



Important notice

Purpose

AEMO has prepared this report pursuant to rule 351 of the National Gas Rules (NGR), using information available as at 15 June 2022, unless otherwise specified.

Disclaimer

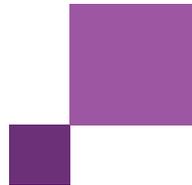
AEMO has made every effort to ensure the quality of the information in this report but cannot guarantee its accuracy or completeness. Any views expressed in this report are those of AEMO unless otherwise stated and may be based on information given to AEMO by other persons.

Accordingly, to the maximum extent permitted by law, AEMO and its officers, employees and consultants involved in the preparation of this document:

- make no representation or warranty, express or implied, as to the currency, accuracy, reliability or completeness of the information in this document; and
- are not liable (whether by reason of negligence or otherwise) for any statements or representations in this document, or any omissions from it, or for any use or reliance on the information in it.

Copyright

© 2022 Australian Energy Market Operator Limited. The material in this publication may be used in accordance with the [copyright permissions on AEMO's website](#).

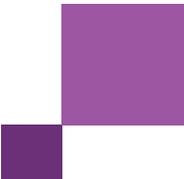


Contents

1	Introduction	1
2	Event Summary	1
2.1	Decrease in injection offers	2
3	Assessment of event	4
3.1	Adequacy of Part 19 of the NGR	4
3.2	Appropriateness of actions taken by AEMO	5
3.3	Costs of intervention	6
4	Conclusion	6
A1.	Chronology	7

Figures

Figure 1: Demand forecast and illustration of available supply to meet demand.....	2
Figure 2: Illustration of the decline in injection offers for gas day 1 June 2022.....	3



1 Introduction

On Wednesday 1 June 2022, AEMO notified the market of a threat to system security (TTSS) in the Victorian Declared Wholesale Gas Market (DWGM) due to insufficient offers being made available to meet forecast demand for the declared transmission system (DTS) at the 10am schedule.

AEMO had identified that by increasing injections from the Longford CPP, Culcairn, or Dandenong LNG the threat could be resolved. There was no breach in system pressure forecast, however AEMO had determined that there was insufficient supply to meet demand for gas day 1 June 2022. Consequently, AEMO sought a market response and issued a notice of threat to system security.

By the 2pm schedule, AEMO had observed a response from the market of increased injection offers which would meet forecast demand for the gas day.

Rule 351 of the National Gas Rules (NGR) requires that AEMO investigate and prepare a report following an event which is or may be a threat to system security. Rule 351 also requires that AEMO assess and advise on:

- the adequacy of the provisions of the NGR relevant to the event or events
- the appropriateness of actions taken by AEMO in relation to the event or events
- the costs incurred by AEMO and Registered participants as a consequence of responding to the event or events.

This report is published in accordance with rule 351(2) of the NGR. All times used in this report are in Australian Eastern Standard Time (AEST) and a chronology of events is included in Appendix A1.

2 Event Summary

At the 10am schedule on 1 June 2022, AEMO determined that there was insufficient injection offers into the DTS to meet forecast demand for gas day 1 June 2022.

In situations where there is a supply shortfall there are two practical outcomes. In the scheduling process, the Market Clearing Engine (MCE) will schedule all available injection offers, reduce controllable (price sensitive) withdrawals to zero and then, if necessary, curtail uncontrollable demand to a level that can be supported. However, curtailment may not be required, as AEMO may in some circumstances be able to accommodate a temporary reduction in the End of Day (EOD) linepack target to get through a single day shortfall.

