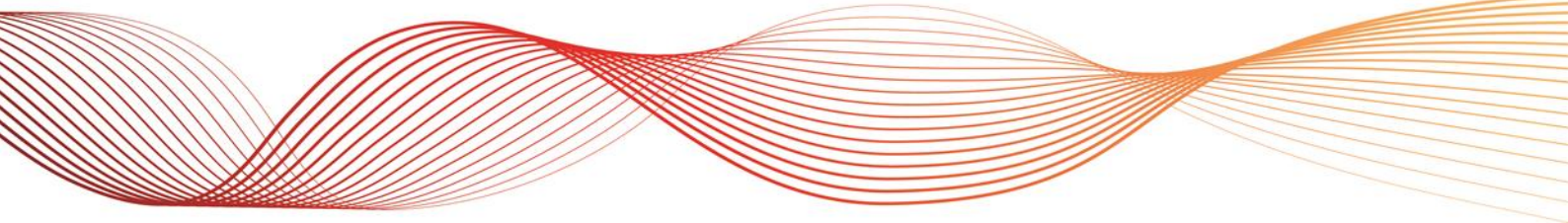




STATUS REPORT

Prepared under clause 7.12 of the Wholesale Electricity Market Rules

1 July 2017 to 30 September 2017





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1. Introduction

The Australian Energy Market Operator (**AEMO**) has prepared this report under clause 7.12 of the Wholesale Electricity Market Rules (**WEM Rules**).

Clause 7.12 of the WEM Rules requires AEMO to provide a report to the Economic Regulation Authority (**ERA**) once every three months 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 clause 7.12.1 of the WEM Rules, issuing Dispatch Orders to the Balancing Portfolio in accordance with clause 7.6.2 of the WEM Rules;
- 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; and
- the incidence and reasons for the selection and use of LFAS Facilities under clause 7B.3.8 of the WEM Rules.

In this report:

- the reporting period is from 1 July 2017 to 30 September 2017;
- terms that are capitalised but not defined have the meaning given in the WEM Rules; and
- date references are to Trading Days, not calendar days, unless otherwise stated.

2. Issuance of Dispatch Instructions and Operating Instructions

AEMO issued 10,875 Dispatch Instructions to Market Participants during the reporting period.

Figure 1 below shows the number of Dispatch instructions issued during each Trading Month since 1 April 2016.

