19 May 2022

Meredith Mayes
Director
Australian Energy Market Commission
Via: www.aemc.gov.au

Dear Ms Mayes,

Energy Networks Australia's response to the "Review into extending the natural gas regulatory framework."

Energy Networks Australia welcomes the opportunity to respond to the AEMC's *Draft Report: Review into extending the regulatory frameworks to hydrogen and renewable gases published* on 31 March 2022 (the Report).

Energy Networks Australia is the national industry body representing Australia's electricity transmission and distribution and gas distribution networks. Our members provide more than 16 million electricity and gas connections to almost every home and business across Australia.

We support the range of reforms to the natural gas regulatory framework to expand the definition of gas to covered gases, which will enable renewable gases to be introduced to gas networks supporting the decarbonisation of Australia's gas sector. Since 2017, ENA has led the development of Gas Vision 2050, which is the industry's response to the Paris agreement on climate change. We have identified that removing regulatory roadblocks formed through historical regulation that did not include renewable gases and setting in place regulatory frameworks that recognise and support renewable gases will be a key to forming a foundation from which the renewable hydrogen and biomethane industries can grow. The current reforms address economic regulation, but parallel reforms need to be undertaken in technical regulation. Furthermore, market development will also be needed.

It should be noted that the proposed drafting for the National Gas Law and the proposed changes to the NGR are intended to enable renewable gas and hydrogen to be considered as part of the regulatory framework for natural gas. This is a positive development.

It is unclear whether the proposed changes will support the **development** of a renewable gas and hydrogen market. Gas distribution networks have been leading the development of renewable gas production and are seeking changes to the regulatory framework to support the development of this market.

Gas networks in Australia are already blending renewable gas

Australia's gas distribution networks are leading the development of renewable gas demonstration. Both renewable hydrogen and biomethane projects are under development. Of particular interest are the following projects:

- **Hydrogen Park, SA[1]:** Renewable hydrogen is produced using a 1.25MW electrolyser with water and renewable electricity. The renewable hydrogen is blended with natural gas at volumes of up to 5 per cent and supplied to nearby homes (over 700 homes) via the existing gas network. This project is already demonstrating that renewable gas can be provided to customers.
- **Western Sydney Green Hydrogen Hub[2]:** Hydrogen is carbon neutral and a 500kW electrolyser installed as part of the Western Sydney Green Gas Project produces renewable hydrogen and blends that into Jemena's gas network to approximately 250 homes. The project is expected to reach 23,500 residential customers, 100 commercial customers, and seven industrial customers. The project will also supply green hydrogen for use by transport from early 2022.
- **Malabar Biomethane Project[3]:** This project located in Sydney aims to produce renewable biogas from wastewater. This biogas will be upgraded to meet the specifications of natural gas allowing it to be injected and blended into the natural gas distribution system. The project is currently under construction with a planned operation date in 2022 when renewable biomethane will be injected into Jemena's natural gas network. At the same time, GreenPower is developing a pilot certification scheme to verify that this biomethane is a renewable gas.
- Clean Energy Innovation Hub[4]: This project has been producing renewable hydrogen since 2019 and using it within ATCO's operations depot in Jandakot, WA. By the end of 2022, hydrogen from the Hub will also be used for passenger vehicle refuelling and blended into a section of the WA gas distribution network with approximately 2500 residential customers receiving a hydrogen blend.

These projects are demonstrating a pathway to deliver renewable gas to homes and businesses. These are the first steps to achieving net zero emissions across the gas supply chain.

Actions requires to reach 100 per cent renewable gas in network by 2040 to 2050.

