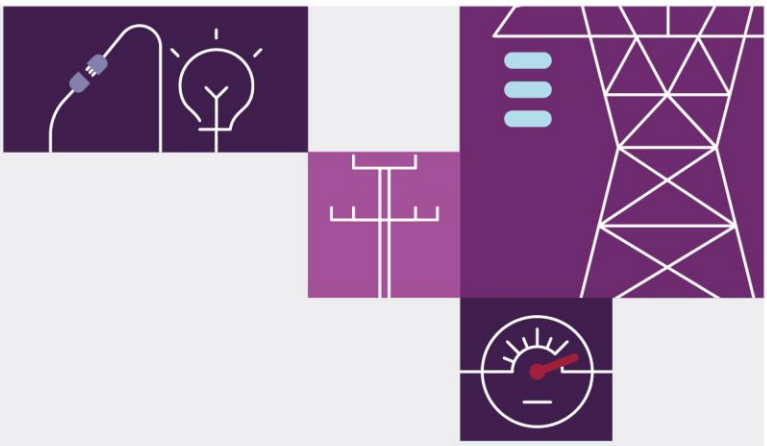
NEM Lack of Reserve Framework Report 1 January to 31 March 2022

April 2022

A report for the National Electricity Market on the operation of the Lack of Reserve Framework



Important notice

Purpose

AEMO has prepared this document under clause 4.8.4B of the National Electricity Rules to report on the operation of the NEM Lack of Reserve Framework for the period from 1 January to 31 March 2022.

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This document or the information in it may be subsequently updated or amended. This document does not constitute legal or business advice, and should not be relied on as a substitute for obtaining detailed advice about the National Electricity Law, the National Electricity Rules, or any other applicable laws, procedures or policies. AEMO has made every effort to.

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Version control

Version	Release date	Changes
1	26/04/2022	Initial release

Executive summary

This report has been published in accordance with clause 4.8.4B of the National Electricity Rules (NER).

In the reporting period 1 January to 31 March 2022 (Quarter 1 2022), AEMO declared 36 Lack of Reserve (LOR) conditions in the National Electricity Market (NEM)[1]:

- There were 15 forecast LOR1 conditions.
- There were eight forecast LOR2 conditions.
- There were two forecast LOR3 conditions.
- There were nine actual LOR1 conditions.
- There were two actual LOR2 conditions.
- There were no actual LOR3 conditions.

This compares with 55 LOR conditions declared in the previous reporting period (Quarter 4 2021), and seven LOR conditions declared for the same period last year (Quarter 1 2021)[2].

Quarter 1 2022 covered the later summer months and first month of autumn:

- The LOR declarations in this quarter are mainly due to decreased generation availability and an increase in forecast demand.
- None of the actual LOR conditions were unanticipated.
- Many of the forecast LOR conditions did not eventuate into actual LOR conditions, mainly because the market response in the form of increased generation availability and revised forecast demand meant the actual demand was not as high as the forecast demand.
- The LOR conditions in New South Wales and Queensland were driven by high demand forecasts and decreased generation availability.
- The LOR conditions in South Australia were mainly due to decreased generation availability and high demand forecasts.

Of the 36 LOR declarations in Quarter 1 2022:

- For 24 declarations, the reserve requirement was set by the sum of the two largest credible risks (LCR2, for LOR1 thresholds). There was one declaration where the reserve requirement was set by the largest credible risk (LCR, for LOR2 thresholds). There were nine declarations where the reserve requirement was set by the Forecast Uncertainty Measure (FUM).

[1] Forecast or actual LOR1, LOR2, or LOR3. LOR is described in clause 4.8.4 of the National Electricity Rules (NER). AEMO's considerations and methodology, and the LOR levels, are outlined in AEMO's Reserve Level Declaration Guidelines, at https://www.aemo.com.au/Electricity/National-Electricity-Market-NEM/Security-and-reliability/Power-system-operation.

[2] In Quarter 4 2021, the declared LOR conditions were 29 forecast LOR1 conditions, 18 forecast LOR2 conditions, seven actual LOR1 conditions and one actual LOR2 condition; in Quarter 1 2021 the declared LOR conditions were two forecast LOR1 conditions, three actual LOR1 conditions and two actual LOR2 conditions. Previous quarterly reports are on AEMO's website at https://www.aemo.com.au/energy-systems/electricity/national-electricity-market-nem/system-operations/power-system-operation/nem-lack-of-reserve-framework-quarterly-reports.

- This means 25% of LOR conditions were declared when the reserve requirement was being set by the FUM. For comparison, in Quarter 4 2021, 9 of the 55 LOR declarations were set by the FUM (16%), and in Quarter 1 2021, none of the 7 LOR declarations was set by the FUM (0%).

The next report on the NEM Lack of Reserve Framework, for the reporting period 1 April to 30 June 2022, will be published by 31 July 2022.

Contents

Tables

Figures

1 Introduction

This report has been published in accordance with clause 4.8.4B of the National Electricity Rules (NER), to provide a high-level analysis of how the Lack of Reserve (LOR) framework is operating. This report covers the period from 1 January to 31 March 2022 (Quarter 1 2022).

Unless otherwise noted, all times in this report are National Electricity Market (NEM) time (Australian Eastern Standard Time [AEST]).

The report is divided into three sections:

- **Reserve Level Declaration Guidelines** – a summary of changes to the Guidelines over the past quarter, and the retraining of the Bayesian Belief Network (BBN).
- **LOR conditions declared** – details of all LOR conditions declared or revised during the past quarter (based on market notices). For each condition declared, the report indicates the required reserve level and whether the requirement was set by the Forecast Uncertainty Measure (FUM), or the largest credible risk/s (LCR) in the region. The reserve requirement can be set by the largest credible risk (LCR, for LOR2 conditions) or the sum of the two largest credible risks (LCR2, for LOR1 thresholds). The FUM value for each relevant period is also provided.
- **Review of performance** – a review of the performance of the LOR framework and any observed trends, providing an assessment of FUM values compared to previous quarters, determinants of reserve level requirements, number of LOR declarations, and leading factors or causes of LOR declarations.

Please direct all LOR inquiries to www.aemo.com.au/Contact-us. In the inquiry form field '*What is your enquiry regarding?*', write "**LOR Framework Report**".

The next report on the NEM Lack of Reserve Framework, for the reporting period from 1 April to 30 June 2022 (Quarter 1 2022), will be published by 31 July 2022.

2 Reserve level declaration guidelines

2.1 Changes in the reporting period

During the reporting period, there were no changes to the Guidelines[3].

2.2 Retraining of the Bayesian Belief Network

The BBN is the algorithm which determines the FUM, which in turn can determine LOR levels. This process is summarised in the Guidelines. The intention of retraining the BBN is to update the network to include recent historical data since the last retraining. AEMO commenced the retraining in April 2022 to include data up to 31 March 2022. The retraining involves a three-stage process:

1. Extract-Transform-Load (ETL) stage, to extract historical data up to 31 March 2022, perform data validation and cleansing, and compile the data into the structured format required to incorporate into the network.
2. Analysis and modelling stage, to update the network and compile the network nodes.
3. Test and verification stage, to ensure the retrained network is suitable for production implementation.

AEMO is in the final stage of retraining, and plans to implement the retrained BBN into production around the end of April 2022, pending final verification and readiness checks in the pre-production environment.

2.2.1 Results from retraining

To verify the retraining, AEMO completed a backcast of all forecast intervals from January 2021 to December 2021, inclusive, using the existing BBN and the retrained BBN. The intention of the backcast is to provide an indication of the magnitude of changes to future FUM values.

In previous quarters, this report described changes in FUM using maximum, mean and minimum values. As changes in maximum and minimum values are sensitive to unique events and limited sample sizes during the retraining quarter, from Q1 2022 onwards, 90th, 50th (median) and 10th percentiles are used in commentary to describe changes in FUM. Maximum, mean and minimum values are to still be included in visuals for review of performance in section 4.1 of this report.

These changes in FUM between the existing and retrained BBN backcasts are listed below. Minor changes were identified for some other forecast horizons and distribution statistics but are not listed here.

- New South Wales – 90th percentile FUM values decreased by 100 megawatts (MW), 88 MW, 52 MW and 102 MW for the two, six, 12 and 24 hours ahead forecast horizon respectively. Median FUM values increased by 52 MW for the two hours ahead forecast horizon. 10th percentile FUM values increased by 59 MW for the two hours ahead forecast horizon and decreased by 47 MW and 87 MW for the 12 and 60 hours ahead forecast horizons respectively.

[3] The Guidelines are at http://aemo.com.au/Electricity/National-Electricity-Market-NEM/Security-and-reliability/Power-system-operation.

- Queensland – 90th percentile FUM values decreased by 83 MW, 141 MW, 91 MW and 308 MW for the two, six, 12, and 24 hour ahead forecast horizons respectively. Median and 10th percentile FUM values were relatively unchanged. The decrease in 90th percentile FUM is attributed to reduced forecast error this quarter, particularly for interconnector error, compared to the remainder of the training set. This introduced lower uncertainty in the retrained model and hence reduced 90th percentile FUM values up to 24 hours ahead.
- South Australia – 90th percentile FUM values decreased by 51 MW, 28 MW, 28 MW and 84 MW for the two, six, 12 and 24 hours ahead forecast horizons respectively. Median percentile FUM values decreased by 10 MW and 14 MW for the 12 and 24 hours ahead forecast horizons respectively. 10th percentile FUM values were relatively unchanged.
- Tasmania – 90th percentile FUM values increased by 13 MW for the two hours ahead forecast horizon and decreased by 22 MW and 11 MW for the 12 and 24 hours ahead forecast horizon respectively. Median FUM values increased by 4 MW for the two hours ahead forecast horizon and decreased by 19 MW for the 12 hours ahead forecast horizon. 10th percentile FUM values decreased by 11 MW for the two hours ahead forecast horizon.
- Victoria – 90th percentile FUM values decreased by 30 MW and 94 MW for the 12 and 24 hours ahead forecast horizons respectively. Median FUM values decreased by 44 MW for the 24 hours ahead forecast horizon. 10th percentile FUM values were relatively unchanged.

3 Lack of Reserve conditions declared

Table 1 provides a high-level summary of the counts of forecast and actual LOR conditions based on the declaration count principles.

Table 2 lists all market notice declarations of forecast and actual LOR conditions over the reporting period from 1 January to 31 March 2022. Table 2 also identifies the market notices that communicated updates to, and cancellation of, either forecast or actual LOR conditions.

Declaration count principles

For the reporting period, AEMO determined the total count for LOR conditions based on the following principles:

- All market notices making the initial declaration of a forecast or actual LOR condition with an effective date during the reporting period were counted.
- Any market notices which updated previously issued forecast or actual LORs for a given effective date (in relation to the reserve requirement, reserve capacity available, or effective period) were not counted, to prevent double-counting of a continuing condition.
- In cases where forecast LORs were cancelled but subsequently re-issued with approximately the same effective period, re-issues were not counted, to prevent double-counting of effective periods.
- Updates to existing LOR conditions where the LOR level changed were counted as separate LOR conditions.
- Any forecast LORs which were subsequently declared as actual LORs at the same LOR level were counted once. In Table 2, these are shown as actual conditions only. For example:
  - Where a forecast LOR1 was issued and later an actual LOR1 was declared for a similar period, only the actual LOR1 was counted.
  - If the initial forecast was for a forecast LOR2 condition and this was later declared as an actual LOR1, this would be counted as two LOR conditions, due to the differing LOR levels.

Table 1 Summary of forecast and actual LOR conditions, with causing factors

Effective date[A]	Region	LOR1		LOR2		LOR3		Cause and resolution
		Actual	Forecast	Actual	Forecast	Actual	Forecast	
01/02/2022	NSW	1			1			A forecast LOR2 condition was declared with an effective period of 17:30 - 18:30 (65 hour lead time) due to increased forecast demand and increased FUM value. Several updates were issued to the forecast LOR2 conditions with changes in effective period due to decreased generation availability, increased forecast demand and increased FUM values. The forecast LOR2 condition was cancelled due to increased generation availability and decreased forecast demand. A forecast LOR1 condition was declared with an effective period of 17:00 - 18:30 (25 hour lead time) as increased generation and import availability and decreased forecast demand caused LOR2 conditions to improve to LOR1. Several updates were issued to the forecast LOR1 conditions with changes in effective period due to decreased generation availability. A forecast LOR2 condition was declared with an effective period of 17:30 - 18:00 (17 hour lead time) as increased forecast demand caused LOR1 conditions to worsen to LOR2. Several updates were issued to the forecast LOR1 conditions with changes in effective period due to increased forecast demand. An update was issue to the forecast LOR2 conditions with a change in effective period due to increased forecast demand (12 hour lead time). The forecast LOR2 condition was cancelled due to increased generation and import availability. A forecast LOR2 condition was declared with an effective period of 16:00 - 18:00 (2 hour lead time) due to increased forecast demand. Several updates were issued to the forecast LOR1 conditions with changes in effective period due to increased forecast demand. An actual LOR1 condition was declared due to decreased generation availability with an effective period starting from 16:45. The forecast LOR2 condition was cancelled due to increased generation availability. The actual LOR1 was cancelled when the effective period elapsed.
17/02/2022	NSW	1						A forecast LOR1 condition was declared with an effective period of 16:30 - 17:30 (2 hour lead time) due to decreased generation availability and increased forecast demand. An actual LOR1 condition was declared due to decreased generation availability with an effective period of 15:30 - 16:00. An update was issued to the actual LOR1 condition with a change in effective period of 16:00 - 18:00 due to decreased generation availability.

Effective date[A]	Region	LOR1		LOR2		LOR3		Cause and resolution
		Actual	Forecast	Actual	Forecast	Actual	Forecast	
								The actual LOR1 condition was cancelled due to the effective period ending.
21/02/2022	NSW	1						A forecast LOR1 condition was declared with an effective period of 16:30 - 17:30 (12 hour lead time) due to decreased generation availability. The forecast LOR1 condition was cancelled due to increased generation availability. A forecast LOR1 condition was declared with an effective period of 16:30 - 19:00 (3 hour lead time) due to decreased generation availability. An actual LOR1 condition was declared due to decreased generation availability and reduced net import with an effective period of 15:30 - 19:00. The actual LOR1 condition was cancelled due to the effective period ending.
07/01/2022	QLD		1					A forecast LOR1 condition was declared with an effective period of 18:30 - 19:00 (7 day lead time) due to decreased generation availability. The forecast LOR1 condition was cancelled due to a decrease in demand and increased generation availability.
09/01/2022	QLD		1					A forecast LOR1 condition was declared with an effective period of 18:00 - 19:00 (3 hour lead time) due to decreased generation availability and slight increase in forecast demand. The forecast LOR1 condition was cancelled due to increased generation availability and slight decrease in forecast demand.
16/01/2022	QLD		1					A forecast LOR1 condition was declared with an effective period of 18:30 - 19:00 (5 day lead time) due to increased demand forecast. An update to the forecast LOR1 condition was issued with an extended effective period of 18:00 - 19:30 (4 day lead time). The forecast LOR1 condition worsened due to increased demand forecast and decreased generation availability. Another update to the forecast LOR1 condition was issued with shortened effective period of 18:30 - 19:00 (3 day lead time). The forecast LOR1 condition improved due to decreased demand forecast. The forecast LOR1 condition was cancelled due to decreased forecast demand.
17/01/2022	QLD	1			1			A forecast LOR1 condition was declared with effective periods of 17:00 - 18:30, 19:00 - 19:30 (7 day lead time) due to decreased generation availability and relatively high forecast demand and reduced net import. A forecast LOR2 condition was declared with an effective period of 18:30 - 19:00 (7 day lead time) due to decreased generation availability and relatively high forecast demand and reduced net import. An update to the forecast LOR2 condition was issued with an extended effective period of 18:00 - 19:00 (7 day lead time). The forecast LOR2 condition worsened due to decreased generation availability.