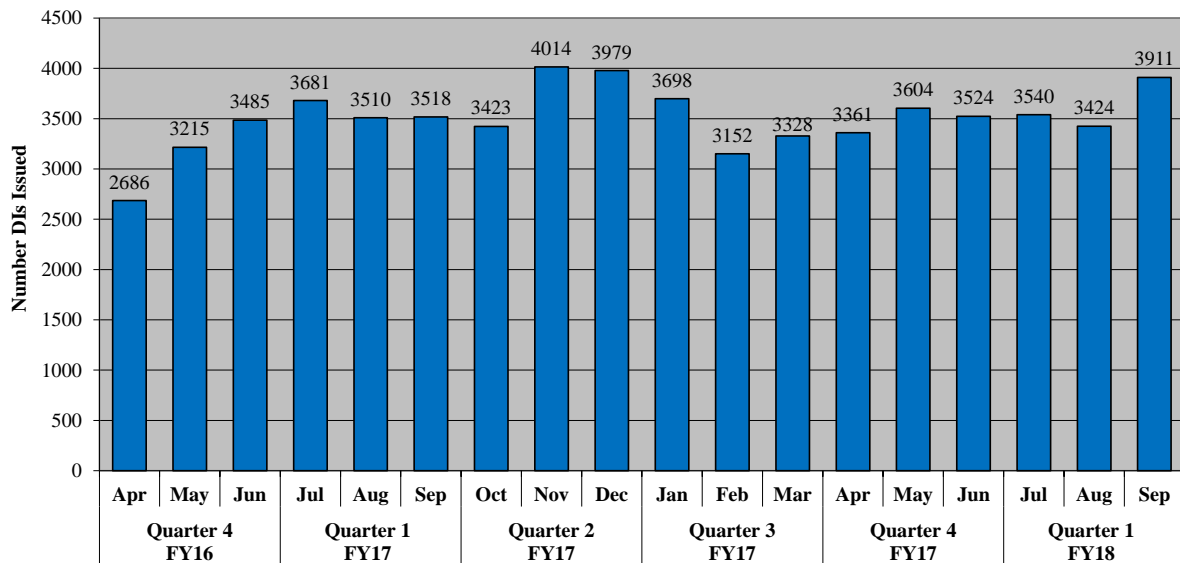


Figure 1: Dispatch Instructions per Trading Month

AEMO issued 35 Operating Instructions during the reporting period.

Two situations where AEMO may issue Operating Instructions under the WEM Rules are for Commissioning Tests and Reserve Capacity Tests.

Figure 2 below shows the number of Operating Instructions issued during each Trading Month since 1 April 2016.

