AEMC

REVIEW

Australian Energy Market Commission

DRAFT REPORT

REVIEW INTO EXTENDING THE REGULATORY FRAMEWORKS TO HYDROGEN AND RENEWABLE GASES

31 MARCH 2022

INQUIRIES

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ABOUT THE AEMC

The AEMC reports to the Energy Ministers' Meeting (formerly the Council of Australian Governments Energy Council). We have two functions. We make and amend the national electricity, gas and energy retail rules and conduct independent reviews for the Energy Ministers' Meeting.

SUMMARY

1 The *Review into extending the regulatory frameworks to hydrogen and renewable gases* is focused on developing initial rules for Energy Ministers to extend the national gas regulatory framework to low-level hydrogen-natural gas blends and renewable gases.

2 This draft report sets out the Australian Energy Market Commission's (AEMC or Commission) draft recommendations and assessment of issues that could emerge in the National Gas Rules (NGR) and National Energy Retail Rules (NERR) if the National Gas Law (NGL) and National Energy Retail Law (NERL) are extended to covered gases and natural gas equivalents are supplied to consumers.

Summary of draft recommendations

3 The Commission's key draft recommendations include:

- Extending the economic regulatory framework.
  - This is to be achieved by making amendments to the economic regulation of pipelines framework to facilitate connections of other covered gas suppliers, increase market transparency, and provide, where necessary, more clarity on the regulatory treatment of pipelines transitioning to transporting another covered gas. Importantly for a transitioning market, the draft recommendations also seek to provide regulatory certainty and clarity on the treatment of government grants and concessional finance used to support new investment.
- Extending the market transparency mechanisms.
  - The extensions of the transparency mechanisms such as the Gas Bulletin Board and the Gas Statement of Opportunities, are expected to reduce the likelihood of material information gaps occurring which could have a range of adverse effects on market participants and economic efficiency. Extending the non-pipeline infrastructure access reporting mechanism to other covered gases and to blend processing facilities will also help facilitate third party access to these facilities.
- Streamlining arrangements for the short term trading market (STTM)
  - Accommodating the introduction of covered gases into the STTM will occur through building on the existing STTM arrangements for distribution connected injection facilities by: creating a single new facility category for injection into the STTM from distribution-connected injection facilities; reducing reporting obligations; allowing for facility aggregation; and changing the process for establishing new custody transfer points.
- Adapting the Victorian declared wholesale gas market (DWGM)
  - All issues related to the settlement of distribution connected facilities in the DWGM are being addressed through the DWGM distribution connected facilities rule change process. This review is considering distribution systems not directly connected to the DTS and unaccounted for gas in the DWGM, where the draft recommendation is to maintain the existing arrangements.

- Allowing new services and commodities to be priced or traded within the retail gas markets.
    - This will be achieved by expanding the existing categories of retail market participants to include those with facilities using other covered gases. This change is likely to encourage the delivery of new services or commodities and should encourage allocative, productive and dynamic efficiency in the provision of those services to end users.
- Enabling consumers to be informed about the transition to natural gas equivalents.
    - Introducing requirements on retailers and distributors to communicate the transition to consumers is expected to facilitate customers' understanding of when and how the transition to a NGE will impact them. This should result in enhanced transparency and should promote confidence of gas consumers in the market.
- Retaining the draft regulatory sandbox rules in their current form as these draft rules can already accommodate other covered gases.

4 Related to these draft recommendations is the AER's advice to Senior Officials on the ring fencing and associate contract arrangements that apply to pipelines under the NGL and NGR. The AER suggested that changes be made to: the exemption framework for minimum ring fencing requirements; the regulator's power to impose additional ring fencing requirements; and the associate contract approval process. In accordance with its terms of reference, the AER did not carry out public consultation to inform its advice. Consequently, the Commission has set out the AER's suggestions in this draft report for consultation

Benefits of the draft recommendations

5 This review focuses on the necessary changes to the NGR and NERR that will support and implement the changes being made to the relevant laws by jurisdictional officials. In doing so, the Commission has sought to identify changes to the existing regulatory frameworks that are consistent with achieving the NGO and NERO.

6 The draft recommendations have been made to enable:

- efficient delivery of new services through the operation of markets that enable new entrants to emerge and efficient investment
- continued innovation in developing new services for customers
- the implementation of recommendations that aim to be fit for purpose and proportionate to the issues they seek to address and achievable for market participants
- clarity on the roles and responsibilities for the quality, safety, reliability, and security of supply of gas, to maintain operational safety of infrastructure and customer equipment and appliances
- existing consumer protections to be maintained during the transition to the increasing use of hydrogen and renewable gases.

7 Importantly, the Commission has also considered how its draft recommendations support and enable the decarbonisation of the energy market as well as provide a framework for market participants to continue to innovate in a market that is open to competitive tension and

fosters efficiencies that will result in new gas services that customers seek. Where competition may be limited, the existing arrangements of applying economic regulation and market transparency are recommended to extend to the provision of new gases to provide a clear and consistent framework for all gas sector participants.

Background

8 On 20 August 2021, Energy Ministers agreed that the national gas regulatory framework should be amended to bring biomethane, hydrogen blends and other renewable methane gas blends within its scope.

9 The AEMC was tasked with a review of the NGR and NERR to develop initial rules that will extend the regulatory frameworks to low-level hydrogen-natural gas blends and other renewable gases. In addition, the AEMC is also to provide Energy Ministers with advice on any changes to the NGL and NERL required to enable these rules.