While the proposed changes to the national framework enable blending and renewable gas in networks, they fall short of supporting this development. Indeed, section 3.4.3 of the Report notes:

> *While some stakeholders have observed that the criteria may not 'actively encourage' the transition, it is important to recognise that this is not the intent of the reforms to the NGR. Rather, the intent is, as noted in the terms of reference for the review, to extend the application of the NGR to other covered gases and to address any gaps that may emerge as a result of the supply of these gases. Amending the rules to actively encourage a transition goes beyond the terms of reference. {emphasis added}*

While the proposed changes to the framework enable renewable gas and hydrogen, additional policy support will be needed to develop a market for these gases. It is important to remember that a broad range of actions will be required and to ensure that progress in one area does not create unintended consequences that may slow down progress in other areas. For example, an overly prescriptive set of rules aimed at a fully developed renewable gas market may impose additional reporting or information

[1] https://www.agig.com.au/hydrogen-park-south-australia
[2] https://jemena.com.au/about/newsroom/media-release/2021/first-green-hydrogen-for-new-south-wales-homes-and
[3] https://jemena.com.au/about/innovation/malabar-biomethane-project
4 https://www.atco.com/en-au/projects/hydrogen.htm

disclosure requirements that could impede the emergence of a competitive and efficient renewable gas market.

ENA has published an update to Gas Vision 2050[5] focussing on identifying the actions required to reach net zero emissions from gas. This update identified actions to achieve:

- Blending of up to 10 per cent renewable gas by 2030;
- 100 per cent supply of renewable gas to a new residential development before 2030; and
- De-risking the pathway to 100 per cent network conversion by 2050.

The report noted that good progress was being made in developing the economic regulatory framework through, for example, this consultation process. Priority areas identified in the report included market development activities such as introducing market incentives or developing a supportive renewable gas blending target. A better understanding of the biomethane potential by regions and development of appliances that can operate on 100 per cent hydrogen were also identified as key priority areas.

Potential areas where the draft AEMC recommendations could impede the development of a renewable gas market

While the AEMC is currently consulting on a range of recommendations which will be used to introduce rule changes for covered gases, some of our comments identify potential impediments of those recommendations to the emerging renewable gas market.

In general, ENA supports a principles approach, without rules being too prescriptive. In this emerging stage of industry development, it is important for the rules to have flexibility to accommodate the evolving interactions between all market participants.

ENA is broadly supportive of the draft recommendations as noted in the Summary of the Report. However, some of the detailed recommendations found in the body of the report differ in substance compared to those in the summary. We have identified that some of the draft recommendations may impede the development of a renewable gas market in the following areas:

- While the renewable gas market is developing, there may be a need to encourage additional innovation and demonstration of renewable gas production and injection projects. The draft recommendations appear focussed on a mature market and a range of exemptions may be required to develop this market in the near term. ENA recommends that the AEMC considers how the proposed rules can both apply to a mature renewable gas market while also supporting an emerging renewable gas market.
- A number of recommendations (for example Draft Recommendations 1 and 2) appear to be for market rules that already exist for natural gas. It is unclear whether the intention is to modify those rules or whether additional rules are needed. ENA recommends that any changes to the rules are limited to extending the framework to include covered gases.
- The reporting obligations (Draft Recommendation 5) on the gas a pipeline can transport and any proposed changes to this may become an onerous reporting requirement in an emerging market when renewable gas blends may change to reflect the production of those gases. ENA recommends

[5] https://www.energynetworks.com.au/resources/reports/2022-reports-and-publications/delivering-the-pathway-to-net-zero-for-australia-2022-outlook/

that this reporting requirement be adjusted to accommodate an emerging renewable gas market. In particular, we suggest that Draft recommendation 5 be updated to require the information to be included in the user access guide, and not the Access Arrangement (AA). The AA, which is updated every five years, will not provide flexibility for reporting updates. Information on trials, for instance, will likely need to be updated more frequently than that.

