

National Gas
Amendment (Extension
of the DWGM
Dandenong LNG
interim arrangements)
Rule 2025

APA Submission

29 May 2025



Anna Collyer
Chair
Australian Energy Market Commission
Level 15, 60 Castlereagh Street
SYDNEY NSW 2000

Lodged online

29 May 2025

RE: APA Submission to DWGM Dandenong LNG Interim Arrangements Consultation Paper

Dear Ms Collyer,

Thank you for the opportunity to comment on the AEMC's National Gas Amendment (Extension of the DWGM Dandenong LNG interim arrangements) Rule 2025 Consultation Paper (Consultation Paper).

APA is an ASX listed owner, operator, and developer of energy infrastructure assets across Australia. Through a diverse portfolio of assets, we provide energy to customers in every state and territory. As well as an extensive network of natural gas pipelines, we own or have interests in gas storage and generation facilities, electricity transmission networks, and 692 MW of renewable generation and battery storage infrastructure.

We support mechanisms that aim to increase the reliability and security of gas supply in the Victorian Declared Transmission System (DTS). The Victorian Government's proposed rule change (2025 rule change) aims to address a critical issue in the Victorian gas market - mitigating the risk of shortfalls, particularly in high demand winter periods. The Dandenong LNG storage facility (Dandenong LNG) has the potential, as demonstrated in the past, to address this concern.

Long-term certainty is essential to support investment and enable Dandenong LNG to operate reliably and provide the critical backup needed for the DTS. For this reason, our submission proposes that a ten-year extension of the National Gas Amendment (DWGM Interim LNG Storage Measures) Rule 2022 (2022 Rule), rather than a 3-year extension, is needed to provide the long-term certainty needed to support investment.

If you have any questions about our submission, please contact John Skinner on 0435 898 022 or john.skinner2@apa.com.au.

Regards,



Natalie Lindsay
General Manager, Economic Regulation and External Policy
Strategy and Corporate Development

1. Submission

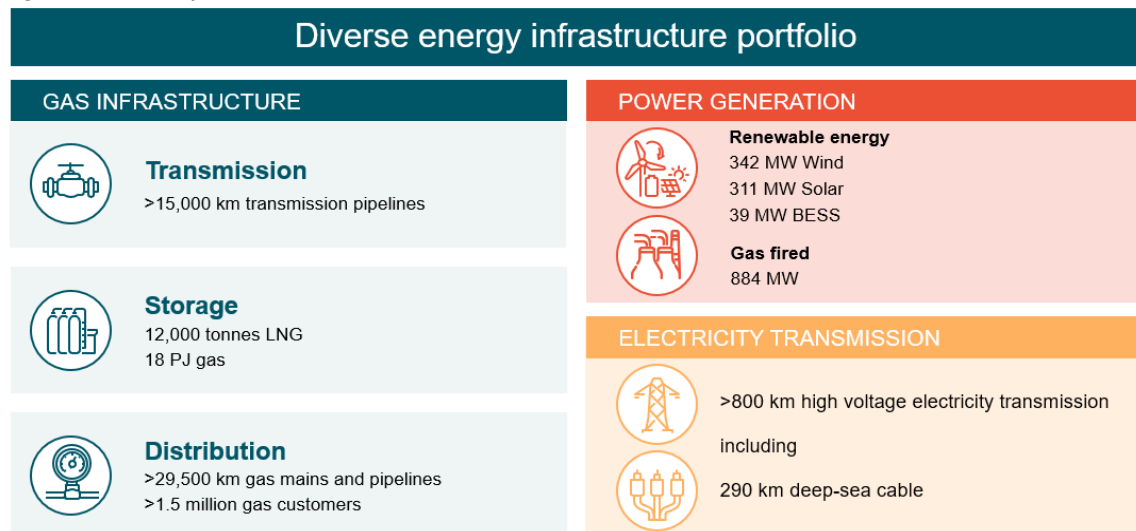
Key Points

- Dandenong LNG plays a key role in managing risk of gas shortfalls in the DTS, maintaining system reliability, security, and stability.
- Investment is required to maintain reliable operation of Dandenong LNG and enable the provision of critical services.
- A short-term, three-year extension of the 2022 rule is not sufficient to underpin the significant capital expenditure required to make this investment.
- Long-term contracting is essential to provide a sufficient time horizon for investment certainty to ensure the reliable operations of Dandenong LNG.