10 The AEMC's review is part of a suite of reviews that will be conducted concurrently with the purpose of enabling the NGL, NGR, NERL and NERR to be extended to the supply of natural gas equivalents. The other reviews are being carried out by:

- Jurisdictional officials, who are responsible for identifying and developing the changes required to the NGL, NERL and regulations made under the NGL and NERL.
- AEMO, who is responsible for reviewing its procedures and other subordinate instruments for the facilitated and regulated retail gas markets and will also inform the AEMC of any changes it considers necessary to the NGR to enable these changes.

Interaction with the AEMC DWGM distribution connected facilities rule change

11 The AEMC's consideration of the *DWGM distribution connected facilities rule change* is being undertaken concurrently with this review. The rule change request seeks to enable the participation of distribution connected production and storage facilities in the DWGM. While the request does not explicitly target the integration of hydrogen blends and renewable gases, its focus on allowing distribution connected facilities to participate in the DWGM has implications for enabling covered gases to be injected into gas distribution systems in Victoria.

Next steps

12 The AEMC will be participating in a public forum hosted by the Department of Industry, Science, Energy and Resources on Friday 1 April 2022. AEMC staff will present an overview of this draft report at the forum.

13 Written submissions to this draft report are sought by Thursday 19 May 2022.

14 A final report and draft initial rules will be published for consultation in September 2022. Final initial draft rules will be provided to Energy Ministers by 14 November 2022.

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1 INTRODUCTION

In August 2021, Energy Ministers tasked the Australian Energy Market Commission (AEMC or Commission) with a review of the National Gas Rules (NGR) and National Energy Retail Rules (NERR) to develop initial rules that will extend the regulatory frameworks to low-level hydrogen-natural gas blends and renewable gases. In addition, the AEMC is to also provide Energy Ministers with advice on any changes to the National Gas Law (NGL) and National Energy Retail Law (NERL) required to enable these rules.

This chapter introduces the review and outlines:

- the context of the review
- the purpose and focus of the review
- the review processes
- the structure of this draft report.

For ease of reference this draft report uses the following terms:

- "covered gas" to refer to a covered gas under the proposed amendments to the NGL being consulted on by jurisdictional officials, which will initially be only a primary gas or a blend of primary gases
- "primary gas" to refer to a gas identified as a primary gas under the NGL, initially only natural gas, biomethane, synthetic methane and hydrogen
- "other covered gas" to refer to a covered gas (primary gas or gas blend) other than natural gas
- "natural gas equivalent" (NGE)" to refer to a covered gas (other than natural gas) that is suitable for consumption in existing natural gas appliances
- "constituent gas" to refer to a primary gas that is used to create a gas blend

1.1 Context for this review

1.1.1 Background

In December 2018, Energy Ministers agreed to work together to develop and implement a National Hydrogen Strategy to build hydrogen export markets and deliver domestic hydrogen projects. In 2019, the COAG Energy Council Hydrogen Working Group, led by Dr Alan Finkel AO, developed the strategy, which was endorsed by Energy Ministers on 22 November 2019.

The National Hydrogen Strategy sets out several government actions to support the development of a hydrogen industry, one of which is to use clean hydrogen in gas distribution pipelines. The strategy noted, however, that before widespread blending of hydrogen in gas distribution pipelines can occur, further work on a range of technical, economic, regulatory and legal matters will be required. Action 3.12 of the National Hydrogen Strategy recommended that a review of a range of matters be undertaken in 2020, including, among others the application of the NGL to hydrogen. The recommended review was undertaken and advice from it was provided to Energy Ministers in mid-2021.

On 20 August 2021, Energy Ministers agreed that the national gas regulatory framework should be amended to bring biomethane, hydrogen blends and other renewable methane gas blends within its scope.[1] Energy Ministers also agreed that the amendments should initially focus on natural gas equivalents and be expedited so that:

- regulatory barriers do not restrict proposed investments in projects involving the supply of natural gas equivalents or the facilities and activities involved in their supply
- existing regulatory arrangements and protections continue to work as intended where these products are supplied.

Regulatory framework amendments addressing these concerns were identified as a priority by Energy Ministers because a number of trials of NGEs were expected to commence in 2021 and 2022, and there is currently uncertainty surrounding whether provisions in the NGL, including the definition of natural gas, may present a barrier to these trials.

The AEMC's review is part of a suite of reviews that will be conducted concurrently with the purpose of enabling the NGL, NGR, NERL and NERR to be extended to the supply of natural gas equivalents. The other reviews are being carried out by:[2]

- jurisdictional officials (officials), who are responsible for identifying and developing the changes required to the NGL, NERL and regulations made under the NGL and NERL.
- AEMO, who is responsible for reviewing its procedures and other subordinate instruments for the facilitated and regulated retail gas markets and will also inform the AEMC of any changes it considers necessary to the NGR to enable these changes.

Concurrently with these reviews, the AEMC is undertaking a rule change process to assess a request to incorporate distribution connected facilities into the Victorian declared wholesale gas market (DWGM).[3]

The rule change request was submitted to the AEMC on 8 September 2021 by the Victorian Minister for Energy, Environment and Climate Change. It seeks to amend Part 19 of the NGR to enable the participation of distribution connected production and storage facilities in the DWGM. As the intention of the request is not to limit distribution connected facilities to natural gas facilities, the request does have implications for enabling natural gas equivalents and other covered gases to be injected into gas distribution systems in Victoria. Accordingly, the rule change process complements the work of the broader national reviews.