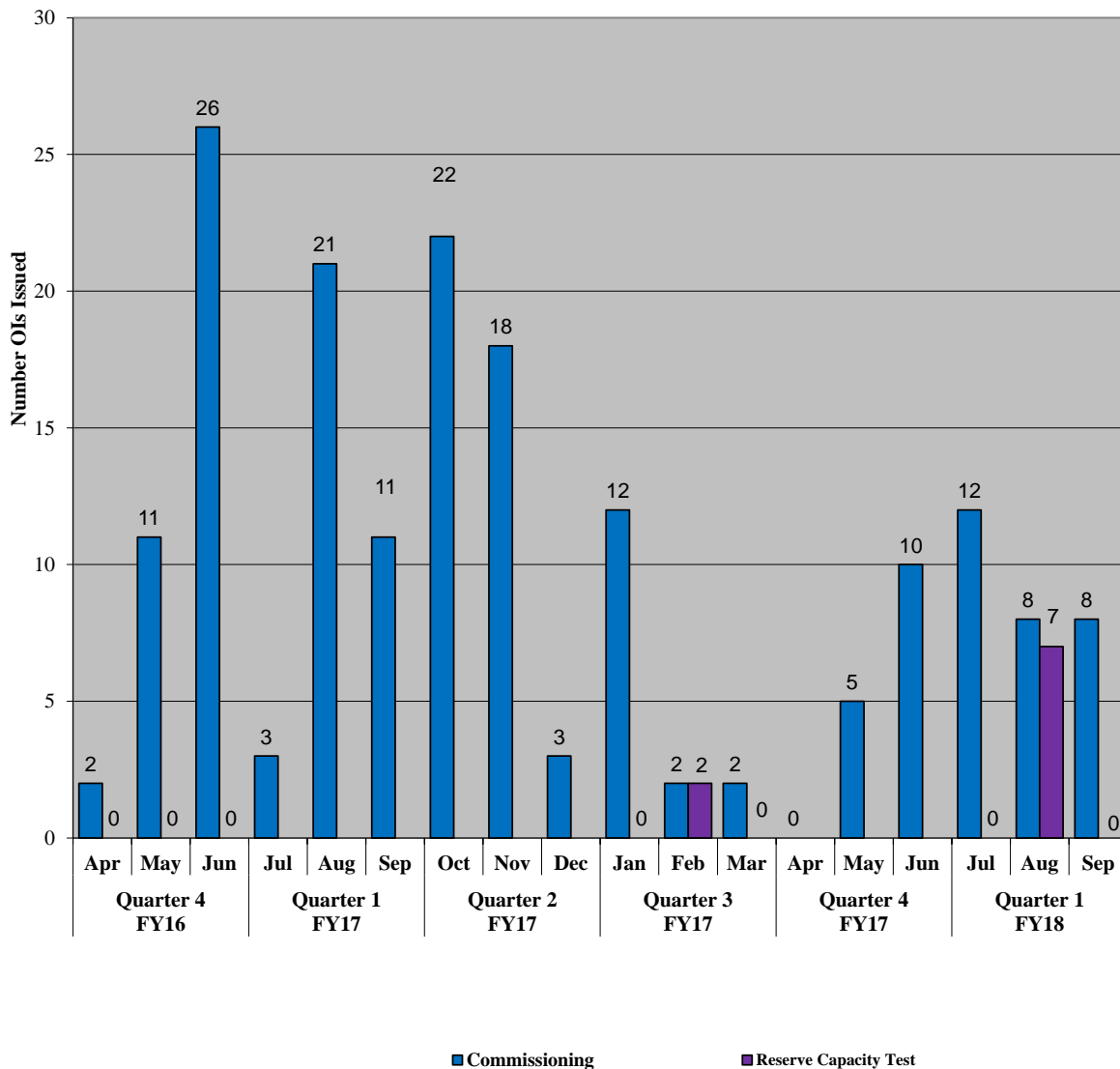


Figure 2: Operating Instructions per Trading Month

3. Non-Compliance with Dispatch Instructions and Operating Instructions

During the reporting period, System Management issued 10,069 one minute non-compliance notifications to Market Participants for non-compliance with Dispatch Instructions, taking into account the Tolerance Range and (where applicable) any Facility Tolerance Ranges.

During the reporting period, there were 173 instances where a Market Participant did not confirm receipt of a Dispatch Instruction when required to do so under the WEM Rules and the Dispatch Power System Operation Procedure.

During the reporting period, there were no instances where a Market Participant did not confirm receipt of an Operating Instruction.

Figures 3 & 4 below provides historical non-compliance data since 1 April 2016.

