
**Status Report prepared under
clause 7.12 of the Market Rules by
System Management
1 October 2014 – 31 December 2014**



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	6
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.....	10
6.3	Shortfalls in Ancillary Services	11
6.4	Involuntary curtailment of load	11
7	LFAS Facilities out of Merit Order	11

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 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 2014 to 31 December 2014.

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 11,345 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.

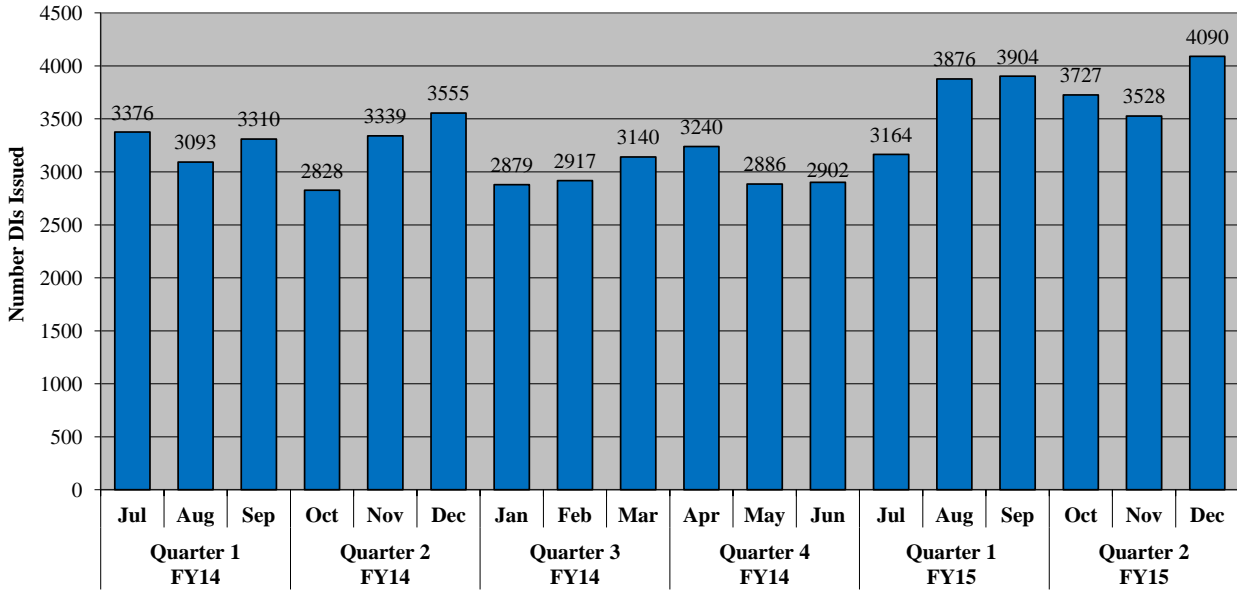


Figure 1: Dispatch Instructions per month

During the current reporting period, System Management issued a total of 43 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.

