

Australian Energy Market Commission

CONSULTATION PAPER

NATIONAL GAS AMENDMENT (DWGM INTERIM LNG STORAGE MEASURES) RULE 2022

PROPONENT

Victorian Minister for Energy, Environment and Climate Action

1 SEPTEMBER 2022

RULE

INQUIRIES

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ABOUT THE AEMC

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1 INTRODUCTION

On 8 August 2022, the Victorian Minister for Energy, Environment and Climate Action (Victorian Minister or proponent) submitted a rule change request to the Australian Energy Market Commission (AEMC or Commission) and asked the Commission to consider it as an urgent rule under the National Gas Law (NGL).¹

The rule change request is one of the priority actions that was agreed to by Energy Ministers on 8 June 2022 and is intended to reduce the risks to system security and public safety and improve the reliability of supply in the Victorian Declared Wholesale Gas Market (DWGM) between winter 2023 and 2025.² It aims to do this by amending the National Gas Rules (NGR) to require the Australian Energy Market Operator (AEMO) to:³

- act as buyer of last resort of capacity in the Dandenong liquified natural gas (LNG) storage facility and hold a target level of LNG stock in this facility during the winter months
- act as supplier of last resort in relation to the use of its LNG stock.

The proposed rule also sets out:

- the contractual arrangements to be put in place between AEMO and the LNG storage provider to support AEMO's roles as buyer and supplier of last resort
- how the costs AEMO incurs as buyer and supplier of last resort are to be recovered from market participants
- the accountability and transparency measures that would apply to AEMO in its capacity as buyer and supplier of last resort.

The proposed rule is described in the rule change request as an interim measure that aims to reduce the risks under the current arrangements while work is undertaken on longer term security of supply and reliability reforms.⁴

This consultation paper has been prepared to facilitate public consultation on the rule change request and to seek stakeholder submissions. It should be read in conjunction with both:

- the rule change request and the proposed rule
- the existing contract between AEMO and the LNG storage provider (APA) that is referred to in the rule change request and which both parties have agreed should be published to enable a well-informed consideration of the potential implications of the rule change request.

Copies of the rule change request, the proposed rule and the existing LNG storage contract⁵ can be found on the AEMC website, www.aemc.gov.au.

1 Victorian Minister for Energy, Environment and Climate Action, *Rule Change Proposal — Enhanced Utilisation of the Dandenong LNG facility* (rule change request), 8 August 2022.

2 Rule change request, pp. 1-2; Energy Ministers, *Meeting communique*, 8 June 2022.

3 Rule change request, pp. 11-16.

4 Rule change request, pp. 1-2.

5 Confidential information has been redacted.

This paper:

- provides a summary of, and background to, the rule change request
- sets out the proposed assessment framework for the rule change request
- identifies a number of questions and issues to facilitate consultation
- outlines the process for making submissions.

1.1 Key dates

The Commission considers that this rule change request meets the definition of an urgent rule under s. 290 of the NGL. It has therefore decided to use the expedited rule change process under s. 304 of the NGL, provided it does not receive any valid objections to doing so.⁶

Given the complex issues associated with the rule change request, the Commission has also decided to extend the time between the publication of the consultation paper and the final rule determination from eight weeks to twelve weeks. This extension will provide stakeholders and the Commission more time to consider these issues.

Consistent with this timeframe and requirements for an expedited rule change process under the NGL, the key dates for this process are:

- Rule change commences: **1 September 2022**
- Information session: **2 September 2022**
- Due date for objections to the use of an expedited process: **15 September 2022**
- Due date for submissions to consultation paper: **29 September 2022**
- Publication of final determination and final rule (if made): **24 November 2022.**

⁶ See chapter 6 of this consultation paper for more information on the treatment of this rule change request as urgent.

2 BACKGROUND AND CURRENT ARRANGEMENTS

This chapter provides an overview of:

- the DWGM
- the role and use of the Dandenong LNG facility
- the NGL and NGR provisions currently relating to the use of the Dandenong LNG facility
- other reforms that may affect the Dandenong LNG facility over the medium term.

2.1 Overview of the Victorian DWGM

The DWGM was established by the Victorian Government in March 1999 and for the purposes of the NGL is a regulated wholesale gas market that is operated and administered by AEMO. The objectives of the DWGM are to:

- provide participants with a transparent and efficient market-based mechanism to trade imbalances, purchase gas on a short-term basis and efficiently allocate gas during system constraints and emergencies
- support full retail contestability by reducing the barriers to entry by new retailers
- encourage diversity of supply and upstream competition.

The DWGM is a 'gross pool' market, which means that it is compulsory for market participants wanting to inject gas to, or withdraw gas from, the Declared Transmission System (DTS) to trade through the DWGM.⁷

It operates on an intraday basis and uses participant's injection and withdrawal bids and demand forecasts to manage supply, demand and linepack on the DTS. That is, access and use of the pipeline are determined through the operation of the market — an open access approach unique to Victoria referred to as market carriage.⁸

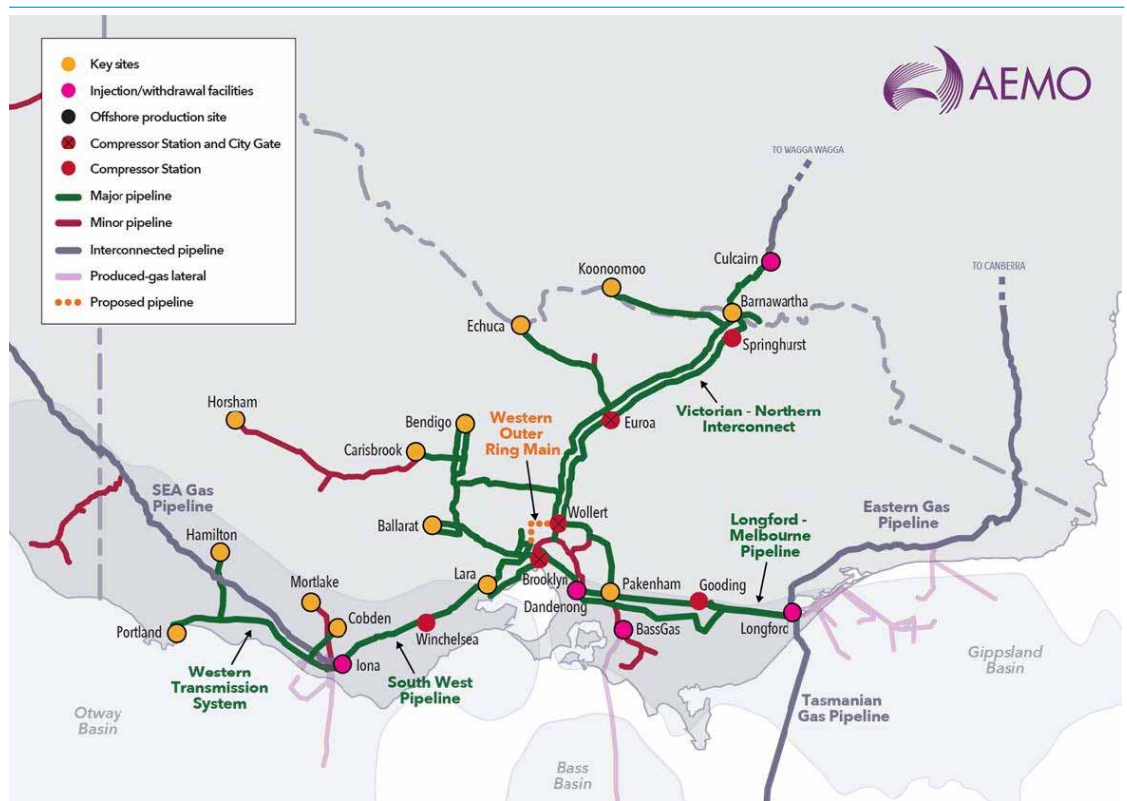
Figure 2.1 shows the locations serviced by the DTS (and consequently the operation of the DWGM). As this figure shows, gas is supplied into the DTS from production facilities, storage facilities (Iona and the Dandenong LNG facility) and other transmission pipelines interconnection points.

This gas can then be supplied to distribution systems, large transmission connected customers, storage facilities and other transmission pipelines that are connected to the DTS.

⁷ Market participants include retailers, large commercial and industrial customers, traders, gas producers and storage providers that directly bid on the DWGM.

⁸ In contrast to other pipelines which use contracts between the pipeline service provider and user to determine access to a pipeline (known as contract carriage).

Figure 2.1: The Victorian Declared Transmission System



Source: AEMO, *Victorian gas planning report update*, March 2022, p. 25.

The physical characteristics of the DTS mean it must be closely managed to ensure that gas flows in the manner required and system security is maintained.⁹ This is because the DTS has some characteristics of a meshed network. The amount of gas it can store through linepack is therefore relatively small and cannot be relied upon to manage significant deviations between demand and supply.¹⁰

As a result of the limited linepack, on a peak day, the DTS may be replenished three times to meet demand.¹¹ Storage, therefore, plays a critical role in managing the DWGM. There are currently two storage facilities located in the DWGM:

- The **Iona underground storage facility** (which is owned and operated by Lochard Energy) is a depleted gas field located in Western Victoria. This storage facility can be used to store large volumes of gas (~23.5PJ) and is typically used to manage seasonal demand (that is, by storing gas in summer and withdrawing it in winter to meet peak demand).

⁹ Rule change request, p. 4.

¹⁰ *ibid.*

¹¹ *ibid.*

- The **Dandenong LNG facility** (which is owned and operated by APA Group) is an LNG tank located in Melbourne. In contrast to the Iona facility, the Dandenong LNG facility can only store relatively small volumes (~680TJ) of gas and is typically used to address short-term peaks in demand, maintain system security and for emergency management.