Section 3.3 of the Wholesale Market Security Procedures outlines that the EOF linepack target is set by balancing the needs of system security with market requirements. AEMO determined that a reduction in EOD linepack target could not be facilitated given the high demand forecast and uncertainty for gas day 2 June 2022 (8am D+1 of 1,003 TJ increased to 1,153 TJ by the 4pm D+1 schedule) and a similar tight supply outlook unfolding for that day. A schedule was therefore approved for publication at 10am with a reduction in uncontrollable withdrawals of 429 GJ. Technically this represented a curtailment of system demand within the schedule. Curtailment is classified as an intervention in the market (Rule 343), necessitating AEMO to notify the market of a Threat to System Security (Rule 341).

At 11.13am on 1 June 2022, AEMO notified the market of a threat to system security, due to their being insufficient supply to meet demand. In the notice AEMO asked for a market response in the form of additional

supply from Gippsland and Culcairn, as well as information on market participants ability and conditions to offer additional supplies as per Rule 341 (2).

At the 2pm schedule, the total demand forecast (including Gas Generation) decreased and additional offers were made available to the market so that there were sufficient injections offers to meet the forecast demand.

AEMO ended the threat to system security at 21.50 hrs on 1 June 2022 and no intervention was required.

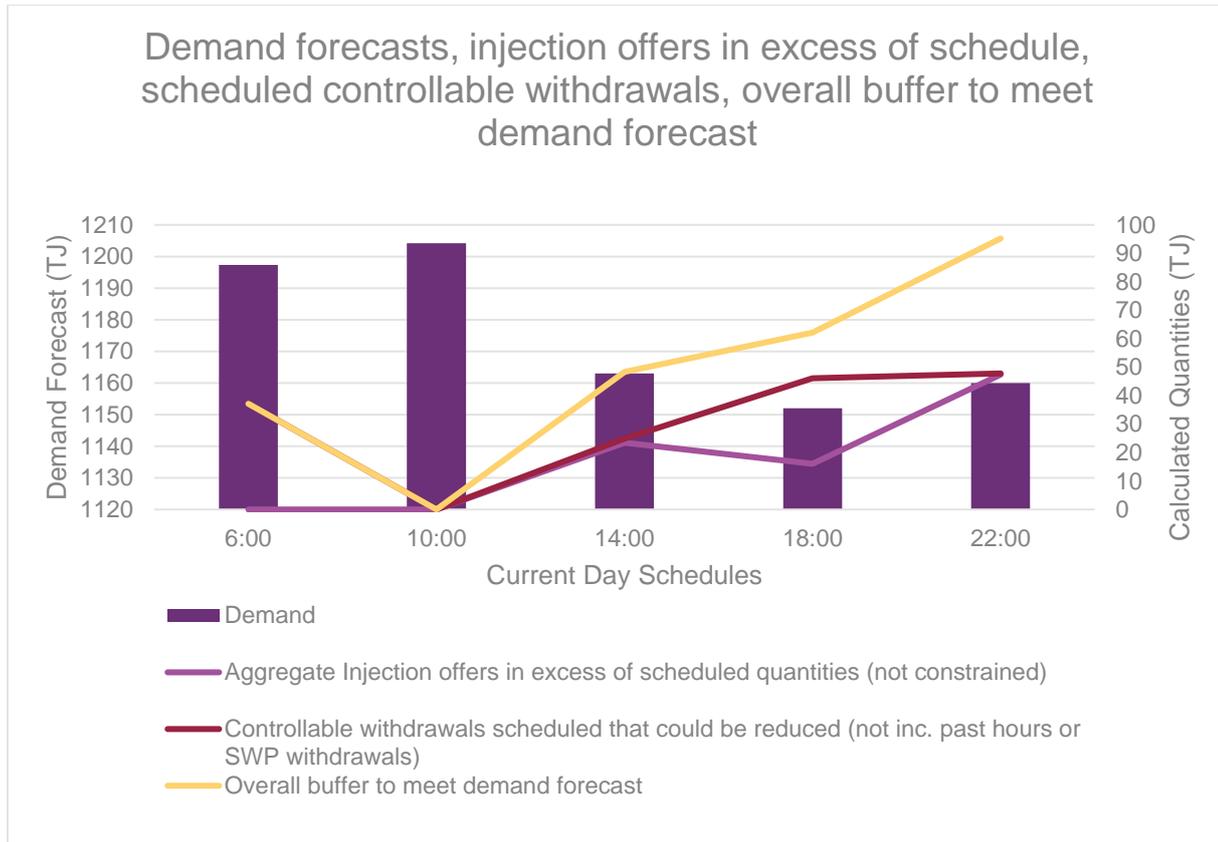


Figure 1: Demand forecast and illustration of available supply to meet demand

Figure 1, above, shows how the balance in supply and demand tracked across the gas day. It illustrates the tight supply situation from the beginning of the day and the response from market participants from the 2pm schedule.

2.1 Decrease in injection offers

AEMO observed a significant decrease in injection offers from the 2-day-ahead schedule and into gas day 1 June 2022. Figure 2 compares the offers made at each schedule for gas day 1 June 2022 with those of 24 May 22 (same gas day, 1 week prior) and 21 June 2021, which was the highest demand day for 2021 and one during which AEMO issued a Threat to System Security notice. These serve as two reference points to demonstrate typical trends in market injection offers over the scheduling timeline. Note that DLNG offers have been omitted, as they typically are used for peak shaving as opposed to portfolio balancing. Looking at the chart of the three trends (Figure 2), the available offers decrease significantly for 1 June 2022 in contrast to the other two days.