1.1. APA as a partner of choice in Australia's energy transition

APA is a leading ASX listed energy infrastructure business. Consistent with our purpose of securing Australia's energy future, our diverse portfolio of energy infrastructure delivers energy to customers in every Australian state and territory. For decades we have owned, operated, and maintained some of Australia's most important energy infrastructure.

Figure 1: APA's portfolio



Our 15,000 kilometres of natural gas pipelines connect sources of supply and markets across mainland Australia. We operate and maintain networks connecting 1.5 million Australian homes and businesses to the benefits of natural gas. We also own or have interests in gas storage facilities and Gas-Powered Generation (GPG).

We operate and have interests in 692 MW of renewable generation and battery storage infrastructure, while our high voltage electricity transmission assets connect Victoria with South Australia, New South Wales with Queensland and Tasmania with Victoria.

APA actively supports the transition to a lower carbon future. In September 2024, we published our FY24 Climate Report, detailing our progress against our Climate Transition Plan. This plan outlines our commitments to support Australia's energy transition and pathway to net zero operations emissions by 2050.

In 2023, APA established an Electricity Transmission business unit with a focus on electricity transmission infrastructure across Australia. We have recruited a team of established industry professionals to lead APA in playing a pivotal role in the energy transition. In line with our strategic focus, we have also announced a partnership with leading global infrastructure organisation EDF Group. This partnership synergises EDF's global experience in electricity transmission delivery and operations, with APA's strong local experience in the construction and operation of linear energy infrastructure.¹

With our extensive portfolio of assets and expertise across gas, electricity and renewables, APA is well-placed to support the energy transition towards net zero.

1.2. Secure gas supplies are critical during the energy market transition

The East Coast Gas Market (ECGM) is at risk of gas shortfalls this decade, as flagged by both the Australian Energy Market Operator (AEMO) and the Australian Competition and Consumer Commission (ACCC).² This puts at risk the vital role gas will play in 'unlocking' renewables for a secure energy transition. AEMO has also pointed to an overall reduction in system resilience which will add further pressure to the gas markets.³ Gas storage is crucial in this context.

GPG is expected to play a key role in navigating an orderly and secure energy transition.⁴ As the penetration of variable renewable energy sources, such as wind and solar, increase, and aging coal power stations retire, GPG will play a critical role in meeting electricity demand and maintaining security of the system. This is because extended periods of low wind and solar will require significant volumes of dispatchable energy to be available.

On 13 February 2024, severe storms impacted 12,000km of powerlines across Victoria, causing outages that impacted more than 500,000 homes and businesses. The storm lead to the tripping of Loy Yang A power station, requiring multiple GPG units across Victoria to come online. Dandenong LNG vapourised 270 tonnes (out of a total capacity of 12,400 tonnes) of LNG into the Declared Wholesale Gas Market (DWGM) to support GPG, which equates to approximately 15 TJ of gas, providing reliable energy supplies

¹ APA, 'APA Group and EDF Group to pursue electricity transmission projects' (Media Release, 31 October 2023).

² AEMO, 2025 Gas Statement of Opportunities, pg. 4; ACCC, Gas Inquiry 2017-30, Interim update on east coast gas market, December 2024

³ AEMO, 2025 Gas Statement of Opportunities, pg. 77

⁴ Commonwealth Government, Future Gas Strategy Consultation Paper

to Victorian customers. This demonstrated the potential for Dandenong LNG to mitigate gas shortfall concerns as supported by the Consultation Paper.

1.3. Dandenong LNG helps maintain system security and manages the risk of gas shortfalls in Victoria

The Dandenong LNG storage facility is owned and operated by APA and is a declared LNG storage provider within the Victorian DTS and the DWGM. Third-party market participants contract to store gas at Dandenong LNG, and APA bears the risk associated with owning and operating the storage facility.