Effective date[A]	Region	LOR1		LOR2		LOR3		Cause and resolution
		Actual	Forecast	Actual	Forecast	Actual	Forecast	
								The forecast LOR2 condition was cancelled due to increased net import. A forecast LOR2 condition was later redeclared with an effective period of 18:30 - 19:00 (6 day lead time) due to reduced net import. The forecast LOR2 condition was cancelled due to decreased forecast demand. An update to the forecast LOR1 condition was issued with an extended effective period of 17:00 - 20:00 (6 day lead time). The forecast LOR1 condition worsened due to decreased generation availability. A forecast LOR2 condition was later redeclared with an effective period of 18:00 - 19:00 (6 day lead time) due to decreased generation availability and increased demand forecast. An update to the forecast LOR2 condition was issued with an extended effective period of 17:30 - 19:30 (6 day lead time). The forecast LOR2 condition worsened due to increased demand forecast. Another update to the forecast LOR2 condition was issued with a shortened effective period of 17:00 - 19:30 (6 day lead time). The forecast LOR2 condition worsened due to increased demand forecast. Another update to the forecast LOR2 condition was issued with an effective period of 17:00 - 20:00 (5 day lead time). The forecast LOR2 condition improved due to decreased demand forecast and increased generation availability. Another update to the forecast LOR1 condition was issued with extended effective periods of 16:30 - 17:30, 19:00 - 20:00 (5 day lead time). The forecast LOR1 condition worsened due to increased demand forecast. Another update to the forecast LOR2 condition was issued with a shortened effective period of 17:30 - 19:00 (5 day lead time). The forecast LOR2 condition improved due to decreased demand forecast and increased generation availability. The forecast LOR2 condition was cancelled due to decreased demand forecast and increased net import. Another update to the forecast LOR1 condition was issued with a shortened effective period of 17:00 - 19:30 (4 day lead time). The forecast LOR1 condition improved due to decreased demand forecast. The forecast LOR1 condition was cancelled due to decreased forecast demand. A forecast LOR1 condition was later redeclared with an effective period of 17:30 - 19:30 (5 hour lead time) due to decreased generation availability and increased demand forecast. An actual LOR1 was declared due to decreased generation availability and increased demand forecast. Actual conditions existed from 17:30 - 20:00. The actual LOR1 was cancelled when the effective period elapsed.
18/01/2022	QLD		1					A forecast LOR1 condition was declared with an effective period of 18:30 - 19:00 (7 day lead time) due to decreased generation availability.

Effective date[A]	Region	LOR1		LOR2		LOR3		Cause and resolution
		Actual	Forecast	Actual	Forecast	Actual	Forecast	
								An update to the forecast LOR1 condition was issued with an extended effective period of 17:30 - 19:30 (6 day lead time). The forecast LOR1 condition worsened due to increased demand forecast and reduced net import. Another update to the forecast LOR1 condition was issued with the same effective period of 17:30 - 19:30 (5 day lead time). The forecast LOR1 condition improved due to decreased demand forecast. The forecast LOR1 condition was cancelled due to decreased forecast demand and decrease in LOR1 trigger level. A forecast LOR1 condition was later redeclared with an effective period of 18:00 - 19:00 (12 hour lead time) due to reduced net import and increase in demand forecast. The forecast LOR1 condition was cancelled due to increased generation availability and decreased forecast demand. A forecast LOR1 condition was later redeclared with an effective period of 18:30 - 19:00 (1 hour lead time) due to decreased generation availability. The forecast LOR1 condition was cancelled due decreased forecast demand.
19/01/2022	QLD		1					A forecast LOR1 condition was declared with an effective period of 18:30 - 19:00 (3 hour lead time) due to decreased generation availability. An update to the forecast LOR1 condition was issued with an extended effective period of 18:00 - 19:30 (1 hour lead time). The forecast LOR1 condition worsened due to increased demand forecast and decreased generation availability. Another update to the forecast LOR1 condition was issued with shortened effective period of 18:30 - 19:00 (2 hour lead time). The forecast LOR1 condition improved due to decreased demand forecast and increased generation availability. The forecast LOR1 condition was cancelled due to increased generation availability and decreased forecast demand.
31/01/2022	QLD	1						A forecast LOR1 condition was declared with an effective period of 18:30 - 19:30 (7 day lead time) due to decreased generation availability. The forecast LOR1 condition was cancelled due to increased generation availability and a decrease in forecast demand. A forecast LOR1 condition was redeclared with an effective period of 18:30 - 19:00 (4 day lead time) due to decreased generation availability. The forecast LOR1 condition was cancelled due to increased generation availability. A forecast LOR1 condition was later redeclared with an effective period of 18:30 - 19:00 (4 hour lead time) due to an increase in forecast demand. An actual LOR1 was declared due to an increase in forecast demand. Actual conditions existed from 18:45 - 19:30. Actual LOR1 condition was cancelled when the effective period elapsed.

Effective date[A]	Region	LOR1		LOR2		LOR3		Cause and resolution
		Actual	Forecast	Actual	Forecast	Actual	Forecast	
01/02/2022	QLD	1		1			1	A forecast LOR2 condition was declared with an effective period of 18:30 - 19:00 (7 day lead time) due to decreased generation availability. A forecast LOR1 condition was declared with effective periods of 17:30 - 18:30 and 19:00 - 20:00 (7 day lead time) due to decreased generation availability. An update to the forecast LOR1 condition was issued with similar effective periods of 17:30 - 18:00 and 19:00 - 21:00 (6 day lead time). The forecast LOR1 condition worsened due to decreased generation availability. Several updates to the forecast LOR1 condition were issued with similar effective periods. The forecast LOR1 condition worsened or improved due to change in the generation availability and forecast demand. An update to the forecast LOR2 condition was issued with the same effective period of 18:30 - 19:00 (6 day lead time). The forecast LOR2 condition worsened due to decreased generation availability. Another update to the forecast LOR2 condition was later issued with the same effective period of 18:30 - 19:00 (5 day lead time). The forecast LOR2 condition improved due to increased generation availability. The forecast LOR1 condition was cancelled due to a decrease in forecast demand. The forecast LOR2 condition was cancelled due to increased generation availability and a decrease in forecast demand. A forecast LOR2 condition was later redeclared with an effective period of 18:00 - 19:00 (66 hour lead time) due to an increase in forecast demand. Several updates to the forecast LOR2 condition were issued with similar effective periods. The forecast LOR2 condition worsened due to an increase in forecast demand, reduced net import and decreased generation availability. A forecast LOR1 condition was later redeclared with an effective period of 19:30 - 20:00 (53 hour lead time) due to decreased generation availability and an increase in forecast demand. An update to the forecast LOR1 condition was issued with an effective period of 16:30 - 17:00 (26 hour lead time). The forecast LOR1 condition worsened due to decreased net import and an increase in forecast demand. A forecast LOR3 condition was declared with an effective period of 18:00 – 19:00 (22 hour lead time) due to an increase in forecast demand and reduced net import. An update to forecast LOR2 condition was issued with an effective period of 16:30 - 18:00 and 19:00 - 21:00 (20 hour lead time). The forecast LOR2 condition worsen due to an increase in forecast demand and decreased generation availability. An update to forecast LOR1 condition was issued with an effective period of 21:00 - 21:30 an (25 hour lead time). The forecast LOR1 condition worsen due to decreased generation availability and reduced net import.

Effective date[A]	Region	LOR1		LOR2		LOR3		Cause and resolution
		Actual	Forecast	Actual	Forecast	Actual	Forecast	
								The forecast LOR3 condition was cancelled due to a decrease in forecast demand. Several updates were issued to the forecast LOR1 and LOR2 conditions with changes in effective period and reserve levels (15 and 20 hour lead time) due to an increase in forecast demand and decreased generation availability. A forecast LOR3 condition was declared with an effective period of 18:00 – 19:00 (17 hour lead time) due to an increase in forecast demand and decreased generation availability and reduced net import. Forecast LOR3 condition was cancelled due to a decrease in forecast demand and increased net import. An actual LOR1 was later declared due to increase in forecast demand. Actual conditions existed from 15:30. An actual LOR2 was later declared due to increase in forecast demand. Actual conditions existed from 17:00. Actual LOR1 condition was cancelled when the effective period elapsed. Actual LOR2 condition was cancelled when the effective period elapsed.
02/02/2022	QLD	1			1		1	A forecast LOR2 condition was declared with an effective period of 17:00 - 19:30 (7 day lead time) due to decreased generation availability. A forecast LOR1 condition was declared with effective periods of 16:30 - 17:00 and 19:30 - 21:00 (7 day lead time) due to decreased generation availability and an increase in forecast demand. A forecast LOR3 condition was declared with an effective period of 18:30 - 19:00 (7 day lead time) due to decreased generation availability and reduced net import. The forecast LOR3 condition was cancelled due to increased generation availability, increased net import and a decrease in forecast demand. An update to the forecast LOR1 condition was issued with effective periods of 16:30 - 17:30 and 19:30 - 20:00 (6 day lead time). The forecast reserve level decreased due to decreased generation availability, reduced net import and an increase in forecast demand. An update to the forecast LOR2 condition was issued with similar effective periods of 17:00 - 18:30 and 19:00 - 19:30 (6 day lead time). The forecast LOR2 condition improved due to a decrease in forecast demand. Several updates to the forecast LOR2 condition were issued with similar effective periods. The forecast LOR2 condition improved due to increased generation availability and a decrease in forecast demand. Several updates to the forecast LOR1 condition were issued with similar effective periods. The forecast LOR1 condition worsened or improved due to change in the generation availability, net import and forecast demand. The forecast LOR2 condition was cancelled due to increased generation availability.

Effective date[A]	Region	LOR1		LOR2		LOR3		Cause and resolution
		Actual	Forecast	Actual	Forecast	Actual	Forecast	
								A forecast LOR3 condition was later redeclared with an effective period of 18:30 - 19:00 (6 day lead time) due to decreased generation availability and reduced net import. The forecast LOR3 condition was cancelled due to increased generation availability, increased net import and a decrease in forecast demand. A forecast LOR2 condition was later redeclared with an effective period of 17:00 - 19:30 (6 day lead time) due to decreased generation availability. An update to the forecast LOR2 condition was issued with a similar effective period of 17:00 - 19:30 (6 day lead time). The forecast LOR2 condition worsened due to an increase in forecast demand. Another update to the forecast LOR2 condition was later issued with an effective period of 17:30 - 19:00 (5 day lead time). The forecast LOR2 condition improved due to a decrease in forecast demand and increased net import. The forecast LOR2 condition was cancelled due to a decrease in forecast demand and increased generation availability. A forecast LOR2 condition was later redeclared with an effective period of 17:30 - 18:00 (4 day lead time) due to an increase in forecast demand. Several updates to the forecast LOR2 condition were issued with similar effective periods. The forecast LOR2 condition worsened due to an increase in forecast demand. The forecast LOR2 condition was cancelled due to a decrease in forecast demand and increased net import. A forecast LOR2 condition was later redeclared with extended effective periods of 15:00 - 15:30, 16:00 - 17:00 and 17:30 - 19:00 (3 day lead time) due to an increase in forecast demand and decreased generation availability. Several updates to the forecast LOR2 condition were issued with similar effective periods. The forecast LOR2 condition worsened or improved due to change in the generation availability, net import and forecast demand. An update to forecast LOR2 condition was issued with an effective period of 12:30 - 18:30 and 19:00 - 21:00 (46 hour lead time). The forecast LOR2 condition improved due to a decrease in forecast demand and increased generation availability. Several updates were issued to the forecast LOR2 condition with changes in effective period and reserve levels (27 and 32 hour lead time) due to an increase in forecast demand. A forecast LOR2 condition was later declared with an effective period of 15:00 – 19:00 and 18:30 - 19:00 (25 hour lead time) due to an increase in forecast demand and decreased generation availability. Several updates were issued to the forecast LOR2 condition with changes in effective period and reserve levels (14 and 12 hour lead time) due to an increase in forecast demand. A forecast LOR3 condition was declared with an effective period of 19:00 – 19:30 (29 hour lead time) due to an increase in forecast demand.

Effective date[A]	Region	LOR1		LOR2		LOR3		Cause and resolution
		Actual	Forecast	Actual	Forecast	Actual	Forecast	
								Forecast LOR3 condition was cancelled due to a decrease in forecast demand. A forecast LOR1 condition was declared with an effective period of 21:00 - 21:30 (21 hour lead time) due to an increase in forecast demand. Several updates were issued to the forecast LOR1 condition with changes in effective period and reserve levels (2 and 13 hour lead time) due to an increase in forecast demand. The forecast LOR2 condition was cancelled due to increased net import and increased generation availability. A forecast LOR2 condition was later declared with an effective period of 17:00 – 18:30 and 18:30 - 19:00 (22 hour lead time) due to an increase in forecast demand and decreased generation availability. Several updates were issued to the forecast LOR2 condition with changes in effective period and reserve levels (3 and 14 hour lead time) due to an increase in forecast demand. An actual LOR1 was later declared due to increase in forecast demand. Actual conditions existed from 14:30 – 17:00. Actual LOR1 condition elapsed when the effective period ended. The forecast LOR1 condition was cancelled due to a decrease in forecast demand. The forecast LOR2 condition was cancelled due to a decrease in forecast demand.
28/02/2022	QLD		1					A forecast LOR1 condition was declared with an effective period of 18:30 - 19:00 (29 hour lead time) due to decreased generation availability. The forecast LOR1 condition was cancelled due to increased generation availability.
01/03/2022	QLD		1					A forecast LOR1 condition was declared with an effective period of 18:00 - 19:30 (51 hour lead time) due to decreased generation availability and increase in demand forecast. An update to the forecast LOR1 condition was issued with a shortened effective period of 18:30 - 19:00 (30 hour lead time). The forecast LOR1 condition improved due to increased generation availability. Another update to the forecast LOR1 condition was issued (29 hour lead time) with no significant change to previous LOR condition. Another update to the forecast LOR1 condition was issued (25 hour lead time) with no significant change to previous LOR condition. Another update to the forecast LOR1 condition was issued with an extended effective period of 17:30 - 19:30 (11 hour lead time). The forecast LOR1 condition worsened due to increased LOR trigger level. The forecast LOR1 condition was cancelled due to decreased demand forecast. A forecast LOR1 condition was later redeclared with an effective period of 18:30 - 19:00 (9 hour lead time) due to reduced generation availability. The forecast LOR1 condition was cancelled due to increased net import.