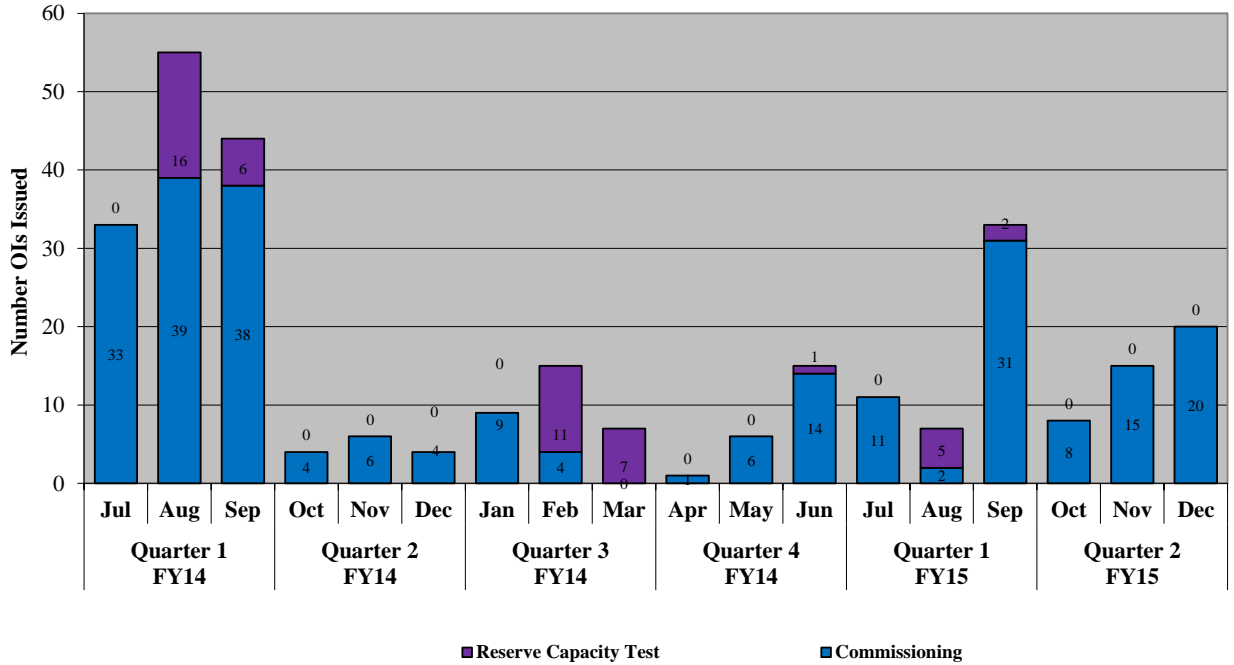


Figure 2: Operating Instructions per month

3 Non-compliance with Dispatch and Operating Instructions

In the current reporting period, System Management reported 324 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 19,375 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 135 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.

Figure 3, below provides historical non-compliance data since 1 July 2014.