In addition to these facilities, there are a number of transmission pipelines connected to the DTS that allow small volumes of gas to be stored that could potentially flow into the DTS and be available for DWGM participants.¹²

2.2 Role and use of the Dandenong LNG facility

2.2.1

Role of the facility

The Dandenong LNG facility is owned by APA. It is located in close proximity to Melbourne (at the Dandenong city gate), which accounts for approximately 70 per cent of peak demand in Victoria.¹³

The facility is used to store LNG, which can be vaporised and injected relatively quickly into the DTS (at a rate of 9.8 TJ/hour) to help alleviate short-term peaks in demand, supply disruptions, threats to system security and emergencies (particularly those in the Melbourne area).

It can also be used in the management of a safe system shutdown, which may be required if a major supply disruption occurs and parts of the system have to be shut down to maintain the integrity of the system and to manage the risks to public safety (for example, to prevent air ingress into pipelines).

As noted in the rule change request, the Dandenong LNG facility is currently the only facility in the DWGM that can address the risk of pipeline pressure breaches and associated safety risks in a timely enough manner and has been used in this capacity during a number of major supply disruptions in Victoria, including the 1998 and 2016 Longford outages.¹⁴ This is because it can take a number of hours to transport gas from other sources (including the Iona Underground Storage facility) to Melbourne.

While the Dandenong LNG facility's vaporisation rate is quite high (9.8 TJ/hour or 237 TJ/day), the refill rate is a lot lower (~0.34 TJ/hour or 8.2 TJ/day).¹⁵ The difference between the two rates means that it takes considerably more time to refill the tank once it has been drawn down (~83 days) than it does to empty the tank (~3 days).

This feature of the facility has important implications for how it is used throughout the year. It is not, for instance, continuously drawn down and refilled throughout winter. Nor is all the stock disposed of at the end of winter. Rather, as Figure 2.2 shows, participants tend to maintain similar levels of LNG in storage throughout the year.

¹² These pipelines include the Tasmanian Gas Pipeline, the Moomba Sydney Pipeline and the Eastern Gas Pipeline.

¹³ Rule change request, p. 4.

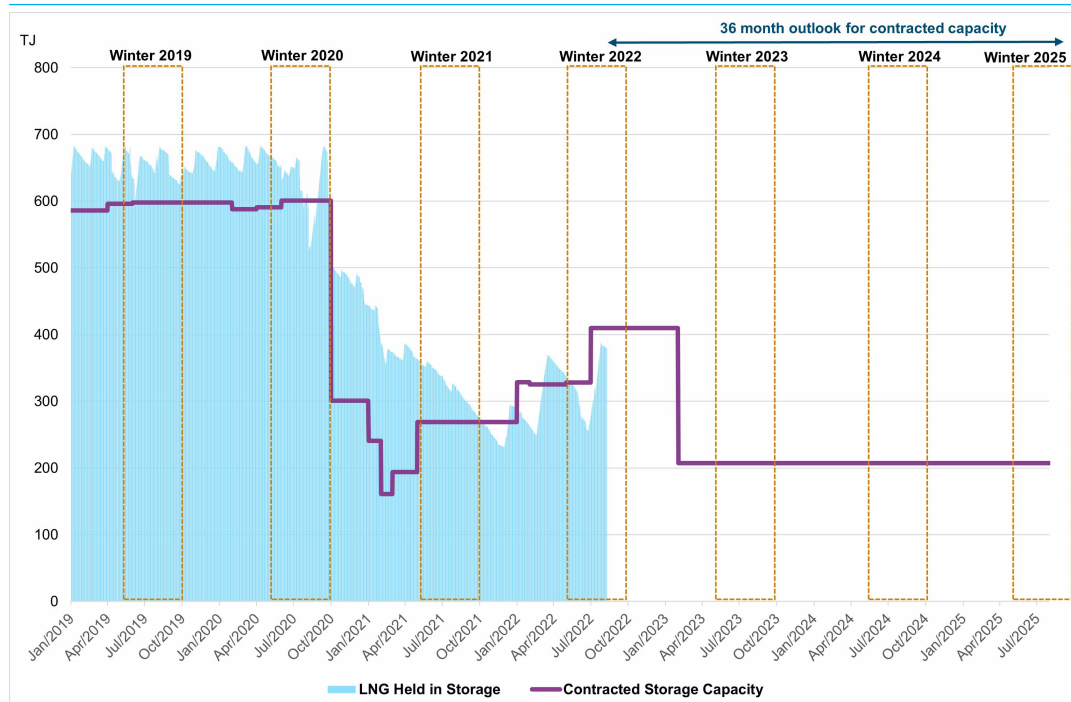
¹⁴ *ibid.*

¹⁵ These rates are based on the nameplate rating data on the Natural Gas Services Bulletin Board.

2.2.2 Declining use of the facility

While the Dandenong LNG facility plays a critical role in the DWGM, the amount of LNG stock and contracted storage capacity has been declining since 2020, as shown in Figure 2.2 below.

Figure 2.2: Dandenong LNG facility LNG stock and capacity storage capacity



Source: AEMC analysis of actual storage and uncontracted capacity data from Natural Gas Services Bulletin Board.

Note: The winter periods reflect the definition used in the VGPR, which is from 1 May to 30 September.

As this figure shows, the amount of LNG stock held in the Dandenong facility fell by over 40 per cent between January 2020 and July 2022 (from around 680 TJ to 380 TJ), reaching a low of 231 TJ in November 2021. A similar trend can be seen in contracted capacity, which fell by over 30 per cent between January 2020 and July 2022 (from around 585 TJ to 410 TJ), reaching a low of 160 TJ in February 2021.

Looking forward to the period over which the proposed rule would apply, the amount of storage capacity currently contracted for 2023-2025 is around 207 TJ. This is approximately one-third of the level that was contracted in 2019 and 2020.

According to the Australian Competition & Consumer Commission (ACCC), the decline in LNG stock and contracted capacity coincided with a change in APA's contracting model that was implemented in December 2020. Prior to December 2020, users of the Dandenong LNG facility were required to contract storage capacity rights and received pro-rata access to vapourisation rights.¹⁶ This contracting model would appear to have the result that market

¹⁶ A vapourisation right is the right to withdraw gas from storage.

participants holding more LNG in storage would have a greater likelihood of their LNG being injected.

Under the new contracting model, storage users must contract firm vaporisation rights and receive a multiple of this vaporisation right as a storage capacity right.¹⁷ The new model also allows storage users to buy contingency vaporisation rights and supplementary storage capacity.

The change in the contracting model may have resulted in a change in the incentive that market participants have to hold LNG in storage. That is, under the old model where vaporisation capacity was allocated on a pro-rata basis, market participants had an incentive to hold more LNG than they required to improve the likelihood that the amount of LNG they required on a day would be injected.

Under the new contracting model, market participants no longer have this incentive because they procure firm vaporisation rights.

The ACCC noted that this change to the contracting model resulted in a 44-46 per cent increase in prices payable for storage at the Dandenong LNG facility.¹⁸ The ACCC also expressed concerns about the market power held by the LNG storage provider during negotiations with users of the facility:¹⁹

In the few instances that shippers attempted to negotiate lower prices for their contracted volumes and term lengths their requests were rejected by APA.

APA's ability to change its contracting model and reject shippers' requests to negotiate more favourable terms underscores the significant market power that they have in respect of the Dandenong LNG facility.

In our January 2022 report, we recommended that consideration be given to implementing a third-party access regime for storage, particularly given how critical storage is expected to be going forward with AEMO projecting peak day supply shortfalls.

Irrespective of the reason for the decline in LNG stock and contracted capacity, the significant reduction in the amount of LNG available to manage threats to system security and emergencies is a matter of concern to AEMO and the Victorian Minister.

To try to address this concern, AEMO issued two threat to security notices in March 2021 and March 2022 seeking a market response to increase LNG stock held at the Dandenong facility to alleviate the threat to system security and remove the need for AEMO to take action. Both of these notices identified that there was insufficient LNG stock available for all operational and emergency scenarios and that this posed a threat to the whole system.²⁰

17 ACCC, *Gas inquiry interim report*, July 2022, p. 89. The standard service appearing on APA's website provides for three units of storage for every unit of firm vaporisation. See <https://www.apa.com.au/our-services/gas-transmission/gas-storage/dandenong-lng-gas-storage-facility/>

18 ACCC, *Gas inquiry interim report*, July 2022, p. 89.

19 ACCC, *Gas inquiry interim report*, July 2022, p. 91.

20 AEMO, *Notice of a threat to system security*, 29 March 2021; AEMO, *Notice of a threat to system security*, 29 March 2022.

Neither of the notices issued by AEMO elicited a sufficient response from market participants. AEMO was therefore required to procure storage capacity and gas sufficient for emergency system shutdown purposes, which AEMO as DTS operator is responsible for under the *Victorian Gas Safety Act 1997*.²¹

2.2.3

Forecast need for the facility between 2023 and 2025

Estimates developed by AEMO as part of the latest *Victorian Gas Planning Report (VGPR)* suggest that 60-66 per cent of the capacity of the Dandenong LNG facility will be required in winter 2023 for operational, reliability and emergency system shutdown purposes. Specifically, AEMO has estimated that approximately:²²

- 140 TJ will be required for emergency system shutdown purposes
- 266–310 TJ will be required to mitigate against the risk of customer curtailment, with 310 TJ being required if the commissioning of the western outer ring main is delayed.

The amounts required for operational and reliability purposes in winter 2023 are significantly higher than those estimated for 2021 (110 TJ) and 2022 (128 TJ). This reflects an increased risk of curtailment that is expected to occur from 2023 as a result of a projected deterioration in the supply-demand balance and system resilience (see Box 1).