Effective date[A]	Region	LOR1		LOR2		LOR3		Cause and resolution
		Actual	Forecast	Actual	Forecast	Actual	Forecast	
02/03/2022	QLD		1		1			A forecast LOR2 condition was declared with an effective period of 18:30 - 19:00 (53 hour lead time) due to increased demand forecast, decreased generation availability and a slight increase in the FUM. A forecast LOR1 condition was declared with effective periods of 18:00 - 18:30, 19:00 - 19:30 (51 hour lead time) due to decreased generation availability and increase in demand forecast. The forecast LOR2 condition was cancelled due to decreased forecast demand. An update to the forecast LOR1 condition was issued with the same effective period of 18:00 - 19:30 (36 hour lead time). The forecast LOR1 condition is due to LOR2 being cancelled. No significant change to previous LOR1 condition. Another update to the forecast LOR1 condition was issued (29 hour lead time) with no significant change to previous LOR condition. Another update to the forecast LOR1 condition was issued with the shortened effective period of 18:30 - 19:00 (30 hour lead time) with no significant change to previous LOR condition. The forecast LOR1 condition was cancelled due to increased generation availability.
03/03/2022	QLD		1		1			A forecast LOR1 condition was declared with an effective period of 18:30 - 19:00 (52 hour lead time) due to decreased generation availability. A forecast LOR2 condition was declared with an effective period of 18:30 - 19:00 (47 hour lead time) due to decreased generation availability and increased demand forecast. The forecast LOR2 condition was cancelled due to decreased generation availability and increased demand forecast. The forecast LOR1 condition was cancelled due to decreased forecast demand and increased generation availability.
08/03/2022	QLD	1		1				A forecast LOR2 condition was declared with an effective period of 18:30 - 19:00 (56 hour lead time) due to decreased generation availability and an increase in the FUM. The forecast LOR2 condition was cancelled due to decreased FUM. A forecast LOR2 condition was later redeclared with an effective period of 18:30 - 19:00 (52 hour lead time) due to decreased generation availability, increase in demand forecast and an increase in the FUM. A forecast LOR1 condition was declared with effective periods of 18:00 - 18:30, 19:00 - 19:30 (51 hour lead time) due to decreased generation availability and increase in demand forecast. The forecast LOR2 condition was cancelled due to a slight increase in generation availability and slight increase net import. A forecast LOR2 condition was later redeclared with an effective period of 18:30 - 19:00 (49 hour lead time) due to increase in demand forecast and an increase in the FUM. The forecast LOR2 condition was cancelled due to a slight increase in generation availability and slight increase net import.

Effective date[A]	Region	LOR1		LOR2		LOR3		Cause and resolution
		Actual	Forecast	Actual	Forecast	Actual	Forecast	
								An update to the forecast LOR1 condition was issued with a shortened effective period of 18:00 - 19:00 (36 hour lead time). LOR2 condition downgraded to LOR1 condition due to slight increase in generation availability and slight increase net import. The forecast LOR1 condition was cancelled due increased generation availability. A forecast LOR1 condition was later redeclared with an effective period of 18:00 - 19:00 (20 hour lead time) due to decreased generation availability. The forecast LOR1 condition was cancelled due decreased forecast demand. A forecast LOR1 condition was later redeclared with an effective period of 18:30 - 19:00 (4 hour lead time) due to an increase in demand forecast. An update to the forecast LOR1 condition was issued (2 hour lead time) with no significant change to previous LOR condition. An actual LOR1 was declared due to an increase in demand caused an actual LOR1 condition. Actual conditions forecasted to exist from 17:00 - 19:30. An actual LOR2 was declared due to an increase in demand caused an actual LOR2 condition. Actual conditions existed from 17:30 - 20:00. An update to the actual LOR1 condition was issued due to change in effective period and forecast reserve level. The actual LOR1 condition was extended due to increased demand forecast. An update to the actual LOR1 condition was issued with an extended effective period of 19:30 - 20:30. The actual LOR1 condition was extended due to increased demand forecast.
09/03/2022	QLD	1						A forecast LOR1 condition was declared with an effective period of 18:00 - 19:00 (19 hour lead time) due to increase in demand forecast. An update to the forecast LOR1 condition was issued with an extended effective period of 16:30 - 19:00 (11 hour lead time). The forecast LOR1 condition worsened due to increased demand forecast. Another update to the forecast LOR1 condition was issued with a different effective period of 17:30 - 19:30 (8 hour lead time). The forecast LOR1 condition changed due to decreased generation availability and increased demand forecast. Another update to the forecast LOR1 condition was issued with a shortened effective period of 17:00 - 18:30 (3 hour lead time). The forecast LOR1 condition improved due to decreased demand forecast. An actual LOR1 was declared due to an increase in demand. Actual conditions existed from 17:30 - 20:00. The actual LOR1 was cancelled when the effective period elapsed.
10/01/2022	SA		1		1			A forecast LOR1 condition was declared with an effective period of 15:30 - 16:00 (24 hour lead time) due to decreased generation availability.

Effective date[A]	Region	LOR1		LOR2		LOR3		Cause and resolution
		Actual	Forecast	Actual	Forecast	Actual	Forecast	
								An update was issued for the forecast LOR1 conditions with a change in effective period due to decreased generation availability (22 hour lead time). A forecast LOR2 condition was declared with an effective period of 15:30 - 16:30 (23 hour lead time) due to decreased generation availability. The forecast LOR2 condition was cancelled due to increased generation availability. Several updates were issued for the forecast LOR1 conditions with changes in effective period due to decreased generation availability. The forecast LOR1 condition was cancelled due to increased generation availability.
11/01/2022	SA		1		1			A forecast LOR2 condition was declared with an effective period of 16:30 - 19:00 and 20:30 - 21:30 (60 hour lead time) due to decreased generation availability and increased forecast demand. Several updates were issued for the forecast LOR2 conditions with changes in effective period due to decreased generation availability and increased forecast demand. A forecast LOR1 condition was declared with an effective period of 17:00 - 17:30 and 20:30 - 21:00 (28 hour lead time) as increased generation availability caused forecast LOR2 conditions to improve to LOR1. The forecast LOR2 condition was cancelled due to increased generation availability and decreased forecast demand. The forecast LOR1 condition was cancelled due to increased generation availability and decreased forecast demand.
12/01/2022	SA				1			A forecast LOR2 condition was declared with an effective period of 20:30 - 21:00 (71 hour lead time) due to decreased generation availability. An update was issued for the forecast LOR2 conditions with a change in effective period due to increased forecast demand (59 hour lead time). The forecast LOR2 condition was cancelled due to increased generation and import availability.
25/01/2022	SA		1					A forecast LOR1 condition was declared with an effective period of 18:30 - 19:00 (77 hour lead time) due to decreased generation availability. The forecast LOR1 condition was cancelled due to increased generation availability and decreased forecast demand.
08/02/2022	SA		1					A forecast LOR1 condition was declared with an effective period of 18:30 - 19:30 (7 day lead time) due to decreased generation availability. The forecast LOR1 condition was cancelled due to increased generation availability.
15/03/2022	SA		1					A forecast LOR1 condition was declared with an effective period of 18:30 - 19:00 (7 day lead time) due to decreased generation availability.

Effective date[A]	Region	LOR1		LOR2		LOR3		Cause and resolution
		Actual	Forecast	Actual	Forecast	Actual	Forecast	
								The forecast LOR1 condition was cancelled due to increased generation availability.
19/03/2022	SA		1					A forecast LOR1 condition was declared with an effective period of 18:30 - 19:00 (8 hour lead time) due to decreased generation availability. The forecast LOR1 condition was cancelled due to increased generation availability.
Total		9	15	2	8	0	2	

A. Effective date is the date on which the condition occurred or was expected to occur, and may differ from the date on which a market notice advising of the forecast or actual condition was issued.

Table 2 LOR notices declared during the reporting period from 1 January to 31 March 2022

Effective date and time	Market Notice ID	Issue date and time	Level	Actual, forecast, update or cancel	Comments	Reserve requirement (MW)[A]		FUM value (MW)[B]	Reserve requirement set by
						Required	Available		
New South Wales region									
01/02/2022 17:30 - 18:30	94197	30/01/2022 0:25	LOR2	Forecast	Forecast LOR2 declared due to increased forecast demand and increased FUM value.	1,273	1,216	1,273	FUM
01/02/2022 17:00 - 19:00	94201	30/01/2022 5:32	LOR2	Update	Update to the LOR2 forecast in MN 94197 with a change in effective period due to increased forecast demand and increased FUM value.	1,347	1,006	1,347	FUM
01/02/2022 15:30 - 16:00; 16:30 - 19:30	94204	30/01/2022 8:41	LOR2	Update	Update to the LOR2 forecast in MN 94201 with a change in effective period due to increased forecast demand, increased FUM value, and decreased generation availability.	1,543	922	1,543	FUM
01/02/2022 15:30 - 19:30	94208	30/01/2022 10:35	LOR2	Update	Update to the LOR2 forecast in MN 94204 with a change in effective period and worsened reserve level due to decreased generation availability and increased forecast demand.	1,597	796	1,597	FUM
01/02/2022 15:30 - 16:00; 16:30 - 19:00	94220	30/01/2022 15:07	LOR2	Update	Update to the LOR2 forecast in MN 94208 with a change in effective period and worsened reserve level due to decreased generation availability and increased forecast demand.	1,420	845	1,420	FUM
01/02/2022 15:30 - 19:00	94240	30/01/2022 21:33	LOR2	Update	Update to the LOR2 forecast in MN 94220 with a change in effective period and worsened reserve level due to decreased import availability and increased forecast demand.	1,255	634	1,255	FUM

Effective date and time	Market Notice ID	Issue date and time	Level	Actual, forecast, update or cancel	Comments	Reserve requirement (MW)[A]		FUM value (MW)[B]	Reserve requirement set by
						Required	Available		
01/02/2022 15:30 - 19:30	94244	31/01/2022 4:48	LOR2	Update	Update to the LOR2 forecast in MN 94220 with a change in effective period and worsened reserve level due to decreased import availability and increased forecast demand.	1,173	268	1,173	FUM
01/02/2022 14:30 - 15:30; 15:30 - 18:30	94247	31/01/2022 9:56	LOR2	Update	Update to the LOR2 forecast in MN 94244 with a change in effective period due to increased generation availability.	1,416	1,090	1,416	FUM
01/02/2022 15:30 - 18:30	94252	31/01/2022 11:45	LOR2	Update	Update to the LOR2 forecast in MN 92427 with a change in effective period and improved reserve levels due to increased generation availability.	1,359	1,033	1,359	FUM
01/02/2022 17:00 - 18:30	94255	31/01/2022 14:00	LOR2	Forecast	Forecast LOR2 declared due to increased forecast demand.	1,201	1,065	1,201	FUM
01/02/2022	94281	31/01/2022 17:05	LOR2	Cancelled	This cancelled MN 94255. Forecast LOR2 cancelled as reserves improved due to increased generation availability and decreased forecast demand.	1,019	1,022	1,019	FUM
01/02/2022 17:00 - 18:30	94282	31/01/2022 17:06	LOR1	Forecast	Forecast LOR1 declared due to LOR2 conditions moving to LOR1 as generation and import availability increased and forecast demand decreased.	1,320	1,016	981	LCR2
01/02/2022 15:00 - 15:30; 16:30 - 18:30	94320	31/01/2022 20:51	LOR1	Update	Update to the LOR1 forecast in MN 92482 with a change in effective period due to decreased generation availability.	1,320	1,006	829	LCR2

Effective date and time	Market Notice ID	Issue date and time	Level	Actual, forecast, update or cancel	Comments	Reserve requirement (MW)[A]		FUM value (MW)[B]	Reserve requirement set by
						Required	Available		
01/02/2022 14:30 - 15:30; 16:30 - 19:00	94328	31/01/2022 23:51	LOR1	Update	Update to the LOR1 forecast in MN 94320 with a change in effective period due to decreased generation availability.	1,320	772	766	LCR2
01/02/2022 17:30 - 18:00	94333	1/02/2022 0:57	LOR2	Forecast	Update to the LOR1 forecast in MN 94328. Forecast LOR1 condition has worsened to LOR2 condition due to increased forecast demand.	761	747	761	FUM
01/02/2022 14:30 - 15:30; 16:30 - 17:30; 18:00 - 19:00	94332	1/02/2022 0:58	LOR1	Update	Update to the LOR1 forecast in MN 94328 with a change in effective period due to increased forecast demand.	1,320	847	757	LCR2
01/02/2022 14:30 - 15:30; 16:00 - 17:00; 18:00 - 19:30	94337	1/02/2022 5:28	LOR1	Update	Update to the LOR1 forecast in MN 94332 with a change in effective period due to increased forecast demand.	1,320	761	692	LCR2
01/02/2022 17:00 - 18:00	94338	1/02/2022 5:30	LOR2	Update	Update to the LOR2 forecast in MN 94333 with a change in effective period and worsened reserve level due to increased forecast demand.	686	588	686	FUM
01/02/2022	94369	1/02/2022 13:51	LOR2	Cancelled	This cancelled MN 94338. Forecast LOR2 conditions cancelled due to increased generation and import availability.	680	749	515	LCR
01/02/2022	94369	1/02/2022 13:51	LOR2	Cancelled	This cancelled MN 94338. Forecast LOR2 conditions cancelled due to increased generation and import availability.	680	749	515	LCR

Effective date and time	Market Notice ID	Issue date and time	Level	Actual, forecast, update or cancel	Comments	Reserve requirement (MW)[A]		FUM value (MW)[B]	Reserve requirement set by
						Required	Available		
01/02/2022 16:00 - 18:00	94380	1/02/2022 15:19	LOR2	Forecast	Forecast LOR2 declared due to increased forecast demand.	670	418	505	LCR
01/02/2022 15:30 - 16:30; 17:00 - 18:30	94381	1/02/2022 15:23	LOR1	Update	Update to the LOR1 forecast in MN94337 with a change in effective period due to increased forecast demand.	1,320	743	392	LCR2
01/02/2022 16:45	94389	1/02/2022 16:52	LOR1	Actual	Actual LOR1 declared. Decreased generation availability caused an actual LOR1 condition.	1,320	1,102	362	LCR2
01/02/2022	94392	1/02/2022 17:06	LOR2	Cancelled	This cancelled MN 94380. Forecast LOR2 conditions cancelled due to increased generation availability and decreased forecast demand.	1,313	680	220	LCR
01/02/2022	94392	1/02/2022 17:06	LOR2	Cancelled	This cancelled MN 94380. Forecast LOR2 conditions cancelled due to increased generation availability and decreased forecast demand.	1,313	680	220	LCR
1/02/2022	94397	1/02/2022 17:49	LOR1	Cancelled	This cancelled MN 94389. Actual LOR1 cancelled due to the condition clearing after the effective period.	1,320	1,746	213	LCR
17/02/2022 16:30 - 17:30	94643	17/02/2022 14:52	LOR1	Forecast	Forecast LOR1 declared due to decreased generation availability and increased forecast demand.	1,345	1,291	560	LCR2

Effective date and time	Market Notice ID	Issue date and time	Level	Actual, forecast, update or cancel	Comments	Reserve requirement (MW)[A]		FUM value (MW)[B]	Reserve requirement set by
						Required	Available		
17/02/2022 15:30 - 16:00	94652	17/02/2022 15:51	LOR1	Actual	Actual LOR1 declared. Decreased generation availability caused an actual LOR1 condition.	1,320	1,312	519	LCR2
17/02/2022 16:00 - 18:00	94665	17/02/2022 16:21	LOR1	Update	Update to the actual LOR1 declared in MN 94652 with a change in effective period due to decreased generation availability.	1,355	1,015	267	LCR2
17/02/2022	94680	17/02/2022 19:09	LOR1	Cancelled	This cancelled MN 94676. Actual LOR1 condition cancelled due to the condition clearing after the effective period.	1,451	2,385	301	LCR2
21/02/2022 16:30 - 17:30	94765	21/02/2022 5:22	LOR1	Forecast	Forecast LOR1 declared due to decreased generation availability.	1,403	1,385	719	LCR2
21/02/2022	94768	21/02/2022 7:03	LOR1	Cancelled	This cancelled MN 94675. Forecast LOR1 condition cancelled due to increased generation availability.	1,441	1,574	736	LCR2
21/02/2022 16:30 - 19:00	94798	21/02/2022 14:59	LOR1	Forecast	Forecast LOR1 declared due to decreased generation availability.	1,405	1,281	570	LCR2