1 "National gas regulatory framework" refers to the NGL, NGR, NERL, NERR and subordinate instruments made under these laws and rules.

2 Energy Ministers, *Extending the national gas regulatory framework to hydrogen blends and renewable gases*, information sheet, 23 September 2021 at https://energyministers.gov.au/publications/extending-national-gas-regulatory-framework-hydrogen-blends-and-renewable-gases

3 See AEMC website: https://www.aemc.gov.au/rule-changes/dwgm-distribution-connected-facilities

1.1.2 Impact of the change in the officials' review

In their review, officials have refined their approach to extending the national framework to hydrogen-natural gas blends and other renewable gases.

The officials' refined approach is to limit the categories of gas products that fall within the scope of the NGL, and could potentially fall within the scope of the NERL, to:[4]

- "primary gases", which would mean natural gas, biomethane, synthetic methane, hydrogen and any other gas specified in the National Gas Regulations to be a primary gas; and
- "gas blends", which would be a blend of any primary gases (e.g. a natural gas-hydrogen blend, a natural gas-biomethane blend or a biomethane-hydrogen blend).

These products, which are jointly referred to as a "covered gas", would be listed in the NGL. In addition, the officials' refined approach would allow a jurisdiction to add to the list of covered gases by making a local regulation. The gas would only be a covered gas when supplied in that jurisdiction.

Under the officials' refined approach, NGEs, and constituent gases would all be a type of "covered gas" under the NGL. The situation differs for the NERL, because under the refined approach, NGEs would automatically become subject to the NERL and NERR, while any other covered gas would only become subject to the NERL if the jurisdictions agree to prescribe the gas under the National Energy Retail Regulations.[5]

Under the approach outlined by officials, jurisdictions would retain responsibility for safety and technical regulation.

1.2 Purpose and focus of this review

The purpose of the AEMC's review is to:

1. Identify potential issues in the NGR and NERR that could emerge if the scope of the national gas regulatory framework is extended to hydrogen and other renewable gases.
2. Develop draft initial rules to address these issues through a consultative process.
3. Inform jurisdictional officials of any NGL or NERL changes that it considers should be made to achieve the objective of the Energy Ministers.

In undertaking this review the Commission has applied the assessment framework set out in Appendix C.

In the original terms of reference for this review, the AEMC was not tasked with considering the NGR and NERR changes that would be required if the national framework was extended to products other than NGEs and their constituent gases, with the intention that any other

4 Energy Ministers, *Extending the national gas regulatory framework to hydrogen and renewable gases proposed changes to NGL, NERL and National Regulations*, consultation paper, March 2022, chapter 3.

5 Because constituent gases are not sold directly to customers (as such), constituent gases and their related activities would not be subject to the NERL. To be clear, it is not intended to exclude or exempt constituent gases from the NERL. A gas that is a constituent gas in one situation (for example, natural gas when supplied to a customer as part of an NGE blend) may still be subject to the NERL if it is supplied directly to customers, for example, natural gas when supplied unblended, or biogas if it is an NGE.

gas products could be considered in the future. During the review, and taking into account the refined approach proposed by officials, the AEMC has nonetheless considered all covered gases in some areas. In particular:

- The refined approach proposed by officials provides for pipelines carrying any covered gas to be subject to the pipelines economic regulation framework under the NGL from the commencement of the reforms. The AEMC's recommendations for changes to the NGR provisions relating to economic regulation of pipelines therefore extend to any covered gas.
- Similarly, the refined approach proposed by officials provides for blend processing facilities to be subject to a new light-handed access regime from the commencement of the reforms. That regime includes arrangements in the NGR for the publication of information about standing terms and prices. The AEMC's draft recommendations for the changes needed to these provisions also extend to any covered gas.
- The AEMC's draft recommendations for changes to the rules governing the STTM and DWGM allow for the injection of any covered gas into those markets, since all quantities injected and withdrawn will need to be settled, regardless of whether the gas is ultimately supplied to end users as natural gas, an NGE or an other covered gas.
- For the GSOO, Bulletin Board and other transparency measures, the AEMC has considered on a case by case basis which covered gases should be included, and the draft recommendations are tailored accordingly.
- For the regulated retail markets and consumer protections, the AEMC has focused on the supply of NGEs to consumers.

1.2.1 Scope of this review

The AEMC review focuses on the changes required to the NGR and NERR in order to address issues that could emerge if the NGL and NERL are extended to covered gases as contemplated by the refined approach being consulted on by officials and if natural gas equivalents are supplied to customers. In doing so, it also identifies those changes that need to be made for the initial rules and whether any amendments to the NGR or NERR could be deferred. This prioritisation will assist the Energy Ministers in meeting the expedited time frame that has been set for these reforms.

Those parts of the NGR and NERR that the Commission considers are within the scope of its review are shown in Table B.1 in Appendix B.

1.2.2 Out of scope of this review

There are a number of areas that are out of scope of this review. This is because they are either outside the AEMC's responsibilities or the terms of reference provided for this review, or the Commission's preliminary assessment indicated that an issue is unlikely to be a priority for the initial rules package.

The following issues are outside the AEMC's responsibilities, or are not captured by the scope of the terms of reference:

- jurisdictional arrangements, including licensing — amendments that will need to be made to jurisdictional legislation and regulations to accommodate natural gas equivalents are matters for the respective jurisdictional governments and not an AEMC responsibility
- issues arising from the supply to customers of other gas products that are not suitable for consumption as natural gas are not included in this review as the terms of reference specify that the focus is on accommodating natural gas equivalents in the NGR and NERR
- impacts, including the operation of facilities such as electrolysers, on the National Electricity Law or National Electricity Rules are not specified in the terms of reference as within scope of this review.

