



Extension of the DWGM Dandenong LNG Interim Arrangements (GRC0078)

Submission to AEMC by BOC, a Linde Company



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

Re: Extension of the DWGM Dandenong LNG interim arrangements

Dear Ms Collyer,

On behalf of BOC, thank you for the opportunity to submit feedback pertaining to the extension of the 2022 DWGM Dandenong LNG (DLNG) interim arrangements.

BOC, as a Linde company, forms part of a world leading industrial gases and engineering company with extensive global and local LNG experience. Our high-quality solutions, technology and services enable us to live our mission to make the world more productive and support our customers to be more successful.

In Victoria, BOC plays an integral role supporting businesses and industries. We supply vital industrial gases, including LNG from our Dandenong facility which has been in operation for more than 40 years.

BOC remains steadfast in its support of Victorian industry and views these changes to the 2022 DWGM Dandenong LNG (DLNG) interim arrangements as an opportunity to increase system reliability through investment, underpinned by a longer-term commitment by AEMO.

With respect to reporting, BOC believes unreasonable costs would be incurred for minimal benefit in complying with the proposed Part 18 (Gas Bulletin Board) reporting obligations.

BOC looks forward to working with AEMC and the Victorian Government moving forward. If you have any queries relating to our submission, please contact me.

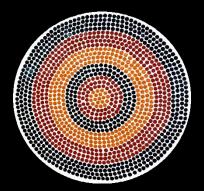
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In the spirit of reconciliation, BOC acknowledges Aboriginal and Torres Strait Islander peoples as the Traditional Custodians of Country throughout Australia. We recognise the continuing connection to land, sea and community and we pay respect to their cultures, and to Elders past, present and emerging.

Questions and Responses

Question 1: Extension of the interim DLNG arrangements, including the dispute resolution mechanism

a. Do you consider that the proposed solution (Option 3) addresses the issue identified in the rule change request?

BOC Response:

While a three-year extension as proposed in Option 3 provides a short-term bridge, it does not provide a long enough commitment to underpin a significant reinvestment of the LNG plant. As flagged in the 2025 Victoria Gas Planning Report, the LNG plant has had a number of reliability challenges in maintaining availability. This is a result of a lack of investment certainty which has precluded BOC from re-investing in the plant to modernise and address a changing gas supply environment.

BOC is prepared to reinvest in the LNG plant and address reliability threats, debottleneck capacity and provide firm availability through peak gas periods. However, the investment certainty required is a minimum horizon of ten years to recover the capital deployed.

In addition to market certainty, a ten-year investment term also allows for the broader LNG production, storage and reinjection facility to be assessed for feasibility of renewable options such as biogas, which could provide a credible pathway to hit the Victorian Government's 6% target by 2035. The consultation paper states the importance of the DLNG facility due to its location on the inner ring main, and as such BOC believes stakeholders should be prepared to commit to the facility for an extended period, particularly while the natural gas market undergoes a structural change with Longford production likely to phase out from the early 2030's.

- b. Views on the need for a dispute resolution mechanism to cover:
 - i. Contract extension process
 - ii. Compliance with rules (e.g., rule 282(2))
 - iii. Contract variations not accounted for in the rules

BOC Response:

BOC does not have any direct feedback on this matter as it not a party to the agreements between its customer APA and third parties including AEMO and shippers.

Question 2: Costs and benefits of the proposed time extension

a. What do you consider the costs and benefits of the proposed extension compared to using the trading fund function?

BOC Response:

While BOC is advocating for Option 2 (a ten-year extension), a three-year extension (Option 3) is still preferable to a reliance on AEMO's trading function. BOC notes that this would provide even less certainty for APA and has potential to create some confusion in the market due to a lack of established processes. The delay in establishing these procedures would ultimately causes a higher level of risk out to 2027.

While BOC does not have expertise in the economics of Options 1 versus 3, BOC would expect that having preestablished protocols and planning should allow for a lower cost than relying on AEMO's trading function on an ad-hoc basis.

BOC notes that one curtailment event would exceed the all-up cost of a ten-year commitment, the DLNG facility is ultimately an insurance policy against a serious shock event that would impact the entire Victorian economy.

b. Will Option 3 better contribute to the NGO compared to Options 1 and 2?