Effective date and time	Market Notice ID	Issue date and time	Level	Actual, forecast, update or cancel	Comments	Reserve requirement (MW)[A]		FUM value (MW)[B]	Reserve requirement set by
						Required	Available		
21/02/2022 15:30 - 19:00	94801	21/02/2022 15:54	LOR1	Actual	Actual LOR1 declared. Decreased generation and import availability caused an actual LOR1 condition.	1,440	1,158	420	LCR2
21/02/2022	94803	21/02/2022 17:48	LOR1	Cancelled	This cancelled MN 94801. Actual LOR1 condition cancelled due to increased generation and import availability.	1,355	1,595	414	LCR
Queensland region									
07/01/2022 18:30 -19:00	93492	31/12/2021 14:58	LOR1	Forecast	Forecast LOR1 declared due to decreased generation availability.	985	960	n/a – forecast > 72 hrs ahead	LCR2
07/01/2022	93505	1/01/2022 14:19	LOR1	Cancelled	This cancelled MN 93492. Forecast LOR1 cancelled due to a decrease in demand and increased generation availability.	964	1,323	n/a – forecast > 72 hrs ahead	LCR2
09/01/2022 18:00 - 19:00	93725	9/01/2022 14:55	LOR1	Forecast	Forecast LOR1 declared due to decreased generation availability and slight increase in forecast demand.	1,004	938	402	LCR2
09/01/2022	93730	9/01/2022 16:47	LOR1	Cancelled	This cancelled MN 93725. Forecast LOR1 cancelled due to increased generation availability and slight decrease in forecast demand.	1,012	1,040	334	LCR2

Effective date and time	Market Notice ID	Issue date and time	Level	Actual, forecast, update or cancel	Comments	Reserve requirement (MW)[A]		FUM value (MW)[B]	Reserve requirement set by
						Required	Available		
16/01/2022 18:30 - 19:00	93775	11/01/2022 15:19	LOR1	Forecast	Forecast LOR1 declared due to increased demand forecast.	1,022	1,004	n/a – forecast > 72 hrs ahead	LCR2
16/01/2022 18:00 - 19:30	93805	12/01/2022 15:04	LOR1	Update	Update to MN 93775 due to change in effective period and forecast reserve level. The forecast LOR1 condition worsened due to increased demand forecast and decreased generation availability.	1,045	832	n/a – forecast > 72 hrs ahead	LCR2
16/01/2022 18:30 - 19:00	93843	13/01/2022 14:48	LOR1	Update	Update to MN 93805 due to change in effective period and forecast reserve level. The forecast LOR1 condition improved due to decreased demand forecast.	1,012	938	n/a – forecast > 72 hrs ahead	LCR2
16/01/2022	93893	15/01/2022 18:23	LOR1	Cancelled	This cancelled MN 93843. Forecast LOR1 cancelled due to decreased forecast demand.	1,041	1,791	544	LCR2
17/01/2022 17:00 - 18:30; 19:00 - 19:30	93756	10/01/2022 14:46	LOR1	Forecast	Forecast LOR1 declared due to decreased generation availability and relatively high forecast demand and reduced net import.	1,059	715	n/a – forecast > 72 hrs ahead	LCR2
17/01/2022 18:30 - 19:00	93757	10/01/2022 14:59	LOR2	Forecast	Forecast LOR1 declared due to decreased generation availability and relatively high forecast demand and reduced net import.	648	630	n/a – forecast > 72 hrs ahead	LCR
17/01/2022 18:00 - 19:00	93762	10/01/2022 20:28	LOR2	Update	Update to MN 93757 due to change in effective period and forecast reserve level. The forecast LOR2 condition worsened due to decreased generation availability.	632	503	n/a – forecast > 72 hrs ahead	LCR

Effective date and time	Market Notice ID	Issue date and time	Level	Actual, forecast, update or cancel	Comments	Reserve requirement (MW)[A]		FUM value (MW)[B]	Reserve requirement set by
						Required	Available		
17/01/2022	93765	11/01/2022 04:45	LOR2	Cancelled	This cancelled MN 93762. Forecast LOR2 cancelled due to increased net import.	501	567	n/a – forecast > 72 hrs ahead	LCR
17/01/2022 18:30 - 19:00	93768	11/01/2022 10:21	LOR2	Forecast	Forecast LOR2 declared due to reduced net import.	583	543	n/a – forecast > 72 hrs ahead	LCR
17/01/2022	93773	11/01/2022 15:07	LOR2	Cancelled	This cancelled MN 93773. Forecast LOR2 cancelled due to decreased forecast demand.	574	583	n/a – forecast > 72 hrs ahead	LCR
17/01/2022 17:00 - 20:00	93774	11/01/2022 15:13	LOR1	Update	Update to MN 93756 due to change in effective period and forecast reserve level. The forecast LOR1 condition worsened due to decreased generation availability.	1,017	583	n/a – forecast > 72 hrs ahead	LCR2
17/01/2022 18:00 - 19:00	93777	11/01/2022 17:42	LOR2	Forecast	Forecast LOR2 declared due to decreased generation availability and increased demand forecast.	548	444	n/a – forecast > 72 hrs ahead	LCR
17/01/2022 17:30 - 19:30	93794	11/01/2022 22:51	LOR2	Update	Update to MN 93777 due to change in effective period and forecast reserve level. The forecast LOR2 condition worsened due to increased demand forecast.	545	397	n/a – forecast > 72 hrs ahead	LCR
17/01/2022 17:00 - 20:00	93795	12/01/2022 04:29	LOR2	Update	Update to MN 93794 due to change in effective period and forecast reserve level. The forecast LOR2 condition worsened due to increased demand forecast.	589	194	n/a – forecast > 72 hrs ahead	LCR

Effective date and time	Market Notice ID	Issue date and time	Level	Actual, forecast, update or cancel	Comments	Reserve requirement (MW)[A]		FUM value (MW)[B]	Reserve requirement set by
						Required	Available		
17/01/2022 17:00 - 19:30	93796	12/01/2022 09:37	LOR2	Update	Update to MN 93795 due to change in effective period and forecast reserve level. The forecast LOR2 condition improved due to decreased demand forecast and increased generation availability.	588	342	n/a – forecast > 72 hrs ahead	LCR
17/01/2022 16:30 - 17:30; 19:00 - 20:00	93804	12/01/2022 14:59	LOR1	Update	Update to MN 93774 due to change in effective period and forecast reserve level. The forecast LOR1 condition worsened due to increased demand forecast.	942	495	n/a – forecast > 72 hrs ahead	LCR2
17/01/2022 17:30 - 19:00	93806	12/01/2022 15:14	LOR2	Update	Update to MN 93796 due to change in effective period and forecast reserve level. The forecast LOR2 condition improved due to decreased demand forecast and increased generation availability.	515	395	n/a – forecast > 72 hrs ahead	LCR
17/01/2022	93823	13/01/2022 03:22	LOR2	Cancelled	This cancelled MN 93806. Forecast LOR2 cancelled due to decreased demand forecast and increased net import.	580	594	n/a – forecast > 72 hrs ahead	LCR
17/01/2022 17:00 - 19:30	93842	13/01/2022 14:43	LOR1	Update	Update to MN 93804 due to change in effective period and forecast reserve level. The forecast LOR1 condition improved due to decreased demand forecast.	1,089	673	n/a – forecast > 72 hrs ahead	LCR2
17/01/2022	93891	15/01/2022 18:22	LOR1	Cancelled	This cancelled MN 93842. Forecast LOR1 cancelled due to decreased forecast demand.	868	1,219	731	LCR2

Effective date and time	Market Notice ID	Issue date and time	Level	Actual, forecast, update or cancel	Comments	Reserve requirement (MW)[A]		FUM value (MW)[B]	Reserve requirement set by
						Required	Available		
17/01/2022 17:30 - 19:30	93919	17/01/2022 11:58	LOR1	Forecast	Forecast LOR1 declared due to decreased generation availability and increased demand forecast.	971	822	403	LCR2
17/01/2022 17:30 - 20:30	93929	17/01/2022 17:45	LOR1	Actual	Actual LOR1 declared. due to decreased generation availability and increased demand forecast caused an actual LOR1 condition.	1,031	737	272	LCR2
17/01/2022	93933	17/01/2022 19:46	LOR1	Cancelled	This cancelled MN 93929. The actual LOR1 was cancelled when the effective period elapsed. LOR period ended 30 minutes earlier than forecast due to increased generation availability.	1,004	1,046	160	LCR2
18/01/2022 18:30 - 19:00	93775	11/01/2022 15:19	LOR1	Forecast	Forecast LOR1 declared due to decreased generation availability.	914	860	n/a – forecast > 72 hrs ahead	LCR2
18/01/2022 17:30 - 19:30	93805	12/01/2022 15:04	LOR1	Update	Update to MN 93775 due to change in effective period and forecast reserve level. The forecast LOR1 condition worsened due to increased demand forecast and reduced net import.	1,004	695	n/a – forecast > 72 hrs ahead	LCR2
18/01/2022 17:30 - 19:30	93843	13/01/2022 14:48	LOR1	Update	Update to MN 93805 due to change in effective period and forecast reserve level. The forecast LOR1 condition improved due to decreased demand forecast.	1,095	827	n/a – forecast > 72 hrs ahead	LCR2
18/01/2022	93893	15/01/2022 18:23	LOR1	Cancelled	This cancelled MN 93843. Forecast LOR1 cancelled due to decreased forecast demand and decrease in LOR1 trigger level.	1,033	1177	n/a – forecast > 72 hrs ahead	LCR2

Effective date and time	Market Notice ID	Issue date and time	Level	Actual, forecast, update or cancel	Comments	Reserve requirement (MW)[A]		FUM value (MW)[B]	Reserve requirement set by
						Required	Available		
18/01/2022 18:00 - 19:00	93935	18/01/2022 05:46	LOR1	Forecast	Forecast LOR1 declared due to reduced net import and increase in demand forecast.	1,096	1,026	470	LCR2
18/01/2022	93938	18/01/2022 10:21	LOR1	Cancelled	This cancelled MN 93935. Forecast LOR1 cancelled due to increased generation availability and decreased forecast demand.	1,097	1,117	379	LCR2
18/01/2022 18:30 - 19:00	93942	18/01/2022 17:19	LOR1	Forecast	Forecast LOR1 declared due to decreased generation availability.	1,026	1,008	310	LCR2
18/01/2022	93943	18/01/2022 18:02	LOR1	Cancelled	This cancelled MN 93942. Forecast LOR1 cancelled due decreased forecast demand.	1,037	1,124	265	LCR2
19/01/2022 18:30 - 19:00	93954	19/01/2022 15:49	LOR1	Forecast	Forecast LOR1 declared due to decreased generation availability.	1,022	995	374	LCR2
19/01/2022 18:00 - 19:30	93955	19/01/2022 16:34	LOR1	Update	Update to MN 93954 due to change in effective period and forecast reserve level. The forecast LOR1 condition worsened due to increased demand forecast and decreased generation availability.	1,020	940	356	LCR2
19/01/2022 18:30 - 19:00	93956	19/01/2022 16:53	LOR1	Update	Update to MN 93955 due to change in effective period and forecast reserve level. The forecast LOR1 condition improved due to decreased demand forecast and increased generation availability.	1,025	1,006	332	LCR2

Effective date and time	Market Notice ID	Issue date and time	Level	Actual, forecast, update or cancel	Comments	Reserve requirement (MW)[A]		FUM value (MW)[B]	Reserve requirement set by
						Required	Available		
19/01/2022	93957	19/01/2022 17:19	LOR1	Cancelled	This cancelled MN 93956. Forecast LOR1 cancelled due to increased generation availability and decreased forecast demand.	1,010	1,040	301	LCR2
31/01/2022 18:30 - 19:30	94015	24/01/2022 14:37	LOR1	Forecast	Forecast LOR1 declared due to decreased generation availability.	878	675	n/a – forecast > 72 hrs ahead	LCR2
31/01/2022	94039	25/01/2022 14:39	LOR1	Cancelled	This cancelled MN 94015. Forecast LOR1 cancelled due to increased generation availability and a decrease in forecast demand.	870	903	n/a – forecast > 72 hrs ahead	LCR2
31/01/2022 18:30 - 19:00	94112	27/01/2022 15:07	LOR1	Forecast	Forecast LOR1 declared due to decreased generation availability.	878	829	n/a – forecast > 72 hrs ahead	LCR2
31/01/2022	94140	28/01/2022 14:40	LOR1	Cancelled	This cancelled MN 94112. Forecast LOR1 cancelled due to increased generation availability.	874	1,205	n/a – forecast > 72 hrs ahead	LCR2
31/01/2022 18:30 - 19:00	94256	31/01/2022 15:05	LOR1	Forecast	Forecast LOR1 declared due to an increase in forecast demand.	876	792	402	LCR2
31/01/2022 18:45 - 19:30	94309	31/01/2022 18:46	LOR1	Actual	Actual LOR1 condition declared due to an increase in forecast demand.	794	877	160	LCR2
31/01/2022	94314	31/01/2022 19:14	LOR1	Cancelled	Actual LOR1 condition cancelled when the effective period elapsed.	878	908	160	LCR2

Effective date and time	Market Notice ID	Issue date and time	Level	Actual, forecast, update or cancel	Comments	Reserve requirement (MW)[A]		FUM value (MW)[B]	Reserve requirement set by
						Required	Available		
01/02/2022 18:30 - 19:00	94032	25/01/2022 13:48	LOR2	Forecast	Forecast LOR2 declared due to decreased generation availability.	443	356	n/a – forecast > 72 hrs ahead	LCR
01/02/2022 17:30 - 18:30; 19:00 - 20:00	94038	25/01/2022 14:35	LOR1	Forecast	Forecast LOR1 declared due to decreased generation availability.	870	504	n/a – forecast > 72 hrs ahead	LCR2
01/02/2022 18:30 - 19:00	94047	26/01/2022 15:10	LOR2	Update	Update to MN 94032 due to change in forecast reserve level. Forecast LOR2 condition worsened due to decreased generation availability.	443	270	n/a – forecast > 72 hrs ahead	LCR
01/02/2022 17:30 - 18:00; 19:00 - 21:00	94048	26/01/2022 15:11	LOR1	Update	Update to MN 94038 due to change in forecast reserve level and effective period. Forecast LOR1 condition worsened due to decreased generation availability.	870	445	n/a – forecast > 72 hrs ahead	LCR2
01/02/2022 18:30 - 19:00	94101	27/01/2022 10:42	LOR2	Update	Update to MN 94047 due to change in forecast reserve level. Forecast LOR2 condition improved due to increased generation availability.	443	356	n/a – forecast > 72 hrs ahead	LCR
01/02/2022 18:30 - 19:00	94111	27/01/2022 13:50	LOR2	Update	Update to MN 94101 due to change in forecast reserve level. Forecast LOR2 condition improved due to increased generation availability.	443	363	n/a – forecast > 72 hrs ahead	LCR
01/02/2022 17:30 - 20:00	94113	27/01/2022 15:07	LOR1	Update	Update to MN 94048 due to change in effective period and forecast reserve level. Forecast LOR1 condition improved due to increased generation availability.	878	492	n/a – forecast > 72 hrs ahead	LCR2