The Dandenong LNG tank can hold 680 TJ (12,400 tonnes) of LNG in total which can be vaporised for injection into the network at a maximum rate of 9.8 TJ/hour. The tank refill process (including liquefaction) occurs at a maximum rate of 8.2 TJ/day. With the current equipment in place, the Dandenong LNG tank can vaporise its entire contents in approximately 3 days. Refilling the tank would take upwards of 80 days in a best-case scenario due to reliability issues with the liquefaction facility.

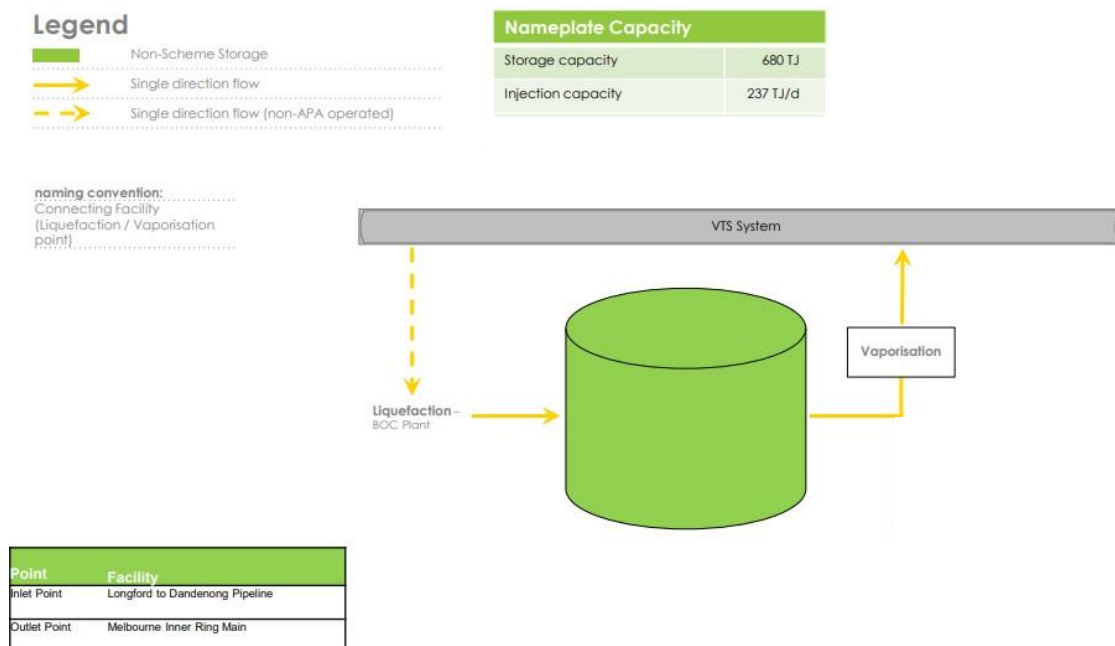
The Victorian Minister's 2022 rule change proposal outlined the critical role that Dandenong LNG plays in the Victorian market. It aims to create a framework for how Dandenong LNG can be managed to improve system security and reliability of gas to end customers.⁵ This is done by ensuring adequate inventory within Dandenong LNG, such that it would enable AEMO to act as a supplier of last resort to manage risks of gas shortfalls. One of the reasons for this is that Dandenong LNG is located on Melbourne's inner ring main and is ideally situated to enable the rapid vaporisation of LNG and injection into the DTS.

1.4. Need for urgent investment in Dandenong LNG liquefaction facility

The liquefaction service at Dandenong LNG is provided by BOC's liquefaction plant, which is located adjacent to Dandenong LNG. Liquefaction is targeted for schedule the day after vaporisation and in accordance with liquefaction priorities under LNG Services Agreements. This allows third party market participants to replenish their LNG holding up to their maximum storage allowance, and AEMO to fulfil its obligation to contract the remaining uncontracted capacity and fill the tank. The schematic in Figure 2 displays the process of liquefaction at Dandenong LNG. APA operates the storage and vaporisation, to the capacity and timings outlined in Section 1.3.

