

8 May 2025

Anna Collyer  
Chair, Australian Energy Market Commission (AEMC)  
Via submission portal

## **RE: ECGS Projected Assessment of System Adequacy (PASA)**

Dear Madam/Sir,

Squadron Energy welcomes the opportunity to respond to the AEMC's consultation on the proposal to introduce two forecasts for reliability and supply adequacy. Squadron Energy is Australia's leading renewable energy company that develops, operates and owns renewable energy assets in Australia. With proven experience and expertise across the project lifecycle, we work with local communities and our customers to lead the transition to Australia's clean energy future.

We have 1.1 gigawatts (GW) of renewable energy in operation and will be the single biggest contributor to helping Australia meet its 2030 target of 82% renewable energy. Our development pipeline has projects at differing stages of development and includes wind, solar and firming capacity such as batteries and gas peaking plants with dual fuel capability. We have also repurposed the former Port Kembla coal terminal into an LNG regassification facility - the Port Kembla Energy Terminal (PKET). Once operational, Squadron Energy's PKET will include a floating storage and regasification unit (FSRU) to enable LNG to supply the domestic market. At full capacity, PKET can supply over 500TJ/day and up to 130PJ per annum.

Generally, we agree that greater visibility of reliability and supply adequacy (RSA) threats will aid market participants, AEMO, and policy makers to make timely and efficient decisions in response to threats. We support analysis of RSA risks being published by AEMO in PASA type notifications. The development of any PASA should consider that:

- while it is recognised that MT PASA is focussing on medium term supply-demand balance, without a key focus on the structural deficit in gas supply, the measures proposed in this rule change and across the suite of Stage 2 RSA reforms will be of limited utility in terms of addressing the fundamental issue of longer-term supply needs. To improve reliability of gas supply, it is critical that both the timing of supply solutions and the capacity of infrastructure used in the supply of gas to end-users can deliver gas when and where it is needed. Understanding both available energy and capacity is important. A PASA would then support the optimisation of the supply-demand balance, but its benefit in aiding the market's ability to identify and respond to longer-term supply adequacy is limited.
- detailed consideration needs to be given to the ability of facility operators to meet the proposed data requirements given the technical and operational complexity of running an LNG regas terminal. In this way, a PASA may not provide a sufficient basis for operational or commercial decisions by either AEMO or market participants if the adequate information is not available, limiting its usefulness for decision making.

## **Reliability and supply adequacy risk are fundamentally driven by a geographical supply-demand imbalance and uncertainty in the role gas will play in the transition**

As the demand-supply balance in the east coast gas market continues to tighten, the market has become more exposed to reliability and supply adequacy risks particularly in short periods of high demand (be it direct gas use or GPG). This has been exacerbated by the combination of:

- the rapid decline of production from legacy gas fields in the southern states - Gippsland, Bass and Sydney basins - and the uncertain rate and duration of future production, leading to an increased reliance on gas piped from Queensland.
- the changing nature of demand, with the frequency of peak day and seasonal demand events increasing. Risks will increasingly be driven by both supply and demand side factors including severe weather events, increasing Gas Power Generation (GPG) demand, coal electricity generation outages, and outages at key supply facilities.
- supply and transportation infrastructure constraints, including physical constraints on existing north-south pipelines and southern storage facilities exacerbating the geographical supply-demand imbalance.

These factors emphasise both the challenges regarding the amount of gas that is available to be supplied but also the capacity of existing infrastructure to supply gas when and where it is needed. As Marsden Jacob Associates (MJA) suggest *'what is perhaps more pressing is that the new gas [supply needed to replace southern fields] will not have the embedded capacity, the flexibility and reserve capacity that the market needs to run reliably and meet winter peak demand'*.<sup>1</sup> LNG regas terminals, such as the PKET, offer this flexibility and mean that domestic supply is not solely reliant on limited interstate pipeline capacity or domestic production. Its Floating Storage and Regasification Unit (FSRU)-based model allows for scalable supply adjustments, unlike pipeline projects that lock in infrastructure and consumer costs for decades. If market conditions shift, PKET's floating infrastructure can be ramped to meet demand or redeployed/repurposed, reducing the risk of stranded assets.

While the proposed PASAs have a potentially very useful application in providing transparency on where capacity constraints are and may emerge as the role of gas changes through the transition, the fundamental issue remains ensuring the appropriate capacity is available close to southern demand centres. As electrification continues and Australia's coal-fired power stations' reliability decay, the challenges of managing supply capacity adequacy will be compounded by increasing demand from GPG. Given the operation of GPG is intermittent to meet peak loads they do not require gas year-round but do require significant supply capacity for short periods when in operation. In this context, we encourage the AEMC and governments to consider more fully the importance of flexible capacity and time-limited gas supply arrangements and their relationship to enabling the core work of the renewable transition - to exit coal safely. This requires long-term policy vision. While the Commonwealth Future Gas Strategy canvasses this issue at a high-level there is a need for a clearly articulated and coordinated vision for the feasibility, timing and role to be played by gas and GPG in the transition. This would be a much more direct solution to inform decision making by stakeholders.