- The recommendation around treating concessional finance as capital contribution (Draft Recommendation 7) could hinder the objectives of governments that provide support for the emergence of a renewable gas market through concessional finance arrangements. The paper refers to a need for clarity to "prevent service providers from deriving a windfall gain from government grants and concessional finance". This view undermines the intent of concessional finance being provided to incentivise investment where it would not otherwise occur. Treating concessional finance differently to any other form of debt financing also goes against the principles embedded in setting the cost of debt in the Rate of Return Instrument and the incentive based regulatory framework. The regulatory practice in Australia is to set the cost of debt for a benchmark entity rather than set for the specific circumstances of the individual firm – this recommendation is a notable step away from this and fundamentally changes the regulatory framework in Australia. ENA recommends further engagement on this topic with regulated gas distribution networks.
- The new reporting requirements for the Gas Statement of Outlook and bulletin board appear sensible (e.g. Draft Recommendations 8, 9 & 12) but a different approach may be required for interim blending of renewable gas. This interim blending may be seasonal (e.g. to accommodate seasonal biomass availability) and/or fluctuate throughout the day (e.g. hydrogen electrolysers being run to optimise the utilisation of renewable electricity). ENA recommends that a minimum production threshold should be considered as part of the reporting requirements.
- Creating a single injection facility category (Draft Recommendation 17) may not adequately capture the different characteristics of the full range of plants and processes involved in the production and blending of covered gases. The covered gases include hydrogen, biomethane, natural gas and blends of those. The production facilities for those gases will physically be different and have different operating characteristics. This may likely lead to different operating procedures for blending those gases into the gas transmission or distribution networks. Direct injection could also occur into the distribution networks rather than the transmission network and this would be at different operating condition, once again questioning whether this could be covered in a single injection facility category Further, there appears to be no analysis on the impact of this draft recommendation on the development of the market of small producers, especially those who are not incumbent producers or retailers. ENA recommends that the need for a single category is reviewed.
- The reporting requirements for Natural Gas Equivalents (NGE) (Draft recommendations 23 to 25) seem superfluous. NGE's by their definition are equivalent to natural gas, and any change in heating values will be immaterial. As such, customers will continue to have the same user experience with NGE as they currently do with natural gas. Should there be any material changes, heating values will be adjusted through existing mechanisms to carve out new heating value zones, so that any bill impact is minimised. As noted above, the renewable gas blending during the market development stage may be intermittent. Under the proposed recommendation this may require continual reporting as the blend changes. The requirement is likely unnecessary during the market development stage because the intermittent nature of blending should be clearly explained by gas networks to customers participating in trials. Furthermore, the blending approach will conform with

the natural gas specifications approved by the jurisdictions. Additional reporting requirements to account for these variations may become an impediment to the development of innovative renewable gas trial projects. ENA recommends that these reporting requirements are redefined to focus on the transition from NGE's to 100 per cent renewable gas. ENA and its gas distribution members would welcome the opportunity to discuss these reporting requirements.

The ring-fencing provisions provided in Chapter 4 essentially provide the AER with some more discretion, clearer guidance, and a capacity to increase the control of the exemption process. We have responded to those questions in the attached, especially in relation to the class exemptions and associate contracts.

Should you have any queries please contact ENA's Head of Renewable Gas, Dr Dennis Van Puyvelde, dvanpuyvelde@energynetworks.com.au.

Yours sincerely,

Dominic Adams

General Manager, Networks

Attachment 1: ENA's feedback on the proposed changes to the Ring-fencing framework