Effective date and time	Market Notice ID	Issue date and time	Level	Actual, forecast, update or cancel	Comments	Reserve requirement (MW)[A]		FUM value (MW)[B]	Reserve requirement set by
						Required	Available		
01/02/2022	94114	27/01/2022 15:08	LOR2	Cancelled	This cancelled MN 94111. Forecast LOR2 cancelled due to increased generation availability and a decrease in forecast demand.	443	517	n/a – forecast > 72 hrs ahead	LCR
01/02/2022 18:30 - 19:00	94120	27/01/2022 18:34	LOR1	Update	Update to MN 94113 due to change in effective period and forecast reserve level. Forecast LOR1 improved due to increased generation availability.	878	752	n/a – forecast > 72 hrs ahead	LCR2
01/02/2022 18:00 - 19:00	94130	28/01/2022 05:25	LOR1	Update	Update to MN 94120 due to change in effective period and forecast reserve level. Forecast LOR1 worsened due to an increase in forecast demand.	878	682	n/a – forecast > 72 hrs ahead	LCR2
01/02/2022 17:30 - 19:30	94141	28/01/2022 14:45	LOR1	Update	Update to MN 94130 due to change in effective period and forecast reserve level. Forecast LOR1 worsened due to an increase in forecast demand.	878	595	n/a – forecast > 72 hrs ahead	LCR2
01/02/2022	94178	29/01/2022 14:33	LOR1	Cancelled	This cancelled MN 94141. Forecast LOR1 cancelled due to a decrease in forecast demand.	877	987	n/a – forecast > 72 hrs ahead	LCR2
01/02/2022 18:00 - 19:00	94198	30/01/2022 00:38	LOR2	Forecast	Forecast LOR2 declared due to an increase in forecast demand.	710	620	710	FUM
01/02/2022 18:00 - 19:00	94202	30/01/2022 05:38	LOR2	Update	Update to MN 94198 due to change in forecast reserve level. Forecast LOR2 worsened due to an increase in forecast demand.	648	488	648	FUM

Effective date and time	Market Notice ID	Issue date and time	Level	Actual, forecast, update or cancel	Comments	Reserve requirement (MW)[A]		FUM value (MW)[B]	Reserve requirement set by
						Required	Available		
01/02/2022 17:30 - 19:00	94205	30/01/2022 08:56	LOR2	Update	Update to MN 94202 due to change in effective period and forecast reserve level. Forecast LOR2 worsened due to an increase in forecast demand.	682	453	682	FUM
01/02/2022 19:30 - 20:00	94217	30/01/2022 15:04	LOR1	Forecast	Forecast LOR1 declared due to decreased generation availability and an increase in forecast demand.	867	854	705	LCR2
01/02/2022 17:30 - 19:30	94219	30/01/2022 15:08	LOR2	Update	Update to MN 94205 due to change in effective period and forecast reserve level. Forecast LOR2 worsened due to decreased generation availability.	729	412	729	FUM
01/02/2022 17:00 - 19:30	94242	30/01/2022 23:29	LOR2	Update	Update to MN 94219 due to change in effective period and forecast reserve level. Forecast LOR2 worsened due to an increase in forecast demand and reduced net import.	661	235	661	FUM
01/02/2022 17:00 - 19:30	94246	31/01/2022 04:52	LOR2	Update	Update to MN 94242 due to change in forecast reserve level. Forecast LOR2 worsened due to an increase in forecast demand.	641	133	641	FUM
01/02/2022 16:30 - 21:30	94254	31/01/2022 13:32	LOR2	Update	Update to MN 94246 due to change in effective period and forecast reserve level. Forecast LOR2 worsened due to an increase in forecast demand and decreased generation availability.	606	30	606	FUM
01/02/2022 16:30 - 17:00	94257	31/01/2022 15:06	LOR1	Update	Update to MN 94217 due to change in effective period and forecast reserve level. Forecast	823	583	542	LCR2

Effective date and time	Market Notice ID	Issue date and time	Level	Actual, forecast, update or cancel	Comments	Reserve requirement (MW)[A]		FUM value (MW)[B]	Reserve requirement set by
						Required	Available		
					LOR1 worsened due to decreased net import and an increase in forecast demand.				
01/02/2022 18:00 - 19:00	94316	31/01/2022 19:59	LOR3	Forecast	Forecast LOR3 declared due to an increase in forecast demand and reduced net import.	0	-39	684	0
01/02/2022 16:30 - 18:00; 19:00 - 21:00	94315	31/01/2022 20:00	LOR2	Update	Update to MN 94254 due to change in effective period and forecast reserve level. The forecast LOR2 condition worsened due to an increase in forecast demand and decreased generation availability.	701	23	677	LCR
01/02/2022 21:00 - 21:30	94317	31/01/2022 20:06	LOR1	Update	Update to MN 94257 due to change in effective period and forecast reserve level. The forecast LOR1 condition worsened due to decreased generation availability and reduced net import	878	558	540	LCR2
01/02/2022	94322	31/01/2022 21:30	LOR3	Cancelled	Forecast LOR3 condition advised in MN 94316 cancelled due to decrease in forecast demand.	0	1,062	609	0
01/02/2022 17:00 - 20:00	94323	31/01/2022 21:31	LOR2	Update	Update to MN 94315 due to change in effective period and forecast reserve level. The forecast LOR2 condition worsened due to decreased generation availability and reduced net import.	588	17	588	FUM
01/02/2022 16:30 - 17:00; 20:00 - 23:30	94324	31/01/2022 21:32	LOR1	Update	Update to MN 94317 due to change in effective period and forecast reserve level. The forecast LOR1 condition worsened due decreased generation availability and reduced net import and increased forecast demand.	825	730	500	LCR

Effective date and time	Market Notice ID	Issue date and time	Level	Actual, forecast, update or cancel	Comments	Reserve requirement (MW)[A]		FUM value (MW)[B]	Reserve requirement set by
						Required	Available		
01/02/2022 16:30 - 21:00	94326	31/01/2022 21:51	LOR2	Update	Update to MN 94254 due to change in effective period and forecast reserve level. The forecast LOR2 condition worsened due to decreased generation availability and an increase in forecast demand.	564	43	564	FUM
01/02/2022 18:00 - 19:00	94329	01/02/2022 0:54	LOR3	Forecast	Forecast LOR3 declared due to an increase in forecast demand and decreased generation availability and reduced net import.	0	-52	488	0
01/02/2022 17:00 - 18:00; 19:00 - 20:00; 20:30 - 21:00	94330	01/02/2022 0:55	LOR2	Update	Update to MN 94323 due to change in effective period and forecast reserve level. The forecast LOR2 condition worsened due to an increase in forecast demand and reduced net import.	490	85	490	FUM
01/02/2022 16:30 - 17:00; 20:00 - 20:30; 21:00 - 21:30	94331	01/02/2022 0:56	LOR1	Update	Update to MN 94324 due to change in effective period and forecast reserve level. The forecast LOR2 condition worsened due to an increase in forecast demand and reduced net import.	825	659	471	LCR
01/02/2022 17:00 - 18:00; 19:00 - 21:30	94335	01/02/2022 3:00	LOR2	Update	Update to MN 94330 due to change in effective period and forecast reserve level. The forecast LOR2 condition worsened due to an increase in forecast demand and reduced net import.	465	33	462	LCR
01/02/2022 18:00 - 19:00	94334	01/02/2022 3:00	LOR3	Update	Update to MN 94329 due to change in forecast reserve level. The forecast LOR3 condition worsened due to an increase in forecast demand and reduced net import.	0	-52	465	0

Effective date and time	Market Notice ID	Issue date and time	Level	Actual, forecast, update or cancel	Comments	Reserve requirement (MW)[A]		FUM value (MW)[B]	Reserve requirement set by
						Required	Available		
01/02/2022 16:30 - 17:00	94336	01/02/2022 3:01	LOR1	Update	Update to MN 94331 due to change in effective period and forecast reserve level. The forecast LOR1 condition improved due to increased generation availability and a decrease in forecast demand.	825	567	460	LCR2
01/02/2022 17:00 - 21:30	94343	01/02/2022 10:49	LOR2	Update	Update to MN 94335 due to change in effective period and forecast reserve level. The forecast LOR2 condition worsened due to an increase in forecast demand.	443	43	377	LCR
01/02/2022	94342	01/02/2022 10:49	LOR3	Cancelled	Forecast LOR3 condition advised in MN 94334 cancelled due to a decrease in forecast demand and increased net import.	0	1,029	413	0
01/02/2022 16:00 - 17:00	94344	01/02/2022 10:50	LOR1	Update	Update to MN 94336 due to change in effective period and forecast reserve level. The forecast LOR1 condition worsened due to an increase in forecast demand.	825	480	418	LCR2
01/02/2022 16:30 - 17:00	94345	01/02/2022 11:01	LOR2	Update	Update to MN 94331 due to change in effective period and forecast reserve level. The forecast LOR2 condition improved due to a decrease in forecast demand.	643	281	643	FUM
01/02/2022 15:30	94383	01/02/2022 15:30	LOR1	Actual	Actual LOR1 condition declared due to an increase in forecast demand.	824	444	402	LCR2
01/02/2022 17:00	94395	01/02/2022 17:38	LOR2	Actual	Actual LOR2 condition declared due to an increase in forecast demand.	443	77	205	LCR

Effective date and time	Market Notice ID	Issue date and time	Level	Actual, forecast, update or cancel	Comments	Reserve requirement (MW)[A]		FUM value (MW)[B]	Reserve requirement set by
						Required	Available		
01/02/2022	94407	01/02/2022 19:59	LOR1	Cancelled	Actual LOR1 condition advised in MN 94383 cancelled when the effective period elapsed.	878	1,137	160	LCR2
01/02/2022	94406	01/02/2022 19:59	LOR2	Cancelled	Actual LOR2 condition advised in MN 94395 cancelled due to a decrease in forecast demand and an increase in available generation.	443	1,137	160	LCR2
02/02/2022 17:00 - 19:30	94047	26/01/2022 15:10	LOR2	Forecast	Forecast LOR2 declared due to decreased generation availability.	443	14	n/a – forecast > 72 hrs ahead	LCR
02/02/2022 16:30 - 17:00; 19:30 - 21:00	94048	26/01/2022 15:11	LOR1	Forecast	Forecast LOR1 declared due to decreased generation availability and an increase in forecast demand.	870	561	n/a – forecast > 72 hrs ahead	LCR2
02/02/2022 18:30 - 19:00	94058	26/01/2022 21:30	LOR3	Forecast	Forecast LOR3 declared due to decreased generation availability and reduced net import.	0	-21	n/a – forecast > 72 hrs ahead	0
02/02/2022	94061	26/01/2022 23:16	LOR3	Cancelled	This cancelled MN 94058. Forecast LOR3 cancelled due to increased generation availability, increased net import and a decrease in forecast demand.	443	90	n/a – forecast > 72 hrs ahead	0
02/02/2022 17:00 - 18:30; 19:00 - 19:30	94101	27/01/2022 10:42	LOR2	Update	Update to MN 94047 due to change in forecast reserve level. Forecast LOR2 condition improved due to a decrease in forecast demand.	443	28	n/a – forecast > 72 hrs ahead	LCR

Effective date and time	Market Notice ID	Issue date and time	Level	Actual, forecast, update or cancel	Comments	Reserve requirement (MW)[A]		FUM value (MW)[B]	Reserve requirement set by
						Required	Available		
02/02/2022 18:30 - 19:00	94102	27/01/2022 10:56	LOR3	Forecast	Forecast LOR3 declared due to decreased generation availability and reduced net import.	0	-12	n/a – forecast > 72 hrs ahead	0
02/02/2022	94110	27/01/2022 13:49	LOR3	Cancelled	This cancelled MN 94102. Forecast LOR3 cancelled due to increased generation availability, increased net import and a decrease in forecast demand.	0	104	n/a – forecast > 72 hrs ahead	0
02/02/2022 17:00 - 19:30	94111	27/01/2022 13:50	LOR2	Update	Update to MN 94101 due to change in forecast reserve level. Forecast LOR2 condition improved due to increased generation availability.	443	104	n/a – forecast > 72 hrs ahead	LCR
02/02/2022 16:30 - 17:30; 19:30 - 20:00	94113	27/01/2022 15:07	LOR1	Update	Update to MN 94048 due to change in forecast reserve level and shortened effective period. The forecast reserve level decreased due to decreased generation availability, reduced net import and an increase in forecast demand.	877	492	n/a – forecast > 72 hrs ahead	LCR2
02/02/2022 17:30 - 19:30	94115	27/01/2022 15:09	LOR2	Update	Update to MN 94111 due to change in effective period and forecast reserve level. Forecast LOR2 improved due to increased generation availability and a decrease in forecast demand.	443	199	n/a – forecast > 72 hrs ahead	LCR
02/02/2022 17:30 - 19:00	94118	27/01/2022 17:49	LOR2	Update	Update to MN 94115 due to change in effective period and forecast reserve level. Forecast LOR2 improved due to increased generation availability.	443	345	n/a – forecast > 72 hrs ahead	LCR

Effective date and time	Market Notice ID	Issue date and time	Level	Actual, forecast, update or cancel	Comments	Reserve requirement (MW)[A]		FUM value (MW)[B]	Reserve requirement set by
						Required	Available		
02/02/2022	94119	27/01/2022 18:33	LOR2	Cancelled	This cancelled MN 94118. Forecast LOR2 cancelled due to increased generation availability.	443	507	n/a – forecast > 72 hrs ahead	LCR
02/02/2022 16:30 - 19:30	94120	27/01/2022 18:34	LOR1	Update	Update to MN 94113 due to change in effective period and forecast reserve level. Forecast LOR1 improved due to increased generation availability.	878	507	n/a – forecast > 72 hrs ahead	LCR2
02/02/2022 18:00 -19:00	94124	27/01/2022 22:38	LOR2	Forecast	Forecast LOR2 declared due to decreased generation availability.	443	420	n/a – forecast > 72 hrs ahead	LCR
02/02/2022 17:00 - 19:30	94129	28/01/2022 05:24	LOR2	Update	Update to MN 94124 due to change in effective and forecast reserve level. Forecast LOR2 worsened due to an increase in forecast demand.	443	189	n/a – forecast > 72 hrs ahead	LCR
02/02/2022 16:00 - 17:00; 19:30 - 20:00	94130	28/01/2022 05:25	LOR1	Update	Update to MN 94120 due to change in effective period and forecast reserve level. Forecast LOR1 worsened due to an increase in forecast demand.	837	489	n/a – forecast > 72 hrs ahead	LCR2
02/02/2022 17:30 - 19:00	94133	28/01/2022 11:40	LOR2	Update	Update to MN 94129 due to change in effective period and forecast reserve level. Forecast LOR2 improved due to a decrease in forecast demand and increased net import.	443	301	n/a – forecast > 72 hrs ahead	LCR

Effective date and time	Market Notice ID	Issue date and time	Level	Actual, forecast, update or cancel	Comments	Reserve requirement (MW)[A]		FUM value (MW)[B]	Reserve requirement set by
						Required	Available		
02/02/2022 16:00 - 17:30; 19:00 - 19:30	94141	28/01/2022 14:45	LOR1	Update	Update to MN 94130 due to change in effective period and forecast reserve level. Forecast LOR1 worsened due to an increase in forecast demand and reduced net import.	877	449	n/a – forecast > 72 hrs ahead	LCR2
02/02/2022	94174	29/01/2022 09:30	LOR2	Cancelled	This cancelled MN 94133. Forecast LOR2 cancelled due to a decrease in forecast demand and increased generation availability.	443	570	n/a – forecast > 72 hrs ahead	LCR
02/02/2022 17:30 - 18:00	94176	29/01/2022 12:31	LOR2	Forecast	Forecast LOR2 declared due to an increase in forecast demand.	443	406	n/a – forecast > 72 hrs ahead	LCR
02/02/2022 16:30 - 17:30; 18:00 - 19:30	94179	29/01/2022 14:34	LOR1	Update	Update to MN 94141 due to change in effective period and forecast reserve level. Forecast LOR1 improved due to increased generation availability.	877	470	n/a – forecast > 72 hrs ahead	LCR2
02/02/2022 17:00 - 19:00	94189	29/01/2022 17:39	LOR2	Update	Update to MN 94176 due to change in effective period and forecast reserve level. Forecast LOR2 worsened due to an increase in forecast demand.	443	333	n/a – forecast > 72 hrs ahead	LCR
02/02/2022 17:00 - 19:00	94203	30/01/2022 05:39	LOR2	Update	Update to MN 94189 due to change in forecast reserve level. Forecast LOR2 worsened due to an increase in forecast demand.	443	318	n/a – forecast > 72 hrs ahead	LCR
02/02/2022	94206	30/01/2022 08:56	LOR2	Cancelled	This cancelled MN 94203. Forecast LOR2 cancelled due to a decrease in forecast demand and increased net import.	443	455	n/a – forecast > 72 hrs ahead	LCR