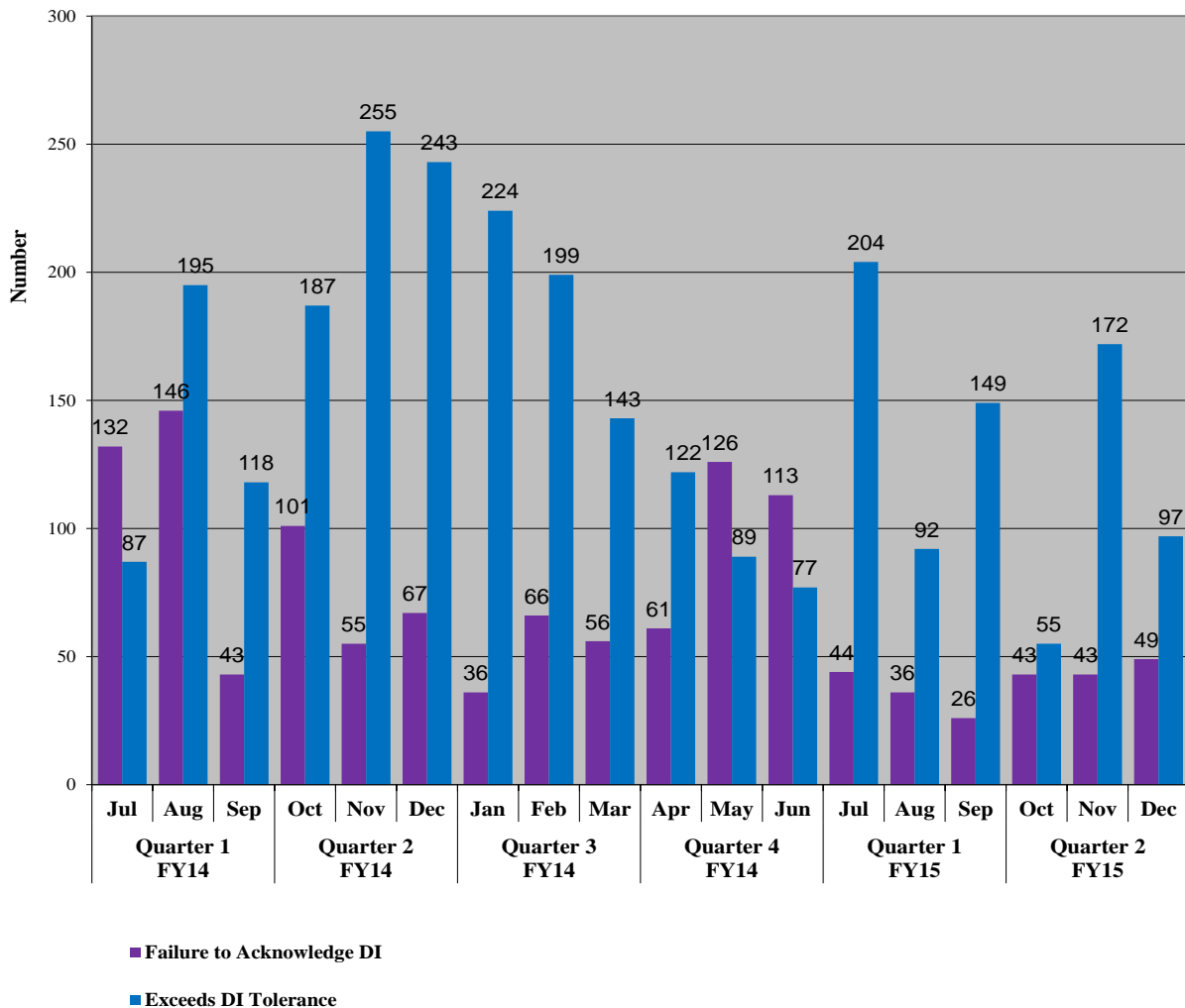


Figure 3: Dispatch Instruction non-compliance notifications and non-acknowledged Dispatch Instructions (at end of interval).

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 there were no self reported occasions of potential Out of Merit dispatch 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 either decrease output or increase output as required by the circumstances of the constraint.

System Management has identified the following transmission constraint events during the period:

- On 1 October 2014 at interval 16:1 the PIC_MRR 81 transmission line suffered a Forced Outage in conjunction with the pre-existing Muja BTT1 outage. As a result the following Vinalco Facilities were dispatched to maintain system security and reliability subsequent to the transmission line Forced Outage from interval 0:1 on 5 October 2014 through to interval 15:1 on 16 October 2014 (refer to Dispatch Advisory numbers 6491, 6507 and 6508):
 - MUJA_G3 constrained on for 30 intervals
 - MUJA_G4 constrained on for 5 intervals
- On 3 November 2014 from interval 6:1 there was a planned transmission outage in the South West and Great Southern region. As a result the following Vinalco Facilities were dispatched to maintain system security and reliability subsequent to the transmission line outage from interval 0:1 on 3 November 2014 through to interval 16:1 on 16 November 2014 (refer to Dispatch Advisory 6607):
 - MUJA_G3 constrained on for 31 intervals
 - MUJA_G4 constrained on for 33 intervals
- From 5:1 until 11:1 on the 19 December 2014 planned transmission works were carried out in MUJA terminal substation on the MUBTT3 transformer. The Eastern Goldfields network was radialised from MUJA and out of merit generation was required in the Eastern Goldfields Region to alleviate an overload on the MUBTT2 transformer as follows (refer to Dispatch Advisories 6805 and 6807):
 - MUJA_G1 constrained on for 12 intervals
 - MUJA_G2 constrained on for 12 intervals
 - INVESTEC_COLLGAR_WF1 constrained off for 10 intervals
 - STHRNCRS_EG constrained for 8 intervals.

