17 April 2025

Submission: National Gas Amendment (ECGS reliability standard and associated settings) Rule

The Australian Pipelines and Gas Association (APGA) represents the owners, operators, designers, constructors and service providers of Australia's pipeline infrastructure. APGA members ensure safe and reliable delivery of over 1,500 PJpa of gas consumed in Australia alongside over 4,500 PJpa of gas for export.

APGA welcomes the opportunity to contribute to the Australian Energy Market Commission's consultation on developing a reliability standard, and associated settings, for the East Coast Gas System (ECGS). This is the latest step a long conversation with industry about the future of the ECGS and its critical contribution it makes to Australia's economy.

The reliability of gas infrastructure assets and the nature of the market carriage operation of the gas market have long made them largely 'set and forget' from a regulatory perspective. Interventions in the market to address access and potential supply shortfalls have introduced new variables and potentially disruptions.

APGA accepts the market may benefit from additional objective steering through measures such as a reliability standard, and proposes a dual measure that considers both unserved gas and peak day shortfalls would be a useful measure for the southern jurisdictions. However, the benefit other proposed tools such as a Value of Gas Consumer Reliability are far less obvious.

Previous feedback on Stage 2 reforms

In July 2023, the Department of Climate Change, Energy, the Environment and Water (DCCEEW) consulted on the proposed "Stage 2" reliability and supply adequacy reforms for the ECGS. APGA provided extensive comment and the recommendations of that submission are worth revisiting in light of the current rule change proposals before the AEMC.[1] This provides necessary context and should be read in conjunction with this submission.

At the time, APGA supported the development of solutions and tools to manage the East Coast Gas Market (ECGM) when it is short in supply. This was on the basis of significant benefit in delivering measures that will facilitate a return to a ECGM which has sufficient supply. APGA made the following recommendations:

[1] APGA, 2023, *Reliability and Supply Adequacy framework for the East Coast Gas Market*, https://apga.org.au/submissions/reliability-and-supply-adequacy-framework-for-the-east-coast-gas-market

1. **Implement a probabilistic Reliability Standard for gas supply that applies to the southern jurisdictions.**

A combination of an unserved gas (USG) measure and an appropriate peak demand target which applies to production (not infrastructure) in the southern jurisdictions should be used.

2. **To support the Reliability Standard, APGA recommends implementing a modified Reliability and Supply Adequacy (RSA) Contracting Mechanism.**

Reforms should centre on a requirement for wholesale gas customers to demonstrate contractually secured supply in a supply adequacy event. Reforms should not impose a mandate to contract if insufficient supply security is demonstrated. Instead, a wholesale gas customer without a contract should be subject to:

a) Retraction of AEMO Supply Assurance secured under Stage 1 reforms.
b) Repositioning at the top of the demand response mechanism list.

3. **To provide protections for customers of gas retailers and GPG who fail to secure supply under the modified RSA Contracting Obligation, APGA also recommends:**

a) A Gas Retailer Reliability Obligation (Gas RRO) within the NERL requiring gas retailers to be required to always demonstrate supply adequacy.
b) A GPG Security Mechanism within the NEL allowing AEMO to identify how much GPG is required and incentivise GPG to secure sufficient secure gas supply to meet this.

4. **A short term (ST) PASA should use existing data to provide a rolling 7-day forecast. APGA does not support the need for a medium term (MT) PASA.**

Adequate Market transparency will allow wholesale gas customers to accurately manage risk by securing supply through contracting firm gas supply and transport. Hence, we also suggest improvements to AEMO's gas forecasting models to accurately forecast gas demand.

5. **To support additional supply coming into the market, APGA recommends all investment (greenfield or brownfield) specifically targeted at addressing supply adequacy concerns receive the Greenfield Incentive plus Price Protection.**

Many of the proposed concepts in the Stage 2 reforms have been somewhat uncomfortably imported from the electricity sector. Given the differences in the operation of these markets, these concepts are not always directly transferrable. APGA reiterates that not all wholesale gas customers value secure supply in the same way that it is valued in the electricity market. Gas customers are free to choose not to have firm supply contracts, and should accept the consequences of short supply events. In 2022, gas customers who were covered by firm supply contracts did not experience any supply issues, while those that were not experienced price shocks.

