
**Status Report prepared under
clause 7.12 of the Market Rules by
System Management
1 July 2016 – 30 September 2016**

Table of Contents

1	Introduction.....	3
1.1	System Management.....	3
1.2	Status Report.....	3
2	Issuance of Dispatch and Operating Instructions.	3
3	Non-compliance with Dispatch and Operating Instructions	5
4	Issuance of Dispatch Instructions to Balancing Facilities Out of Merit Order.	6
4.1	Out of Merit instances reported to the IMO	6
4.2	Other instances of Out of Merit dispatch	7
5	Transmission constraints	7
6	Operating States, Shortfalls in Ancillary Services and Involuntary Curtailment of Load. 7	
6.1	High Risk Operating State	7
6.2	Emergency Operating State.....	9
6.3	Shortfalls in Ancillary Services	9
6.4	Involuntary curtailment of load	10
7	LFAS Facilities out of Merit Order	10

1 Introduction

1.1 System Management

On 1 July 2016 Australia Energy Market Operator (AEMO) assumed accountability of System Management functions under the Wholesale Electrical Market Rules.

Coinciding with this, the Economic Regulation Authority (ERA) has also taken accountability of compliance functions from the Independent Market Operator (IMO) as of 1 July 2016.

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 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 July 2016 to 30 September 2016.

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 10,709 Dispatch Instructions to Market Participants during the current reporting period.

Figure 1 below shows the number of Dispatch instructions issued by month since 1 April 2015.

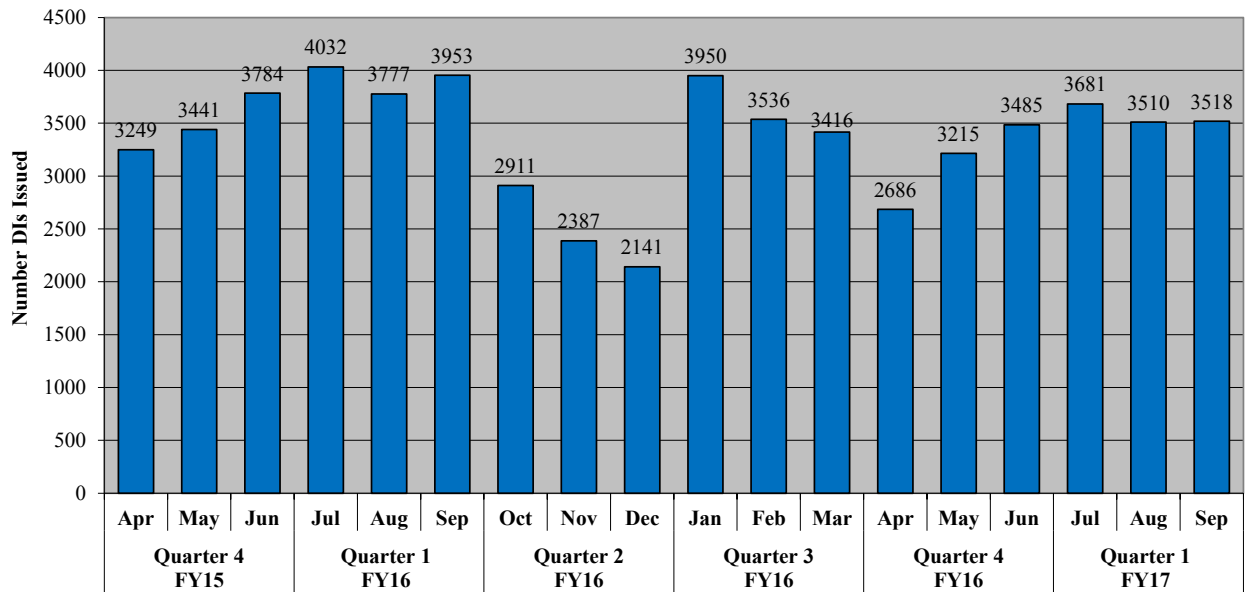


Figure 1: Dispatch Instructions per month

During the current reporting period, System Management issued a total of 35 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 April 2015.