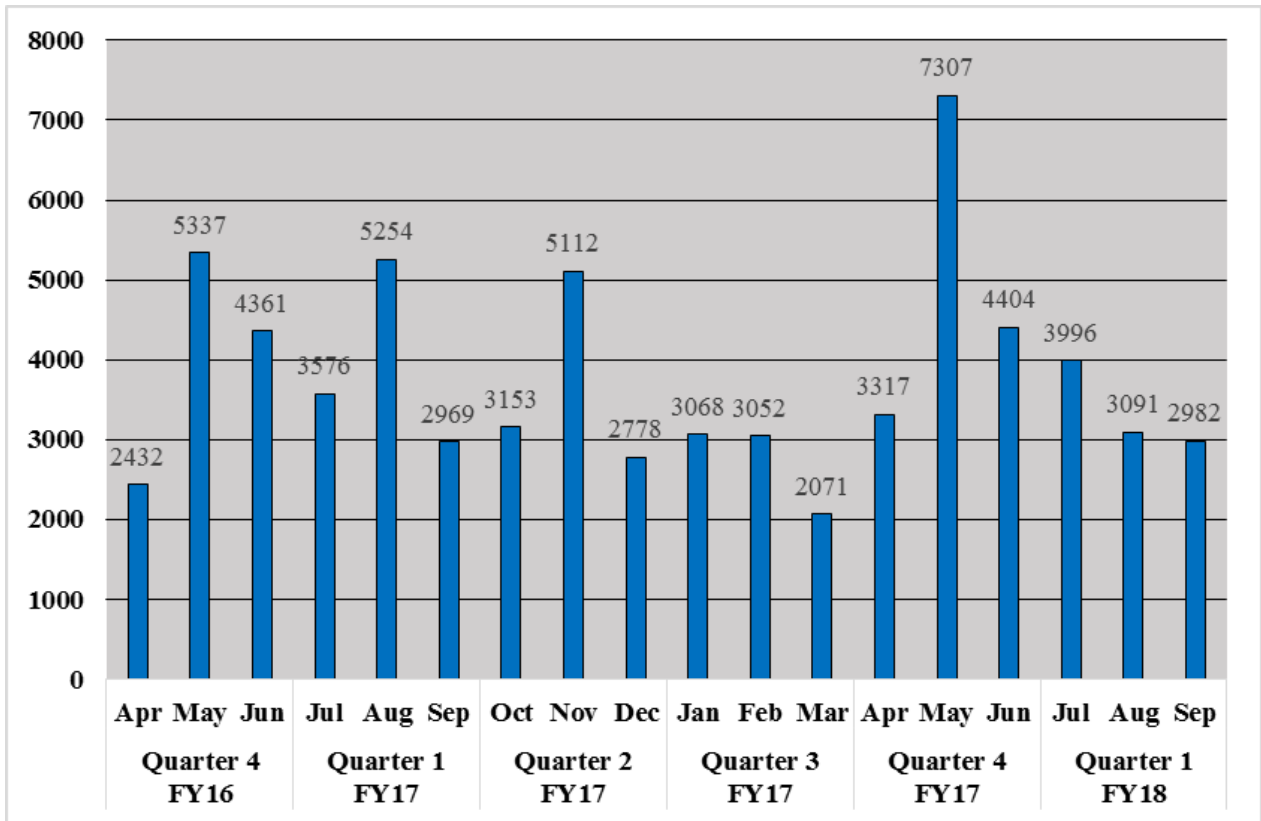


Figure 3: One-minute non-compliance with Dispatch Instruction notifications

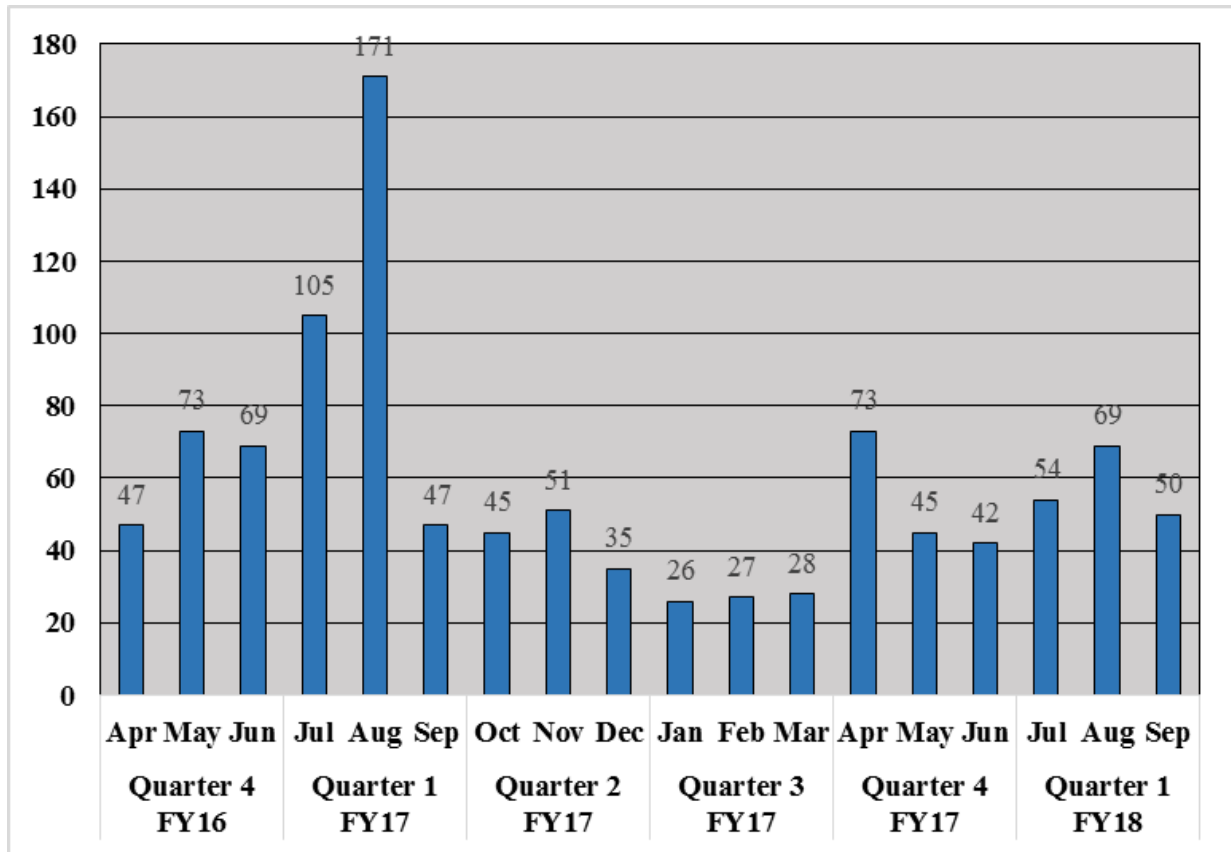


Figure 4: Failures to acknowledge Dispatch Instructions

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

4.1 Instances of Out of Merit dispatch identified by AEMO

During the reporting period, there was one instance of potential non-compliant Out of Merit dispatch.¹ AEMO will provide relevant information to the ERA as required under the WEM Rules.

¹ Clause 7.6.1D of the WEM 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, to enable the SWIS to be returned to a Normal Operating State.

Date	27 August 2017
Trading Interval	11:2 to 12:2
Details	AEMO issued a Dispatch Instruction to a Market Participant. The Market Participant informed AEMO that it could not comply with the Dispatch Instruction because the quantity specified (which corresponded to the quantity specified in the Market Participant's Balancing Submission) was below the Facility's minimum stable generation level. AEMO placed a minimum constraint on the Facility in the Real-Time Dispatch Engine for a quantity above the Facility's minimum stable generation level. Preliminary analysis shows that Out of Merit dispatch occurred as a result of the minimum constraint.
AEMO action	System Management placed a minimum constraint on a Facility in the RTDE for a number of Trading Intervals.

4.2 Other instances of Out of Merit dispatch

Section 5 of this report contains information about Facilities that have been impacted by transmission constraints. Where a transmission constraint reported in section 5 of this report has resulted in a Facility or Facilities 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 occurred during the reporting period. During elevated Operating States, there may be a need to dispatch Facilities Out of Merit to enable the SWIS to be returned to a Normal Operating State.