RING-FENCING QUESTIONS (CHAPTER 4)	
Questions from AER on ring-fencing	**ENA Feedback**
QUESTION 1: EXEMPTION CRITERIA FOR MINIMUM RING-FENCING REQUIREMENTS	
1. Should the NGR continue to set out the limited circumstances in which exemptions from the minimum ring-fencing requirements can be granted, or be amended to provide the regulator with greater discretion under high level criteria?	ENA supports a principles-based approach to ringfencing exemptions and consider the principles applied in the Electricity Distribution Ring-fencing Guideline to be a suitable approach. However, in addition to those principles, we consider, as a transitional measure, that certain types of activities should either be: • Deemed to meet the ring-fencing exemption principles at the commencement of the reforms; or • The AER identify certain activities to be subject to a standing exemption for a fixed period of time. We consider activities that would fall into this category to be: • Procuring gas used for network operations from renewable gas producers to underwrite upstream renewable gas projects. • Procuring localised renewable gases injection or build assets enabling green gas injection or storage to support the delivery of haulage services, for instance to defer or avoid network augmentation to supply loads at peak times. (We note that it may not be possible for a 3rd party to provide this service where the safety and security of the gas network depends on supply at key times and/or where the most economic solution is to 'insource' production and operation of a green gas facility) • Allowing the injection of 100% hydrogen into our network – and using our existing network (with some upgrades) to provide instream blending so that end users are provided with a NGE. • Undertake a trial blending different renewable gases into conventional gas to understand the impact of changing gas characteristics.
2. If the current approach is to be maintained, are the exemption criteria in rules 31(3)-(4) fit for purpose, or can they be improved? Please set out the changes you think need to be made and why.	
3. If changes are to be made to the exemption framework, what are the likely costs, benefits and risks?	
4. If changes are to be made to the exemption framework should they apply generally (for all covered gases including natural gas), or be limited to trials of hydrogen and renewable gases?	

RING-FENCING QUESTIONS (CHAPTER 4)	
Questions from AER on ring-fencing	**ENA Feedback**
	Undertake additional trial projects to test and demonstrate the technical and economic feasibility of green gas options using our network. Blending or production facilities with a specified capacity threshold that are directly connected to the service provider's pipeline. In the absence of these standing exemptions, the AER should grant an exemption if it reasonably considers: • the service to be provided will assist in the development of the market for that service or asset; • the service being provided is part of a trial or in response to a research and development grant; • the gas being transacted represents an immaterial portion of gas being transacted in the relevant market/jurisdiction.
QUESTION 2: CLASS EXEMPTIONS FOR MINIMUM RING-FENCING REQUIREMENTS	
1. Should the regulator continue to assess exemptions from the minimum ring-fencing requirements on a case-by-case basis, or should it be able to issue class exemptions?	The AER already has the power to impose ring-fencing requirements on a class of participants (by naming those participants individually) and it has not done so. It is unclear at this stage if an additional power is warranted for new and emerging markets if it has not been necessary for established markets. Class exemptions presume that there are identifiable classes with similar characteristics that justify exemption across a particular category. It enables the regulator to make assumptions about the class rather conducting a specific analysis of each participant. Therefore, we consider class exemptions should only be introduced where there is a clear trend for exemptions being required by a class of service providers and precedent to suggest class exemptions would be a more efficient approach.
2. If class exemptions are permitted, a. what are the likely costs, benefits and risks? b. in what circumstances could class exemptions be relevant? c. how do you think the risks with class exemptions should be addressed?	
QUESTION 3: CONDITIONS ON EXEMPTIONS FROM MINIMUM RING-FENCING REQUIREMENTS	
1. Should the regulator have the ability to impose conditions on an exemption	ENA supports the regulator having the ability to impose conditions on ring-fencing exemptions consistent with other