In addition, the Commission noted some issues may not be a priority for the initial rules package and identified some aspects of the NGR and NERR that are not expected to be impacted by the proposed change to accommodate other covered gases in the framework. See Table B.2 in Appendix B.

1.3 Stakeholder engagement to date

On 21 October 2021 the AEMC published a consultation paper to commence this review and received 23 submissions from stakeholders. These submissions are available from the AEMC website.

The AEMC also met more than 20 stakeholders including gas pipeline service providers, users and relevant jurisdictional policy bodies. It has also held regular meetings with the AER, ERA and AEMO.

Following this initial consultation phase, the AEMC ran three public workshops on 13, 14 and 15 December 2021 to discuss possible solutions to key issues raised in the consultation paper. Further consultation with a number of stakeholders was also held in the period since these workshops.

As required with the terms of reference, the AEMC provided draft law recommendations to jurisdictional officials on 24 February 2022 for their consideration. A summary of these is in appendix D. The officials' review is consulting on changes to the NGL and NERL.

1.4 This report

This draft report sets out the Commission's assessment of issues that could emerge in the NGR and NERR if the NGL and NERL are extended to covered gases and natural gas equivalents are supplied to consumers. It includes the Commission's draft recommendations on these issues for further stakeholder comment.

Chapter 2 of this draft report provides an overview of the Commission's assessment and its draft recommendations. This is followed by a chapter on each area of interest included in this review:

- Chapter 3 — economic regulation of pipelines

- Chapter 4 — ring fencing
- Chapter 5 — market transparency mechanisms
- Chapter 6 — short term trading market (STTM)
- Chapter 7 — declared wholesale gas market (DWGM)
- Chapter 8 — regulated retail markets (RRM)
- Chapter 9 — consumer protections
- Chapter 10 — regulatory sandbox framework.

These are followed by an appendix on the other issues raised by stakeholders not included in the chapters (Appendix A) and Appendix B which sets out an overview of the broader regulatory frameworks review. Appendix C outlines the assessment framework the Commission has applied in determining whether the draft recommendations contribute to the NGO and the NERO.

Appendix D provides a summary of the advice the AEMC provided senior officials on required changes to the NGL and NERL that have been identified through its review into the NGR and NERR. Consequential rule changes the AEMC has identified are discussed in Appendix E and Appendix F provides a complete list of the draft rule recommendations made in this draft report.

This draft report contains descriptions of the rules that the Commission considers are needed to resolve the issues discussed. These are set out in the form of draft recommendations throughout the chapters as relevant. The Commission expects that the final report will contain draft initial rule amendments for the NGR and NERR which will be consulted on following the publication of the final report.[6] Accordingly, stakeholders are encouraged to comment not only on the draft recommendations but also any potential drafting and implementation issues that may arise in making rules.

The AEMC notes that there are currently three reform packages from Energy Ministers that include pending rules to be made by the South Australian Minister. These reform packages relate to economic regulation of pipelines, transparency measures and the regulatory sandbox framework.[7] These reform packages have yet to pass the South Australian Parliament and the rules will only be made after that occurs. References to the NGR in this draft report assume the planned rule changes from these reform packages will be made. Where these expected rule changes are referred to in this draft report, the AEMC is referring to the most recent version that is publicly available.

6 This is on the basis that current reforms on regulatory sandbox, transparency and economic regulation are sufficiently progressed to enable rule drafting that takes them into account.

7 The NGL, NERL and National Regulations are in the process of being amended to implement three other reforms that Energy Ministers have already agreed. These are the market transparency, regulatory sandboxing and pipeline regulation reforms. Given that these reforms have already been agreed to, the draft amendments in Attachment A have been prepared using: the *Statutes Amendment (National Energy Laws) (Regulatory Sandboxing) Bill 2021,* which was introduced in the SA Parliament in August 2021; the *National Gas (South Australia) (Market Transparency) Amendment Bill 2021*, which was introduced in the SA Parliament in September 2021; and the draft *National Energy Laws Amendment (Gas Pipelines) Bill 2021,* which was released for consultation in September 2021 but is yet to be introduced in the SA Parliament. In this case it has been necessary to use the consultation version, because the final Bill has not been introduced in the SA Parliament, so it is not publicly available.

1.5 Review process

1.5.1 AEMC review process

The key deliverables and dates for the AEMC's review are outlined in the table below.

Table 1.1: **AEMC's review – remaining key milestones**

MILESTONE	DATE
Publication of draft report for consultation	31 March 2022
Public forum	1 April 2022
Submissions to the draft report close	19 May 2022
Publication of final report (with finalised policy positions) and draft initial rules for consultation	8 September 2022
Provide final initial draft rules to Energy Ministers for approval	by 14 November 2022

For more detail on the AEMC review process see Appendix B.

1.5.2 Next steps

Public forum

The AEMC will be participating in a public forum hosted by the Department of Industry, Science, Energy and Resources on Friday 1 April 2022. AEMC staff will present an overview of this draft report at the forum.

Lodging a submission

Written submissions on this draft report must be lodged with the Commission by COB Thursday 19 May 2022 online via the Commission's website, www.aemc.gov.au, using the "lodge a submission" function and selecting the project reference code EMO0042.

The submission must be on letterhead (if submitted on behalf of an organisation), signed and dated.