Modelling undertaken by AEMO suggests that if the level of inventory going into winter 2023 is the same as the level at the start of winter 2022, there is a 15-35 per cent likelihood of curtailment.²³

BOX 1: FORECAST MARKET CONDITIONS OVER TERM OF PROPOSED RULE

In its July 2022 *Gas inquiry interim report*, the ACCC noted that there is a significant risk to the east coast's energy security in 2023, with a 56 PJ shortfall in supply forecast to occur in 2023. The effects of the shortfall are expected to be more pronounced in the south, with a 54 PJ shortfall forecast in the southern states (that is, Victoria, NSW, SA, ACT and Tasmania). This represents a significant deterioration in the supply-demand balance in the southern states, which the ACCC attributed to:

- a 32 PJ increase in forecast demand, with gas-powered generation demand expected to increase by 35 PJ while other sources of domestic demand are expected to fall by 3 PJ
- a 16 PJ reduction in forecast supply, with production in the southern states expected to fall by 21 PJ (mainly as a result of the cessation of production from a number of the Gippsland Basin Joint Venture's larger legacy gas fields) while supply from the Cooper Basin is expected to increase by 5 PJ.

Longer-term forecasts published by the ACCC in January 2022 suggest that demand will continue to exceed supply in the southern states in 2024 and 2025, with the supply shortfall

21 See AEMO, *Victorian gas planning report update*, March 2022, p. 11; rule change request, p. 3.

22 AEMO, *Victorian gas planning report update*, March 2022, pp. 62-63.

23 Rule change request, p. 9.

expected to increase each year unless new sources of supply (including from an LNG import terminal) are brought online. The ACCC's projections are broadly consistent with AEMO's, with the March 2022 VGPR noting that peak day and seasonal adequacy risks are forecast to emerge in Victoria in 2023:^(a)

Winter 2023 peak day supply capacity (including firm rate Dandenong LNG and assuming no net imports from NSW) is just above the forecast 1-in-20-year peak day system demand under both the Step Change and Progressive Change scenarios.

The 2022 Gas Statement of Opportunities (GSOO) forecasts that extreme gas demand (including gas generation) in severe cold weather may exceed the supply available in Victoria and NSW from winter 2023.

Unplanned capacity reductions of production, storage or transmission facility capacity, higher gas generation demands than forecast due to co-incident or prolonged coal-fired generator outages, or the delayed completion of the Western Outer Ring Main (WORM) project may result in insufficient peak day or seasonal supply capacity from 2023.

There are no anticipated supply solutions that can be developed prior to winter 2023... In the absence of higher than forecast Longford gas production, options to mitigate the peak day shortfall risk are limited to demand response, including curtailment.

...

Victorian production continues to decline, with a large forecast reduction in capacity prior to winter 2023. Total available (existing plus committed) production is forecast to reduce from 360 PJ in 2022 to 243 PJ in 2026. Total available peak day supply capacity is forecast to reduce from 1,552 TJ/d in 2022 to 1,125 TJ/d in 2026.

AEMO also pointed to the risks associated with an overall decline in system resilience in Victoria and noted that greater reliance would be placed on the Dandenong LNG facility to help alleviate threats to system security and emergencies.^(a)

The reduction in system resilience has largely been attributed to the Longford gas plant. Esso has advised AEMO that, as production declines and there is less redundancy, full plant outages will be required, with a one-day outage planned for late 2023 and a one-month outage planned for late 2025.

AEMO noted that these will be the first full plant planned outages of the Longford gas plant and that it will need to operate the DTS in an unprecedented manner during these outages.

Source: ACCC, *Gas inquiry interim report*, July 2022, pp. 17; 27; 45.

AEMO, *Victorian gas planning report update*, March 2022, pp. 3; 11; 61; 78.

Note: (a) AEMO defines system resilience as the ability of the system to limit the extent, severity and duration of system degradation following an abnormal event.

2.3 Current regulatory arrangements applying to Dandenong LNG

2.3.1 NGL and NGR provisions applying to the Dandenong LNG facility

The service provider of the Dandenong LNG facility is a declared LNG storage provider for the purposes of the NGL and NGR.²⁴ As a declared LNG storage provider, the Dandenong LNG service provider is required by the NGL to participate in the DWGM in a registrable capacity and to be a registered participant.²⁵

The NGL also provides for rules to be made to regulate a declared LNG storage provider and the LNG stored by the provider.²⁶

Part 15A of the NGR sets out the registrable categories in the DWGM. The Dandenong LNG facility is currently registered in both the 'storage provider' and 'market participant — storage provider' registrable categories.²⁷

As both a registered participant and a market participant, the Dandenong LNG storage provider (referred to as an 'LNG storage provider' in the NGR), is subject to the market related rules in Part 19 of the NGR. The facility is also subject to a number of specific provisions in Part 19 Division 3 Subdivision 2 of the NGR. These provisions require:²⁸

- the LNG storage provider to:
 - ensure that its LNG storage facility is utilised with the objective of maintaining LNG stock at the highest level possible
 - operate the LNG storage facility in accordance with AEMO's scheduling instructions
 - inform AEMO of all matters or circumstances relating to the operation of the facility that may affect AEMO's ability to schedule LNG injections bids and use its LNG reserve²⁹
 - provide the following to AEMO at the end of each gas day:
 - information on the total quantity of LNG stock and the total quantity of LNG stock held on behalf of market participants, which is available to be bid into the market
 - a register of LNG storage capacity, which must include information on each holder of LNG storage capacity, the amount of storage space³⁰ to which each holder is entitled and the quantity of LNG stock held on behalf of each holder.
- AEMO to schedule LNG injection bids³¹ and issue scheduling instructions to the LNG storage provider.³²

24 The service provider of the Dandenong LNG facility was declared to be a declared LNG storage provider through a Victorian Ministerial Order that was made on 30 June 2009.

25 Sections 91BI and 91BJ of the NGL.

26 See Schedule 1, clause 55F of the NGL.

27 AEMO, Gas market participant lists: <https://aemo.com.au/en/energy-systems/gas/gas-market-participants>

28 See rules 279-281 of the NGR.

29 The term 'LNG reserve' is defined in rule 200 of the NGR as the LNG storage capacity to which AEMO is entitled under its LNG storage agreement.

30 This term is defined in rule 200 as 'the right of a market participant to store a quantity of gas (expressed in tonnes) in an LNG storage facility in accordance with its LNG storage agreement and this part.

31 See rule 278 of the NGR.

32 See rules 278 and 284 of the NGR.

This subdivision was the subject of a rule change in 2010, which resulted in, among other things, the removal of the rules that had:³³

- required the LNG storage provider to provide AEMO with 3,000 tonnes (~165 TJ) of storage capacity (LNG reserve) and other provisions relating to AEMO's management and use of the LNG reserve
- required LNG injected into the LNG storage facility to be allocated between storage holders in accordance with a fixed formula
- regulated the transfer of storage capacity and LNG stock between market participants.

The 2010 rule change was made in response to a request by AEMO that the rules enable a more liberalised operation of the Dandenong LNG facility and allow AEMO and the LNG storage provider to determine the amount of storage capacity to be held by AEMO through a commercial agreement.³⁴

In the 2010 rule change request, AEMO stated that the LNG storage provisions in the NGR were limiting the ability of the LNG storage provider to offer efficient and innovative LNG storage services.³⁵ It also noted that the facility was not as critical to the DWGM as it was prior to the establishment of alternative sources of supply and that the requirement to maintain a 3,000-tonne reserve was costing market participants in excess of \$2 million per annum.³⁶

As the proponent observed in the current rule change request, the conditions prevailing in the market in 2010 are very different to those that are expected to prevail over the next few years, with AEMO and the ACCC projecting supply shortfalls from 2023 and greater reliance expected to be placed on the Dandenong LNG facility (see Box 1).³⁷

2.3.2 **AEMO's use of the Dandenong LNG facility**

While the 2010 rule change resulted in the removal of AEMO's 3,000 tonne LNG capacity reserve, rule 343 of the NGR still recognises that AEMO may hold an LNG reserve and use it to address threats to system security. This rule, which builds on AEMO's direction power under s. 91BC of the NGL, provides for AEMO to intervene in the market in certain circumstances.

Specifically, rule 343 of the NGR states that if AEMO reasonably considers that a threat to system security is unlikely to subside without intervention, it must intervene in the market by taking any measures it believes are reasonable and necessary to overcome the threat to system security, including (without limitation) injecting gas from AEMO's LNG reserve or making directions under s. 91BC of the NGL.

AEMO is authorised under s. 91BA(2) of the NGL to trade in natural gas to the extent necessary or desirable for the safety, security or reliability of the DTS, or in an emergency.

³³ AEMC, *Dandenong liquefied natural gas storage facility*, final determination, 16 December 2010.

³⁴ AEMO, *Dandenong liquefied natural gas storage facility*, rule change request, 8 June 2010, p. 5.

³⁵ AEMO, rule change request, 8 June 2010.

³⁶ *ibid.*

³⁷ Rule change request, pp. 5-6.

2.4 Reform work that may affect Dandenong LNG in the medium term

In the rule change request, the proponent noted that the proposed rule is intended to be an interim measure and that work would be undertaken on a broader reform program focused on enhancing the reliability of supply and system security.³⁸

The potential reforms that were referred to in this context include the introduction of a gas reliability standard and a reliability and reserve trader (RERT) scheme.³⁹

Energy Ministers have recently announced that a regulatory impact statement will be prepared to consider whether a third-party access regime for storage facilities should be implemented, as recommended by the ACCC.⁴⁰

38 Rule change request, p. 15.

39 *ibid.*

40 Energy Ministers, *Meeting communique*, 12 August 2022.

3 DETAILS OF THE RULE CHANGE REQUEST

This chapter provides an overview of:

- the issues identified in the rule change request
- the proposed solution to address the identified issues
- the costs and benefits of the rule change identified by the proponent.

A copy of the rule change request and proposed rule can be found on the AEMC website, www.aemc.gov.au.