⁵ Hon Lily D'Ambrosio MP, Rule Change Proposal – Enhance Utilisation of the Dandenong LNG facility, August 2022
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Figure 2 Dandenong LNG Liquefaction and Vaporization Schematic



BOC's Dandenong LNG liquefaction plant was built in the 1970s and has experienced significant reliability issues over the last few years that are progressively extending timeframes for liquefaction. This was outlined in the AEMO's 2025 Gas Statement of Opportunities (GSOO) Report. The liquefaction plant remains in operation. However, unplanned outages continue to occur and there is an increased risk of a major failure, posing a risk for refilling the Dandenong LNG tank.⁶

It has recently taken approximately four weeks from liquefaction order to the start of liquefaction, due to unplanned maintenance. Given the gas supply and demand balance on the east coast remains tight and is forecast to remain so up to 2035, the ability to refill the tank in a timely manner is critical.

To maintain the reliable operation of Dandenong LNG, there is an urgent need for investment in a reliable liquefaction solution. The future operation of the BOC facility is uncertain due to the plant's age and reliability, and significant capital expenditure is required to maintain its reliable use.

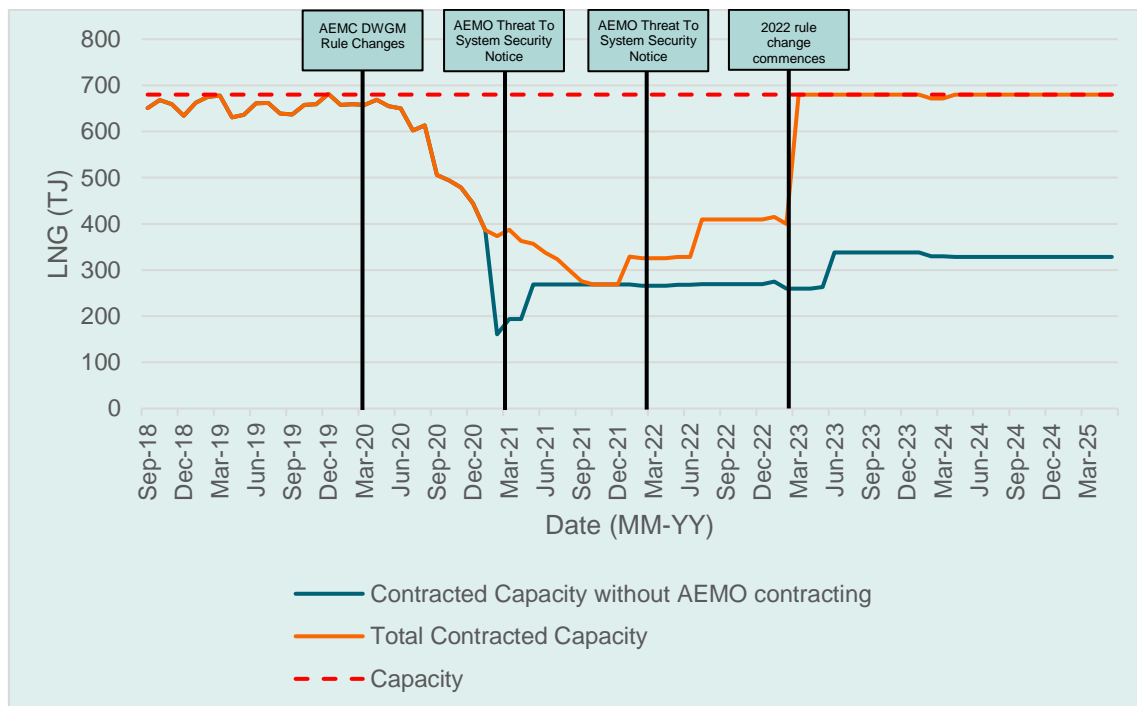
1.4.1. Long term contracting is essential for investment

Investment in gas infrastructure requires the mobilisation of long-term capital. Regulatory uncertainty and a lack of third-party market participant long-term contracting of Dandenong LNG storage capacity are acting as barriers to significant investment required in the liquefaction facility.

⁶ AEMO, 2025 Gas Statement of Opportunities, pg. 62
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As demonstrated by Figure 3, without AEMO's contracted storage position, there is low utilisation of Dandenong LNG storage. Following the commencement of the 2022 Rule change there was a marginal increase in third-party market participant contracting, but more than half the capacity would remain uncontracted but for the AEMO position.