Where practicable, submissions should be prepared in accordance with the Commission's guidelines for making written submissions which is available from the AEMC website. The Commission publishes all submissions on its website, subject to a claim of confidentiality.

All enquiries on this project should be addressed to James Tyrrell on (02) 8296 7842 or james.tyrrell@aemc.gov.au.

2 OVERVIEW OF RECOMMENDATIONS

This chapter sets out an overview of the recommendations that are detailed in the following chapters of this draft report. The Commission's draft recommendations are included in the relevant chapters and also listed in appendix F.

For further detail on the scope of this review see appendix B of this draft report.

2.1 Introduction

On 20 August 2021, Energy Ministers agreed that the national gas regulatory framework should be amended to bring biomethane, hydrogen blends and renewable gases into its scope. This represents a significant change to the Australian gas sector to decarbonise and meet customer expectations for a more sustainable energy source in the future. It also has the potential to increase the linkages between gas and electricity further than they already are today.

This review is one action required to achieve the vision of the Energy Ministers. It focuses on the necessary changes to the NGR and NERR that will support and implement the changes being made to the relevant laws by jurisdictional officials. In doing so, the Commission has sought to identify changes to the existing regulatory frameworks that are consistent with achieving the NGO and NERO as described by the assessment framework set out in the consultation paper (see appendix C). That is, the draft recommendations have been made with consideration to enable:

- efficient delivery of new services through the operation of markets that enable new entrants to emerge and efficient investment
- continued innovation in developing new services for customers
- the implementation of recommendations that aim to be fit for purpose and proportionate to the issues they seek to address and achievable for market participants
- clarity on the roles and responsibilities for the quality, safety, reliability and security of supply of gas to maintain operational safety of infrastructure and customer equipment and appliances
- existing consumer protections to be maintained during the transition to the increasing use of hydrogen and renewable gases.

Importantly, the Commission has also considered how its draft recommendations support and enable the decarbonisation of the energy market as well as provide a framework for market participants to continue to innovate in a market that is open to competitive tension and fosters efficiencies that will result in new gas services that customers seek. Where competition may be limited, the existing arrangements of applying economic regulation and market transparency are recommended to extend to the provision of new gases to provide a clear and consistent framework for all gas sector participants.

The Commission acknowledges that the hydrogen and renewable gas industry is presently small and consequently some stakeholders consider this should result in minimal obligations and responsibilities for the relevant parties. It has considered the current state of the

industry in how the draft recommendations could be implemented; for example, by using thresholds, setting minimal requirements or enabling aggregation of small facilities. However, it is equally important that the gas regulatory framework is prepared for the growth of the industry and that clarity and certainty on the broad form and direction of the regulatory framework is provided to market participants and investors. The Commission considers this forward-looking approach will aid informed and efficient operational and investment decisions in the sector which will ultimately be in the long term interests of consumers.

Over the last several months the Commission has worked closely with stakeholders, jurisdictional officials, AEMO, AER and ERA to form a set of draft recommendations that it considers is consistent with the planned future decarbonisation of the gas sector. These draft recommendations are described below and detailed in the following chapters of this draft report.

2.2 Recommended reforms

This section describes the draft recommended changes to the NGR and NERR that the Commission considers should be made in order to extend the regulatory frameworks to low-level hydrogen-natural gas blends and renewable gases. The draft recommendations made by the Commission are reproduced in appendix F. Discussion on each is included in the chapters of this draft report.

The Commission's key draft recommendations:

- Extending the economic regulatory framework.

  Making amendments to the economic regulation of pipelines framework to facilitate connections of other covered gas suppliers, increase market transparency, and provide, where necessary, more clarity on the regulatory treatment of pipelines transitioning to transporting another covered gas. Importantly for a transitioning market, the draft recommendations also seek to provide regulatory certainty and clarity on the treatment of government grants and concessional finance used to support new investments. These changes are expected to support the maintenance of a safe and reliable supply of gas to all users, and increase transparency to support efficient market development and operation. They should also support appropriate regulation in the long term interests of consumers.

- Extending the market transparency mechanisms.

  The extension of the transparency mechanisms such as the Gas Bulletin Board and the Gas Statement of Opportunities, is expected to reduce the likelihood of material information gaps occurring which could have a range of adverse effects on market participants and economic efficiency. Extending the non-pipeline infrastructure access reporting mechanism to other covered gases and to blend processing facilities will also help to facilitate third party access to these facilities. The extension of all these transparency mechanisms to other covered gases is expected to promote the NGO, provide greater regulatory certainty to all facility service providers and investors, and

support market participants and policy-makers to make more informed and efficient decisions.

- Streamlining arrangements for the STTM.

  The draft recommendations to accommodate the introduction of covered gases into the STTM builds on the existing STTM arrangements, for distribution connected injection facilities, by: creating a single new facility category for injection into the STTM from distribution-connected injection facilities; reducing reporting obligations; allowing for facility aggregation; and changing the process for establishing new custody transfer points. Not only should these changes reduce the regulatory burden for new participants, but they should also simplify some existing arrangements.

- Adapting the Victorian DWGM.

  All issues related to the settlement of distribution connected facilities in the DWGM are being addressed through the DWGM distribution connected facilities rule change process.[8] This review is considering distribution systems not directly connected to the DTS and unaccounted for gas in the DWGM, where the draft recommendation is to maintain the existing arrangements.

- Allowing new services and commodities within the retail gas markets.

  This will be achieved by expanding the existing categories of retail market participants to include those with facilities using other covered gases. This change is likely to encourage the delivery of new services or commodities and should encourage allocative, productive and dynamic efficiency in the provision of those services to end users.