## **The technical and operational complexity of LNG regas terminals will limit the completeness of data available**

To the extent that a ST gas PASA is achievable based on the information currently reported to AEMO, we consider there may be merit in this. However, the proposed inputs that are required from industry to

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<sup>1</sup> Marsden Jacob Associates, Adequacy of Gas Supply: Factors impacting retailer and generator contracting, March 2023, pp. 19-20.

develop an MT PASA will be challenging for LNG regas facility operators to provide with adequate certainty. This is because:

- i. the technical and operational complexity of processing LNG for use in the domestic market will have implications for the capacity and availability of gas to be supplied on both a daily basis and across an annual reporting period (the challenge of describing the interplay between capacity and energy). Additionally, the timing at which the terminal receives information and/or revised information from terminal users is also unlikely to support the availability of meaningful information aligned to a MT PASA time horizon.
- ii. the commercial arrangements that are required to underpin the terminal, from LNG supply to terminal users (of which there may be multiple) to the sale of gas into the domestic market, will mean facility operators have limited control of, or access to, necessary information to provide appropriate data as it is likely to be unavailable within the timeframes required or commercial in confidence. Even where access to required information was possible, this could potentially impact market competitiveness in way that would ultimately be detrimental to decisions made and the prices faced by consumers.

While in principle we support the rationale for developing a MT PASA, it remains a concern that:

- if only best estimate data is available then it is unlikely that it would provide significant additional benefit beyond AEMO's existing Bulletin Board (BB) reporting requirements
- given the long-time horizons associated with new gas infrastructure investments, assessments at a monthly frequency are unlikely to provide any incremental benefit in aiding the market's ability to identify and respond to longer-term supply adequacy threats.

The remainder of this section provides an example of where the operational and technical complexity of an LNG regas facility may lead to limitations in the facility operator's ability to provide complete and meaningful data to inform the MT PASA.

*Processing gas from diverse sources and with different qualities will impact the volume of supply that can be known in advance and made available*

LNG regas facilities will mean new gas supply from diverse domestic and international sources. In the case of LNG regas facilities, these new sources of supply require the impacts of injecting different gas qualities (e.g. rich or lean in the case of LNG) or forms (e.g. hydrogen) into the network to be managed. The qualities of the gas that arrives at an LNG regas facility is not always expected to be known in advance and may change where a distressed cargo is purchased or where a cargo is swapped and redirected. This information is only available shortly before (or even as) LNG is regasified and injected into the grid.

Additionally, the facility itself will have varying operational requirements depending on a number of factors, largely connected to the specifics of the incoming cargoes, and terminal users will take advantage of the flexibility it can provide to vary their offtakes regularly. As such, there is likely to be large variations in the volume of supply that can be expected even 3-months in advance, and these are liable to change. A best estimate or nameplate capacity for the plant could be used as a proxy capacity outlook, however, we consider that this introduces significant risks to the veracity of the information.

Visibility of capacity outlooks for a facility operator is further complicated where the user(s) of the LNG regas terminal is a separate party under a commercial arrangement. In this circumstance, facility operators have limited control or access to the information regarding gas supply required to provide quality data as it will be commercial in confidence. Even where access to required information was possible, this could potentially impact market competitiveness in ways that would ultimately be detrimental to the prices faced

by consumers. International LNG suppliers acting rationally and informed of the forecast supply-demand dynamics set out in the PASA would have an incentive to price supply for LNG regas facility users at a premium, creating a disadvantage where terminal users are entering international LNG markets to secure supply.

We look forward to the opportunity to continue to support the rapid uptake of renewable generation. If you would like to discuss this submission or any related content, please contact Rupert Doney, Director - Policy at [rdoney@squadronenergy.com](mailto:rdoney@squadronenergy.com)

Yours sincerely,



Walter Schutte  
**EGM, Customer and Energy Markets**  
For and behalf of Squadron Energy Services Pty Ltd

## Attachment A

No.	Question	Feedback
1	Is there enough quality information covering the intra-year period to support decision-making by ECGS participants, AEMO and policymakers?	See submission document.
2	Do you consider a principles-based approach to be the most appropriate solution?	Yes. Taking a principles-based approach supports flexibility and implementation outcomes.
3	Which factors should guide AEMO's development of ECGS PASA modelling regions?	Pipeline linked regions showing constraints and bottlenecks appear most suitable given north-south production and demand dynamics.
4/5	Is the proposed ST and MT PASA design fit for purpose?	See submission document.
6	What are your views on compliance and enforcement?	Proposed compliance and enforcement arrangements are reasonable.
7	Are there additional opportunities for streamlining or to remove duplication?	Additional considerations: <ul style="list-style-type: none"> <li>At a broader level, is introducing a reliability and supply adequacy framework creating competing regulatory incentives with other policy, such as the emissions safeguard mechanism.</li> <li>How does setting reliability metrics (and VCR values) have flow on effects for the AER's regulation of gas network businesses?</li> </ul>
8	What are your views on implementation timing?	Perhaps benefit in taking a staged approach – starting with ST PASA given it utilises existing data sources, systems can be built around this while the need for MT PASA and reliability standard can be considered further and progressed if needs be.
9	Are there alternative solutions that would be preferable?	Propose that a more clearly articulated and coordinated vision for the feasibility, timing and role to be played by gas and GPG in the transition is needed
10	Do you agree with the proposed assessment criteria? Are there additional criteria that the Commission should consider or criteria included here that are not relevant?	NA