Figure 3 Utilisation of Dandenong LNG Capacity



A lack of confidence that third-party market participants will contract with Dandenong LNG long-term will continue to harm the investment appetite in upgrading the liquefaction facility. Feedback from our customers supports this view. Without the assurance provided by long-term contracts, the prospect of sustained investment in the Dandenong LNG plant and liquefaction services is limited.

1.4.2. Regulatory uncertainty needs to be addressed to incentivise investment

On 8 December 2023, Energy Ministers agreed to progress Stage 2 of the East Coast Gas Market Reliability and Supply Adequacy Reforms (Stage 2 rule changes).⁷ This reform package includes four rule changes aimed at introducing a reliability standard and framework for gas markets. It also contains other reforms relating to monitoring and communication of threats to system security:

- Advance notification requirements for planned supply and delivery infrastructure closure⁸ – consultation on rule change proposal closed on 17 April 2025.

⁷ Department of Climate Change, Energy, the Environment and Water, Energy Ministers agree to final package of Stage 2 Reliability and Supply Adequacy reforms, <https://www.energy.gov.au/news-media/news/energy-ministers-agree-final-package-stage-2-reliability-and-supply-adequacy-reforms>

⁸ AEMC, ECGS Notice of closure for gas infrastructure rule change proposal
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- Reliability standards and associated settings⁹ – consultation on rule change proposal closed on 17 April 2025.
- Supplier of last resort¹⁰ powers for AEMO – rule change was submitted to the AEMC on 8 July 2024.
- Projected assessment of system adequacy¹¹ – consultation on rule change proposal closed on 8 May 2025.

While the reform package is focused on providing market participants with greater visibility of supply adequacy and generating a market-led response, the future is still uncertain:

- it is not clear what any rule changes (if made by the AEMC) will look like, and any final rules and guidelines may not be operational until well into 2027, as supported by the rule change proponents¹²;
- it is not clear whether and how third-party market participants will respond to any rule changes.

There is an urgent need to improve the reliability of Dandenong LNG liquefaction. The regulatory uncertainty created by the Stage 2 rule changes factors is one of the factors acting as a barrier to long term investment. For this reason, we support a long-term extension to the 2022 Rule to provide the necessary investment certainty in a timely manner.

1.5. It is critical that the 2022 rule change is extended long-term to support the necessary investment in Dandenong LNG

This section relates to Questions 1, 2, and 6 of the Consultation Paper.

Do stakeholders consider that the proposed solution to extend the interim DLNG arrangements for three years (Option 3) addresses the issue identified in the rule change request? If not, why?

Do you consider the proposed time extension (Option 3) will, or is likely to, better contribute to the achievement of the NGO compared to AEMO relying on its existing powers (Option 1) or a longer-term extension (Option 2)?

Do you consider the proposed extension of the DWGM maintenance obligations to the Dandenong liquefaction facility is required to address the issues identified by the proponent?

The 2025 rule change request is intended to support AEMO in exercising its declared system functions in the VTS and DWGM as set out under the National Gas Law (NGL) and National Gas Rules (NGR). These functions include system security, safety, reliability, and the efficient operation of the market. We support the overarching objectives of 2025 rule change request,¹³ which aim to promote the efficient operation and use of the Dandenong LNG storage facility.

⁹ AEMC, *ECGS Reliability standard and associated settings rule change proposal*

¹⁰ AEMC, *ECGS Supplier of last resort mechanism rule change proposal*

¹¹ AEMC, *ECGS Projected Assessment of System Adequacy rule change proposal*

¹² Victorian Government, *Extending DWGM interim LNG storage arrangements rule change proposal*, pg. 20

¹³ AEMC, *Consultation paper – Extension of the DWGM Dandenong LNG interim arrangements*, pg. i

The rule change proponent proposed three options to address the issues outlined in their rule change proposal:

- *Option 1: Allow the interim DLNG arrangements to expire and rely on AEMO's powers to issue directions and trade in gas*
- *Option 2: Long-term extension of the interim DLNG arrangements*
- *Option 3: Three-year extension of the interim DLNG arrangements¹⁴*

The Consultation Paper evaluated these three options against the following assessment criteria, considering the National Gas Objective (NGO):

