

---

**Status Report prepared under  
clause 7.12 of the Market Rules by  
System Management  
1 October 2015 – 31 December 2015**

---



## Table of Contents

1	Introduction.....	3
1.1	System Management.....	3
1.2	Status Report.....	3
2	Issuance of Dispatch and Operating Instructions. ....	4
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. ....	8
6.1	High Risk Operating State .....	8
6.2	Emergency Operating State.....	8
6.3	Shortfalls in Ancillary Services .....	10
6.4	Involuntary curtailment of load .....	10
7	LFAS Facilities out of Merit Order .....	10

# 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 Synergy 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 October 2015 to 31 December 2015.

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 7,439 Dispatch Instructions to Market Participants during the current reporting period.

Figure 1 below shows the number of Dispatch instructions issued by month since 1 July 2014.

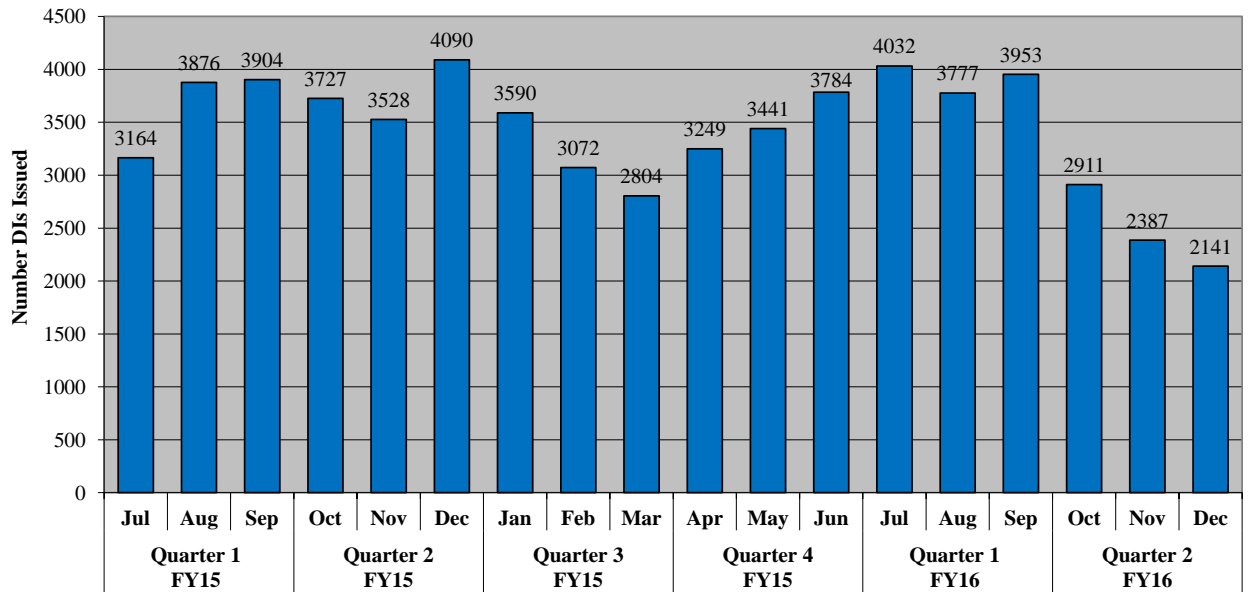


Figure 1: Dispatch Instructions per month

During the current reporting period, System Management issued a total of 94 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 2014.