As detailed in our 2023 submission, successive interventions have resulted in a market where some gas customers can be incentivised to hedge their gas supply exposure, exchanging some or all of their long-term gas supply security for the opportunity of lower short-term prices. Not only does this have flow on effects with infrastructure development, it

created a situation where further interventions such as the Stage 1 reforms became necessary.

Hence, in supporting the development of an RSA and recommending an accompanying RSA Contracting Obligation, APGA also recommended a quid pro quo in the form of a Gas Retailer Reliability Obligation. This would require gas retailers to demonstrate they have contracted sufficient supply adequacy, and avoid a situation where AEMO is forced to direct gas they have not contracted for their benefit. For GPG, APGA recommended implementing a GPG Security Mechanism to influence or incentivise GPG operators to secure firm gas supply. Whether or not these tool would be a useful additions would in some respects depend on how an RSA is arranged for AEMO to exhaust market-led responses before undertaking directions.

Necessity of additional reforms

The proponent asserts that developing a Reliability and Supply Adequacy standard would provide AEMO with guidance on how and when to exercise its RSA functions.

In the intervening period between the commencement of Stage 1 powers in May 2023 and now, AEMO has had to exercise its Stage 1 diversion powers on one occasion, 5 March 2024. This occurred due to a failure of a section of Jemena's Queensland Gas Pipeline, and required AEMO to exercise its gas diversion powers on six occasions 5-17 March, followed by directions to maintain supply to end users between 8 March and 10 December 2024.[2]

AEMO has issued a further two threat notices unrelated to the QGP event, one on 23 August 2024 which was revoked, and one on 19 June 2024.

All of this is evidence of the fact that, in general, situations requiring AEMO direction to maintain the supply of gas are rare. When it is required AEMO can and has used its existing Stage 1 directions powers to intervene where necessary due to insufficient contracting of gas. This has also been a rare event, despite forecast tight supply in the ECGS.

The rule change request acknowledges that 'market-led responses will generally result in a more efficient outcome than intervention by AEMO', and this framework will only be required to support AEMO intervention as a last resort.

The private sector has demonstrated it is capable of responding to signals to invest in new supply and infrastructure, and gas customers have demonstrated they value the security of the contracts necessary to underpin those developments. There have been several such infrastructure investment announcements in the first three months of 2025, including APA's East Coast Gas Grid Expansion Plan.[3]

[2] AEMO, 2024, *East Coast Gas System – Queensland Gas Pipeline event, Final Post Intervention Report, December 2024*, https://aemo.com.au/-/media/files/gas/east-coast-gas-system/east-coast-gas-system---queensland-gas-pipeline-post-intervention-report-december-2024.pdf

[3] APA, 2025, *APA's East Coast Gas Expansion Plan*, https://www.apa.com.au/news/asx-and-media-releases/apas-east-coast-gas-expansion-plan

Given this, the existing Stage 1 frameworks are probably sufficient in supporting AEMO's stop-gap directions powers. Nevertheless and consistent with our position in 2023, APGA notionally supports the development of a dual reliability standard (RSA).

Necessity of a VGCR

The proponent has proposed that in determining the level of an RSA, the AEMC be required to have regard to the VGCR (Value of Gas Consumer Reliability), to be developed by the AER. APGA does *not* consider a VGCR to be a necessary component of an RSA.

As noted above, gas networks are predominantly underground, are resilient to severe weather events, and are inherently reliable. While there are potentially very significant costs and safety risks of shortfalls and outages, these are very rare. This is unlike electricity infrastructure which is vulnerable to physical outages, and from which the concept of a 'value of reliability' has been imported.

The proponent acknowledges that there is currently no well-accepted estimate of the VGCR in the ECGS. Developing a VGCR will be challenging precisely because gas outages are so rare, and it will be difficult to balance competing gas customer interests. For example,

- Industry and commercial may place a much higher value on gas reliability than residential consumers. Not being able to use gas for heating or cooking is inconvenient for residential customers, but industry and commercial users can be entirely reliant and outages (though exceedingly rare) could be devastating for those businesses. Hence it is likely that these customers will value reliability differently.
- The rarity of outages makes it difficult for consumers to quantify a value of reliability, i.e., how much more they are willing to pay to reduce reliability risks.
- Consumers who *have* experienced serious outages (i.e. the Longford incident in Victoria) may place a different value to those who have not, even if those incidents are unlikely to be repeated.