- *Safety, security and reliability: would the proposed rule change promote efficient operation and use of the DLNG storage facility to support system security, safety and reliability in the DWGM?*
- *Principles of market efficiency: would the proposed rule change promote efficient operation and investment in the DLNG storage facility and associated infrastructure, and does it appropriately allocate risk and/or affect existing incentives?*
- *Implementation considerations: would the proposed rule change affect costs for participants, consumers and market bodies, and would it align with other work being undertaken on security and reliability?*
- *Principles of good regulatory practice: would the proposed rule change provide for predictability, stability, simplicity and transparency?*

We agree with the rule change proponent that Option 1 will involve significant administrative overheads and opportunity costs, and that it appears counterproductive to reintroduce uncertainty around AEMO's management of Dandenong LNG inventory.

We agree with the 2025 rule change request that an extension to the interim measures is critical.

1.5.1. Limitation of the rule change proponent's preferred term of extension

The rule change proponent outlined their preference for Option 3 (three-year extension).¹⁵ For the reasons outlined in Table 1 below, a proposed three-year extension does not offer sufficient certainty to support the significant capital investment required in the liquefaction facilities for the use of Dandenong LNG.

Investment in liquefaction facilities is not supported by the current AEMO 2022 LNG Storage Agreement, and the current liquefaction tariffs are insufficient to recover the costs associated with the required capital investment. To support investment and ensure that any tariff increase remains reasonable, in line with the National Gas Objective (NGO), a longer-term rule change is required.

¹⁴ AEMC, *Consultation paper – Extension of the DWGM Dandenong LNG interim arrangements*, pg. 6

¹⁵ AEMC, *Consultation paper – Extension of the DWGM Dandenong LNG interim arrangements*, pg. 7
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1.5.2. A longer-term rule change (e.g. 10 years) is needed

Due to the uncertain regulatory environment and a lack of confidence around third-party market participant contracting, we support Option 2 (a ten-year extension). A long-term rule change better aligns with the assessment criteria (discussed below) and provides the long-term certainty necessary to underpin investment decisions.

Significant capital expenditure is needed in the BOC liquefaction facilities to maintain the operation and use of the liquefaction service required by the Dandenong LNG facility and ensure its capability to provide critical services. We consider that Option 2 would enable the ongoing and reliable operation of the Dandenong LNG facility for managing the risk of gas curtailment in the DWGM.

1.5.3. Option 2 meets all the proposed assessment criteria

This section relates to Questions 9 of the Consultation Paper on the assessment framework.

Do you consider the proposed assessment criteria to be appropriate? If not, why?

We support the proposed assessment criteria, as they effectively address the importance of the facility and its contributions to the NGO. In Table 1 below, our submission assesses a short term and long-term rule change against the assessment criteria.

For the reasons discussed in Table 1, we propose that Option 2 be adopted.

Table 1 Assessment Criteria against Option 2 and Option 3

Assessment Criteria		Option 2: 10-year extension		Option 3: 3-year extension	
Criteria	Description	Meets	Description	Meets	
Safety, security and reliability: <i>would the proposed rule change promote efficient operation and use of the DLNG storage facility to support system security, safety and reliability in the DWGM?</i>	A longer-term rule change will provide the investment incentive to ensure the reliable operation of the facility. Option 2 meets this criterion by ensuring that Dandenong LNG is sufficiently utilised and filled yearly, particularly in winter, during the energy transition.	✓	Would maintain AEMO’s obligation to fill Dandenong LNG prior to winter for three additional years, supporting the security and reliability of the DWGM in the short term.	✓	
			Without longer term certainty, any party is unlikely to invest to enable the reliable operation and use of the facility.	✗	
Principles of market efficiency: <i>would the proposed rule change promote efficient operation and investment in the DLNG storage facility and associated infrastructure, and does it appropriately allocate risk and/or affect existing incentives?</i>	Would promote efficient investment in the liquefaction facility which will in turn promote efficient operation of the Dandenong LNG storage facility by providing sufficient incentive and mitigated risk to invest in the required infrastructure. This would work to remove the risk of further reliability concerns in the liquefaction facility.	✓	Would not provide the necessary conditions for investment in liquefaction facility, which will continue to lead to disruptions in the operation of the facility.	✗	