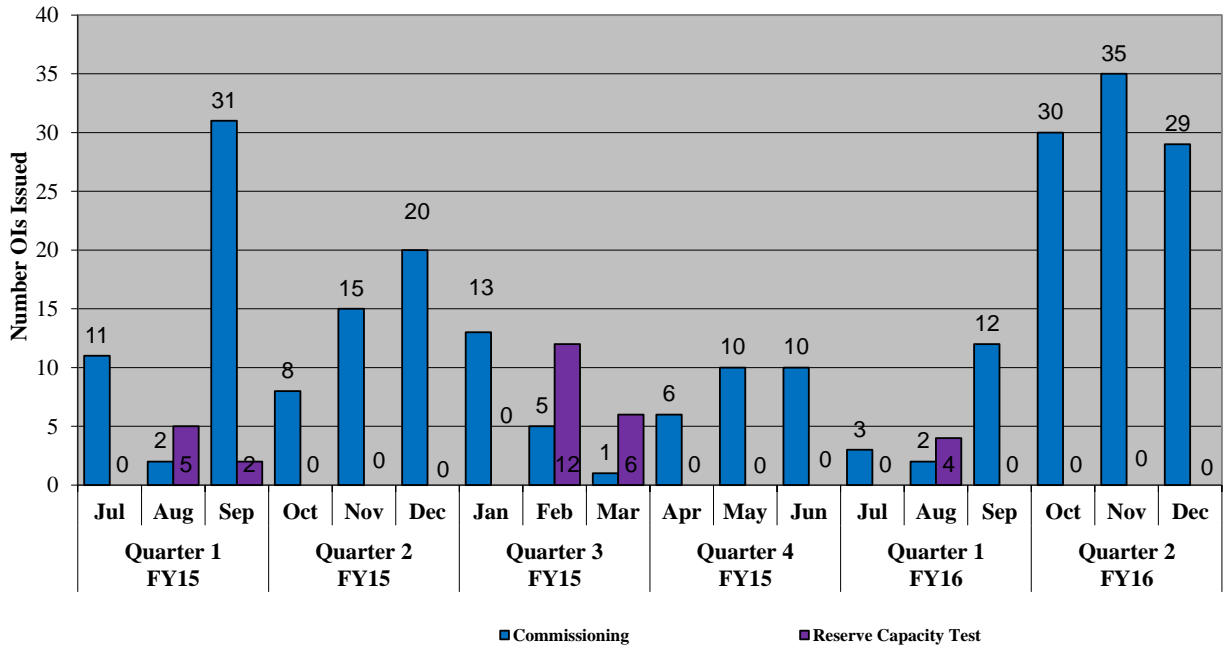


Figure 2: Operating Instructions per month

### 3 Non-compliance with Dispatch and Operating Instructions

In the current reporting period, System Management reported 318 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 11,825 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 169 failures by a Market Participant to acknowledge a Dispatch Instruction through the Market Participant Interface.

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

Figure 3 below shows the number of Dispatch Instruction Non-compliance notifications issued by month since 1 July 2014.

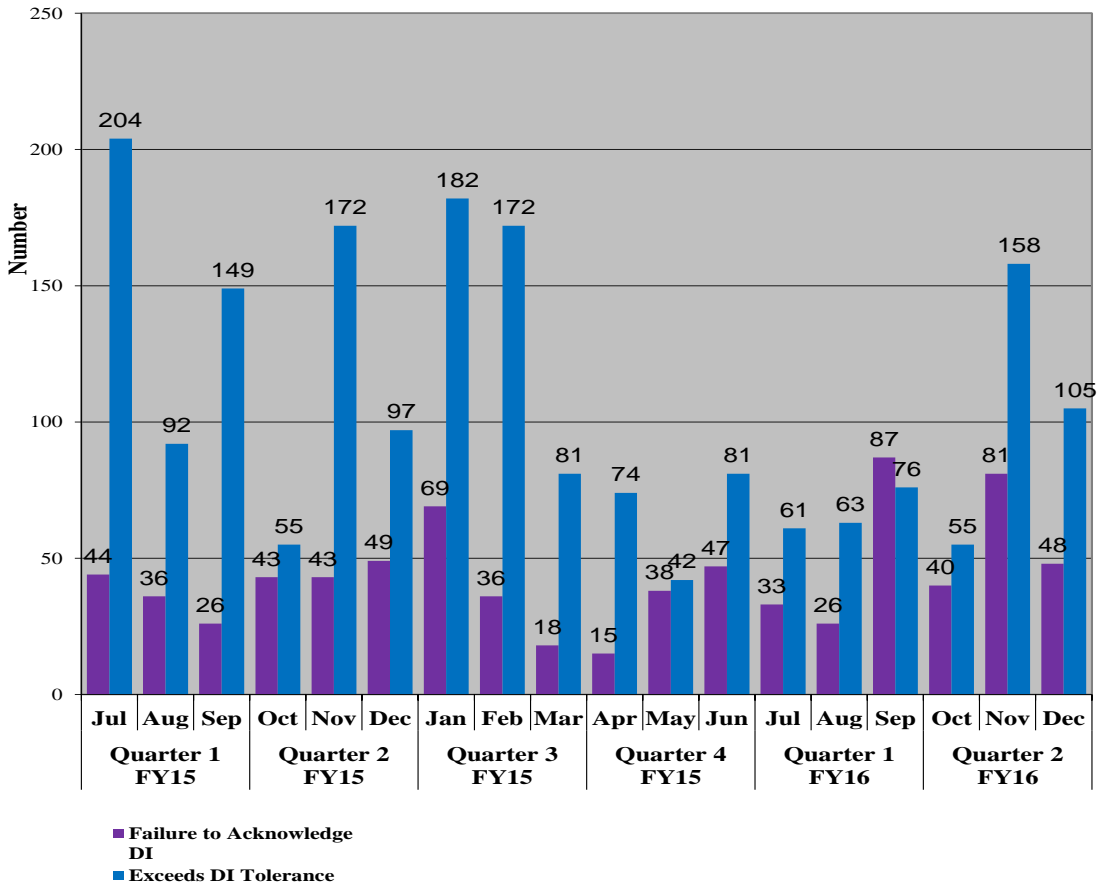


Figure 3: Dispatch Instruction non-compliance notifications (end of interval) and non-acknowledged Dispatch Instructions

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

### 4.1 Out of Merit instances reported to the IMO

During the period System Management reported the following occasion of potential Out of Merit dispatch to the IMO.