BOC Response:

Option 2 (a 10-year extension) is the preferred option for BOC. As outlined in the response to Question 1, it provides the long-term certainty for BOC to reinvest in the plant. The benefits of reinvestment include a firm commitment during the peak period of the year (February to September), higher production volumes and market certainty. It also avoids the regulatory churn associated with repeated short-term rule changes, thereby supporting good regulatory practice and long-term planning certainty.

It is important to note that the concerns highlighted around the reliability of the LNG facility by the 2025 Victorian Natural Gas Planning Report are a function of the following two factors:

- 1. The lack of forward certainty has precluded BOC from reinvesting into the plant, which has meant that reliability threats are addressed at the time of failure, rather than large scale upgrading and modernisation of the plant.
- 2. The quality of natural gas into the plant has varied over time, with higher heavies and CO2 fractions seen in recent years, as well as a change in plant inlet pressure. This has in turn meant that the plant is operating at the edge of the design envelope in purifying incoming natural gas for the liquefaction process, which has reliability implications.

Both factors are issues that BOC would typically address with reinvestment, allowing the plant to be modified for the current demands and modernised as appropriate. This reinvestment requires a longer-term commitment, typically ten or more years (per Option2).

Question 3: Improving transparency and oversight of the Dandenong liquefaction facility

Do you think there is a lack of transparency and oversight over the Dandenong liquefaction facility and the declared LNG supply agreement, and if so, how material do you think the transparency and oversight problems are and what impacts could they have on:

i. market participants' ability to make informed and efficient decisions?

ii. AEMO's ability to perform its declared system functions?

BOC Response:

BOC disagrees that there is a material transparency and oversight issue. This is because the liquefaction/refill rate at 1-2% is entirely disconnected from the injection rate (up to 200TJ/d). Therefore, the visibility on LNG storage level is the key piece of information, not refill rates. This is already available to view on the Gas Bulletin Board (GBB).

BOC argues that only information limited to the LNG liquefaction facility's planned or unplanned availability would be useful to AEMO. This is likely to be of little use to most users of the GBB and can be managed through BOC's existing operational communications with APA. Overall, BOC suggests that oversight measures in the proposed Part 19 (DWGM) rules are more applicable than Part 18 (GBB). However, BOC maintains that any reporting obligations, either direct or via APA, should not be in conflict with its contractual commitments.

Question 4: Extending Gas Bulletin Board (GBB) reporting obligations (Part 18 NGR)

a. Is extending GBB obligations necessary to address the issues identified?

BOC Response:

Because of the order of magnitude difference between storage volume and injection rates versus production rates, BOC does not believe visibility on the liquefaction facility beyond availability and forecasting maintenance windows will have a material impact for AEMO and shippers. Further, BOC would point out that the preferred option put forward for the rule change is preserving the status quo, which should also preserve the reporting status quo.

b. Do AEMO and participants need all proposed data or only some?

BOC Response:

BOC requests that any information requested does not require BOC to breach commercial arrangements with our counterparty (APA) and is not so onerous as to require daily or weekly updates to avoid unreasonable cost imposition. BOC refers to the point made in question 4(a), whereby the disconnect between storage volume and injection rates versus production rates makes daily updating on liquefaction irrelevant.

Further, BOC believes that any obligations limited to Part 19 would give the same benefit of oversight without imposing unreasonable costs on BOC and creating potential commercial discrepancies. The proposed Part 18 obligations have the potential to create unreasonable costs for BOC, being a business that does not typically operate in the Gas Bulletin Board environment.

c. Suggestions for defining terms (e.g., daily capacity, flow)?

BOC Response:

BOC's preference is to limit any reporting obligation to the extent possible. As an example, per the commentary in clause 4.2.2, BOC is of the view that reporting on both flow from the LNG plant and flow into DLNG storage is essentially a duplication of reporting as the flow rate should be the same, within any metering error allowances.

It should also be noted that as the operator of the LNG facility, BOC does not take custody of natural gas, nor nominate or act as a shipper at any point in the LNG production process. Therefore, we believe that much of the information sought in Part 18, when applied to the LNG facility, is of limited value to Gas Bulletin Board users, while imposing unreasonable costs on BOC.