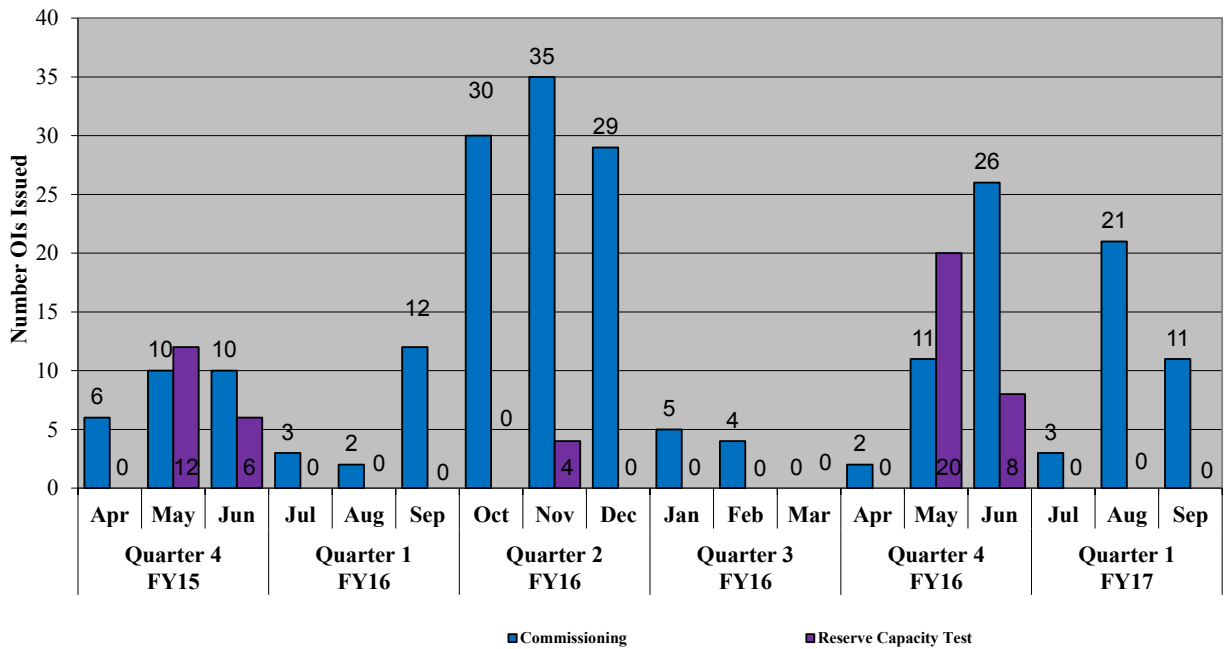


Figure 2: Operating Instructions per month

3 Non-compliance with Dispatch and Operating Instructions

In the current reporting period, System Management reported 287 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 11,799 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 323 failures by a Market Participant to acknowledge a Dispatch Instruction through the Market Participant Interface.

There were no failures by a Market Participant to acknowledge an Operating Instruction during the current reporting period.

Figure 3¹, below provides historical non-compliance data since 1 April 2015.