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 generation Facility. As a result of the transmission constraint, the generation Facility is required to increase or decrease output, depending on the relevant circumstances.

System Management has identified the following transmission constraints during the reporting period:

- On 4 July 2017, commencing Trading Interval 22:1 and ending 5 July 2017 Trading Interval 4:1, a planned line outage on the KDN-MRTX1 220kV transmission line resulted in the islanding of the Eastern Goldfields area. This resulted in the NAMKKN_MERR_SG1, INVESTEC_COLLGAR_WF1 and PRK_AG Facilities being constrained (Dispatch Advisory 17180).
 - The NAMKKN_MERR_SG1 Facility constrained to 0MW for 11 Trading Intervals.
 - The INVESTEC_COLLGAR_WF1 Facility constrained to between 0MW and 60MW for 12 Trading Intervals.
 - The PRK_AG Facility constrained on to between 15MW and 25MW for 11 Trading Intervals.

- On 5 September 2017, commencing Trading Interval 13:2 and ending Trading Interval 20:1, a planned line outage on the KDN-MRTX1 220kV transmission line resulted in the islanding of the Eastern Goldfields area. This resulted in the INVESTEC_COLLGAR_WF1 and PRK_AG Facilities being constrained (Dispatch Advisory 17308).
 - The INVESTEC_COLLGAR_WF1 Facility constrained to 0MW for 16 Trading Intervals.
 - The PRK_AG Facility constrained on to between 20MW and 40MW for 14 Trading Intervals.
- On 25 September 2017, commencing Trading Interval 12:2 and ending Trading Interval 16:1, high winds and the risk of exceeding line overload limits on the TS-MGA81 line resulted in the ALINTA_WWF Facility being constrained (Dispatch Advisory 17348).
 - The ALINTA_WWF Facility constrained on to 70MW for 4 Trading Intervals and 75MW for 4 Trading Intervals.