Effective date and time	Market Notice ID	Issue date and time	Level	Actual, forecast, update or cancel	Comments	Reserve requirement (MW)[A]		FUM value (MW)[B]	Reserve requirement set by
						Required	Available		
02/02/2022 17:30 - 18:30	94212	30/01/2022 12:48	LOR2	Forecast	Forecast LOR2 declared due to an increase in forecast demand.	443	421	n/a – forecast > 72 hrs ahead	LCR
02/02/2022	94221	30/01/2022 15:04	LOR2	Cancelled	This cancelled MN 94212. Forecast LOR2 cancelled due to a decrease in forecast demand.	443	454	n/a – forecast > 72 hrs ahead	LCR
02/02/2022 16:00 - 19:30	94218	30/01/2022 15:05	LOR1	Update	Update to MN 94179 due to change in effective period and forecast reserve level. Forecast LOR1 worsened due to decreased generation availability and an increase in forecast demand.	878	454	n/a – forecast > 72 hrs ahead	LCR2
02/02/2022 15:00 - 15:30; 16:00 - 17:00; 17:30 - 19:00	94223	30/01/2022 17:39	LOR2	Forecast	Forecast LOR2 declared due to an increase in forecast demand and decreased generation availability.	443	378	n/a – forecast > 72 hrs ahead	LCR
02/02/2022 16:00 - 19:00	94225	30/01/2022 18:45	LOR2	Update	Update to MN 94223 due to change in effective period and forecast reserve level. Forecast LOR2 improved due to increased net import.	774	380	774	FUM
02/02/2022 14:30 - 19:30	94239	30/01/2022 21:26	LOR2	Update	Update to MN 94225 due to change in effective period and forecast reserve level. Forecast LOR2 worsened due to decreased generation availability.	778	339	778	FUM
02/02/2022 12:30 - 19:30	94245	31/01/2022 04:51	LOR2	Update	Update to MN 94239 due to change in effective period and forecast reserve level. Forecast	648	117	648	FUM

Effective date and time	Market Notice ID	Issue date and time	Level	Actual, forecast, update or cancel	Comments	Reserve requirement (MW)[A]		FUM value (MW)[B]	Reserve requirement set by
						Required	Available		
					LOR2 worsened due to an increase in forecast demand.				
02/02/2022 12:00 - 19:30	94249	31/01/2022 10:36	LOR2	Update	Update to MN 94245 due to change in effective period and forecast reserve level. Forecast reserve level increased due to a decrease in forecast demand and increased net import.	687	295	687	FUM
02/02/2022 19:00 - 19:30	94258	31/01/2022 15:02	LOR1	Update	Update to MN 94218 due to change in effective period and forecast reserve level. Forecast LOR1 improved due to increased net import.	870	694	682	LCR2
02/02/2022 12:30 - 18:30	94264	31/01/2022 15:38	LOR2	Update	Update to MN 94249 due to change in effective period and forecast reserve level. The forecast LOR2 condition improved due to increased generation availability and a decrease in forecast demand.	687	423	680	LCR
02/02/2022 12:00 - 19:00	94339	01/02/2022 5:37	LOR2	Update	Update to MN 94264 due to change in effective period and forecast reserve level. The forecast LOR2 condition worsened due to an increase in forecast demand.	638	284	658	LCR
02/02/2022 13:30 - 19:30	94346	01/02/2022 11:34	LOR2	Update	Update to MN 94345 due to change in effective period and forecast reserve level. The forecast LOR2 condition improved due to an increase in available generation and net import.	616	343	643	LCR
02/02/2022 15:00 - 19:00; 19:30 - 21:30	94357	01/02/2022 13:26	LOR2	Forecast	Forecast LOR2 declared due to an increase in forecast demand.	594	17	594	FUM

Effective date and time	Market Notice ID	Issue date and time	Level	Actual, forecast, update or cancel	Comments	Reserve requirement (MW)[A]		FUM value (MW)[B]	Reserve requirement set by
						Required	Available		
02/02/2022 19:00 - 19:30	94355	01/02/2022 13:26	LOR3	Forecast	Forecast LOR3 declared due to decreased generation availability.	0	-80	603	0
02/02/2022	94391	01/02/2022 17:23	LOR3	Cancelled	Forecast LOR3 condition in MN 94355 cancelled due to a decrease in forecast demand.	0	80	525	0
02/02/2022 15:30 - 16:00; 21:00 - 21:30	94399	01/02/2022 18:23	LOR1	Forecast	Forecast LOR1 declared due to an increase in forecast demand.	878	703	575	LCR2
02/02/2022 16:00 - 21:00	94398	01/02/2022 18:23	LOR2	Forecast	Forecast LOR2 declared due to decreased generation availability.	534	54	534	FUM
02/02/2022 15:30 - 17:00; 18:30 - 19:00; 19:30 - 21:00	94415	02/02/2022 2:22	LOR1	Update	Update to MN94399 has been updated due to an increase in forecast demand and a decrease in generation availability and reduced net import.	878	573	486	LCR2
02/02/2022 17:00 - 18:30; 19:00 - 19:30	94416	02/02/2022 2:23	LOR2	Update	Update to MN 94398 due to change in effective period and forecast reserve level. The forecast LOR2 condition improved due to a decrease in forecast demand.	476	418	476	FUM
02/02/2022 15:30 - 17:00; 19:30 - 21:00	94417	02/02/2022 4:22	LOR1	Update	Update to MN 94415 due to change in effective period and forecast reserve level. The forecast LOR1 condition improved due to a decrease in forecast demand.	878	563	482	LCR2
02/02/2022 17:00 - 19:30	94418	02/02/2022 4:23	LOR2	Update	Update to MN 94416 due to change in effective period and forecast reserve level. The forecast LOR2 condition improved due to a decrease in	480	386	480	FUM

Effective date and time	Market Notice ID	Issue date and time	Level	Actual, forecast, update or cancel	Comments	Reserve requirement (MW)[A]		FUM value (MW)[B]	Reserve requirement set by
						Required	Available		
					forecast demand and an increase in generation availability and net import.				
02/02/2022	94419	02/02/2022 4:46	LOR2	Cancelled	Forecast LOR2 condition advised in MN 94418 cancelled due to a decrease in forecast demand and an increase in available generation and net import.	457	943	457	FUM
02/02/2022 15:30 - 20:30	94420	02/02/2022 4:48	LOR1	Update	Update to MN 94417 due to change in effective period and forecast reserve level. The forecast LOR1 condition improved due to a decrease in forecast demand and an increase in available generation and net import.	878	543	481	LCR2
02/02/2022 15:00 - 17:00; 18:30 - 21:00	94433	02/02/2022 8:47	LOR1	Update	Update to MN 94420 due to change in effective period and forecast reserve level. The forecast LOR1 condition worsened due a decrease in generation availability.	878	545	444	LCR2
02/02/2022 17:00 - 18:30	94434	02/02/2022 8:52	LOR2	Forecast	Forecast LOR2 condition declared due to a decrease in generation availability and reduced net import.	443	386	424	FUM
02/02/2022 14:30 - 17:00; 18:30 - 21:00	94436	02/02/2022 10:16	LOR1	Update	Update to MN 94433 due to change in effective period and forecast reserve level. The forecast LOR1 condition worsened due to a decrease in generation availability.	867	484	429	LCR2
02/02/2022 16:00 - 19:00	94437	02/02/2022 11:22	LOR2	Update	Update to MN 94434 due to change in effective period and forecast reserve level. The forecast	443	330	429	LCR

Effective date and time	Market Notice ID	Issue date and time	Level	Actual, forecast, update or cancel	Comments	Reserve requirement (MW)[A]		FUM value (MW)[B]	Reserve requirement set by
						Required	Available		
					LOR2 condition worsened due to a decrease in generation availability.				
02/02/2022 14:30 - 16:00; 19:00 - 21:00	94438	02/02/2022 11:24	LOR1	Update	Update to MN 94436 due to change in effective period and forecast reserve level. The forecast LOR1 condition worsened due to a decrease in generation availability.	867	497	433	LCR2
02/02/2022 16:00 - 19:00	94439	2/02/2022 12:52	LOR2	Update	Update to MN 94437 due to change in forecast reserve level. The forecast LOR2 condition worsened due to a decrease in generation availability.	443	252	440	LCR
02/02/2022 15:00 - 16:00; 19:00 - 20:00; 20:30 - 21:30	94440	2/02/2022 12:53	LOR1	Update	Update to MN 94438 due to change in effective period and forecast reserve level. The forecast LOR1 condition worsened due to a decrease in generation availability.	867	479	401	LCR2
02/02/2022 14:30 - 17:00	94449	02/02/2022 15:00	LOR1	Actual	Actual LOR1 condition declared due to an increase in forecast demand.	878	503	308	LCR2
02/02/2022 18:30 - 19:30	94448	2/02/2022 15:03	LOR1	Update	Update to MN 94440 due to change in effective period and forecast reserve level. The forecast LOR1 condition worsened due to a decrease in generation availability.	878	527	308	LCR2
02/02/2022	94450	02/02/2022 15:35	LOR1	Cancelled	Actual LOR1 condition advised in MN 94449 cancelled due to a decrease in forecast demand.	878	975	402	LCR2
02/02/2022	94455	02/02/2022 16:26	LOR2	Cancelled	Forecast LOR2 condition advised in MN 94446 cancelled due to a decrease in forecast demand.	443	976	260	LCR

Effective date and time	Market Notice ID	Issue date and time	Level	Actual, forecast, update or cancel	Comments	Reserve requirement (MW)[A]		FUM value (MW)[B]	Reserve requirement set by
						Required	Available		
02/02/2022 18:30 - 19:30	94456	02/02/2022 16:32	LOR1	Update	Update to MN 94448 due to change in forecast reserve level. The forecast LOR1 condition improved due to a decrease in forecast demand.	878	810	301	LCR2
02/02/2022	94457	02/02/2022 17:15	LOR1	Cancelled	Forecast LOR1 condition advised in MN 94456 cancelled due to a decrease in forecast demand.	878	968	287	LCR
28/02/2022 18:30 - 19:00	94913	27/02/2022 13:15	LOR1	Forecast	Forecast LOR1 declared due to a decrease in generation availability.	1,163	1,097	610	LCR2
28/02/2022	94914	27/02/2022 14:37	LOR1	Cancelled	The forecast LOR1 condition was cancelled due to an increase in generation availability.	1,144	1,183	570	LCR2
01/03/2022 18:00 - 19:30	94915	27/02/2022 14:39	LOR1	Forecast	Forecast LOR1 declared due to decreased generation availability and increase in demand forecast.	914	771	687	LCR2
01/03/2022 18:30 - 19:00	94929	28/02/2022 12:52	LOR1	Update	Update to MN 94915 due to change in effective period and forecast reserve level. The forecast LOR1 condition improved due to increased generation availability.	979	866	610	LCR2
01/03/2022 18:30 - 19:00	94933	28/02/2022 13:46	LOR1	Update	No significant change to previous LOR condition.	971	842	607	LCR2
01/03/2022 18:30 - 19:00	94941	28/02/2022 17:49	LOR1	Update	No significant change to previous LOR condition.	914	808	522	LCR2

Effective date and time	Market Notice ID	Issue date and time	Level	Actual, forecast, update or cancel	Comments	Reserve requirement (MW)[A]		FUM value (MW)[B]	Reserve requirement set by
						Required	Available		
01/03/2022 17:30 - 19:30	94971	01/03/2022 06:23	LOR1	Update	Update to MN 94941 due to change in effective period. The forecast LOR1 condition worsened due to increased LOR trigger level.	1,163	829	482	LCR2
01/03/2022	94975	01/03/2022 09:17	LOR1	Cancelled	This cancelled MN 94971. Forecast LOR1 cancelled due to decreased demand forecast.	868	929	395	LCR2
01/03/2022 18:30 - 19:00	94976	01/03/2022 09:56	LOR1	Forecast	Forecast LOR1 declared due to reduced generation availability.	929	923	371	LCR2
01/03/2022	94977	01/03/2022 10:16	LOR1	Cancelled	This cancelled MN 94976. Forecast LOR1 cancelled due to increased net import.	871	951	369	LCR2
02/03/2022 18:30 - 19:00	94930	28/02/2022 13:39	LOR2	Forecast	Forecast LOR2 declared due to increased demand forecast, decreased generation availability and a slight increase in the FUM.	633	578	633	FUM
02/03/2022 18:00 - 18:30, 19:00 - 19:30	94934	28/02/2022 14:51	LOR1	Update	Update to MN 94933 Forecast LOR1 declared due to decreased generation availability and increase in demand forecast.	914	684	667	LCR2
02/03/2022	94969	01/03/2022 06:15	LOR2	Cancelled	This cancelled MN 94930. Forecast LOR2 cancelled due to decreased forecast demand.	914	672	646	LCR
02/03/2022 18:00 - 19:30	94970	01/03/2022 06:24	LOR1	Update	Update to MN 94969 Forecast LOR1 declared due to LOR2 being cancelled. No significant change to previous LOR1 condition in MN 94934.	914	672	646	LCR2

Effective date and time	Market Notice ID	Issue date and time	Level	Actual, forecast, update or cancel	Comments	Reserve requirement (MW)[A]		FUM value (MW)[B]	Reserve requirement set by
						Required	Available		
02/03/2022 18:30 - 19:00	94980	01/03/2022 12:50	LOR1	Update	Update to MN 94970 Forecast LOR1 declared due to LOR1 being cancelled. No significant change to previous LOR1 condition in MN 94934.	914	907	608	LCR2
02/03/2022	94986	01/03/2022 14:51	LOR1	Cancelled	This cancelled MN 94980. Forecast LOR1 cancelled due to increased generation availability.	914	1044	584	LCR
03/03/2022 18:30 - 19:00	94987	01/03/2022 14:56	LOR1	Forecast	Forecast LOR1 declared due to decreased generation availability.	914	811	643	LCR2
03/03/2022 18:30 - 19:00	94994	01/03/2022 19:35	LOR2	Forecast	Forecast LOR2 declared due to decreased generation availability and increased demand forecast.	725	698	725	FUM
03/03/2022	94998	01/03/2022 22:34	LOR2	Cancelled	This cancelled MN 94994. Forecast LOR2 cancelled due to decreased forecast demand.	669	754	669	FUM
03/03/2022	95004	02/03/2022 14:24	LOR1	Cancelled	This cancelled MN 94987. Forecast LOR1 condition cancelled due to decreased forecast demand and increased generation availability.	914	950	415	LCR2
08/03/2022 18:30 - 19:00	95084	6/03/2022 10:27	LOR2	Forecast	Forecast LOR2 declared due to decreased generation availability and an increase in the FUM.	651	600	651	FUM
08/03/2022	95085	6/03/2022 11:29	LOR2	Cancelled	This cancelled MN 95084. Forecast LOR2 cancelled due to decreased FUM.	611	648	611	FUM