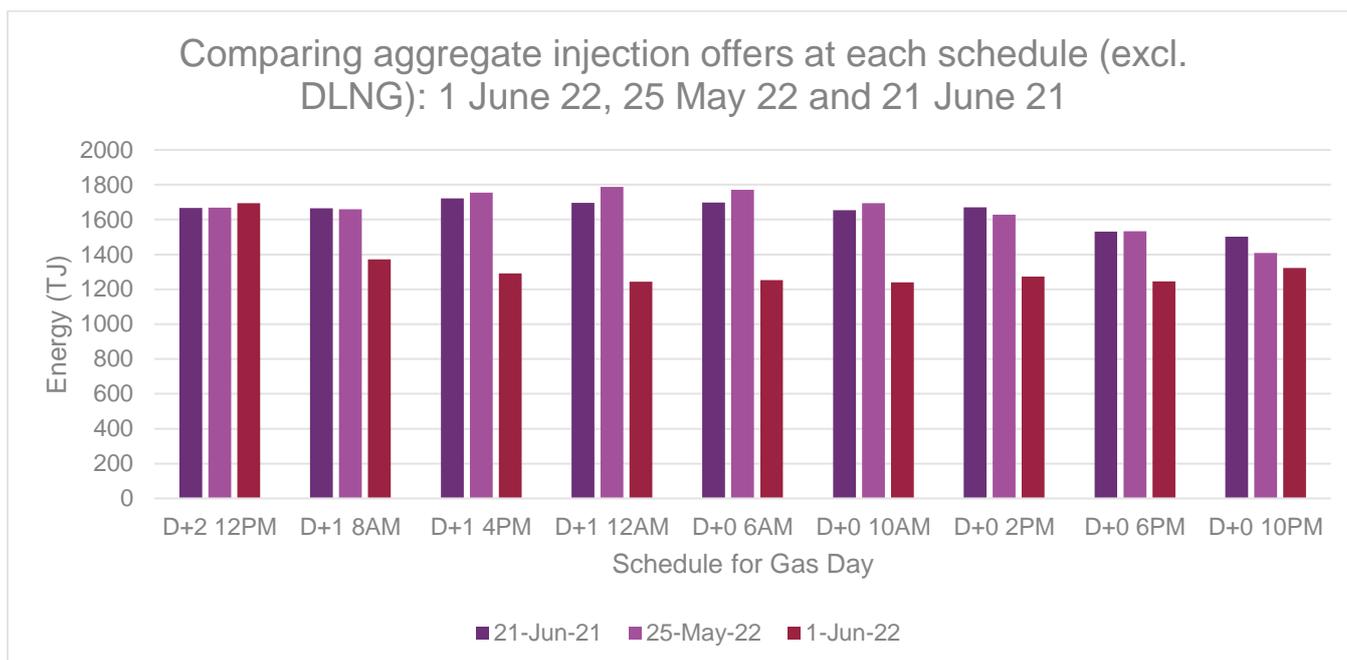


Figure 2: Illustration of the decline in injection offers for gas day 1 June 2022

AEMO notes two factors that were present on this gas day, but were not on the others:

- Prior to this event, AEMO had declared an Administered Price Period to commence from 10.00 hrs on gas day 30 May 2022 due to the cumulative price threshold being exceeded, effectively capping the price at \$40/GJ. This price was lower than those observed in the GSH and in the Adelaide STTM Hub. Sydney and Brisbane STTM Hubs were also in administered states.
- Supply in Southeast Australia was tighter, as evidenced by AEMO notifying the market and stakeholders later that day of a Gas Supply Guarantee Event, due to gas generators being unable to source supply.

AEMO will not be assessing these market conditions and outcomes in detail for this report. This could potentially benefit from a separate assessment, with a wider scope and looking beyond the Victorian DWGM to other markets.

3 Assessment of event

This event occurred due to insufficient injection offers in the market to meet daily demand on 1 June 2022. AEMO called for a market response through the threat to system security notices. AEMO received a fast response from market participant to the threat to system security notice to secure supply by the 2pm schedule and end the threat to system security by the 10pm schedule.

3.1 Adequacy of Part 19 of the NGR

In respect to this event, AEMO has assessed the application and adequacy of the NGR, with a primary focus on the following provisions:

- NGR 341 Notice of threat to system security.
- NGR 342 Market response to threat to system security.
- NGR 351 Intervention Reports.

3.1.1 Notice of threat to system security

Rule 341 requires that if AEMO believes there is a potential threat to system security, it must notify registered participants, without delay, the details of that threat to system security. In this case, AEMO believed that a threat was indicated by supply being unable to meet demand at the 10am schedule.