3.1 Issues identified in the rule change request

The key concern raised in the rule change request is that the arrangements currently applying to the Dandenong LNG facility are not providing for the effective use of the facility and are, therefore, posing a significant risk to system security, safety and reliability of supply in Victoria and to the effective operation of the DWGM.⁴¹

Elaborating further on this, the rule change request noted that the stock of LNG held in the Dandenong LNG facility has fallen significantly since 2019 and the market has failed to adequately respond to the threat to system security notices issued by AEMO. This has resulted in the LNG stock reaching “hazardously” low levels going into winter 2021 and 2022.⁴²

According to the proponent, if this trend continues into 2023 when the supply-demand balance is expected to tighten, it will pose a significant risk to the DWGM, with AEMO modelling suggesting a 15-35 per cent probability of curtailment in 2023 if the same level of LNG stock held at the start of winter 2022 is held at the start of winter 2023.⁴³

The need for sufficient LNG stock to manage operational, reliability and emergency requirements is expected to continue through to 2025, as production from legacy gas fields in Victoria declines and the Longford gas plant is subject to planned outages.⁴⁴

The proponent noted that the NGR may be contributing to the inefficient use of the Dandenong LNG facility because, while it is clear that AEMO can use the facility to fulfil its system security and safety roles, it is unclear whether it can do so for reliability purposes (for example, to mitigate against the risk of curtailment in winter):⁴⁵

In view of the shifting context of the market, there is a strong case for AEMO’s role in relation to Dandenong LNG storage to be strengthened considerably over the next few years and to better define its ability to hold, use and cost recover against any Dandenong LNG that is used to support the reliability of supply...

41 Rule change request, pp. 1-2.

42 *ibid*, pp. 7-9.

43 *ibid*, p. 9.

44 *ibid*.

45 *ibid*, p. 10.

...This rule change request will allow time for a broader package of measures, including a gas reliability standard or equivalent, to be developed by supporting reliable supply over the intervening period in the context of a tightening supply-demand balance and reduced system resilience...

3.2 Proposed solution

To address the issues outlined above, the proponent has proposed that Part 19 of the NGR be amended to implement the proposed rule, which would be in operation between 2023 and 2025. The proposed rule provides for AEMO to act as the:

- buyer of last resort of capacity in the Dandenong LNG facility and to hold a target level of LNG stock in this facility during the winter months
- supplier of last resort in relation to the use of its LNG stock.

The proposed rule also sets out:

- the contractual arrangements to be put in place between AEMO and the LNG storage provider to support AEMO's roles as buyer and supplier of last resort
- how the costs AEMO incurs as buyer and supplier of last resort are to be recovered from market participants
- the accountability and transparency measures that would apply to AEMO in its capacity as buyer and supplier of last resort.

The figure below provides an overview of the key elements of the proposed rule change. Further detail on the proposed rule is provided in section 5.2 and appendix A.

Figure 3.1: Key elements of the proposed rule change

AEMO as buyer of last resort	<p>Procurement of uncontracted storage capacity AEMO must contract any uncontracted LNG storage capacity for winter that is available at the end of 15 March and may contract any additional uncontracted capacity that becomes available after.</p>	<p>Winter target level LNG stock target level is:</p> <ul style="list-style-type: none"> • the highest level reasonably possible, or • such other level determined by AEMO and approved by the Victorian Minister.
	<p>Procurement of gas to fill LNG storage AEMO must purchase gas for storage & vaporisation with objective of achieving and maintaining LNG stock at target level during winter.</p>	
	<p>Relinquishment to other market participants</p> <ul style="list-style-type: none"> • AEMO may relinquish storage capacity to LNG storage provider if a market participant acquires or proposes to acquire the capacity • AEMO may transfer LNG stock to a market participant if that participant has acquired a right to store the stock in the LNG facility 	
AEMO as supplier of last resort	<p>Use of LNG reserve AEMO may use LNG reserve at such times and quantities it considers reasonably necessary, or desirable, to ensure security of the DTS and satisfy operational requirements.</p>	<p>Supplier of last resort principles</p> <ul style="list-style-type: none"> • AEMO's LNG stock is to ordinarily be scheduled after other market participants • AEMO's injection bids from LNG reserve must be at VoLL (i.e. \$800/GJ)
	<p>Procedures The Gas scheduling procedures must set out the procedures relating to the use of the LNG reserve, which must give effect to the supplier of last resort principles</p>	
Contractual arrangements	<p>Storage agreement requirements LNG storage agreement must be in place at all times and allow AEMO to:</p> <ul style="list-style-type: none"> • contract uncontracted LNG storage capacity in periods of relevant year and to the extent AEMO considers necessary or convenient to satisfy its buyer of last resort obligations • relinquish capacity if a market participant acquires or proposes to acquire capacity. 	<p>Terms of LNG storage agreement To be on substantially the same terms as AEMO's winter 2022 agreement, except to the extent changes:</p> <ul style="list-style-type: none"> • are reasonably necessary to: <ul style="list-style-type: none"> ◦ give effect to changes necessary for the facility's safe and reliable operation ◦ ensure consistency with relevant rules • reflect changes in inflation • give effect to changes of law. <p>LNG storage provider must negotiate in good faith and comply with offer requirements.</p>
	<p>Role of AER: AER could take enforcement action if storage agreement requirements not met.</p>	
Cost recovery	<p>AEMO to be able to recover:</p> <ul style="list-style-type: none"> • Costs of acquiring LNG storage capacity through Participant Fees • Losses /proceeds from use of LNG reserve through linepack account 	
Accountability & transparency	<p>AEMO to publish information on:</p> <ul style="list-style-type: none"> • the amount of storage capacity it contracts • any storage capacity it relinquishes and any LNG stock transferred 	

3.3 Potential costs and benefits identified by the proponent

The rule change request did not include an estimate of the costs that are likely to be associated with the implementation of the proposed rule. It did, however, state that the proposed rule would promote the NGO by:⁴⁶

- enabling the risks to public safety, system security and the reliability of supply posed by operational, reliability and emergency events to be more effectively managed
- continuing to provide for the efficient operation of the broader market
- supporting the efficient operation and use of the Dandenong LNG facility while also ensuring AEMO does not crowd out other market participants
- supporting efficient investment in natural gas services by encouraging efficient use of existing infrastructure and avoiding unnecessary investment in new infrastructure that, in the context of a transition to net zero emissions, could become stranded.

⁴⁶ Rule change request, pp. 16-17.

4 ASSESSMENT FRAMEWORK

This chapter outlines the:

- Commission's rule making power
- decision-making framework the Commission must apply to determine whether the rule change request contributes to the NGO
- proposed assessment framework

4.1 Rule making power

Section 295 of the NGL allows the Commission to make a rule regulating the DWGM if the request is made by AEMO or the Victorian Minister and if the Commission is satisfied the proposed rule is compatible with the proper performance of AEMO's declared system functions.

Section 74 of the NGL also allows the Commission to make rules relating to the regulation of a declared LNG storage provider and LNG stored by the provider.⁴⁷

The Commission's rule making power in the NGL also allows the Commission to:

- make a rule that is different (including materially different) to a proposed rule (a more preferable rule) if it is satisfied that, having regard to the issue or issues raised in the rule change request, the more preferable rule will or is likely to better contribute to the achievement of the NGO (s. 296 of the NGL)
- make rules that are necessary or consequential, or correspond, to the rule change request (s. 297 of the NGL).

4.2 Achieving the NGO

The Commission may only make a rule if it is satisfied that the rule will, or is likely to, contribute to the achievement of the NGO.⁴⁸ The NGO is:⁴⁹

to promote efficient investment in, and efficient operation and use of, natural gas services for the long term interests of consumers of natural gas with respect to price, safety, reliability and security of supply of natural gas.

4.3 Proposed assessment framework

To determine whether the proposed rule change will, or is likely to, contribute to the achievement of the NGO, the Commission intends to use the assessment framework outlined below. This may be refined during the rule change process.

⁴⁷ See section 74(2) and Schedule 1, clause 55F of the NGL.

⁴⁸ Section 291(1) of the NGL.

⁴⁹ Section 23 of the NGL.

The proposed assessment framework comprises the following criteria:

- **Safety, security and reliability:** Will the proposed rule change provide for the reliable, secure and safe provision of gas at an efficient cost to consumers?
- **Principles of market efficiency:**
 - Concepts of efficiency:
 - Will the proposed rule change promote efficient investment in, operation and use of the Dandenong LNG facility and/or other infrastructure in the DWGM?
 - Will the proposed rule change promote the efficient operation of the DWGM?
 - Risk allocation: Does the proposed rule change appropriately allocate risks to those parties best placed to manage the risk?
 - Incentives: Will the proposed rule change affect the existing incentives market participants have to contract and use the Dandenong LNG facility?
- **Implementation considerations:**
 - Costs and complexity: What effect will the rule change have on regulatory and administrative costs for market participants, consumers and market bodies?
 - Timing and uncertainty:
 - What will happen at the end of the term of the proposed rule (that is, post-2025)?
 - Will the proposed rule change impede or support the other work that is being undertaken on security and reliability measures?
- **Principles of good regulatory practice:**
 - Is the proposed rule change targeted, fit for purpose and proportionate to the issues it is intended to address?
 - Does the proposed rule change provide for:
 - predictability and stability in regulatory arrangements?
 - simplicity and transparency in regulatory arrangements?

The Commission is seeking stakeholder views on this proposed assessment framework.

QUESTION 1: ASSESSMENT FRAMEWORK

1. Is the proposed assessment framework appropriate for considering the rule change request? Are there any other matters that should be included?

5 ISSUES FOR CONSULTATION

This chapter sets out the issues for consultation that have been identified, having regard to the assessment framework set out in section 4.3.

These issues relate to:

- the problems identified in the rule change request and their potential impact on the operation of the DWGM and the safety, security and reliability of supply in Victoria
- the proposed solution identified in the rule change request
- the costs and benefits associated with the proposed solution, including potential impacts on the safety, security and reliability of supply, market efficiency and costs to consumers.

Stakeholders are encouraged to comment on these issues and any other aspect of the rule change request or the proposed rule.

5.1 What are the problems to be addressed?

The proponent stated that the current arrangements in the DWGM are not providing for the effective use of the Dandenong LNG facility and, as a consequence, are posing a significant risk to the supply of gas in Victoria and the effective operation of the DWGM.⁵⁰

In doing so, she pointed to the failure of the threat to system security notices issued by AEMO in March 2021 and March 2022 to elicit a sufficient response from market participants to fill the Dandenong LNG facility.