Effective date and time	Market Notice ID	Issue date and time	Level	Actual, forecast, update or cancel	Comments	Reserve requirement (MW)[A]		FUM value (MW)[B]	Reserve requirement set by
						Required	Available		
08/03/2022 18:30 - 19:00	95092	6/03/2022 14:47	LOR2	Forecast	Forecast LOR2 declared due to decreased generation availability, increase in demand forecast and an increase in the FUM.	668	655	668	FUM
08/03/2022 18:00 - 18:30; 19:00 - 19:30	95093	6/03/2022 14:48	LOR1	Forecast	Forecast LOR1 declared due to decreased generation availability and increase in demand forecast.	868	704	868	LCR2
08/03/2022	95094	6/03/2022 15:18	LOR2	Cancelled	This cancelled MN 95092. Forecast LOR2 cancelled due to a slight increase in generation availability and slight increase net import.	697	714	697	FUM
08/03/2022 18:30 - 19:00	95098	6/03/2022 17:24	LOR2	Forecast	Forecast LOR2 declared due to increase in demand forecast and an increase in the FUM.	708	681	708	FUM
08/03/2022	95104	7/03/2022 05:41	LOR2	Cancelled	This cancelled MN 95098. Forecast LOR2 cancelled due to a slight increase in generation availability and slight increase net import.	634	734	634	FUM
08/03/2022 18:00 - 19:00	95105	7/03/2022 06:02	LOR1	Update	Update to MN 95093 due to change in effective period and forecast reserve level. LOR2 condition downgraded to LOR1 condition due to slight increase in generation availability and slight increase net import.	868	734	634	LCR2
08/03/2022	95119	7/03/2022 15:29	LOR1	Cancelled	This cancelled MN 94987. Forecast LOR1 condition cancelled due increased generation availability.	868	929	606	LCR2

Effective date and time	Market Notice ID	Issue date and time	Level	Actual, forecast, update or cancel	Comments	Reserve requirement (MW)[A]		FUM value (MW)[B]	Reserve requirement set by
						Required	Available		
08/03/2022 18:00 - 19:00	95129	7/03/2022 22:18	LOR1	Forecast	Forecast LOR1 declared due to decreased generation availability.	868	793	541	LCR2
8/03/2022	95131	8/03/2022 00:18	LOR1	Cancelled	This cancelled MN 95129. Forecast LOR1 cancelled due decreased forecast demand.	868	893	470	LCR2
08/03/2022 18:30 - 19:00	95144	8/03/2022 14:53	LOR1	Forecast	Forecast LOR1 declared due to an increase in forecast demand.	868	857	404	LCR2
08/03/2022 18:00 - 19:00	95161	8/03/2022 16:06	LOR1	Update	No significant change to previous LOR condition.	868	708	376	LCR2
08/03/2022 17:00 - 19:30	95163	8/03/2022 17:14	LOR1	Actual	Actual LOR1 declared. An increase in demand caused an actual LOR1 condition.	868	601	385	LCR
08/03/2022 17:30 - 19:00	95166	8/03/2022 17:43	LOR2	Actual	Actual LOR2 declared. A further increase in demand caused an actual LOR2 condition.	443	314	295	LCR
8/03/2022	95169	8/03/2022 19:32	LOR2	Cancelled	This cancelled MN 95166. The actual LOR2 was cancelled when the effective period elapsed.	443	579	160	LCR
08/03/2022 19:30 - 20:30	95170	8/03/2022 19:42	LOR1	Update	Update to MN 95163 due to change in effective period and forecast reserve level. The actual LOR1 condition was extended due to increased demand forecast.	886	579	160	LCR2
8/03/2022	95171	8/03/2022 20:42	LOR1	Cancelled	This cancelled MN 95170. The actual LOR1 was cancelled when the effective period elapsed.	868	1,167	160	LCR2

Effective date and time	Market Notice ID	Issue date and time	Level	Actual, forecast, update or cancel	Comments	Reserve requirement (MW)[A]		FUM value (MW)[B]	Reserve requirement set by
						Required	Available		
09/03/2022 18:00 - 19:00	95185	8/03/2022 23:32	LOR1	Forecast	Forecast LOR1 declared due to increase in demand forecast.	868	798	490	LCR2
09/03/2022 16:30 - 19:00	95200	9/03/2022 05:54	LOR1	Update	Update to MN 95185 due to change in effective period and forecast reserve level. The forecast LOR1 condition worsened due to increased demand forecast.	749	592	459	LCR2
09/03/2022 17:30 - 19:30	95202	9/03/2022 09:38	LOR1	Update	Update to MN 95200 due to change in effective period and forecast reserve level. The forecast LOR1 condition is due to decreased generation availability and increased demand forecast.	868	621	448	LCR2
09/03/2022 17:00 - 18:30	95205	9/03/2022 14:20	LOR1	Update	Update to MN 93955 due to change in effective period and forecast reserve level. The forecast LOR1 condition improved due to decreased demand forecast.	886	624	404	LCR2
09/03/2022 17:30 - 19:30	95213	9/03/2022 17:48	LOR1	Actual	Actual LOR1 declared. An increase in demand caused an actual LOR1 condition.	886	627	206	LCR2
9/03/2022	95217	9/03/2022 19:42	LOR1	Cancelled	This cancelled MN 95213. The actual LOR1 was cancelled when the effective period elapsed.	852	1,023	160	LCR2
South Australia region									
10/01/2022 15:30 - 16:00	93726	9/01/2022 15:32	LOR1	Forecast	Forecast LOR1 declared due to decreased generation availability.	434	404	273	LCR2

Effective date and time	Market Notice ID	Issue date and time	Level	Actual, forecast, update or cancel	Comments	Reserve requirement (MW)[A]		FUM value (MW)[B]	Reserve requirement set by
						Required	Available		
10/01/2022 14:30 - 15:30	93731	9/01/2022 17:06	LOR1	Update	Update to the LOR1 forecast in MN 93726 with a change in effective period due to decreased generation availability.	434	400	228	LCR2
10/01/2022 15:30 - 16:30	93732	9/01/2022 17:13	LOR2	Forecast	Forecast LOR2 declared due to decreased generation availability.	234	216	234	FUM
10/01/2022	93736	9/01/2022 18:28	LOR2	Cancelled	This cancelled MN 93732. Forecast LOR2 cancelled due to increased generation availability.	262	265	262	FUM
10/01/2022 15:00 - 16:30	93737	9/01/2022 18:34	LOR1	Update	Update to the LOR1 forecast in MN 93731 with a change in effective period due to decreased generation availability.	410	265	262	LCR2
10/01/2022 15:30 - 16:30	93740	9/01/2022 20:45	LOR1	Update	Update to the LOR1 forecast in MN93737 with a change in effective period due to decreased generation availability.	434	363	245	LCR2
10/01/2022	93741	9/01/2022 21:20	LOR1	Cancelled	This cancelled MN 93740. Forecast LOR1 cancelled due to increased generation availability.	432	542	237	LCR2
11/01/2022 16:30 - 19:00; 20:30 - 21:30	93714	9/01/2022 6:05	LOR2	Forecast	Forecast LOR2 declared due to decreased generation availability and increased forecast demand.	485	383	485	FUM

Effective date and time	Market Notice ID	Issue date and time	Level	Actual, forecast, update or cancel	Comments	Reserve requirement (MW)[A]		FUM value (MW)[B]	Reserve requirement set by
						Required	Available		
11/01/2022 14:30 - 20:00; 20:30 - 21:00	93716	9/01/2022 9:25	LOR2	Update	Update to the LOR2 forecast in MN 93714 with a change in effective period due to decreased generation availability.	563	360	563	FUM
11/01/2022 15:00 - 20:00; 20:30 - 21:30	93739	9/01/2022 20:22	LOR2	Update	Update to the LOR2 forecast in MN 93716 with a change in effective period due to decreased generation availability and increased forecast demand.	463	271	463	FUM
11/01/2022 16:30 - 20:00; 20:30 - 21:00	93742	9/01/2022 23:28	LOR2	Update	Update to the LOR2 forecast in MN 93739 with a change in effective period due to decreased generation availability and increased forecast demand.	411	220	411	FUM
11/01/2022 16:00 - 21:30	93744	10/01/2022 8:30	LOR2	Update	Update to the LOR2 forecast in MN 93742 with a change in effective period due to increased forecast demand.	367	160	367	FUM
11/01/2022 19:00 - 19:30; 20:30 - 21:00	93747	10/01/2022 10:03	LOR2	Update	Update to the LOR2 forecast in MN 93744 with a change in effective period due to increased forecast demand.	364	330	364	FUM
11/01/2022 17:00 - 20:00	93750	10/01/2022 12:47	LOR2	Update	Update to the LOR2 forecast in MN 93747 with a change in effective period due to decreased generation availability and increased forecast demand.	313	143	313	FUM
11/01/2022 17:00 - 17:30; 20:30 - 21:00	93752	10/01/2022 13:02	LOR1	Forecast	Forecast LOR1 declared. LOR2 conditions improved to LOR1 due to increased generation availability.	429	363	345	LCR2

Effective date and time	Market Notice ID	Issue date and time	Level	Actual, forecast, update or cancel	Comments	Reserve requirement (MW)[A]		FUM value (MW)[B]	Reserve requirement set by
						Required	Available		
11/01/2022 17:30 - 20:30	93753	10/01/2022 13:14	LOR2	Forecast	Forecast LOR2 declared. LOR1 conditions worsened to LOR2 due to decreased generation availability.	323	41	323	FUM
11/01/2022	93754	10/01/2022 13:56	LOR1	Cancelled	This cancelled MN 93752. Forecast LOR1 conditions cancelled due to increased generation availability and decreased forecast demand.	432	452	327	LCR2
11/01/2022	93755	10/01/2022 14:02	LOR2	Cancelled	This cancelled MN 93753. Forecast LOR2 conditions cancelled due to increased generation availability and decreased forecast demand.	432	452	327	LCR2
12/01/2022 20:30 - 21:00	93743	9/01/2022 23:39	LOR2	Forecast	Forecast LOR2 declared due to decreased generation availability.	406	390	399	LCR
12/01/2022 20:30 - 21:30	93748	10/01/2022 10:14	LOR2	Update	Update to the LOR2 forecast in MN 93743 with a change in effective period due to increased forecast demand.	469	316	469	FUM
12/01/2022	93751	10/01/2022 12:53	LOR2	Cancelled	This cancelled MN 93748. Forecast LOR2 conditions cancelled due to increased generation and import availability.	488	673	488	FUM
25/01/2022 18:30 - 19:00	94003	22/01/2022 15:22	LOR1	Forecast	Forecast LOR1 declared due to decreased generation availability.	600	583	n/a – forecast > 72 hrs ahead	LCR2
25/01/2022	94010	23/01/2022 14:32	LOR1	Cancelled	This cancelled MN 94003. Forecast LOR1 conditions cancelled due to increased generation availability and decreased forecast demand.	600	921	428	LCR2

Effective date and time	Market Notice ID	Issue date and time	Level	Actual, forecast, update or cancel	Comments	Reserve requirement (MW)[A]		FUM value (MW)[B]	Reserve requirement set by
						Required	Available		
08/02/2022 18:30 - 19:30	94375	1/02/2022 14:34	LOR1	Forecast	Forecast LOR1 declared due to decreased generation availability.	600	577	n/a – forecast > 72 hrs ahead	LCR2
8/02/2022	94443	2/02/2022 14:37	LOR1	Cancelled	This cancelled MN 94375. Forecast LOR1 conditions cancelled due to increased generation availability.	600	912	n/a – forecast > 72 hrs ahead	LCR2
15/03/2022 18:30 - 19:00	95142	8/03/2022 15:04	LOR1	Forecast	Forecast LOR1 declared due to decreased generation availability.	600	582	n/a – forecast > 72 hrs ahead	LCR2
15/03/2022	95206	9/03/2022 14:46	LOR1	Cancelled	This cancelled MN 95142. Forecast LOR1 conditions cancelled due to increased generation availability.	600	931	n/a – forecast > 72 hrs ahead	LCR2
19/03/2022 18:30 - 19:00	95458	19/03/2022 11:20	LOR1	Forecast	Forecast LOR1 declared due to decreased generation availability.	600	588	199	LCR2
19/03/2022	95462	19/03/2022 13:05	LOR1	Cancelled	This cancelled MN 95458. Forecast LOR1 conditions cancelled due to increased generation availability.	600	686	212	LCR2

A. Reserve Required and Reserve Available are the values that correspond to the trading interval in the effective period with the lowest reserve available.
B. The value in this field represents the FUM value for the trading interval during which the minimum available reserve occurred (see Reserve Requirement (MW) – Available field).

4 Review of performance

4.1 Forecast Uncertainty Measure values

As in Section 2.1, this section will compare the 10th, 50th (median) and 90th percentile FUM values for this reporting period to those for each quarter from Quarter 1 2021 to Quarter 1 2022 (to Figure 5). FUM values decreasing is indicative of the distribution tightening with decreasing forecast uncertainty.

The most material changes in FUM values between Quarter 4 2021 and Quarter 1 2022 are summarised in this section. For forecast horizons not mentioned, the changes from Quarter 4 2021 were minor:

- New South Wales – the 10th percentile FUM values decreased for the two hours ahead forecast horizon.
- Queensland – 10th, 50th and 90th percentile FUM values were relatively unchanged.
- South Australia – the median FUM values increased for the 60 hours ahead forecast horizon.
- Tasmania – the 10th percentile FUM values decreased for the two and 12 hours ahead horizon. The 90th percentile FUM values decreased for the 6, 24 and 60 hours ahead forecast horizons.
- Victoria – 10th, 50th and 90th percentile FUM values were relatively unchanged.