At 11.13 hrs on 1 June 2022, AEMO notified the market of the threat to system security, calling for a market response. Given the uncertainties around other issues that were happening across the east coast markets¹, the notice for a threat for system security gave the market adequate time to respond. AEMO notes there needs to be a balance between informing the market as early as possible and providing the most current information on potential impacts to the market. As such, the timing of the call for a market response in this case gave participants the time to respond. By the 2pm schedule, AEMO sent a System Wide Notice (SWN) to inform participants that the supply-demand balance remained tight, but that the market had responded with additional supply. The threat remained in place until 21.50 hrs, after the publication of the 10pm schedule.

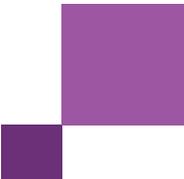
If AEMO reasonably considers that a threat to system security is unlikely to subside without intervention (rule 343), AEMO must intervene in the market by taking any measures it believes are reasonable and necessary to overcome the threat to system security. In this event, AEMO did not need to intervene as participants were able to bid into the market additional supply to meet the end of day linepack.

3.1.2 Market response

When AEMO reasonably considers that a threat to system security will subside without intervention as per rule 342, calling for a market response from market participants is a process to inform the market of the threat and to allow it to respond. On 1 June, AEMO called for a market response when the notice of threat to system security was issued.

The request in the market response was for market participants to re-evaluate their bids and offers, and that the market may alleviate the threat by offering higher quantities into the market. The request for a market response

¹ AEMO had applied an Administered Price period to the DWGM from 10.00 hrs on gas day 30 May 2022 due to the cumulative price threshold horizon exceedance and the STTM markets in Sydney and Brisbane were also under administered price caps.



was made more explicit by stating that if there were increased injections from the Longford CPP, Culcairn, or Dandenong LNG that there will not be a need to intervene and that AEMO. This detail was suggested in the 10 June 2021 Intervention Report to implement in such market notices, and from the market response demonstrates that it is worthwhile providing.