Assessment Criteria		Option 2: 10-year extension		Option 3: 3-year extension	
Criteria	Description	Meets	Description	Meets	
Implementation considerations: <i>would the proposed rule change affect costs for participants, consumers and market bodies, and would it align with other work being undertaken on security and reliability?</i>	Would prevent significant tariff increases for consumers of the Dandenong LNG storage facility, by providing a longer term for cost recovery. By maintaining AEMO’s obligation to fill unutilised capacity, the costs associated with gas shortfalls would be mitigated for all market participants. This aligns with the Stage 2 reforms on increasing the security and reliability in the gas market.	✓	A three year extension, on its own, will not lead to cost increases for consumers and market participants.	✓	
			Any investment to improve the reliability of the Dandenong LNG liquefaction facility risks increasing storage costs, discouraging customers from contracting storage capacity.	✗	
Principles of good regulatory practice: <i>would the proposed rule change provide for predictability, stability, simplicity and transparency?</i>	Would provide predictability and stability around Dandenong LNG’s role in the DWGM over the long term. AEMO’s obligation to fill the storage capacity prior to winter provides a simple and transparent solution for addressing the reliability concerns.	✓	Would provide certainty over the short-term utilisation of Dandenong LNG.	✓	
			Does not provide long term certainty for investment.	✗	

1.6. We support greater transparency and oversight of the Dandenong LNG liquefaction facility

This section relates to Questions 5 and 8 of the Consultation Paper.

Do you consider the proposed extension of the DWGM participant and LNG storage disclosure obligations to the Dandenong liquefaction facility is required to address the issues identified by the proponent?

What do you consider will be the costs and benefits of the proposed transparency and oversight measures?

Do you think the proposed transparency and oversight measures will, or are likely to, contribute to the achievement of the NGO?

Are there other more efficient ways to address the identified problems that the AEMC should consider?

We are broadly supportive of measures that seek to improve the quality of information provided through the NGR reporting mechanisms, to the extent that it leads to efficient operation of the market. It is also important that the benefits of increased reporting outweigh the costs to implement.

The Consultation Paper proposes that BOC's liquefaction facility to be subject to reporting obligations under the NGR, similar to the obligations placed on LNG storage providers. While this will introduce an administrative burden for the service provider, there may be benefits in requiring BOC to report on its facility, given its importance to Dandenong LNG and energy security in the DWGM.

1.7. Support for clear arbitration mechanisms

We are supportive of clear arbitration mechanisms for dispute resolution for the LNG storage agreement between APA and AEMO. We support the continuing of the same arbitration mechanisms that were included in the transitional arrangements introduced in the 2022 Rule.

1.8. Greater management of risk through the rules and the LNG storage agreement

As outlined in Section 1.4 above, liquefaction risk at Dandenong LNG has increased considerably, given the reliability issues at BOC's liquefaction facility. This raises questions as to whether the existing provisions of rule 282 of the NGR best meet the objectives of the 2022 Rule (around security and reliability of gas supply).

Under rule 282(3) of the NGR, AEMO must contract any Dandenong LNG storage capacity that is uncontracted at the end of 1 March. The 2022 Rule final determination introduced rule 282(2) to the NGR, which required that APA's storage agreement with AEMO must be on substantially the same terms (including as to price and price structure) as the AEMO 2022 LNG Storage Agreement.

This creates a tension between the Rules and the existing contract, as the Rules suggest that AEMO is only required to contract from 1 March each year. This also presents significant liquefaction risk, as the liquefaction plant may not be available when AEMO is

required to fill the tank before the 1 March date each year. We consider that rule 282 requires amendment to better align with the objectives of the rule change proposal and any new contract entered into by AEMO and APA.

In our view, amendments to rule 282 should aim to reduce liquefaction risk and promote the efficient utilisation of both Dandenong LNG storage and the liquefaction facility. This would support the overarching objective of the proposed rule, which is to improve the security, safety and reliability of supply. This would necessarily involve a consideration of whether 1 March is an appropriate milestone for the contracting of capacity.

We will engage further with AEMO, the AEMC, and the Victorian Government to discuss contracting approaches that will better promote the objectives of the rule change.