The proponent notes that while a single ECGS RSA standard is proposed, it is possible for different VGCRs to be estimated for each jurisdiction and for each customer type. This is an even more complex task, and may produce unhelpfully diverse VGCRs. Additionally, given the time taken to develop this consultation paper from the initial rule change request, it is entirely possible that the ECGS will look very different by the time a VGCR is developed.

To discuss any of the above feedback further, please contact me on +61 409 489 814 or crafael@apga.org.au.

Yours sincerely,

CATRIONA RAFAEL
National Policy Manager
Australian Pipelines and Gas Association

Consultation questions

AEMC question	APGA response
1. **Do you agree with the proponents' reasons for introducing the tools proposed in this rule change request?** Why or why not? Are the proponents' concerns sufficiently material to support developing the proposed solutions?	The gas supply 'crisis' of 2022 was sufficiently concerning to warrant the introduction of Stage 1 reforms, given the materiality of the threat and potential for it to be an ongoing issue. Indeed gas supply to the ECGM, particularly in the southern states, remains at risk. Both stages of reforms do not necessarily pull the right levers. Directions powers provide AEMO with the ability to direct gas to meet threats of gaps, but do not necessarily provide the signals to market to build sufficient infrastructure, and enter into sufficient contracts, to totally avoid potential supply issues. This is because the design of the ECGM does not incentivise such investment and contracting behaviour. An RSA as per the Stage 2 reforms may provide additional transparency and an objective measure, but that will still not incentivise asset owners to invest in additional assets if there are insufficient contracts to support them. This cannot realistically be solved by an RSA, VGCR, PASA or any other tool proposed in the Stage 2 reforms. APGA has consistently advocated for Senior Officials to address barriers to investment, including through incentivising brownfield investments and in additional supply.[4]
2. Will the proposed reliability standard effectively address the issues raised by the proponents?	The proposed dual reliability standard may not solve all the issues raised by the proponents but it will assist AEMO in exercising its directions powers and trading fund. Ideally this RSA would provide

[4] Such has Federal Budget Statement 2024-25, proposal to ECMC

	additional clarity and signals to market to address issues when and if they arise, with AEMO's directions powers to be used as a last resort measure.
Do you consider the proposed dual reliability standard will be effective in promoting more efficient, timely and informed decisions that have regard to the value customers place on reliability? Do you think the proposed form of the dual reliability standard is optimal?	APGA has previously suggested a combination of probabilistic reliability metrics (USE + peak demand target), with separate standards for the supply element of the supply chain, for the southern jurisdictions only. This measure focuses on the ability of supply to meet forecast demand (including GPG demand) on peak days across the east coast and specifically in the southern states where supply can be constrained.
Do you consider the proposed governance arrangements are adequate?	APGA agrees that given their current functions in the market, it is reasonable for • AEMC to determine and periodically review the RSA, • AER to publish a gas forecasting best practice guideline, and • AEMO to monitor, identifying and communicating actual or potential breaches of the reliability standard to the market.
Do you consider an interim reliability standard (informed by an AEMC-calculated interim VGCR) would be an effective tool until a permanent VGCR and reliability standard are calculated by AER and AEMC respectively?	APGA is not convinced a VGCR is a necessary component of an RSA. An interim reliability standard does not necessarily need to have regard to a VGCR (and the proponent does leave it up to the AEMC as to whether it does so). The time taken to determine even a proxy VGCR may make it difficult to have a sensible interim measure in place in a reasonable timeframe, noting the heightened risk of supply shortfalls over the next few years.
Do you think there are reasons for an alternative reliability standard to apply to any particular jurisdiction (e.g. Northern Territory) or type of gas user?	APGA suggests developing an RSA either for the entire ECGS, or just for the southern states, where supply can be constrained. Any potential advantages of developing an RSA for other regions has not been advanced by the proponent.
3. Will the proposed VGCR effectively address the issues raised by the proponents? Do you consider a VGCR can be estimated in order to inform an ECGS-wide reliability standard that reflects the value different consumers place on reliable gas supply? What	Estimating a whole-of-ECGS VGCR will be complex, and separate VGCRs for specific consumers or jurisdictions even more so. APGA is not convinced it would bring value to an RSA standard, given this value could be so large as to be functionally meaningless. The