- Enabling consumers to be informed about the transition to natural gas equivalents.

  Introducing requirements on retailers and distributors to inform customers of a transition is expected to facilitate customers' understanding of when and how the transition to a NGE will impact them. This will result in enhanced transparency and should promote confidence of gas consumers in the market. These changes will also promote the efficient use of energy services by customers and will enable customers to better understand their use of energy.

- Retaining the draft regulatory sandbox rules in their current form as these draft rules, once extended to covered gases, will be fit for purpose for enabling trial project involving those gases.

Related to these draft recommendations is the AER's advice to Senior Officials on the ring fencing and associate contract arrangements that apply to pipelines under the NGL and NGR. The AER suggested that changes be made to: the exemption framework for minimum ring fencing requirements; the regulator's power to impose additional ring fencing requirements; and the associate contract approval process. In accordance with its terms of reference, the AER did not carry out public consultation to inform its advice. Consequently, the Commission has set out the AER's suggestions in this draft report as they relate to potential changes to the NGR for consultation.

8 AEMC, *DWGM distribution connected facilities*, draft determination, March 2022.

3 ECONOMIC REGULATION OF PIPELINES

BOX 1: SUMMARY OF CHAPTER

This chapter focuses on the pipeline economic regulatory framework, which under the approach proposed by the officials would extend to pipelines transporting any covered gas. While most elements could apply without amendment, a number of issues have been identified that may necessitate changes to the NGR. This chapter examines those issues, which relate to:

- the rights that suppliers of covered gases would have to connect to pipelines, the information that will be available to facilitate those connections and the measures to support non-discriminatory supplier related curtailment
- the information that would be available to the market on the gas a pipeline is licensed to transport and service provider plans to trial or transition to another covered gas
- the regulatory treatment of pipelines proposing to transition to transporting another covered gas, either as a result of a government mandate or a voluntary decision
- the regulatory treatment of government grants and concessional financing.

The changes required to address these issues are reflected in the draft recommendations in this chapter. The Commission has sought to make these fit for purpose, proportionate and targeted to the issues as well as providing the stability and transparency of regulatory arrangements required to enable consumers, market participants and investors to make efficient decisions.

The key draft recommendations made in this chapter are to:

- facilitate the efficient connection of suppliers of covered gases by:
  - amending the pipeline interconnection rules to require connections to be consistent with the safe and reliable supply of gas to end-users and allow service providers to recover the metering and monitoring related costs from connecting parties
  - requiring service providers to report a range of low cost information to help inform a covered gas supplier's decision on whether to connect to a particular pipeline
  - requiring service providers to publish their supplier related curtailment methodology and, in the case of scheme pipelines, have this approved by the relevant regulator.
- require pipeline service providers to publish information on the gas they are licensed to transport, any caps on blending and plans to trial or transition to another covered gas
- amend the arbitration principles to require arbitrators, when arbitrating non-scheme pipeline access disputes, to consider any regulatory obligations or requirements a pipeline is subject to
- amend the scheme pipeline price and revenue rules to enable the relevant regulator to treat government grants and concessional finance as capital contributions.

The NGL and NGR set out the economic regulatory framework that applies to transmission and distribution pipelines involved in the transportation of natural gas in eastern Australia, the Northern Territory and Western Australia. The objective of this framework is to:

- facilitate third party access to pipelines
- constrain the exercise of market power by service providers.

As noted in the consultation paper, the NGL and NGR are in the process of being amended to reflect the decision by Energy Ministers' to reform a number of aspects of the regulatory framework.[9] Given Energy Ministers have already agreed to the reforms, this draft report proceeds on the basis that the amendments set out in the draft amending rule will be made.[10] Further detail on the regulatory framework and the amendments can be found in the consultation paper, Chapter 3 'Economic regulation of pipelines'.[11]

Under the draft Bill issued by Officials for consultation, the economic regulatory framework that currently applies to natural gas pipelines would be extended to pipelines involved in the haulage of any covered gas. While it would appear that most elements of the regulatory framework could be applied to these pipelines without amendment, a number of issues have been identified that may necessitate amendments to the NGR.

This chapter sets out key issues, stakeholder feedback and draft recommendations in relation to:

- the rights that suppliers of covered gases would have to connect to pipelines, the information that will be available to facilitate those connections and the measures to be taken to ensure any supplier related curtailment occurs in a non-discriminatory manner
- the information that would be available to the market on the gas a pipeline is licensed to transport and service provider plans to trial or transition to another covered gas
- the regulatory treatment of pipelines proposing to transition to transporting another covered gas, either as a result of:
  - a government mandate
  - a voluntary decision by the pipeline service provider.
- the regulatory treatment of government grants and concessional financing.

In addition to the changes identified in this chapter, consequential changes to the NGR are set out in appendix E.

9 Energy Ministers, *Options to improve gas pipeline regulation, regulation impact statement for decision*, 3 May 2021 at https://energyministers.gov.au/publications/energy-ministers-release-gas-pipeline-decision-regulation-impact-statement

10 See https://energyministers.gov.au/publications/energy-senior-officials-release-gas-pipeline-draft-legal-package-consultation

11 AEMC, *Review into extending the regulatory frameworks to hydrogen and renewable gases*, consultation paper, 21 October 2021, p. 9.