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

6.1 High Risk Operating State

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

Date	5 November 2014
Interval/s	22:2 (5 November 2014) - 1:1 (6 November 2014)
DA Number	6622
Details	At 22:40 on 5 November 2014, BW2_BLUEWATERS_G1 tripped resulting in a loss of approximately 198MW and a frequency drop to 49.74Hz.
System Management action	Dispatched as per the latest Balancing Merit Order

Date	9 November 2014
Interval/s	7:2 - 8:1
DA Number	6629
Details	BW2_BLUEWATERS_G1 tripped from 198MW at approximately 07:59 as a result of a frequency stabilisation issue caused by the rapid de-commitment of MUJA_G7 at 07:52 due to a cooling issue with the latter Facility. MUJA_G7 was generating approximately 176MW at the time. This resulted in a frequency deviation to approximately 49.00Hz at 07:59
System Management action	Dispatched as per the latest Balancing Merit Order

Date	10 November 2014
Interval/s	16:1 – 16:1
DA Number	6631
Details	Severe weather conditions caused the loss of transmission equipment in the North Country Region. As a result, the North Country Region was briefly islanded.
System Management action	Dispatched as per the latest Balancing Merit Order

Date	10 November 2014
Interval/s	16:1 (10 November 2014) – 9:1 (11 November 2014)
DA Number	6632
Details	Severe weather conditions in the North Country Region may have required the curtailment of Non-Scheduled Generation and out of merit may occur.
System Management action	Dispatched as per the latest Balancing Merit Order

Date	11 November 2014
Interval/s	16:1 – 16:2
DA Number	6635
Details	Due to lightening in the area, the 220 kV line between Collgar and West Kalgoorlie Terminal tripped. This is resulted in PRK_AG and STHRNCRS_EG being islanded.
System Management action	Dispatched as per the latest Balancing Merit Order

Date	26 November 2014
Interval/s	14:1 – 20:1
DA Number	6724
Details	Severe weather conditions caused the loss of transmission equipment in the North Country Region. As a result, the North Country Region was at risk of being islanded. Non-Scheduled Generation was curtailed.
System Management action	Between intervals 14:1 and 19:2 ALINTA_WWF was constrained to 0MW and MWF_MUMBIDA_WF1 was constrained to 20MW.

Date	12 December 2014
Interval/s	15:1 (12 December 2014 – 3:1 (13 December 2014)
DA Number	6786
Details	A Western Power IT failure resulted in the unavailability of the MPI and NOI. Market files could not be sent to or received from the IMO, including the Balancing Merit Order.
System Management action	Dispatched as per the last received Balancing Merit Order until communications restored at interval 3:1 on 13 December 2014.

Date	19 December 2014
Interval/s	17:1 – 20:2
DA Number	6810
Details	A continuing major bush fire in the region of the following 330kV lines, ST-SHO-OLY91 and LWT-ST91, placed the SWIS in a High Risk State (de-escalated from an Emergency State - refer to DA 6808 in section 6.2 for the earlier Emergency State declaration).
System Management action	Dispatched as per the Balancing Merit Order

6.2 Emergency Operating State

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

Date	19 December 2014
Interval/s	12:2 – 17:1
DA Number	6808
Details	The loss of three 330kV lines (LWT-ST 91, SHO-ST-OLY 91 and KW-KEM-OLY 91) due to a major bush fire near Mortimer Road, Bertram placed the SWIS in an Emergency Operating State. In order to maintain Power System Security and Reliability, generation in the 330kV network in the Southern Region was replaced with generation in the Northern Region.
System Management action	<p>ALINTA_WGP_U2 was constrained to 0MW between 13:1 and 17:1</p> <p>ALINTA_PNJ_U2 was constrained to 0MW between 12:2 and 17:1</p> <p>ALINTA_PNJ_U1 was runback to 40MW between 12:2 and 14:1</p> <p>BW1_BLUEWATERS_G2 was constrained down to no more than 150MW at 15:1, and then to no more than 165MW from 15:1 to 17:1</p> <p>BW2_BLUEWATERS_G1 was constrained down to no more than 150MW at 15:1, and then to no more than 165MW from 15:1 to 17:1</p> <p>NEWGEN_NEERABUP_GT1 was constrained on to 100MW from 15:1 to 15:2, then to 200MW from 14:2 to 16:1, then to 250MW from 16:1 to 17:1 and then down to 100MW from 17:1 to 18:1</p> <p>Portfolio generation was also dispatched (COLLIE_G1 and MUJA_G5 to G7 dispatched down and Pinjar units dispatched upwards)</p>