6. Operating States, shortfalls in Ancillary Services and involuntary curtailment of Load

6.1 High Risk Operating State

There were 7 instances of High Risk Operating States during the reporting period.

Date/Interval/s	4 July 2017 Trading Interval 19:1 to Trading Interval 21:2
DA Number	DA 17185
Details	System Management experienced IT issues that affected the transfer of files to and from System Management. Inbound files affected include the Balancing Merit Order, Load Following and Forecast Quantities files. Outbound files affected include Load Forecast Balancing, Interval Resource EOI and Interval RDQ files.
System Management action	System Management dispatched using the latest available information.

Date/Interval/s	05 July 2017 Trading Interval 9:2 to Trading Interval 12:1
DA Number	DA 17186
Details	System Management experienced issues with the Real Time Dispatch Engine and SOCCUI that affected the electronic dispatch of Automatic Balancing Control/Automatic Governance Control facilities.
System Management action	System Management issued Dispatch Instructions verbally based on the latest Balancing Merit Order.

Date/Interval/s	19 July 2017 Trading Interval 13:2 to 20 July 2017 Trading Interval 6:2
DA Number	DA 17204
Details	At 1.47 pm the BW2_BLUEWATERS_G1 Facility tripped, resulting in the loss of approximately 180MW of generation and a reduction in the SWIS system frequency to 49.63Hz. Frequency was restored to a normal operating level by 1.50 pm.
System Management action	System Management dispatched as per the latest Balancing Merit Order to maintain Power System Security and Power System Reliability.

Date/Interval/s	24 July 2017 Trading Interval 11:2
DA Number	DA 17208
Details	At 11.38 am the BW2_BLUEWATERS_G1 Facility tripped, resulting in the loss of approximately 198MW of generation and a reduction in the SWIS system frequency to 49.45Hz. Frequency was restored to a normal operating level by 11.40 am.
System Management action	The BW2_BLUEWATERS_G1 Facility was constrained to 0MW. System Management dispatched as per the latest Balancing Merit Order to maintain Power System Security and Power System Reliability.

Date/Interval/s	28 July 2017 Trading Interval 18:1
DA Number	DA 17218
Details	At 6.17 pm the KEMERTON_GT12 Facility tripped, resulting in the loss of approximately 155MW of generation and a reduction in the SWIS system frequency to 49.67Hz. Frequency was restored to a normal operating level by 6.21 pm.
System Management action	System Management dispatched as per the latest Balancing Merit Order to maintain Power System Security and Power System Reliability.

Date/Interval/s	25 August 2017 Trading Interval 17:2
DA Number	DA 17301
Details	At 5.43 pm the COLLIE_G1 Facility tripped, resulting in the loss of approximately 318MW of generation and a reduction in the SWIS system frequency to 49.38Hz. Frequency was restored to a normal operating level at 5.44 pm.
System Management action	System Management dispatched as per the latest Balancing Merit Order to maintain Power System Security and Power System Reliability.

Date/Interval/s	09 September 2017 Trading Interval 15:2 to Trading Interval 17:2
DA Number	DA 17322
Details	System Management experienced issues with the XA/21 IT System which controls the automatic dispatch of facilities on Automatic Balancing Control/Automatic Governance Control electronically. System Management could issue Dispatch Instructions but Facilities were not being moved automatically as required.
System Management action	System Management advised affected units to switch to Manual Mode and respond to verbal Dispatch Instructions.

6.2 Emergency Operating State

There were no instances of an Emergency Operating State during the reporting period.

Figure 5 below provides historical data for High Risk and Emergency Operating States that have occurred since 1 April 2016.