Question 5: Extending DWGM disclosure obligations (Part 19 NGR)

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?

BOC Response:

BOC reiterates the point that the order of magnitude between storage/injection capacity and LNG liquefaction rates limits the usefulness of the operational disclosures. However, in principle BOC does not object to the Part 19 disclosure obligations being applied to assist AEMO in carrying out its planning and coordination functions. BOC would request that it is walked through any reporting obligation placed upon it, and given the chance to assess, address and be made whole on any impact with its commercial partner APA.

As an operating model, BOC's preference is that operational discussions continue to occur regularly between itself and APA, and APA includes any pertinent disclosure on the liquefaction facility as part of its disclosure on the LNG storage facility.

Question 6: Extending DWGM maintenance obligations (Part 19 NGR)

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?

BOC Response:

BOC would prefer that DWGM maintenance obligations are not extended to the liquefaction plant, as BOC entered into an agreement with APA on a commercial basis, and having a third-party direct maintenance has the potential to erode BOC's commercial position due to scheduling work outside of its own business priorities and resource availability.

Should this obligation be adopted, BOC would stipulate that:

- 1. BOC is not precluded from taking the facility offline to manage any safety issue that may arise
- 2. No direction by AEMO requires BOC to breach a condition of its agreement with APA
- 3. BOC is not worse off commercially for deferring or bringing forward maintenance

Question 7: Reintroduction of AEMO oversight of the declared LNG supply agreement Do you consider the proposed oversight of the declared LNG supply agreement by AEMO and in particular, the prohibition on this agreement being terminated or varied without AEMO's consent (which must not be unreasonably withheld or delayed) is required to address the issues identified by the proponent?

BOC Response:

BOC would always prefer that a third-party does not have input into a direct contractual arrangement between itself and its counterparty. This is especially the case where the preferred rule change option is preserving the status quo, where intervention by AEMO is essentially a post agreement intervention by AEMO into a commercial arrangement between BOC and APA.

Should a new, long-term agreement be entered into by BOC and APA, underpinned by AEMO, BOC would take that position that as a key stakeholder, AEMO oversight of any change or termination of the DLNG agreement may be appropriate. BOC would stipulate however that AEMO must act reasonably to withhold any variation or termination request, and BOC shall not be obligated to continue to operate the facility in conflict with its commercial interests.

Question 8: Costs and benefits of the proposed transparency and oversight obligations

a. What are the expected costs and benefits?

BOC Response:

BOC remains of the view that the proposed transparency and oversight obligations are likely to make BOC worse off by adding overhead burden on reporting, a third-party to manage in contractual matters between BOC and APA, and adding operational/maintenance complexity. BOC is not a business that typically operates in the Gas Bulletin Board environment and as such would incur a significant cost to establish requirements and comply with the obligations proposed.

b. Will the measures contribute to achieving the NGO?

BOC Response:

BOC is of the view that adding more obligation and reporting on the liquefaction plant is of limited value

beyond short-medium term availability forecasting (Part 19). Reliability is inherent in the plant investment horizon, where BOC has previously advocated for Option 2.

c. Are there more efficient alternatives?

BOC Response:

BOC is of the view that the key driver of reliability is reinvestment and plant modernisation to manage the changing gas supply environment. This outcome would be facilitated by the extended rule change (10-years), which is an appropriate amount of time for BOC to recover the capital required for a significant infrastructure investment.

Question 9: Assessment framework

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

BOC Response:

BOC agrees that all four criteria should be considered in applying a rule change but is of the view that they should not be equally weighted. Given the potential cost of a curtailment event and increased likelihood with lower gas availability and Longford reliability, BOC believes a premium should be placed on safety and reliability considerations. When viewed through this lens, the potential cost of \$8.8m per annum versus the potential for a \$1.6 billion event should drive a longer-term view to underpin investment required to insure against such an event.

BOC Overview

BOC Australia, a Linde company, supplies compressed and bulk gases, chemicals and equipment across the South Pacific region. Linde is a leading global industrial gases and engineering company with 2024 sales of US\$33 billion. We live our mission of making our world more productive every day by providing high-quality solutions, technologies and services which are making our customers more successful and helping to sustain, decarbonise and protect our planet.