RING-FENCING QUESTIONS (CHAPTER 4)	
Questions from AER on ring-fencing	**ENA Feedback**
from the minimum ring-fencing requirements and also be able to vary the conditions?	similar powers under the NGL and NGR and as a regulatory tool to adapt to the evolving nature of existing and emerging gas markets. However, the purpose of an exemption is to provide regulatory certainty as to the scope of regulation and incorporating a specific power to vary those conditions undermines that certainty. Prospective participants need to rely on the certainty of the exemption to build business cases and develop new and innovative services particularly through trials. To the extent the AER needs to vary an exemption, it is open to do so within the limits of administrative laws. With the exemption condition power, the regulator has the ability to identify triggers when the exemption will either expire or should be reviewed. This should be sufficient to address any risk that the regulator would otherwise mitigate from prescribing an expiry date or seeking to vary the conditions. Prescribed expiry dates and establishing the power to vary conditions should not substitute for the upfront analysis and assessment that the regulator should conduct when granting an exemption.
2. Should the ring-fencing exemption arrangements be amended to: a. require the regulator to specify an expiration date or a review date for a ring-fencing exemption decision? b. require the service provider to notify the regulator without delay if conditions change such that it no longer qualifies for an exemption? c. clarify the ability of the regulator to revoke an exemption from the minimum ring-fencing requirements?	
QUESTION 4: CONSULTATION PROCESS FOR VARYING OR REVOKING MINIMUM RING-FENCING EXEMPTIONS	
1. Should the regulator be required to employ the expedited consultative procedure for variations to, or revocations from, a minimum ring-fencing exemption, or have greater discretion in the consultation it carries out?	As a matter of principle, the AER should be required to use the same administrative processes to vary or revoke exemptions that it uses to grant exemptions. This is the legally accepted principle for the exercise of statutory functions and powers. The ramifications of a variation or revocation are of equal significance as the initial granting of the exemption.
2. If more flexibility is to be provided, should the regulator have a high or limited degree of discretion to determine the appropriate level of consultation?	The AER should have a limited degree of discretion.
QUESTION 5: CLASS DECISIONS ON ADDITIONAL RING-FENCING REQUIREMENTS	
1. Should the NGR specify any additional matters (in addition to those set out in the draft Bill) that the regulator would	In addition to ENA's comments on the Draft Bill as part of our response to the Officials' paper, we consider that the AER should be obliged to properly consider the long-term benefits to

RING-FENCING QUESTIONS (CHAPTER 4)	
Questions from AER on ring-fencing	**ENA Feedback**
be required to consider when making a ring-fencing order? If so, what are those matters and why are they required?	consumers from market development when assessing whether to grant an exemption. As noted further above, we consider that the AER should be required to grant a range of standing exemptions at the commencement of these reforms. In the absence of these standing exemptions, we consider, in granting an exemption, the AER should grant an exemption if the AER reasonably considers: • the service to be provided will assist in the development of the market for that service or asset; • the service being provided is part of a trial or in response to a research and development grant; • the gas being transacted represents a immaterial portion of gas being transacted in the relevant market/jurisdiction.
2. What matters do you think the regulator should consider when deciding whether to grant individual service providers or associates an exemption from a ring-fencing order?	
3. What consultative procedure do you think the regulator should employ when: a. making a ring-fencing order? b. granting individual exemptions from the ring-fencing order?	
QUESTION 6: APPROVAL OF ASSOCIATE CONTRACTS	
1. Should the current approach of approving associate contracts be retained or amended to require approval prior to (ex ante) entering into a contract? Why?	The existing NGL and NGR framework with respect to ringfencing and by extension, the regulation of associate contracts provides a strong and balanced foundation for ensuring that service providers and their associates conduct their commercial arrangements consistently with competition law principles. The AER has not demonstrated why the existing framework which applies to established markets cannot be extended to renewable gas. The current rules are clear that associate contracts that are not consistent with the competitive parity rule or are otherwise anti-competitive are prohibited. These prohibitions provide a threshold for all associate contracts. Giving the AER an approval role for some or all of these contracts creates additional regulatory burden for both the service provider and the AER with limited value. If the intention is to provide visibility and transparency of associate contracts, the AER can: 1. rely on its existing information gathering powers to seek further information on the associate contracts (noting that it already receives notifications regarding associate contracts) as well as request further evidence from the service provider to
2. If an ex ante approval framework is introduced, should service providers be required to obtain approval of: a. all associate contracts and variations b. only those associate contracts and variations that do not involve the supply of a reference service at the reference tariff, or c. only those associate contracts and variations identified by the regulator?	
3. If the regulator is given the ability to identify the associate contracts that will or will not be subject to an ex ante approval process:	