The proponent also noted the risks to safety, system security and reliability of supply posed by low levels of LNG holdings are expected to become more acute from winter 2023 and continue through to 2025 as a result of tight supply-demand conditions, reduced system resilience and planned outages of the Longford gas plant in late 2023 and 2025.⁵¹

According to the proponent, these risks represent:⁵²

an unacceptable outcome for the community particularly with the means to avert it readily to hand in the form of the facility's unutilised capacity

The rule change request stated that the NGR may be contributing to the identified problems because it provides very little guidance on how AEMO should intervene, when it should intervene and how it should recover the costs of any such intervention.⁵³

The rule change request also noted that while it is clear that AEMO can use the LNG facility to fulfil its system security and safety roles, it is unclear whether it can do so for reliability purposes under the current rules:⁵⁴

50 Rule change request, pp. 1-2.

51 *ibid*, p. 15.

52 *ibid*, p. 9.

53 *ibid*, p. 10.

54 *ibid*, p. 10.

While AEMO can contract to fulfil its system security and safety roles, neither the current NGR nor Victorian legislation currently provide any certainty on whether, when and how AEMO is to procure, maintain and dispose of additional LNG stock from a declared LNG facility, in order to support reliability of supply and mitigate against the risk of curtailment.

There is, for example, no formal reliability standard in place for gas and it will not be possible to implement any such standard by winter 2023. Both AEMO and market participants, and ultimately end users, would benefit from such certainty with regard to Dandenong LNG usage.

Noting all of the above, and in view of the shifting context of the market, there is a strong case for AEMO's role in relation to Dandenong LNG storage to be strengthened considerably over the next few years and to better define its ability to hold, use and cost recover against any Dandenong LNG that is used to support reliability of supply.

QUESTION 2: PROBLEM STATEMENT

1. Do you agree with each of the problems identified in the rule change request (noting the delineation between the safety and system security related problems and the reliability related problems)? If so, do you agree that they need to be addressed prior to winter 2023?
2. What do you think the underlying source of the problems are (i.e. why isn't the Dandenong LNG facility being filled in the way it used to and why aren't market participants responding to AEMO's threat to system security notices)?
3. How material do you think the identified problems are and what impact could they have on the following (distinguishing where possible between the safety and system security related problems and the reliability related problems):
 - a. the supply of gas in Victoria?
 - b. the operation of the DWGM?
 - c. the safety of the infrastructure?
4. What do you think would happen if nothing is done to address the identified problem?

5.2 What is the proposed solution?

To address the problems outlined above, the proponent has requested that Part 19 of the NGR be amended to implement the proposed rule, which would be in operation between 2023 and 2025. The proposed rule establishes AEMO as:

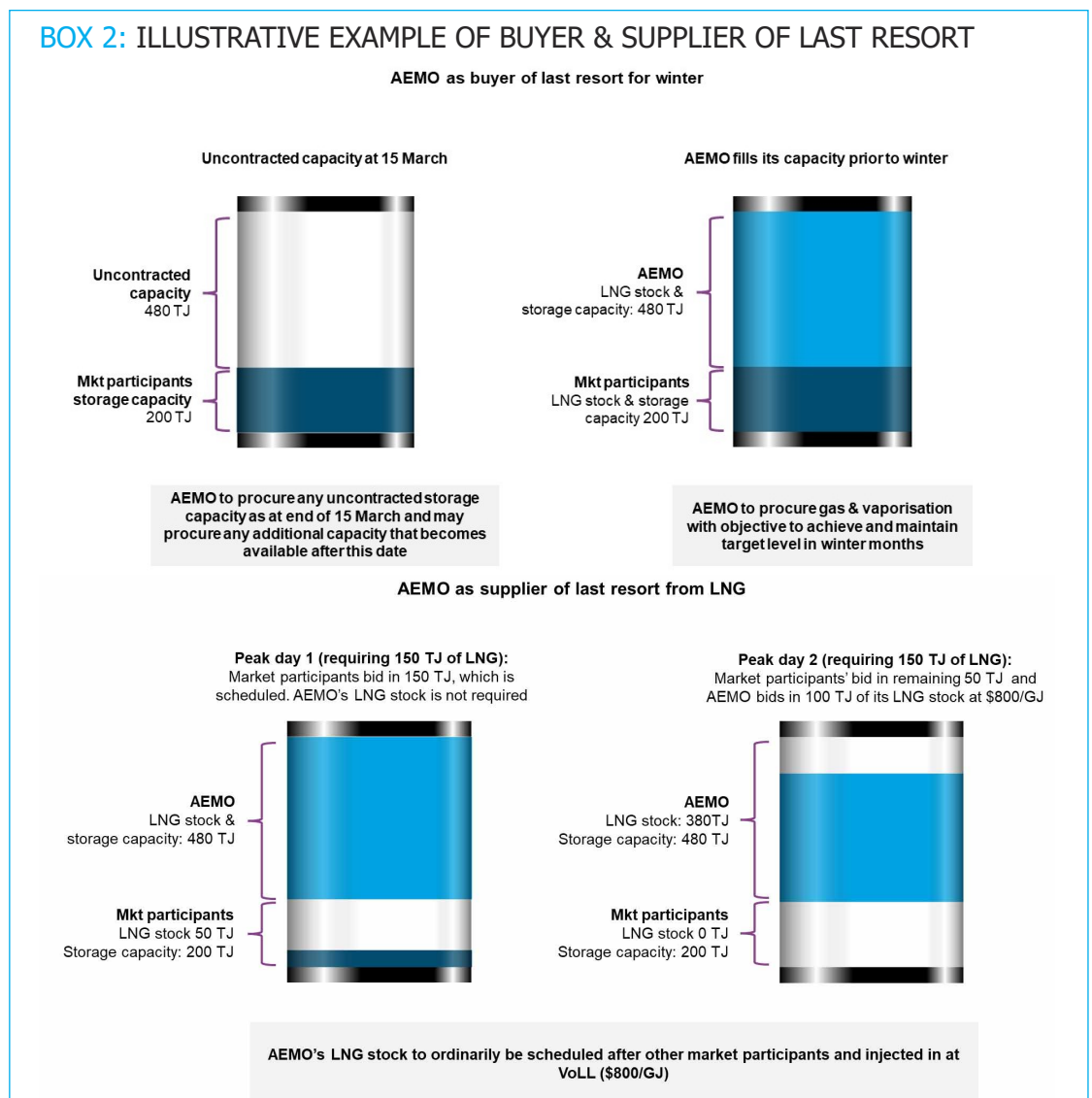
- buyer of last resort of capacity in the Dandenong LNG facility and require it to hold a target level of LNG stock in this facility during the winter months
- supplier of last resort in relation to the use of its LNG stock.

Box 2 below provides an illustrative example of how these two elements are intended to work.

The proposed rule also sets out:

- the requirement for contractual arrangements to be put in place between AEMO and the LNG storage provider to support AEMO's roles as buyer and supplier of last resort
- how the costs AEMO incurs as buyer and supplier of last resort are to be recovered from market participants
- the accountability and transparency measures that would apply to AEMO in its capacity as buyer and supplier of last resort.

Further detail on these elements of the proposed rule is provided below, while appendix A provides further detail on the proposed rule.



QUESTION 3: PROPOSED SOLUTION

1. Do you think the proposed solution is the most appropriate way to address the identified problems, or is there another more effective solution that could be implemented prior to winter 2023 (including non-rules based solutions)?
2. Are there any measures in the proposed solution that you think are not required, or are there additional measures that you think are required?
3. Does the proposed rule properly reflect the solution described in the rule change request, or are amendments required?
4. Do you think the proposed solution:
 - a. is targeted, fit for purpose and proportionate to the issues it is intended to address?
 - b. provides for predictability and stability in regulatory arrangements?
 - c. provides for simplicity and transparency in regulatory arrangements?

5.2.1

AEMO as buyer of last resort

Under the proposed rule change, AEMO would be:

- required to contract any uncontracted LNG storage capacity⁵⁵ that is available for the upcoming winter months at the end of 15 March of the relevant year⁵⁶ and to purchase gas to be stored as LNG, with the objective of achieving and maintaining LNG stock at the target level in the winter months
- allowed to contract for the use of any other uncontracted LNG storage capacity for the winter months that becomes available after 15 March of that year.

The term 'winter months' is not defined in the proposed rule, but for VGPR purposes, AEMO defines the winter period as 1 May to 30 September.⁵⁷

The 'target level' is defined in the proposed rule as:⁵⁸

- the highest level reasonably possible, or
- such other level determined by AEMO and approved by the Victorian Minister, which may occur if AEMO considers that there are extraordinary circumstances that warrant a lower target level and applies to the Minister for approval of a different target level.⁵⁹

In effect, the proposed rule establishes AEMO as buyer of last resort in relation to the Dandenong LNG facility, enabling it to procure any uncontracted storage capacity once market participants have had an opportunity to contract their own storage capacity, LNG

55 The term 'uncontracted LNG storage capacity' would be defined in rule 200 of the NGR as any available storage capacity in an LNG storage facility that is not subject to an LNG storage agreement.

56 Proposed rule 282(4)-(5).

57 AEMO, *Victorian Gas Planning Report Update*, March 2022, p. 106.

58 Proposed rule 282(5).

59 Rule change request, p. 12. The rule change request noted that this could occur if there was no gas available to fill the LNG tank due to a major emergency situation, of where filling the tank could lead to perverse operational outcomes.

stock and injection rights.⁶⁰ According to the rule change request, the 15 March timing is intended to maximise the time available to market participants to enter into contracts, while also providing AEMO sufficient time to fill the storage tank prior to winter.⁶¹

To mitigate against the risk that AEMO crowds out other market participants, the proposed rule allows AEMO to relinquish LNG storage capacity to the LNG storage provider if a market participant proposes to acquire that capacity.⁶²

Under the proposed rule AEMO would also be able to transfer any associated LNG stock to the market participant to avoid unnecessary and inefficient withdrawals from and injections into the LNG storage facility.⁶³ The terms of any such transfer would need to be agreed bilaterally between AEMO and the market participant.

