

# DWGM LNG Reserve



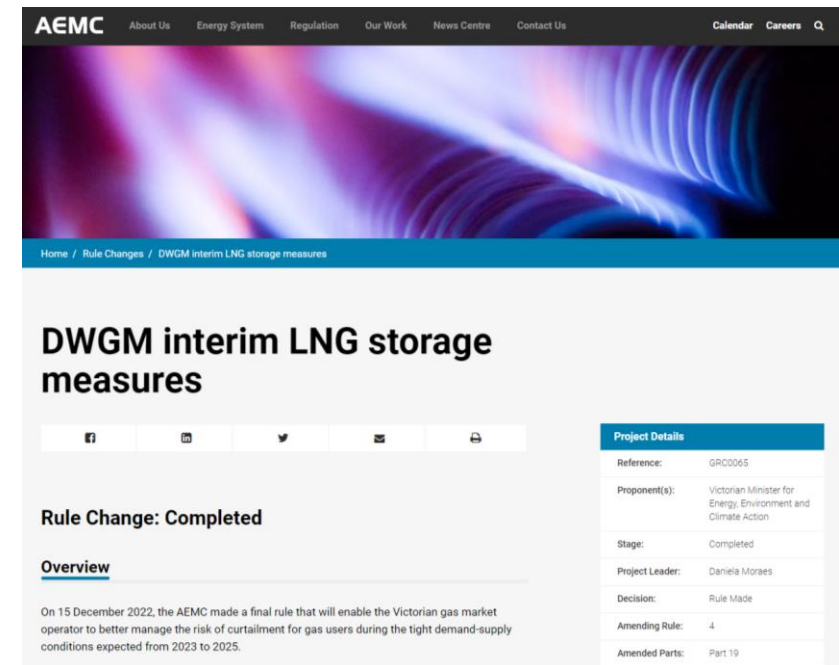
# Agenda

1. Overview
2. Contracting LNG storage capacity
3. Acquiring and relinquishing stock
4. Operation of the reserve
5. Examples
6. Information provision



# Overview

- Rule determination made by AEMC in December 2022
- AEMO is the buyer and supplier of last resort for Dandenong LNG storage facility
- Obligations in effect from 2023 to 2025
- Ensures that gas is available to more effectively manage threat to system security events even if market participants do not contract themselves



The screenshot shows the AEMC website with a navigation bar at the top containing links for About Us, Energy System, Regulation, Our Work, News Centre, and Contact Us. Below the navigation bar is a large banner image with a blue and purple abstract design. The main heading of the page is "DWGM interim LNG storage measures". Below the heading is a row of social media icons for Facebook, LinkedIn, Twitter, Email, and Print. The page is divided into two main sections: "Rule Change: Completed" and "Overview". The "Overview" section contains a paragraph stating: "On 15 December 2022, the AEMC made a final rule that will enable the Victorian gas market operator to better manage the risk of curtailment for gas users during the tight demand-supply conditions expected from 2023 to 2025." To the right of the main text is a "Project Details" table.

Project Details	
Reference:	GRC0065
Proponent(s):	Victorian Minister for Energy, Environment and Climate Action
Stage:	Completed
Project Leader:	Daniela Moraes
Decision:	Rule Made
Amending Rule:	4
Amended Parts:	Part 19

<https://www.aemc.gov.au/rule-changes/dwgm-interim-lng-storage-measures>

# Contracting LNG storage capacity

- AEMO and APA are required to have an LNG Storage Agreement
- Any uncontracted capacity as at 1 March each year must be contracted by AEMO
- Any capacity that becomes available after 1 March may be contracted by AEMO
- AEMO must agree to a refill schedule with the LNG Storage Provider
- Refill schedule and any subsequent material changes are published to the market via System Wide Notice

## Dandenong LNG refill schedule

Under rule 286C(1) of the NGR, AEMO is informing Market Participants that the LNG Storage Provider has provided AEMO with an updated refill schedule. Refill is expected to restart from gas day 08 May 2023. The daily refill schedule has been provided by the LNG Storage Provider below. Remaining refill quantity is 4195 tonnes and the hourly profile is expected to be flat.

AEMO	Tonnes
8/05/2023	75
9/05/2023	95
10/05/2023	95
11/05/2023	95
12/05/2023	95
13/05/2023	95
14/05/2023	95
15/05/2023	110
16/05/2023	110
17/05/2023	110

# Acquisition of stock

- AEMO must obtain stock to reach the target level
- The target level is:
  - The highest level reasonably possible
  - Such other level determined by AEMO and approved by the Minister\*
- AEMO purchases stock from market
- Demand forecast submitted for DTS withdrawals
- AEMO has last priority in refill (market participants and facility operator go first)

\* NGR 282(5) – “extraordinary circumstances” needed to warrant lower target level

# Relinquishment of stock

- AEMO may relinquish stock for three reasons
  1. LNG Storage Provider requests AEMO to relinquish stock as a market participant has made a request for services
  2. AEMO may also dispose of its LNG stock if the LNG Storage Provider undertakes maintenance that requires the disposal of LNG stock during the maintenance period.
  3. AEMO is not required by the rules to have a contract for use of LNG Storage Capacity and AEMO does not otherwise require capacity
- Process for relinquishment is outlined in the procedures
  - AEMO notifies market of quantity and price and requests offers
  - Offers made and payment required
  - Stock not sold during this process is injected into the DTS (where practical this quantity will be spread over multiple intervals/days to minimise disruption to market)
- AEMO will soon run an expedited consultation on the LNG Reserve Procedure to revise the timelines for relinquishment.