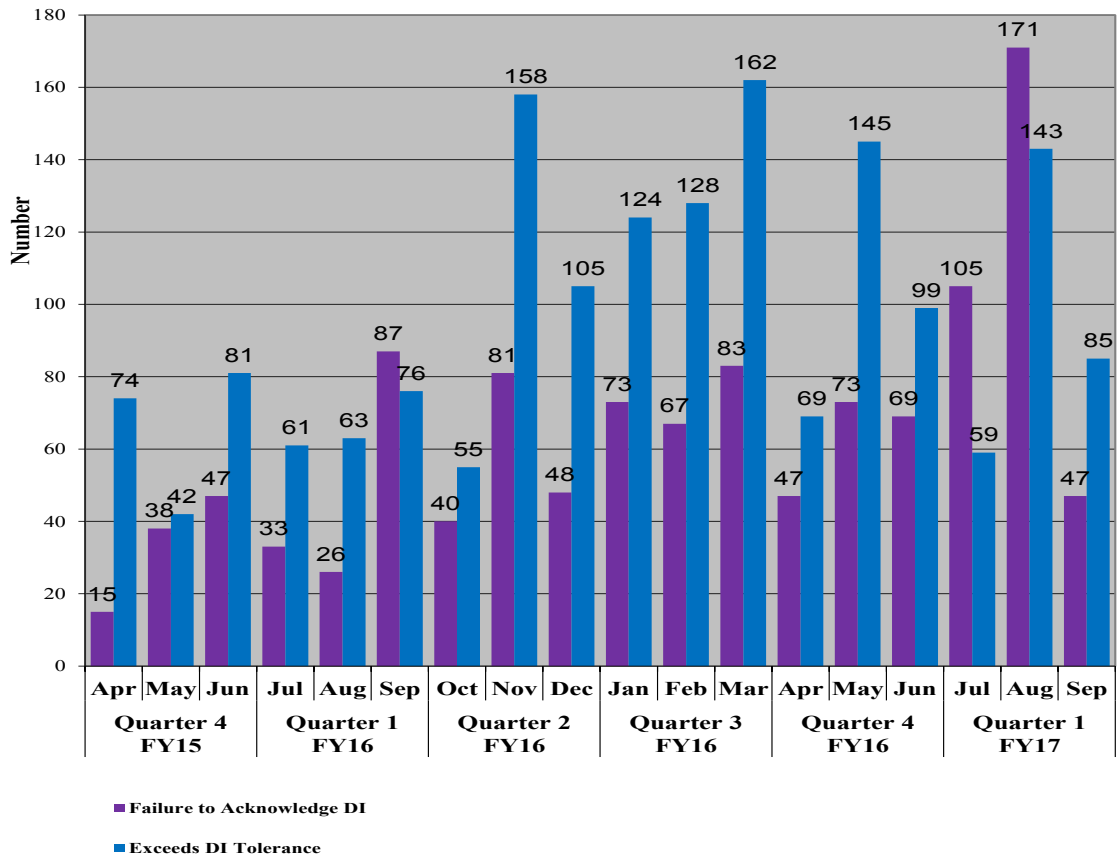


Figure 3: Dispatch Instruction non-compliance notifications (end of interval) and non-acknowledged Dispatch Instructions

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

4.1 Out of Merit instances reported to the AEMO

During the reporting period there were no self-reported occasions of potential Out of Merit dispatch to the AEMO that may have been in breach of the Market Rules².

² Note clause 7.6.1D of the Market Rules provides for Out of Merit Dispatch to avoid a High Risk Operating State or an Emergency Operating State or if the SWIS is in a High Risk Operating State or an Emergency Operating State.

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 constrain 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 either decrease output or increase output as required by the circumstances of the constraint.

System Management has identified the following transmission constraints during the period.

- On 12 July 2016, commencing Interval 07:2 and ending Interval 15:2 an unplanned Western Power Networks issue resulted in PRK_AG and STHRNCRS_EG being islanded from the network (Dispatch Advisory 16584):
 - PRK_AG was constrained to 0MW for 12 Intervals
 - STHRNCRS_EG was constrained to 0MW for 12 Intervals
- On 27 July 2016, commencing Interval 10:2 and ending Interval 13:2 a Western Power Networks outage on the Three Springs – Neerabup 330KV line resulted in ALINTA_WWF being constrained (Dispatch Advisory 16617):
 - ALINTA_WWF was constrained to a maximum of 60MW for 7 Intervals

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

6.1 High Risk Operating State

Five instances of High Risk Operating States occurred during the report period.

Date/Interval/s	23 July 2016 Interval 20:2 to Interval 20:2
DA Number	16615
Details	At 20:31pm Muja_G7 tripped causing a loss of approximately 210MW and resulting in a frequency drop to 49.63Hz. Frequency returned to normal at 20:34pm.
System Management action	System Management continued to Dispatch as per the latest Balancing Merit Order

Date/Interval/s	3 August 2016 Interval 10:2 to 4 August 2016 Interval 08:2
DA Number	16629
Details	Western Power were experiencing IT issues which affected the Market Systems and prevented the latest Balancing Merit Order (BMO) from being accessible to the Real Time Dispatch Engine (RTDE). AGC and ABC systems were affected due to Dispatch Instructions not being issued via the RTDE.
System Management action	System Management issued verbal Dispatch Instructions to Facilities as per the latest known Balancing Merit Order.

Date/Interval/s	17 August 2016 Interval 06:1 to 18 August 2016 Interval 06:2
DA Number	16669
Details	Severe storm activity threatened the Metropolitan and South West area.
System Management action	System Management continued to Dispatch as per the latest Balancing Merit Order

Date/Interval/s	1 September 2016 Interval 09:2
DA Number	16709
Details	At 09:31am Cockburn_CCG1 tripped resulting in a loss of approximately 222MW and a frequency deviation to 49.65Hz.
System Management action	System Management continued to Dispatch as per the latest Balancing Merit Order

Date/Interval/s	22 September 2016 Interval 16:1 to Interval 19:1
DA Number	16749 and 16750
Details	At 16:23pm NEWGEN_KWINANA_CCG1 tripped with a loss of approximately 330MW of generation. The frequency deviated to approximately 48.74 Hz.
System Management action	System Management continued to Dispatch as per the latest Balancing Merit Order

6.2 Emergency Operating State

During the reporting period, no Emergency Operating States were issued.