The rule change request states that AEMO should only be able to do this as part of relinquishment of storage capacity because otherwise, it could provide a disincentive for market participants to contract and create wealth transfer issues.⁶⁴ However, this limitation is not reflected in the proposed rule.

The proposed rule anticipates that the LNG reserve procedures, which AEMO will be required to develop, would provide more detail on relinquishment of storage capacity and transfers of LNG stock (see section 5.2.6 for more detail on the transitional arrangements applying to the procedures).

As noted in the rule change request, the proposed rule would not affect the existing power AEMO has to contract storage capacity at other times of the year if it identifies the need to do so.⁶⁵

QUESTION 4: AEMO AS BUYER OF LAST RESORT

1. Do you agree with the proposals that AEMO should:
 - a. act as buyer of last resort for the Dandenong LNG facility for the winter months?
 - b. procure all of the uncontracted storage capacity available for the winter months?
 - c. maintain a target level of LNG stock based on the highest level reasonably possible, or such other level determined by AEMO and approved by the Victorian Minister?
2. Does the proposal to allow AEMO to relinquish storage capacity if another market participant seeks access to this capacity address the risk that it could crowd out market participants, or would this still be a risk?

60 Rule change request, p. 12.

61 *ibid.*

62 Proposed rule 286(1).

63 Proposed rule 286(2). The relinquishment to the LNG storage provider means that the market participant can contract directly with the LNG storage provider for the use of that capacity.

64 Rule change request, p. 14.

65 Proposed rule 286(2).

3. Do you agree with the proposal that AEMO should only be able to on-sell LNG stock to a market participant as part of the relinquishment of storage capacity? If so, do you think this should be specified in the NGR, or could it be left to the LNG reserve procedures?

5.2.2 AEMO as supplier of last resort

Under the proposed rule, AEMO would be able to utilise its LNG stock by issuing scheduling instructions to the LNG storage facility to vaporise its LNG stock “at such times and in such quantities as AEMO considers reasonably necessary, or desirable, to ensure the security of the DTS and to satisfy AEMO’s operational requirements”.⁶⁶

The proposed rule also requires the procedures relating to the utilisation of the LNG stock to be set out in the gas scheduling procedures and to give effect to the supplier of last resort principle.⁶⁷ The supplier of last resort principle is reflected in the proposed rule as a requirement that the gas scheduling procedures:

- give effect to the principle that AEMO’s LNG stock should ordinarily be scheduled after LNG stock held on behalf of market participants
- must provide for AEMO to place bids for injections of gas from the LNG reserve at a price equal to the value of lost load (VoLL) (currently \$800/GJ) (i.e. to ensure AEMO’s gas is not scheduled before any alternative gas could be injected).

The proponent noted that the supplier of last resort principle will, in her view, ensure market participants continue to have appropriate incentives to use the LNG storage facility and to limit the financial impact of AEMO’s interventions as supplier of last resort.⁶⁸

The rule change request also noted that AEMO would be able to dispose of some of its LNG stock at the end of winter to free up capacity in the LNG storage facility, with any proceeds from the disposal to be returned to market participants.

However, this is not explicitly provided for in the proposed rule. This lack of clarity could be problematic if the operation of the supplier of last resort principle means that AEMO cannot dispose of the LNG stock and has to incur costs storing LNG that is not required. For the reasons set out in section 2.2.1, AEMO would not be expected to dispose of all of its stock at the end of winter. However, there could be value from a cost-minimisation perspective in providing some flexibility in the NGR to allow AEMO to dispose of part of its LNG stock at the end of winter, where appropriate.

Another potential gap is that while the rule change request refers to AEMO being able to utilise its LNG stock for reliability purposes and, in particular, to “support reliability of supply and mitigate against the risk of curtailment”,⁶⁹ this is not reflected in the proposed rule.

⁶⁶ Proposed rule 285(1).

⁶⁷ Proposed rule 285(2)-(3).

⁶⁸ Rule change request, p. 13.

⁶⁹ Rule change request, p. 10.

Rather, proposed rule 285(1) only refers to AEMO being able to utilise the LNG stock for system security and operational purposes:

...at such times and in such quantities as AEMO may reasonably consider necessary or desirable to ensure the security of the declared transmission system and to satisfy AEMO's operational requirements.

QUESTION 5: AEMO AS SUPPLIER OF LAST RESORT

1. Do you agree with the proposal that AEMO should act as supplier of last resort from the Dandenong LNG facility and how this has been reflected in the principle set out in the proposed rule?
2. Do you think that the proposed rule should be amended to allow AEMO to dispose of part of the LNG stock at the end of the winter period?
3. Do you agree that AEMO should be able to use its LNG stock for reliability purposes? If so, should it be clarified in the NGR?

5.2.3

Contractual arrangements for AEMO to use the Dandenong LNG facility

To be able to use the Dandenong LNG facility in the manner described in the rule change request, AEMO would need to have a storage agreement in place with the LNG storage provider that:

1. allows AEMO to contract for the use of the uncontracted LNG storage capacity during periods of the relevant year, and to the extent, that in AEMO's reasonable opinion is necessary or convenient to satisfy the objective of achieving and maintaining LNG stock over the winter months at the target level
2. allows AEMO to relinquish contracted capacity to the LNG storage provider if a market participant acquires or proposes to acquire capacity in the LNG storage facility.

This is reflected in the proposed rule 282(1), which requires AEMO and the LNG storage provider to have an LNG storage agreement in place at all times between 2023 and 2025.⁷⁰

Under proposed rule 282(2), the LNG storage agreement and any amendments must also be consistent with the relevant rules and on substantially the same terms (including price and price structure) as the agreement between AEMO and the LNG storage provider that was in place for winter 2022, except to the extent changes:⁷¹

- are reasonably necessary to:
 - give effect to changes in operational and technical requirements necessary for the safe and reliable operation of the LNG storage facility
 - ensure the agreement is consistent with the relevant rules

⁷⁰ Proposed rule 282(1).

⁷¹ Proposed rule 282(2).

- reflect indexation in line with changes in the consumer price index
- give effect to changes of law.

The proposed transitional rules require the storage agreement to be in place by 15 March 2023 and require the LNG storage provider to comply with obligations relating to the timing of offers, negotiations and proposed rule 282(2).⁷² The proposed transitional rules also state that AEMO's acceptance of an offer will not be evidence that the offer satisfies rule 282(2). The rationale for this rule was described in the rule change request as follows:⁷³

The existing contract is considered to provide a reasonable basis for the contract over the relevant years because it was recently negotiated and agreed to by both APA and AEMO and can be taken to reflect terms that are both acceptable to APA and reasonably provide for its commercial interests, and also provide the services required by AEMO.

Making provision for the existing contract to be varied to reflect the matters described above will also ensure that APA's and AEMO's interests are appropriately taken into account and are consistent with standard contract practices. This approach is also considered consistent with the need for a timely process that can be implemented by winter 2023.

To protect the interests of consumers, these requirements may be enforced if required by the Australian Energy Regulator (AER). Recognising the pressures AEMO will be under to operationalise the rule, the rule clarifies that any enforcement action by the AER will not be affected by AEMO having entered into an LNG storage agreement on terms offered by the facility owner.

To account for potential amendments to the LNG storage agreement, proposed rule 282(3) provides for any amendment requested by AEMO to be negotiated in good faith. It also requires the LNG storage provider to respond to any such request within 10 business days. To help inform interested parties' consideration of this aspect of the rule change, APA and AEMO have agreed that the contract should be published alongside this consultation paper. A copy of this contract can be found on the AEMC website, www.aemc.gov.au.

QUESTION 6: CONTRACTUAL ARRANGEMENTS

1. Do you agree with:
 - a. the proposed treatment of the LNG storage provider and AEMO's LNG storage agreement in the proposed rule and transitional rules?
 - b. the obligations that the proposed rule and transitional rules place on the LNG storage provider and AEMO in relation to contracting?

⁷² Proposed transitional rule (2).

⁷³ Rule change request, p. 12.

5.2.4

Cost recovery

Under the proposed rule, AEMO would be required to:

- recover the costs of acquiring storage capacity through participant fees, with provision made for AEMO to recover these costs prior to the general determination of fees through an additional participant fee, which it would be required to consult on using the standard consultative procedure⁷⁴
- include any losses or proceeds arising from the utilisation of the LNG reserve, including on account of any imbalances, deviations, ancillary or uplift payments in the linepack account, which AEMO is required to clear each billing period by charging or making payments to market participants.⁷⁵

The rule change request notes that the use of the linepack account for losses or proceeds arising from the use of the LNG reserve is equivalent to the current treatment of operational gas and would mean any profit generated by AEMO is rebated to market participants promptly.⁷⁶

However, it is unclear from the drafting of the proposed rule whether the linepack account would also include:⁷⁷

- the costs AEMO incurs in procuring the gas to fill the LNG tank
- the proceeds that AEMO generates from any disposal of the LNG stock arising as a result of a transfer to a market participant.

QUESTION 7: COST RECOVERY

1. Do you agree with the proposals that AEMO should be required to recover:
 - a. storage capacity costs through participant fees?
 - b. the losses/proceeds arising from the use of the LNG stock through the linepack account?
2. Is the proposed rule sufficiently clear on how all the costs that AEMO incurs (net of any proceeds it receives) are to be recovered, or are there some costs (or proceeds) that are not currently addressed?
3. Do you consider that either of the proposed cost recovery mechanisms affects the incentive market participants have to contract their own LNG storage capacity? If so, what is the impact on those incentives?

⁷⁴ Proposed transitional rule (4). This transitional rule defines the commencement of proposed rule 282 as a major gas project for the purposes of rule 135CB(1). It also states that if AEMO is to recover any costs prior to the general determination of participant fees under rule 135CA, the recovery must be through an additional participant fee determined using the standard consultative procedure.

⁷⁵ Proposed rule 285(4).