AEMO finds that the NGR provisions are adequate.

3.1.3 Participant information request

Under Rule 341(2), when providing the market with a notice of a threat to system security, AEMO may issue a request for Registered participants to provide information around their ability and conditions to supply additional gas. AEMO notes that as per 341(3) that Registered participants are to provide AEMO with this information as soon as practicable after they have received the notice. This subrule is classified as a conduct provision.

In this event, AEMO received submissions from less than half of the Registered participants in the DWGM. AEMO believes that the NGR provisions are adequate, but this may require further discussion and review.

3.1.4 Intervention Report timing

NGR 351 places an obligation on AEMO to publish a report within 10 business days after a threat to system security event. AEMO has adopted the following approach to reporting on these events, wherever possible:

- Investigate and publish a report based on immediately available data within 10 business days of the relevant event.
- Where not all information necessary to complete the required assessment is available, that report will be flagged as preliminary, with a final report to be published once the additional information is received and analysed.

For this event, AEMO believes it has all necessary information and does not intend to publish a subsequent report.

3.2 Appropriateness of actions taken by AEMO

AEMO's objectives during this event were to:

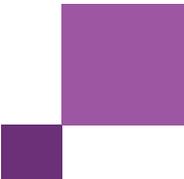
- Operate in accordance with the NGR and the Wholesale Market Procedures.
- Limit the risk of involuntary curtailment to customers including any GPG.
- Alleviate the threat to system security and return the DWGM to normal operating conditions.

NGR 206 requires that AEMO schedule injections into and withdrawals from the distribution transmission system (DTS) in accordance with bids and must:

- Comply with the gas scheduling procedures; and
- Use its reasonable endeavours to operate within the system security procedures.

At the 10am scheduling, AEMO determined that the bids offered into the market for the remainder of gas day 1 June 2022 were insufficient to meet end of day linepack.

In this event, AEMO took all reasonable steps to assess the forecasts and notified the market to alleviate this threat calling for a market response. It is important to note the limited timeframes in which the market could



respond, however the market, possibly due to the interest level across the eastern states, was ready and willing to respond quickly and effectively.

3.3 Costs of intervention

Due to the quick and effective response from market participants AEMO did not require any intervention to alleviate the notice of threat to system security for gas day 1 June 2022. As a result, there was no market impact.

4 Conclusion

AEMO issued a notice of threat to system security in the Victorian DWGM for gas day 1 June 2022 due to insufficient available offers in the market to meet forecast demand. The threat subsided without intervention because of quick and effective responses from market participants.

Rule 351 of the NGR requires that AEMO investigate and prepare a report following an event which is or may be a threat to system security. AEMO has assessed the application and adequacy of associated NGR provisions and finds that these provisions were applied correctly.

Please direct any feedback or questions regarding this report to GasMarket.Monitoring@aemo.com.au.

A1. Chronology

Date/Time (AEST)	Event/Action	Details
1 June 2022, 10.00 hrs	10am schedule	AEMO determined that there were insufficient injection offers into the DTS to meet forecast demand for gas day 1 June 2022.
1 June 2022, 11.15 hrs	Notice of a threat to system security notice	AEMO notified the market of a threat to system security and called for a market response
1 June 2022, 13.36 hrs	System wide notice	AEMO issued a SWN to communicate to the market that there were sufficient injection offers to the market which were likely to meet forecast demand
1 June 2022, 14.00 hrs	2pm schedule	AEMO determined that increased injection offers would meet forecast demand.
1 June 2022 21.50 hrs	Notice of a threat to system security notice end	AEMO ended the threat to system security.