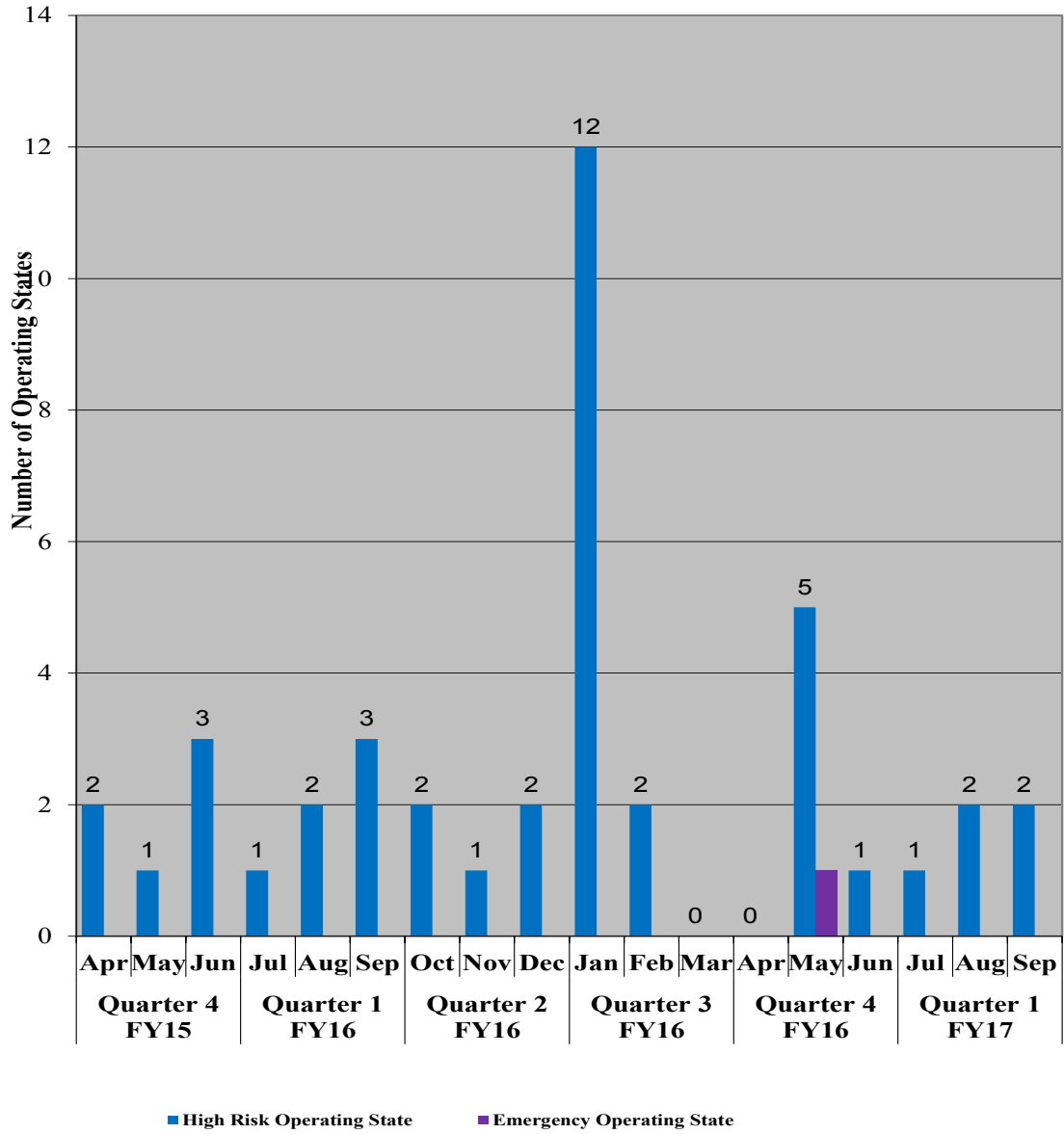


Figure 4: Number of High Risk and Emergency Operating States

6.3 Shortfalls in Ancillary Services

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

6.4 Involuntary curtailment of load

There was one instance of involuntary curtailment of load.

On 22 September 2016 the frequency dropped to 48.74hz in eleven minutes at 16:23pm due to the sudden loss of a major generator which was exporting approximately 330MW at the time (Dispatch Advisories 16749 and 16750). As a result, load shedding was initiated by the automatic under frequency load shedding scheme (UFLS). The frequency decline and the subsequent automatic UFLS resulted in 79 distribution feeders tripping with a load of 153MW. This involved the loss of 130,000 Customers. The last feeder was restored at 17:20pm restoring all customers impacted by the outage.

Western Power issued a media release of which the details are published under Western Power's website: <https://westernpower.com.au/about/media/outage-update/>

7 LFAS Facilities out of Merit Order

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 MR7B.3.8.