⁷⁶ Rule change request, pp. 13-14. The rule change also noted that because AEMO's LNG would only be injected when the market clearing price reaches VoLL, it may make a profit.

⁷⁷ Proposed rule 285(4).

5.2.5 Transparency and accountability

Under the proposed rule change, AEMO would be required to publish information on:

- the amount of storage capacity it contracts and any capacity that it relinquishes⁷⁸
- any LNG stock that it transfers to another market participant.⁷⁹

The publication of this information is intended to make AEMO accountable in its role as buyer and supplier of last resort. It is also expected to assist market participants that are considering procuring some storage capacity and/or LNG stock held by AEMO.⁸⁰

In addition to this information, Energy Ministers have recently agreed that the NGR should be amended to include a new Part 18A, which will require storage facility operators (including the Dandenong LNG facility) to report on the prices actually paid by users, contracted volumes and other key terms and conditions in these contracts.⁸¹ This new part to the NGR is anticipated to commence in 2023.

QUESTION 8: TRANSPARENCY AND ACCOUNTABILITY

1. Does the proposed rule change provide for sufficient accountability and transparency of AEMO's actions as buyer and supplier of last resort, or are additional measures required?

5.2.6 Transitional arrangements

Under the proposed rule, AEMO would need to carry out certain actions before it could use its new powers to:

- enter into the required contractual arrangements with the LNG storage provider
- make the LNG reserve procedures and amend the gas scheduling procedures.⁸²

These actions are also managed by the transitional rules, which:

- specify the dates by which the contractual arrangements must be entered into⁸³
- require AEMO to make and publish the initial LNG reserve procedures by 1 March 2023⁸⁴
- allow AEMO to treat any consultation on the LNG reserve procedures and gas scheduling procedures undertaken prior to the rule being implemented as consultation for the purposes of Part 15B of the NGR.⁸⁵

78 Proposed rule 282(8).

79 Proposed rule 286(3).

80 Rule change request, p. 14.

81 <https://www.energy.gov.au/government-priorities/energy-ministers/energy-ministers-publications/energy-ministers-agree-final-package-gas-pipeline-regulatory-amendment>

82 The rule change request also notes that AEMO may have to amend other procedures, including system security procedures, gas ownership procedures, administered pricing procedures and ancillary and uplift procedures.

83 Proposed transitional rules (1) and (2).

84 Proposed transitional rule (3)(1).

85 Proposed transitional rule (3)(2).

QUESTION 9: TRANSITIONAL ARRANGEMENTS

1. Are any other transitional arrangements required to accommodate the implementation of the proposed solution?

5.2.7

Term of the proposed rule change

The rule change request states that the new rules should be in place for winter 2023 and continue until the end of 2025. The term of the proposed rule is intended to provide sufficient time for work to be undertaken on a broader reform program that will consider other measures to support system security and enhance the reliability of supply.⁸⁶ Energy Ministers have also recently announced that a regulatory impact statement will be conducted to consider whether a third-party access regime should be implemented for storage facilities.⁸⁷

QUESTION 10: TERM OF THE PROPOSED RULE CHANGE

1. Do you agree with the proposed term of the rule change from 2023 to 2025?
2. Do you think the proposed solution would affect the implementation of any other solutions that may be considered as part of the broader reform work being undertaken:
 - a. on security and reliability measures?
 - b. on third-party access to storage facilities?

5.3

What are the costs and benefits of the proposed solution?

The rule change request did not include an estimate of the costs that could be incurred if the proposed solution is implemented. However, it is clear from section 5.2.4 that there will be direct costs associated with AEMO procuring all the uncontracted capacity in the Dandenong LNG facility and the gas required to fill the LNG tank to the target level.

These costs may be offset to some extent by any relinquishment of capacity or transfer of LNG stock that AEMO undertakes. They may also be reduced by the proceeds that AEMO receives from the use of its LNG stock. Nevertheless, AEMO's direct costs will flow through to DWGM market participants and ultimately, Victorian gas users.

In addition to these direct costs, there may be some indirect costs associated with the proposed solution, but these have not been identified in the rule change request.

The benefits of the proposed solution cited in the rule change request are that it would:⁸⁸

⁸⁶ Rule change request, p. 2.

⁸⁷ Energy Ministers, *Meeting communique*, 12 August 2022, p. 4.

⁸⁸ Rule change request, pp. 16-17.

- enable the risks to public safety, system security and the reliability of supply posed by operational, reliability and emergency events to be more effectively managed
- continue to provide for the efficient operation of the DWGM
- support the efficient operation and use of the Dandenong LNG facility, while also ensuring AEMO does not crowd out other market participants
- support efficient investment in natural gas services by encouraging efficient use of existing infrastructure and avoiding unnecessary investment in new infrastructure that, in the context of a transition to net zero emissions, could become stranded.

While steps have been taken in the proposed rule to minimise its impact on the incentive market participants have to contract to use the Dandenong LNG facility, the AEMC is interested in understanding whether there could be any adverse effects and, if so, why.

The AEMC is also interested in understanding:

- whether the proposed solution provides for the safe, secure and reliable provision of gas at an efficient cost to consumers
- the impact that the proposed rule could have on:
 - the allocation of risks across the market
 - the efficient operation of the DWGM
 - the efficiency of investment in, operation and use of the Dandenong LNG facility and any other DWGM infrastructure
 - the prices payable for gas in Victoria.

QUESTION 11: COSTS AND BENEFITS

1. What do you think the direct and indirect costs of the proposed solution are likely to be? Are these costs likely to be proportionate to the problem they are intended to address?
2. What do you think the benefits of the proposed solution are likely to be?
3. Will the proposed solution provide for the safe, secure and reliable provision of gas at an efficient cost to consumers?
4. What, if any effect, will the proposed solution have on:
 - a. the incentive market participants have to contract to use the Dandenong LNG facility?
 - b. the allocation of risks across the market (i.e. will risks be allocated to those best placed to manage them)?
 - c. the efficient operation of the DWGM?
 - d. the efficiency of investment in, operation and use of the Dandenong LNG facility and any other DWGM infrastructure?
5. What, if any, effect will the proposed solution have on the prices paid for gas in Victoria?

6 PROCESS FOR THIS RULE CHANGE

This chapter outlines:

- the expedited process that the Commission proposes to use for this rule change
- how to make submissions to both the proposed use of the expedited process and the proposed rule change.

6.1 Using the expedited process

6.1.1 Request to treat the rule change as an urgent rule using the expedited process

The proponent proposed the rule change request be treated as urgent in accordance with s. 304 of the NGL such that it could be processed on an expedited basis. In doing so, it noted that:

There is ample evidence that current arrangements are not allowing for the effective use of the Dandenong LNG facility and this requires remediation through changes to the NGR. The need for a rule change is further supported by the lack of adequate market response to the threat to system security notices issued by AEMO in March 2021 and March 2022 in relation to insufficient inventory levels at the Dandenong LNG facility to meet all operational and emergency scenarios.

Modelling undertaken by AEMO shows that the issue of low inventory levels must be addressed as a matter of urgency and no later than winter 2023 to mitigate against the risk of curtailment and system security issues. This requires implementation of the proposed rule change well ahead of winter 2023 to allow enough time for the physical refilling of the Dandenong LNG facility.

The proponent also noted that the final rule would need to be in place no later than February 2023 to provide AEMO sufficient time to:⁸⁹

- consult on and make the required amendments to procedures
- enter into the contractual arrangements with the owner of the Dandenong LNG facility
- refill the Dandenong LNG tank before winter commences, which as noted in section 2.2.1 can take more than two months.

These timing objectives would not be met under the standard rule making process. When coupled with the threats posed by the current arrangements to the DWGM, the proponent has requested the rule change be treated as an urgent rule using the expedited process.

6.1.2 Commission's view on the request to treat the rule change as an urgent rule

The Commission can use an expedited rule making process if a rule change is considered urgent. The key differences between the expedited and standard rule making processes are that the expedited process requires one round of consultation and the publication of a final determination within eight weeks of initiating the process.

⁸⁹ Rule change request, p. 2.

The Commission considers that the proposed rule change meets the definition of an urgent rule under s. 290 of the NGL. This is because, as noted by the proponent, the current arrangements do not appear to be providing market participants with a sufficient incentive to hold enough stock in the Dandenong LNG facility. When coupled with the fact that supply shortfalls are forecast to occur on peak days in Victoria between winter 2023 and 2025, it would appear that the arrangements currently relating to the Dandenong LNG facility pose an imminent threat to both:

1. the effective operation of the DWGM, which as required by s. 290 of the NGL, is a regulated gas market operated and administered by AEMO
2. the supply of gas in Victoria.

If insufficient stock is held in the Dandenong LNG facility and an event arises that results in there being insufficient supply to meet demand, then it could threaten system security, public safety and the supply of gas to customers in Victoria. It could also threaten the effective operation of the DWGM (e.g. if curtailment is required for a prolonged period, or if parts of the DTS have to be shut down).

While winter 2023 is some months away, it is worth noting that before AEMO could use the proposed powers it would need to make and amend a number of procedures and enter into the required contractual arrangements with the LNG storage provider. It would also need to procure gas and start the refill process well in advance of winter.

This is because the refill rate for the Dandenong LNG facility is quite slow (see section 2.2.1) and takes time to fill. For example, if the amount of stock in the facility was the same in 2023 as it was on 15 March 2022 (~364 TJ) and AEMO sought to fill it to 680 TJ, then it would take approximately 39 days to do so (based on the current refill rate of 8.2 TJ/day).

Working back from the commencement of winter (i.e. 1 May 2023), the refill process would have to commence by 23 March. The rule change would therefore need to be in place by 1 March 2023 at the latest, which is not feasible under the standard rule change process where AEMO also needs to update its procedures.

Accordingly, the Commission has decided to use the expedited process for this rule change request.⁹⁰

However, given the complex issues associated with the proposed rule change, the Commission has also decided to extend the time between the publication of the consultation paper and the final rule determination from eight weeks to twelve weeks. This additional time is intended to provide stakeholders and the Commission more time to consider these issues.