On 24 November 2015, during interval 0:1 a Western Power IT Communication issue prevented System Management from loading the half hourly Balancing Merit Order (BMO). The IT issue was resolved at 06:10am on 24 November and an updated BMO was received for 06:30am for interval commencement 7:1. During this period System Management was reliant on the BMO created at 23:30 on 23 November 2015 for the interval commencing 0:1 24 November and in addition to this, the following dispatch issues occurred:

- At 06:00hrs on 24 November 2015, Alinta\_Wagerup\_GT should have received a Dispatch Instruction (DI) to synchronise. Due to the IT issues this DI was not issued until 06:20am.
- At 06:30hrs on 24 November 2015, Newgen\_Neerabup\_GT1 should have received a Dispatch Instruction (DI) to synchronise. Due to the IT issue this DI was not issued until 06:50am.

#### **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 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 6 October 2015 (Trade date 5 October), a planned Western Power Networks Transmission outage on West Kalgoorlie Terminal 2 resulted in INVESTEC\_COLLGAR\_WF1 being constrained to a maximum of 50MW from Interval 5:2 to 6:2 (refer Dispatch Advisory 11507).
- On 21 October 2015, a planned Western Power Networks Transmission outage in the Goldfields region resulted in INVESTEC\_COLLGAR\_WF1 being constrained to a maximum 75MW from Interval 6:2 to 7:1 and then from Interval 9:1 to 9:2. Alinta\_WWF was also constrained to a maximum of 50MW during Interval 14:1 (refer Dispatch Advisory 11628).
- On 8 November 2015, Western Power Networks Transmission works resulted in INVESTEC\_COLLGAR\_WF1 being constrained to a maximum of 50MW for five Intervals from Interval 11:1 to 13:1. However the facilities export at the time of the constraint was below 50MW and therefore did not impact on the facility.
- On 16 November 2015, a Western Power Networks Transmission outage at the West Kalgoorlie Terminal 2 required INVESTEC\_COLLGAR\_WF1 to be constrained to a maximum of 75MW from Interval 7:1 to 8:2 (refer to Dispatch Advisory 12740). However, the conditions at the time were such that the Facility’s output was less than 75MW and therefore did not impact on the facility.
- On 2 December 2015 due to Western Power performing planned maintenance works at the West Kalgoorlie Terminal 2 INVESTEC\_COLLGAR\_WF1 was required to be

constrained to a maximum of 70MW from Interval 14:1 to 14:2 (refer to Dispatch Advisory 15348).

- On 4 December 2015 a Western Power Networks Transmission outage required INVESTEC\_COLLGAR\_WF1 to be constrained to a maximum of 50MW from the end of Interval 7:1 to the beginning of interval 7:2. The facilities export at the time was decreasing and therefore the constraint had little impact on the facility.

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

### 6.1 High Risk Operating State

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

<b>Date</b>	8 October 2015
<b>Interval/s</b>	Int 00:2 – Int 00:2
<b>DA Number</b>	11533
<b>Details</b>	Collie_G1 tripped at 00:38am on 08/10/2015 causing a loss of 178MW of generation and a frequency deviation to approximately 49.61Hz.
<b>System Management action</b>	No Out of Merit Dispatch was required and System Management continued to Dispatch as per the latest Balancing Merit Order.

<b>Date</b>	20 October 2015
<b>Interval/s</b>	11:2 – 11:2
<b>DA Number</b>	11626
<b>Details</b>	Collie_G1 tripped at 11:40am causing a loss of 335MW of generation and a frequency deviation to approximately 49.21Hz.
<b>System Management action</b>	No Out of Merit Dispatch was required and System Management continued to Dispatch as per the latest Balancing Merit Order.

<b>Date</b>	22 November 2015
<b>Interval/s</b>	22 Nov 15 Int 16:2 – 23 Nov 15 Int 7:2
<b>DA Number</b>	14967
<b>Details</b>	Major bushfires posed a threat to Transmission Lines: NBT-TS91, PJR-MUC82 and GLT-WLT81.
<b>System Management action</b>	No Out of Merit Dispatch was required and System Management continued to Dispatch as per the latest Balancing Merit Order.



