the SWIS in a reliable and safe manner as per MR 7B.3.8.

However, there was one occasion where for other reasons the LFAS Merit Order was not followed:

 On 14 March 2013 the LFAS merit order indicated that a Participant had bid out of providing LFAS commencing at interval 6:30am (Trade day 13 March and calendar day 14 March 2013). At 6:08am System Management switched the Participant's Facility out of LFAS mode earlier than the planned scheduled time of 6:30am. This was potential a breach of the LFAS Merit Order reported to the IMO in the course of our usual compliance reporting processes.