challenges and opportunities do you consider the AER will face when calculating a VGCR? What factors should the AER take into account?	proponent has not advanced an argument for why an RSA should have regard to a VGCR, other than the fact that the electricity market RS is based on a value of consumer reliability
4. Will the proposed approach to reviewing the market settings effectively address the issues raised by the proponents? Do you consider the current market settings (STTM and DWGM) need to be informed by a reliability standard? Is it essential for the market settings to use a reliability standard as an input or can the settings be updated directly to reflect a VGCR? Do you consider the proposed governance arrangements would be adequate?	APGA does not have a preference for the operation of the STTM/DWGM but observes that in the context of an RSA for the southern jurisdictions, which we have recommended, it would make sense for the DWGM in particular to be informed by an RSA. This does not necessarily need to have regard to a VGCR.
5. **Will the proposed communication tools effectively address the issues raised by the proponents?** Do you consider the proposed threat signalling mechanism and GSAR conferences would be effective tools for AEMO to better communicate reliability and supply adequacy threats so that market participants can adequately respond? Do you consider appropriate for the threat level criteria to be set out in AEMO's ECGS procedures? Could a LOR framework for the ECGS allow AEMO to more objectively issue escalating threat signals to market participants without the need for a reliability standard?	APGA is not opposed to an objective, transparent signalling framework. This may be useful to more readily communicate the nature and severity of these threats to market participants ahead of conferences, although the necessity of this has not been demonstrated by the proponent. The threat notice powers appear to be working as intended, although these are necessarily more short-term than the proposed threat signalling mechanism. A LOR framework may be a reasonable substitute in the absence of a reliability standard, but this would still require determination of specific threat levels.
6. Will the proposed reliability forecast and or the system resilience risk assessment effectively address the issues raised by the proponents? Do you consider the proposed reliability forecast and/or the system resilience risk assessment will be effective in facilitating more informed and efficient planning and investment decisions across the ECGS? Do you think a reliability standard would materially improve the GSOO and the VGPR forecasts and risk assessments? Could other proposed tools (e.g. VGCR) inform those assessments more directly?	The private sector has demonstrated it is capable of responding to signals to invest in new supply and infrastructure, and gas customers have demonstrated they value the security of the contracts necessary to underpin those developments. A reliability forecast may assist in providing those signals, but as noted in our substantive submission, gas infrastructure operators are not going to invest to meet the standard if there is no customer to contract. There are other regulatory measures to improve the investment environment (such as guaranteeing the Greenfield Incentive for brownfield investment that improve supply capacity) but these are beyond the scope of this consultation.

7. **What are your views on the expected benefits and costs of the proposed solution?** Do you agree with the expected benefits identified in the rule change request? Are there other benefits that may arise to ECGS participants and gas users or are relevant to some specific proposed tools included in this rule change request? Do you agree with the expected costs identified in the rule change request? Are there other costs that may arise to ECGS participants and gas users or are relevant to some specific proposed tools included in this rule change request? What do you consider will be the costs and benefits of the proposed solution in both the short/medium-term and longer-term? Are there different design approaches to any of the proposed reliability tools that could assist in improving benefits or reducing costs?	The proponent identifies direct costs to the AEMC, AER and AEMO in performing their functions, some of which (including AEMO's forecasting requirements) may ultimately be passed onto industry and consumers. There are potential indirect costs that have not been acknowledged, notably potentially exacerbating free rider issues that already exist due to the current regulatory environment. Hence, in 2023 APGA proposed introducing a RSA Contracting Obligation, where gas market participants found to be non-compliant in the event of a supply threat would be prevented from benefiting from AEMO directions until and unless they enter into sufficient contracts to secure their supply.
8. **Are there alternative solutions?** Do you consider variations or alternatives to the proposed solutions could solve the issues being presented by the proponents?	See APGA's previous proposal for additional tools including a RSA Contracting Mechanism, a Retailer Reliability Obligation and a GPG Security Mechanism. Depending on the design of an RSA these may not ultimately be necessary but the onus of supply reliability should not solely be on gas shippers. Customers must be incentivised to bear some of the cost through sufficiently contracting supply to meet their needs.