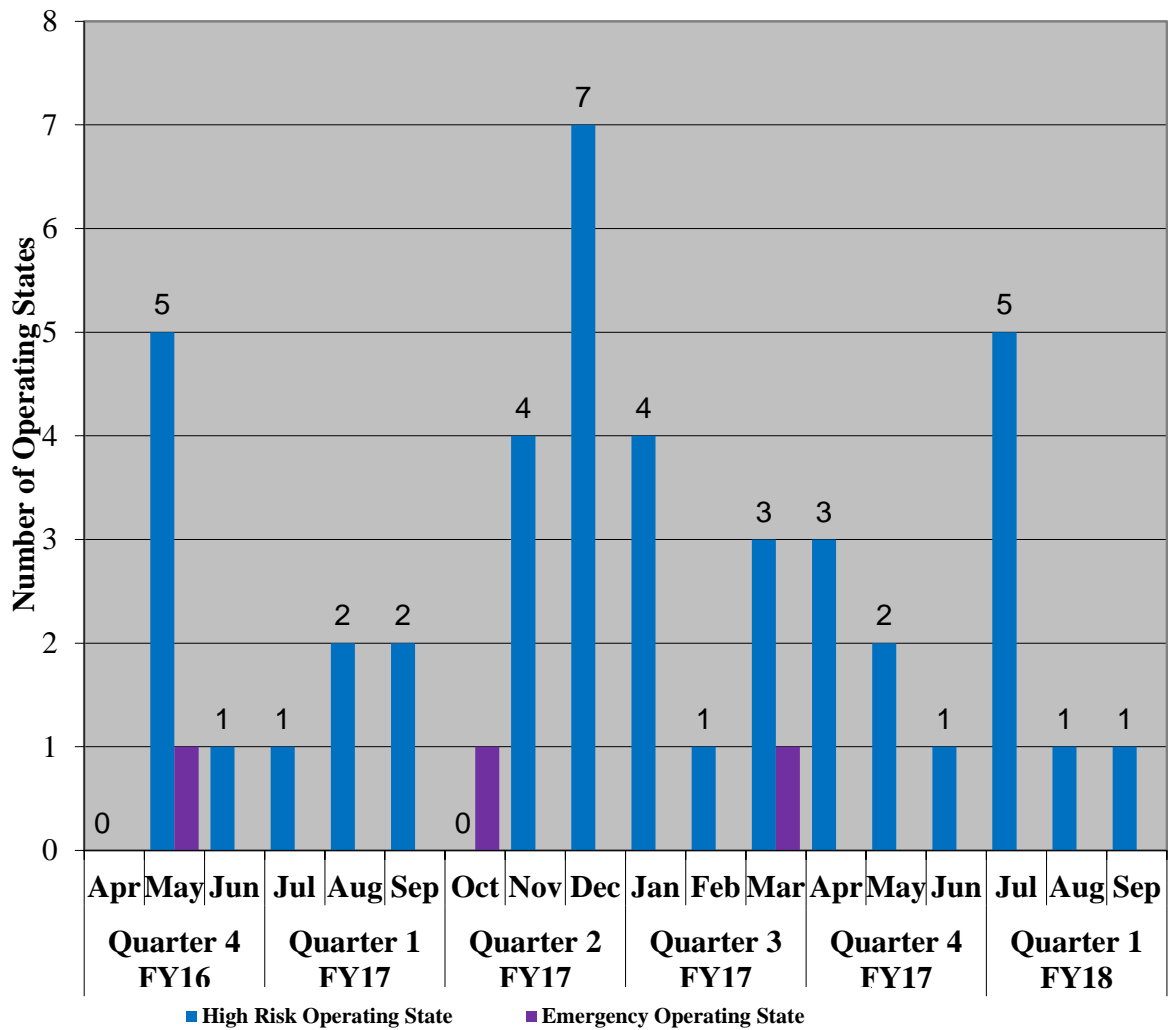


Figure 5: Number of High Risk and Emergency Operating States

6.3 Shortfalls in Ancillary Services

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

6.4 Involuntary curtailment of load

There were no instances of involuntary curtailment of load during the reporting period.

7. Selection and use of LFAS Facilities other than in accordance with LFAS Merit Order

During the reporting period, there were no incidents where System Management was required to use LFAS Facilities other than in accordance with the LFAS Merit Order to operate the SWIS in a reliable and safe manner under clause 7B.3.8 of the WEM Rules.