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

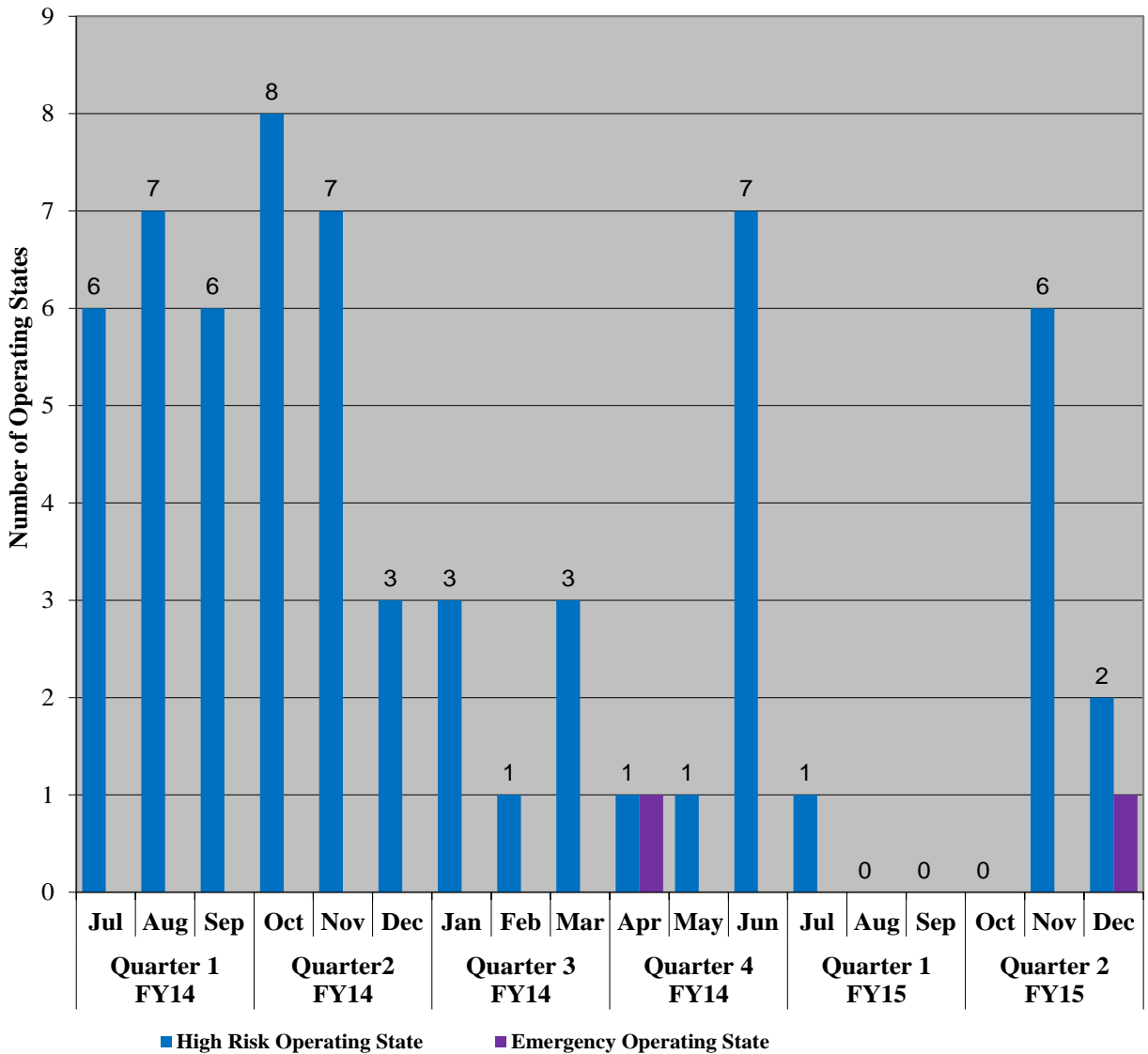


Figure 4: Number of High Risk and Emergency Operating States

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 MR 7B.3.8.