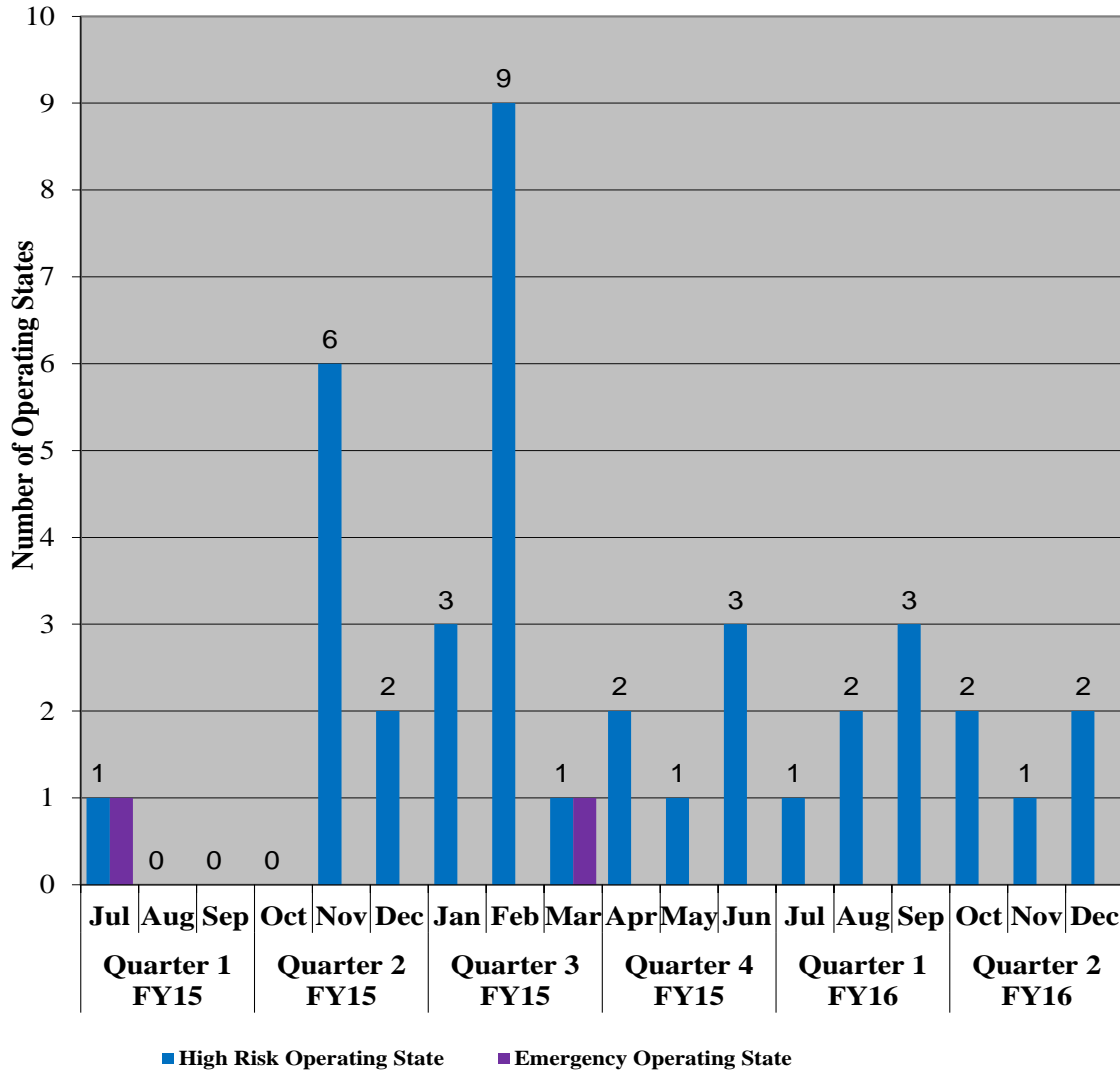
<b>Date</b>	2 December 2015
<b>Interval/s</b>	Int 13:1 – 14:1
<b>DA Number</b>	15347
<b>Details</b>	Power interruptions at the East Perth Control Centre potentially threatened IT Systems.
<b>System Management action</b>	No Out of Merit Dispatch was required and System Management continued to Dispatch as per the latest Balancing Merit Order.

<b>Date</b>	22 December 2015
<b>Interval/s</b>	Int 21:2 – 21:2
<b>DA Number</b>	15478
<b>Details</b>	NEWGEN_KWINANA_CCG1 tripped at 21:30pm resulting in a loss of 323MW of generation and a frequency deviation to approximately 49.57Hz.
<b>System Management action</b>	No Out of Merit Dispatch was required and 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 recorded.

Figure 4 below provides historical data for High Risk and Emergency Operating States that have occurred since 1 July 2014.



.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 were no instances of involuntary curtailment of load.

## 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.