# Operation of the LNG Reserve

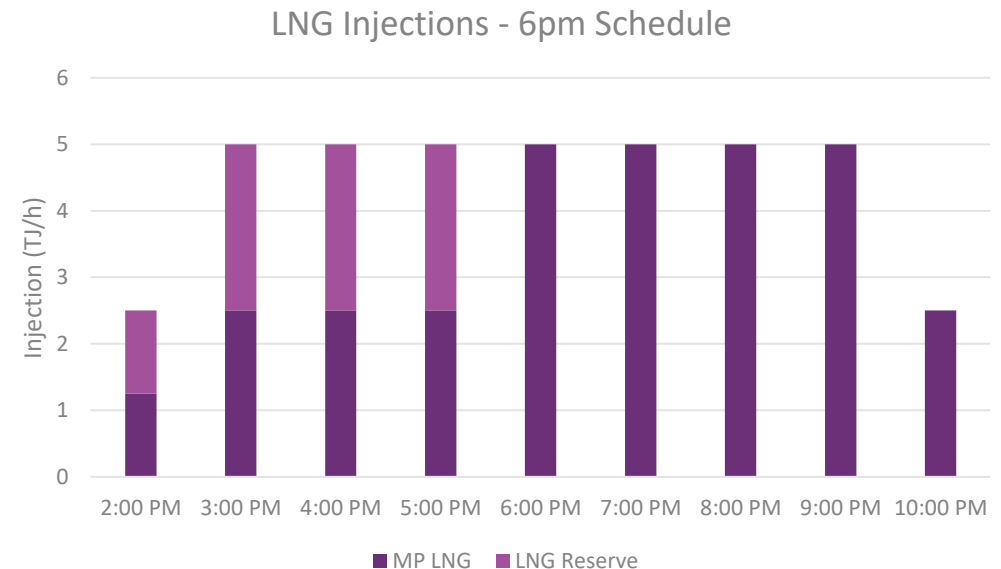
- AEMO is the supplier of last resort – gas will only be scheduled when there is a threat to system security event, for example:
  - locational or temporal issues requiring gas from the LNG storage facility to be injected
  - insufficient supply to meet withdrawals
- LNG Reserve will only be used when all MP **bids** are exhausted
- Quantities from the LNG Reserve will be priced at VoLL (\$800/GJ)
- A standing accreditation of MHQ 0 GJ will prevent the LNG Reserve being scheduled unintentionally



# Example 1

## Peak shaving LNG

- 12.00pm Facility trip, demand higher than forecast
- 12.45pm
  - AEMO issues a threat to system security notice calling for a market response – 40 TJ LNG injections at Dandenong required
- 2pm schedule
  - Only 20 TJ of MP offers for LNG – all scheduled
  - 20 TJ scheduled from the LNG reserve
  - Injections scheduled 4pm-10pm hour (inclusive)
- 6pm schedule
  - Additional 20 TJ of MP offers made in respect to LNG (total now 40 TJ)
  - AEMO uses accreditation to constrain LNG Reserve so that only MP offers are scheduled from 6pm.
- AEMO continues to monitor and ends threat notice at EOD





# Example 2

## Insufficient injections to meet demand

- High demand day – supply constraints in SE Aust mean that the supply-demand balance is tight. Admin market state is in effect.
- 2pm schedule
  - Supply offers insufficient to meet demand (~40 TJ difference)
  - AEMO issues a threat to system security notice calling for a market response
- 6pm schedule
  - No change in market participant offers
  - AEMO schedules 40 TJ of injections from the LNG reserve
- AEMO continues to monitor and ends threat notice at EOD

# Cost recovery / return of proceeds

- Injections and withdrawals associate with the LNG Reserve are treated the same as any other
- Imbalance, deviation, ancillary and uplift payments are calculated
- Monthly costs incurred for capacity and other related services
- At the end of every month the balance of the LNG account (positive or negative) is allocated to participants using an allocation factor
- The allocation factor is determined for each relevant year using the withdrawal allocation for the previous financial year

# Reporting

- AEMO must publish reports no later than 1 May and 1 November that covers:
  - AEMO's LNG stock holding end of March (for 1 May) and end of Sep (for 1 Nov)
  - The following information about the prior 6-month period\*:
    - Amount of LNG capacity procured
    - Amount of LNG stock procured
    - Costs incurred by AEMO in procuring capacity and stock
    - Amounts received by AEMO from selling gas to the market or transferring stock
- The first report has been published and is available via the [DWGM Market Operations page](#)

\*October to March/ April to September

# Pre-winter readiness

- 417.095 TJ of capacity has been acquired for the LNG Reserve (which includes 140 TJ for safe shutdown of gas network)
- AEMO has so far acquired 46.774 TJ of 277.095 TJ of stock needed to reach the target level
- BOC facility that undertakes liquefaction has experienced unplanned outages
- Refilling recommenced on 8 May, however it is now not expected to be end until mid-June

# References and contact

- Rules – Part 19, Division 3, Subdivision 2 LNG Storage
- Wholesale Market LNG Reserve Procedures (Victoria)
- Wholesale Market Gas Scheduling Procedures (Victoria)

## Questions

- About this presentation or procedures:  
[GasMarket.Monitoring@aemo.com.au](mailto:GasMarket.Monitoring@aemo.com.au)
- Market outcomes: [support.hub@aemo.com.au](mailto:support.hub@aemo.com.au)



For more information visit

[aemo.com.au](http://aemo.com.au)