3.1 Access to pipelines by suppliers of covered gases

3.1.1 Current framework and issues

The draft amending rule for the reforms to the regulatory framework includes a number of principles that scheme and non-scheme pipeline service providers and connecting facilities will need to comply with. Among other things, these principles provide that a person has a right to connect a facility to a pipeline where it is:

- technically feasible and consistent with the safe and reliable operation of the pipeline
- the person is prepared to fund the cost associated with the interconnection.

The draft amending rule also sets out:

- the processes to be followed by the interconnecting parties
- how any interconnection fee levied by a service provider is to be calculated, which is based on the directly attributable cost of constructing, operating and maintaining the interconnection, including a rate of return calculated in accordance with the rules
- the obligation that service providers have to develop and maintain an interconnection policy and the information that must be included in the policy.

While it appears the draft amending rule can accommodate the connection of suppliers of covered gases, the consultation paper asked:

- whether any changes are required to the rules to accommodate connections by suppliers of covered gases (interconnection rules)
- whether service providers should be required to publish information to facilitate connections by suppliers of covered gases, or if this should be left to negotiations (information to facilitate connections)
- how the risk that service providers may curtail suppliers of covered gases ahead of their own affiliate suppliers should be dealt with (supplier related curtailment).

These three issues are considered in turn below.

3.1.2 Interconnection rules

Stakeholder responses

Most stakeholders agreed that the new draft interconnection rules appear to be able to accommodate connections by suppliers of NGEs and constituent gases.[12] Jemena did, however, note that some amendments to these rules may be required. In doing so, it stated that:[13]

12 While unrelated to interconnections, a number of retailers noted that the Gas Reference Service Agreements between pipeline service providers and users place the onus for gas quality on the purchaser, retailer, and or shipper. They suggested removing this requirement in these agreements and placing the onus for gas quality on the responsible party, either the producer or the party allowing the injection. This is a contractual matter, rather than a rules matter, so is not considered further. However, in the case of scheme pipelines, the allocation of responsibility can be considered by the regulator as part of the access arrangement review process. In the case of non-scheme pipelines, contracting parties would need to negotiate the appropriate allocation of responsibilities.

13 Jemena, submission to consultation paper, p. 3.

> …service providers should be given greater flexibility on being able to refuse a connection for safety, technical, legal, economic or other operational reasons during the transition while the parameters for the connections framework continue to evolve.

Commission analysis

The Commission considers the draft interconnection rules need to be amended to allow service providers to:

- consider the impact that a connection may have on the safe and reliable supply of gas to end-users
- recover the directly attributable costs associated with any metering or monitoring equipment that may need to be installed as a result of the connection.

On the first of these, there may be end-users connected to a pipeline (or part of a pipeline) that are unable to tolerate the supply of any hydrogen, or only very small amounts of hydrogen.[14] The draft amending rule only requires consideration to be given to whether the connection is technically feasible and consistent with the safe and reliable operation of the pipeline, and does not allow consideration of end-user requirements. There is a risk therefore that under the draft amending rule, service providers would be unable to reject a connection, even where the connection could have an adverse effect on the safe and reliable supply of gas to end-users.

Consequently, the Commission recommends that, the draft rule relating to a person's right to interconnect be amended so that a person's right to interconnect is also subject to the connection being consistent with the safe and reliable supply of gas to end-users. That is, in addition to being technically feasible and consistent with the safe and reliable operation of the pipeline, the connection would need to be consistent with the safe and reliable supply of gas to end-users.

If made, this amendment is expected to contribute to the achievement of the NGO by ensuring that consumers continue to receive a product that is safe and reliable. It is also consistent with the quality, safety, reliability and security of supply limb of the review's assessment criteria.

Second, the draft amending rule provides that, where the service provider develops the connection, service providers may recover the directly attributable costs of constructing, operating and maintaining the interconnection through an interconnection fee. However, this may be unclear on whether this rule would allow service providers to recover the costs associated with metering and monitoring the quality of the gas that is injected by connecting parties, which may become a more significant issue going forward.

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14 GPA Engineering noted in its report for the National Hydrogen Strategy that based on the trials that had been conducted at the time and initial consultation with industry, it appeared that: some end-user installations and appliances may be able to tolerate a 10% blend without major modifications (with Type A appliances potentially able to tolerate a 20% blend); others may not be able to tolerate any level of blending at all, or only very low levels of blending, e.g. compressed natural gas producers and gas engines); a 10% blend could improve the quality of some chemical processes, but in other cases where natural gas is used as feedstock hydrogen is not a substitute: GPA Engineering, *Hydrogen in the gas distribution networks – A kick start project as an input into the development of a National Hydrogen Strategy for Australia*, 2019 and GPA Engineering, *Hydrogen impacts on downstream installations appliances*, 2019, chapter 2.

Therefore, the Commission recommends amending the interconnection fee rule to clarify that the directly attributable costs associated with installing, operating and maintaining metering and monitoring can be recovered from the connecting party.

If made, the Commission expects that the draft recommendation will contribute to the achievement of the NGO by promoting efficient connections (i.e. with the interconnecting party paying all costs directly attributable to the connection) and investment in the pipeline.

> DRAFT RECOMMENDATION 1: CLARIFY THE RIGHT TO CONNECT TO A PIPELINE AND CONNECTION COST RECOVERY FOR SERVICE PROVIDERS
>
> Amend the interconnection rules in the NGR to:
>
> - also state that a person will only have a right to connect a facility to a pipeline where the connection is consistent with the safe and reliable supply of gas to end-users
> - enable a service provider (where it has developed an interconnection or part of an interconnection), to recover as part of its interconnection fee the costs of metering and monitoring the quality of the gas injected by the connecting facility that are directly attributable to the interconnection.