Figure 1 New South Wales region: FUM values for the reporting period, and compared to previous four quarters

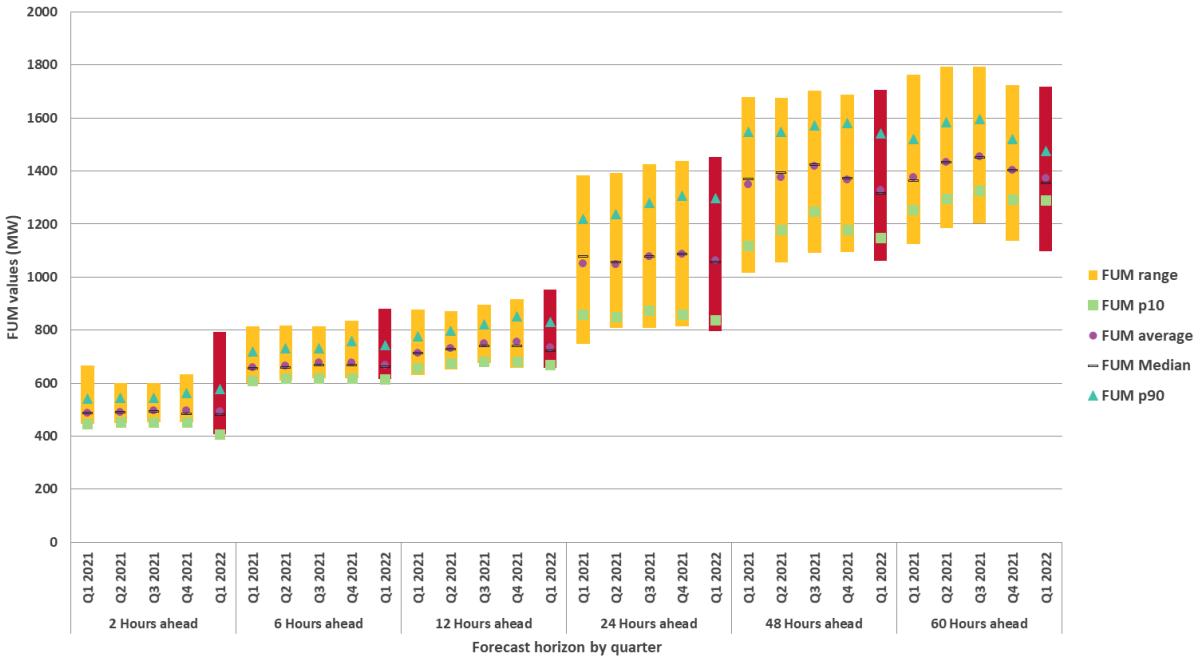


Figure 2 Queensland region: FUM values for the reporting period, and compared to previous four quarters

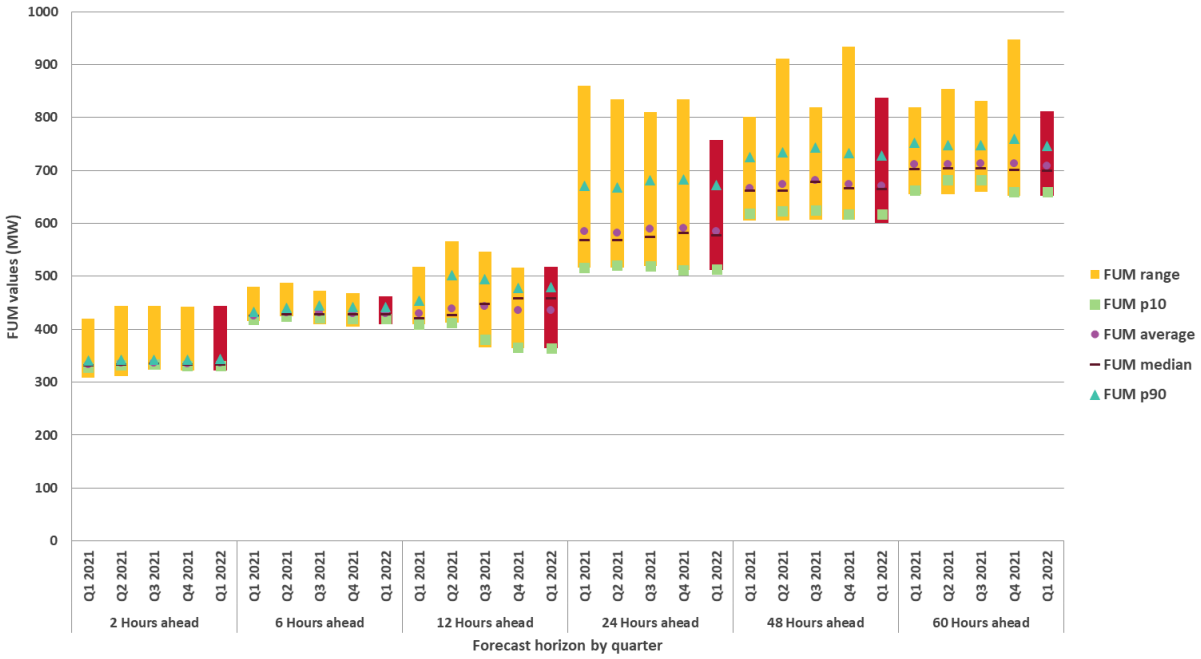


Figure 3 South Australia region: FUM values for the reporting period, and compared to previous four quarters

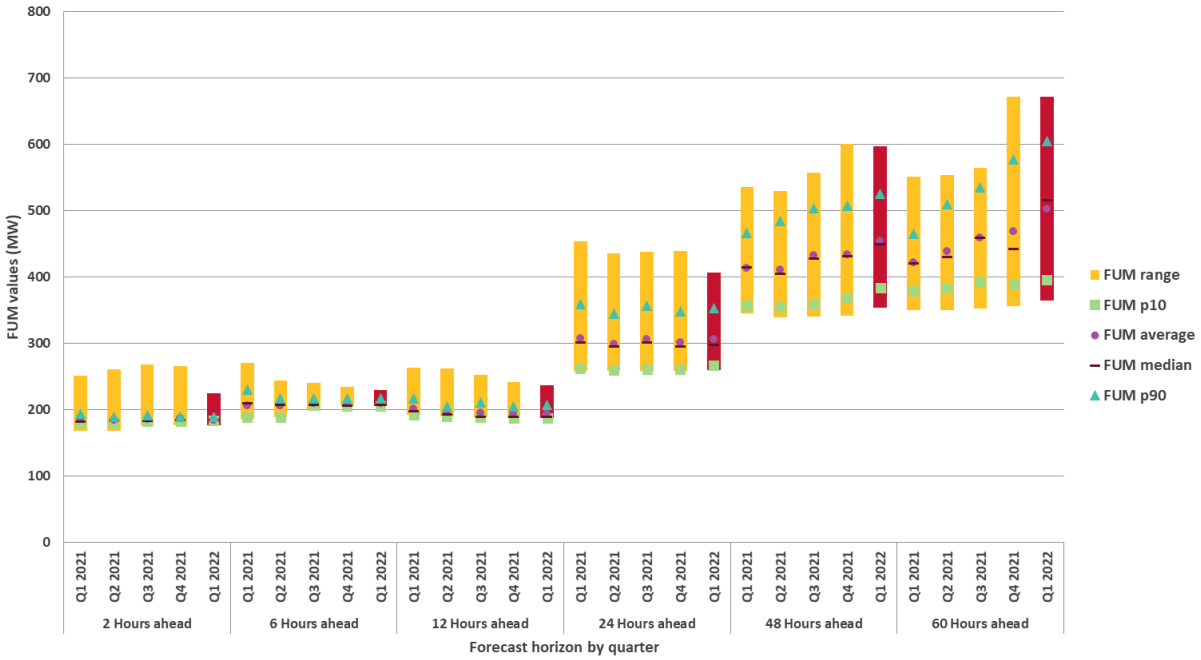
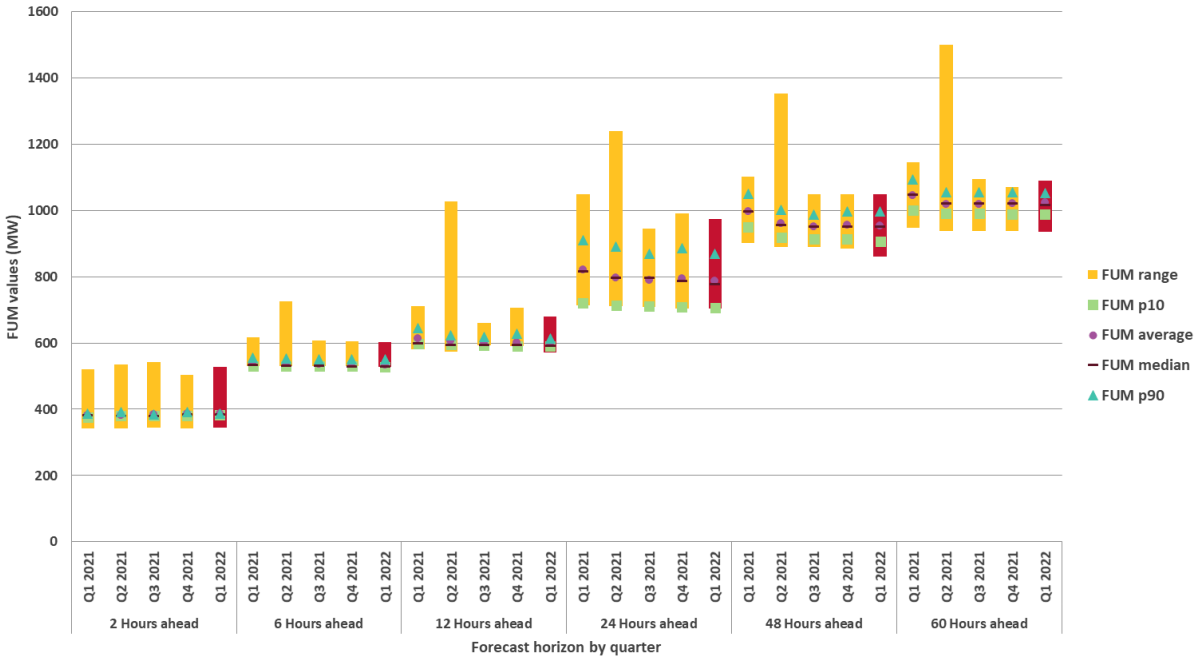


Figure 4 Tasmania region: FUM values for the reporting period, and compared to previous four quarters

Figure 5 Victoria region: FUM values for the reporting period, and compared to previous four quarters



4.2 Forecast and actual LOR declarations

A summary of the count and causes of declared forecast and actual LOR conditions can be found in Table 1 in Section 3 of this report.

During the reporting period from 1 January to 31 March 2022, there were 36 LOR declarations. Of these declarations, 25 were for forecast LOR conditions:

- 15 forecast LOR1 conditions were declared.
- Eight forecast LOR2 conditions were declared.
- Two forecast LOR3 conditions were declared.
- None of the forecast LOR1 conditions was set by the FUM.
- Seven forecast LOR2 conditions were set by the FUM.

A total of nine actual LOR1 conditions were declared during the reporting period. All were observed as forecast LOR1 prior to being declared as an actual, therefore not counted as a forecast declaration based on the declaration count principles outlined in Section 3.

There were two actual LOR2 conditions declared during the reporting period. These were observed as forecast LOR2 conditions prior to being declared as an actual.

There were two forecast LOR3 conditions declared during the reporting period. None of the forecast LOR3 conditions eventuated into actual LOR3.

By comparison, 55 LOR declarations were made in Quarter 4 2021 (47 forecast LOR events and eight actual LOR events) and seven LOR declarations were made in Quarter 1 2021 (two forecast LOR events and five actual events).

There were nine LOR declarations in the reporting period set by the FUM, so the percentage of LOR conditions where the FUM set the reserve requirement was 25%. In Quarter 4 2021 the percentage was 16%, while in Quarter 1 2021 it was 0%.

AEMO requested participants to use the generator recall portal in response to the reserve situations on 1 February 2022 (New South Wales) and on 1 February and 2 February 2022 (Queensland).

During the reporting period RERT services were activated on 1 February 2022 (Queensland)[4].

[4] RERT reporting can be found at https://aemo.com.au/energy-systems/electricity/emergency-management/reliability-and-emergency-reserve-trader-rert/rert-reporting.

Table 3 LORs declared during the reporting period by trigger (FUM or LCR)

Effective period	LOR1	LOR2	LOR3
New South Wales (NSW)			
01/02/2022	Forecast then Actual	Forecast	
17/02/2022	Forecast then Actual		
21/02/2022	Forecast then Actual		
Queensland (QLD)			
07/01/2022	Forecast		
09/01/2022	Forecast		
16/01/2022	Forecast		
17/01/2022	Forecast then Actual	Forecast	
18/01/2022	Forecast		
19/01/2022	Forecast		
31/01/2022	Forecast then Actual		
01/02/2022	Forecast then Actual	Forecast then Actual	Forecast
02/02/2022	Forecast then Actual	Forecast	Forecast
28/02/2022	Forecast		
01/03/2022	Forecast		
02/03/2022	Forecast	Forecast	
03/03/2022	Forecast	Forecast	
08/03/2022	Forecast then Actual	Forecast then Actual	
09/03/2022	Forecast then Actual		
South Australia (SA)			
10/01/2022	Forecast	Forecast	
11/01/2022	Forecast	Forecast	
12/01/2022		Forecast	
25/01/2022	Forecast		
08/02/2022	Forecast		
15/03/2022	Forecast		
19/03/2022	Forecast		
Tasmania (TAS)			
NIL			
Victoria (VIC)			
NIL			

Note. Yellow shading indicates the requirement was set by the LCR or LCR2, and orange indicates the requirement was set by the FUM.

4.3 LOR declaration of reserve requirement

Of the 24 forecast LOR1 conditions declared, nine resulted in actual LOR1 conditions. These were counted as actual LOR1 conditions based on the declaration count principles outlined in Section 3.

Of the 10 forecast LOR2 conditions declared, two resulted in an actual LOR2 condition. It was counted as actual LOR2 condition based on the declaration count principles outlined in Section 3.

There were 15 forecast LOR1 conditions that did not develop into actual LOR1 conditions, and eight forecast LOR2 conditions that did not develop into actual LOR2 conditions. The reasons were either a market response following the issue of the forecast market notice, or changes to the net import or changes in forecast demand. The market response generally took the form of increased available generation and transmission network service providers (TNSPs) rescheduling planned transmission outages.

4.4 Number and cause of LOR declarations

As summarised in Table 1, a total of 36 LOR conditions were declared during the current reporting period: 25 forecast and 11 actual LOR conditions.

This is slightly lower than the 55 LOR declarations recorded in the previous reporting period (1 October 2021 to 31 December 2021) but higher than seven LOR conditions declared for the same period last year (Quarter 1 2021). Quarter 1 2022 covered the later summer months and the first month of autumn.

As Table 3 above shows, there were no instances where actual LOR conditions occurred with no prior forecast; all of the actual LOR conditions had some degree of anticipation and lead time for the market and TNSPs to respond.

Many of the forecast LOR conditions did not eventuate into actual LOR conditions mainly due to market response in the form of increased generation availability and decreased forecast demand.

- The LOR conditions in New South Wales and Queensland were driven by high demand forecasts and decreased generation availability.
- The LOR conditions in South Australia were mainly due to decreased generation availability and high demand forecasts.

Glossary

This document uses many terms that have meanings defined in the NER. The NER meanings are adopted unless otherwise specified.

For each of the terms below, refer to the Reserve Level Declaration Guidelines[5] for further information.

Term	Definition
BBN	Bayesian Belief Network[6]
FUM	Forecast Uncertainty Measure (the number of MW representing the level of forecasting uncertainty)
Guidelines	The Reserve Level Declaration Guidelines published by AEMO under clause 4.8.4A of the NER
LCR	Largest Credible Risk – the single largest credible risk in the region
LCR2	Largest Credible Risk 2 – the sum of the two largest credible risks in the region
LOR1	Lack of Reserve level 1. The threshold for an LOR1 is determined by the larger value of either the FUM or the sum of the two largest credible risks in the region (LCR2).
LOR2	Lack of Reserve level 2. The threshold for an LOR2 is determined by the larger value of either the FUM or the largest credible risk in the region (LCR).
LOR3	Lack of Reserve level 3. The threshold for an LOR3 condition is when the forecast reserve for a region is at or below zero.
PASA	Projected Assessment of System Adequacy[7]
RERT	Reliability and Emergency Reserve Trader[8]
TNSP	Transmission network service provider

[5] See AEMO's reserve level declaration guidelines, at https://www.aemo.com.au/-/media/files/electricity/nem/security_and_reliability/power_system_ops/reserve-level-declaration-guidelines.pdf.

[6] More detail regarding Bayesian Belief Networks is available in the Appendix of AEMO's reserve level declaration guidelines document in the link above.

[7] See AEMO's Projected Assessment of System Adequacy (PASA) principles, at https://aemo.com.au/en/energy-systems/electricity/national-electricity-market-nem/nem-forecasting-and-planning/forecasting-and-reliability/projected-assessment-of-system-adequacy.

[8] See AEMO's Reliability and Emergency Reserve Trader (RERT) guidelines, at https://aemo.com.au/en/energy-systems/electricity/emergency-management/reliability-and-emergency-reserve-trader-rert.