If stakeholders have any objections to the use of the expedited process, they must be provided in writing by **15 September 2022** and we request you contact the project team before doing so. To be valid, an objection must not be misconceived or lacking in substance.⁹¹ The process for submitting an objection is set out below.

⁹⁰ The AEMC has published a notice under ss. 303-304 of the NGL to commence and assess the rule change request as an urgent rule.

⁹¹ See s. 304(3) of the NGL.

6.2 Lodging a submission or objection to the expedited process

The Commission invites stakeholders to submit:

- written objections to the use of the expedited process
- written submissions on the proposed rule change.

These submissions must be lodged online via the Commission's website, www.aemc.gov.au, using the "lodge a submission" function and selecting the project reference code GRC0065.

The request or submission must be on letterhead (if submitted on behalf of an organisation), signed and dated. The Commission publishes all submissions on its website, subject to a claim of confidentiality.

All enquiries on this project should be addressed to Daniela Moraes at (02) 8296 0607 or daniela.moraes@aemc.gov.au.

6.2.1 Lodging an objection to the expedited process

Written objections to making a rule under the expedited process in s. 304 of the NGL must include reasons for the objection and must be lodged with the Commission by **15 September 2022** online in accordance with the process set out above.

To be valid, an objection to the use of the expedited process must set out the reasons why the Commission should not make the rule in accordance with an expedited process, and accordingly, why the rule change request is not an 'urgent rule', as defined in s. 290 of the NGL. Objections on the basis of supporting or not supporting the proposed rule change itself will not be valid.

6.2.2 Lodging a submission

Written submissions on the rule change request must be lodged with Commission by **29 September 2022** online in accordance with the process set out above.

Where practicable, submissions should be prepared in accordance with the Commission's guidelines for making written submissions on rule change requests.⁹²

⁹² This guideline is available on the Commission's website www.aemc.gov.au.

ABBREVIATIONS

ACCC	Australian Competition and Consumer Commission
AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
Commission	See AEMC
DTS	Declared Transmission System
DWGM	Declared Wholesale Gas Market
GJ	gigajoules
GSOO	Gas Statement of Opportunities
LNG	liquified natural gas
LNG reserve	The LNG storage capacity that AEMO is entitled to under its LNG storage agreement
LNG stock	The amount of LNG in an LNG storage facility held on behalf of AEMO, a market participant or any other person
LNG storage capacity	The right to hold capacity in the LNG storage facility granted under an LNG storage agreement.
MCE	Ministerial Council on Energy
NGL	National Gas Law
NGO	National gas objective
NGR	National Gas Rules
PJ	petajoules
RERT	Reliability and Reserve Trader
TJ	terajoules
VGPR	Victorian gas planning report
VoLL	Value of lost load
WORM	Western Outer Ring Main

A PROPOSED RULE

The proponent has included a proposed rule that incorporates amendments to Part 19 of the NGR. The table below provides an overview of the key elements of the proposed rule. This table is illustrative only and does not include an exhaustive list of all rules that would be affected in the NGR.

The proposed rule is included in the rule change request on the AEMC website, www.aemc.gov.au.

Table A.1: Overview of key elements of the proposed rule change

PROPOSED RULE NO.	DESCRIPTION OF THE PROPOSED RULE
AEMO as buyer of last resort and target level of LNG stock to be maintained	
282(4)-(7) 286(1)	<ul style="list-style-type: none"> • Proposed sub-rules 282(4) requires AEMO to contract any uncontracted LNG storage capacity^(a) for winter that is available at the end of 15 March and to purchase gas for storage as LNG and vaporisation in accordance with the rules, with the objective of achieving and maintaining LNG stock at the target level during winter. • Proposed sub-rule 282(5) defines the target level as the highest level reasonably possible, or such other level determined by AEMO and approved by the Victorian Minister. Proposed rule 282(6) provides for AEMO to apply to the Minister for approval of a different target level if it considers that there are extraordinary circumstances warranting a lower target level. • Proposed sub-rule 282(7) allows AEMO to contract for the use of any other uncontracted LNG storage capacity for winter that becomes available after 15 March. • Proposed rule 286 also allows AEMO to: <ul style="list-style-type: none"> • relinquish LNG storage capacity to the LNG Storage Provider if a market participant proposes to acquire that capacity. • transfer LNG stock to a market participant if that market participant has acquired a right to store the stock in the LNG storage facility.
Contracting of LNG storage capacity	
281(5)(d)	<p>Information on uncontracted storage capacity</p> <p>Proposed sub-rule 281(5)(d) requires the LNG Storage Provider to report uncontracted LNG storage capacity in the LNG storage capacity register, provided to AEMO.</p>

PROPOSED RULE NO.	DESCRIPTION OF THE PROPOSED RULE
282(1)-(3) & transitional rules (1)-(2)	<p>Contractual arrangements</p> <p>Proposed rule 282(1)-(3) requires:</p> <ol style="list-style-type: none"> 1. AEMO and the LNG Storage Provider to have an LNG storage agreement in place at all times during the relevant years (2023-2025) that allows AEMO to: <ul style="list-style-type: none"> • contract the uncontracted LNG storage capacity • relinquish contracted capacity if a market participant acquires (or proposes to acquire) capacity in the LNG storage facility. 2. The LNG storage agreement to be consistent with rules 282-286A and on substantially the same terms (including price and price structure) as the agreement in place during winter 2022, except to the extent changes are reasonably necessary to: <ul style="list-style-type: none"> • give effect to changes in operational and technical requirements necessary for the safe and reliable operation of the LNG facility • ensure it is consistent with rules 282 to 286A • reflect indexation of prices in line with changes in inflation • give effect to changes of law. 3. Any amendment to the storage agreement requested by AEMO to be negotiated in good faith and the LNG Storage Provider to respond in 10 business days. <p>Proposed transitional rule (1) states that AEMO and the LNG Storage Provider:</p> <ul style="list-style-type: none"> • are not required to have an LNG storage agreement in place until 14 March 2023 • must use reasonable endeavours to agree by 1 March 2023 a gasification schedule that will allow AEMO to commence storing LNG on and from 15 March 2023. <p>Proposed transitional rule (2) requires the LNG Storage Provider to:</p> <ul style="list-style-type: none"> • provide AEMO with an offer no later than 31 December 2022 • negotiate in good faith the terms of the offer if requested by AEMO • provide a revised offer that complies with proposed rule 282(2) and reflects the outcome of the good faith negotiations within 5 business days of a request. <p>It also states that AEMO's acceptance of an offer is not evidence it satisfies rule 282(2).</p>

PROPOSED RULE NO.	DESCRIPTION OF THE PROPOSED RULE
AEMO as supplier of last resort and disposal of LNG stock	
284(1) and 285(1)-(3)	<p>Proposed rule 284(1) provides for the scheduling of injection bids to be subject to rule 285.</p> <p>Proposed subrules 285(1)-(3):</p> <ul style="list-style-type: none"> • allow AEMO to utilise the LNG reserve by issuing scheduling instructions to the LNG Storage Provider to vaporise AEMO’s LNG stock at such times and in such quantities as AEMO considers reasonably necessary, or desirable, to ensure the security of the DTS and to satisfy AEMO’s operational requirements • require the gas scheduling procedures to set out procedures relating to the utilisation of the LNG reserve, which: <ul style="list-style-type: none"> • must give effect to the supplier of last resort principle by requiring: <ul style="list-style-type: none"> • AEMO’s LNG stock to ordinarily be scheduled after other market participants • AEMO’s bids for injections from the LNG reserve to be equal to VoLL • may allow AEMO to: (a) impose conditions on the scheduling of gas from the LNG reserve and (b) provide a demand forecast • may deem AEMO to have accreditation for the purposes of injecting its LNG stock.
AEMO Procedures	
285, 286A & transitional rule (3)	<ul style="list-style-type: none"> • Gas scheduling procedures: Proposed rule 285 requires AEMO to amend the gas scheduling procedures to provide for the utilisation of the LNG reserve procedures. It also provides for a note to be added to rule 206, which states that the gas scheduling procedures are to cover the manner in which AEMO utilises the LNG reserve under rule 285. • LNG reserve procedures: Proposed rule 286A requires AEMO to develop procedures relating to the contracting of LNG storage capacity, the acquisition of gas for storage and the disposal of the LNG reserve. It also allows these procedures to deal with the publication of information on the LNG storage capacity contracted by AEMO and the LNG storage capacity relinquished and LNG stock transferred. • Timing of procedures: Transitional rule (3) requires AEMO to publish the LNG reserve procedures and to amend the gas scheduling procedures by 1 March 2023. It also allows any consultation undertaken by AEMO on procedures prior to the rule being implemented to qualify as consultation under Part 15B of the NGR.

PROPOSED RULE NO.	DESCRIPTION OF THE PROPOSED RULE
Cost recovery	
285(4) & transitional rule (4)	<p>These proposed rules set out how the costs AEMO incurs are to be recovered, with:</p> <ul style="list-style-type: none"> transitional rule (4) providing for AEMO to recover the costs of acquiring capacity in the LNG storage facility through participant fees by defining the commencement of proposed rule 282 as a major gas project under rule 135CB(1) sub-rule 285(4) requiring any losses or proceeds from the use of the LNG reserve, including as a result of any imbalances, deviations, ancillary or uplift payments, to be included in the linepack account.^(b)
Accountability and transparency	
282(8) and 286(3)	<p>These proposed rules require AEMO to publish information on:</p> <ul style="list-style-type: none"> the amount of storage capacity it contracts (proposed rule 282(8)) any storage capacity that it relinquishes and any LNG stock that it transfers (proposed rule 286(3)).

Source: Rule change request.

Note: (a) The term "uncontracted LNG storage capacity" would be defined in rule 200 as any available storage capacity in an LNG storage facility that is not subject to an LNG storage agreement.

(b) The proposed rule also provides for a note to be included in rule 241 to clarify that the linepack account also includes the amounts under rule 285.