RING-FENCING QUESTIONS (CHAPTER 4)	
Questions from AER on ring-fencing	**ENA Feedback**
a. what types of contracts or variations are more likely to contravene the associate contract provisions in the NGL and should therefore be subject to the process? b. should the rules guide the regulator in exercising that discretion?	establish whether such contracts meet the requirements of the NGL and NGR; 2. exercise its existing approval function to not approve contracts that do not meet the competitive parity rule or are anti-competitive.
QUESTION 7: ONUS OF DEMONSTRATING AN ASSOCIATE CONTRACT COMPLIES WITH THE NGL	
1. Should the current onus on the regulator be maintained or should service providers be required to demonstrate, to the regulator's reasonable satisfaction, that an associate contract or variation does not contravene the anti-competitive effect and competitive parity rule provisions in the NGL? Why?	ENA considers the AER proposed role with respect to associate contracts goes beyond its role as regulator and seeks to intervene in the commercial arrangements of a corporate entity. It presumes that the economic regulator is better placed to assess the impacts of competition from two associates undertaking business. It will add regulatory cost for businesses seeking to develop the market for renewable gas and deter investment in such markets.
2. If the change is made, should service providers be required to include any information that it seeks to rely on in its application, including material that demonstrates that the contract or variation does not contravene the anti-competitive effect and competitive parity rules?	If the change is made, the regulator should clearly outline the information required from service providers to support its decision making.
3. If the change is made, should the regulator be able to seek additional information from the service provider if required?	The information requirements should be agreed at the outset so that the service provider can effectively provide the required information to the regulator.
QUESTION 8: TIME AND CONSULTATION PROCESS FOR ASSOCIATE CONTRACTS DECISIONS	
1. Should the 20 business day time limit for decisions on associate contracts be extended? If so, what should it be?	ENA supports ensuring the AER has sufficient time to consider decisions on associate contracts as long as the timeframe does not impede investment decisions and works commencing. The

RING-FENCING QUESTIONS (CHAPTER 4)	
Questions from AER on ring-fencing	**ENA Feedback**
2. Should a 'stop-the-clock' provision be available to the regulator in this process? If so, should there be any limit on the extent to which the decision-making time limit can be extended? 3. Should the decision-making process include public consultation? If so, what would be appropriate?	efficiency of the decision-making process can be improved by ensuring that only contracts that do not satisfy the NGL and NGR requirements require approval. The AER's approval should be limited to the AER determining whether the service provider has provided sufficient evidence to establish that the associate contract meets the competitive parity rule and is otherwise not anti-competitive. The service provider should be able to establish these requirements by submitting a report by a third party expert (approved by the AER) in which case the AER should not be required to go behind that analysis to further consider the facts. The benefit of an expert report should eliminate the need for public consultation as that report would undertake the market analysis that would otherwise be achieved through public consultation and arguably, provide greater insights. We do not consider it appropriate or commercially acceptable for the terms and conditions of an associate contract to be the subject of public scrutiny and comment. If a more efficient decision making process is adopted (as outlined above), we do not consider the need for a 'stop-the clock' provision.
QUESTION 9: CLARIFYING THE COMPETITIVE PARITY RULE	
1. Should greater guidance on the competitive parity rule be included in the NGR, or is the current definition sufficient? Why? 2. If the change is made, should the new rule be based on the obligation to not discriminate provisions in the Ring-fencing guideline (electricity distribution) 2021, or is there an alternative approach to provide greater guidance?	The competitive parity rule is based on well established competition law principles which industry can rely on when making an assessment in relation to associate contracts. The purpose of the competitive parity rule is not to dictate the terms and conditions of a contract but to provide the overarching principle which should be applied to associate contracts. In ENA's view, it provides sufficient guidance and clarity for service providers to determine how to structure arrangements with related businesses. ENA support no changes being made.