3.1.3 Information to facilitate connections

Stakeholder responses

Stakeholders expressed diverse views on whether service providers should be required to conduct an upfront assessment on the locations where connections by suppliers of NGEs or constituent gases would be technically feasible and to publish this information.

Those that supported the publication of this type of information included PIAC, AEC, retailers and some service providers.[15] AGL, for example, noted that "this information would help enable the development of connections for NGEs and constituent gases". [16] AEC also held this view and suggested[17] that gas networks be required to publish a similar type of annual planning report to electricity distribution networks to facilitate connections.[18]

AGIG, on the other hand, noted that in the early stages of market development it would be better to leave this to negotiations, because requiring published information may "restrict the options available and lead to inefficient solutions".[19]

APGA, Bioenergy Australia, APA and Jemena also thought information about where would be technically feasible to connect a pipeline was better left to bilateral negotiations. Jemena, for example, submitted that:[20]

15 Submissions to consultation paper: AEC, p. 4; AusNet, p. 6; PIAC, p. 9.
16 AGL, submission to consultation paper, p. 3.
17 AEC, submission to consultation paper, p. 4.
18 AEC, submission to consultation paper, p. 4.
19 AGIG, submission to consultation paper, p. 2.
20 Jemena, submission to consultation paper, p. 4.

> the existing connection processes ensure that interested parties have access to such information. It also does not follow that a new requirement mandating identification and publication of possible interconnection locations is appropriate and will provide, on balance, added value to the development of NGE and CG industries.

APGA[21] and APA also noted that it could be quite difficult and costly to determine on an *ex ante* basis where connections would be technically feasible. APA, for example, stated that:[22]

> Pipeline capacity and flow is dynamic and depends on many different factors that change regularly depending on injections, withdrawals, seasons, flow direction, maintenance and operating parameters.

Commission analysis

While there is merit in requiring service providers to publish some information on an ex ante basis to help facilitate connections by covered gas suppliers, conducting an upfront assessment of technical feasibility is likely to be complex and the benefits of doing so may not outweigh the costs.

The Commission has considered whether there is any other low-cost information that service providers could publish that would help to inform a prospective supplier's decision on whether to connect to a pipeline. In addition to the information set out in section 3.2.3 (i.e. information on the gas the pipeline is licensed to transport and any limits on blending that apply to the pipeline), other low-cost information service providers could publish includes:

1. a register of production and blend processing facilities connected to the pipeline and their location, which would be published on the service provider's website
2. information on the level of blending that has occurred in the pipeline (if any) and any supplier curtailment that has occurred in the last month, which would be published on the Gas Bulletin Board.

The costs associated with the information referred to in (1) are expected to be relatively low because the register will only need to be updated when there is a new connection of a supply facility. In the case of the information referred to in (2), the costs associated with this reporting obligation could be reduced by only requiring this information to be published:

- by transmission and distribution pipelines with a nameplate capacity of 10 TJ/day or above, all of whom should already have the systems in place to report the information to AEMO for publication on the Gas Bulletin Board
- on a monthly basis, rather than on a daily basis as most of the information on the Gas Bulletin Board is reported.

While the costs associated with these reporting obligations are expected to be relatively low, the benefits are expected to be material because the information should provide for more efficient connection and investment decisions. It is expected to do this by providing

21 APGA, submission to consultation paper, p. 2.
22 APA, submission to consultation paper, p. 14.

prospective suppliers with information they can use to readily determine whether to approach a pipeline service provider about the potential connection of their facility. The information listed above, in conjunction with the information identified in section 3.2.3, would, for example, allow a prospective supplier to quickly determine whether covered gases can be injected into a pipeline and, if so:

- whether there are any blend limits on the pipeline that may limit the volume of gas they may inject and if, so, whether those limits have already been reached and/or if curtailment has occurred
- where other similar facilities are located.

With this information the prospective supplier could then approach a service provider and negotiate their connection arrangements.

Accordingly, the Commission recommends introducing new reporting obligations to publish this information. The benefits associated with the publication of this information is likely to outweigh the costs. If implemented, this draft recommendation should contribute to the NGO by facilitating more informed and efficient connection and investment decisions by prospective suppliers. It is also consistent with the efficiency and implementation limbs of the assessment framework in that it is targeted, fit for purpose and proportionate to the issue it seeks to address.

The amendment required to implement the reporting obligations in relation to blend limits and supplier curtailment will require changes to the Gas Bulletin Board provisions in Part 18 of the NGR. This amendment is set out in section 5.4.3.

> DRAFT RECOMMENDATION 2: INTRODUCE A REGISTER OF COVERED GAS SUPPLIER PIPELINE CONNECTIONS
>
> Amend the prescribed transparency information provisions in the NGR to introduce a requirement that service providers publish a register of covered gas supply facilities connected to the pipeline including the location of those facilities.

3.1.4 Curtailment

Stakeholder responses

Most stakeholders were of the view that specific curtailment rules were unnecessary and that any concerns around a service provider favouring an affiliate could be dealt with through the existing ring fencing and associate contract provisions. APGA also noted the complexity of developing a rule that would set out a single approach to curtailment across all assets:[23]

> Being a contractually assigned right, there will be as many curtailment methods as there are pipelines.

23 APGA, submission to consultation paper, p. 20.

Other stakeholders suggested that any concerns about service providers favouring an affiliate in relation to curtailment could be dealt with in other ways. Bioenergy Australia and AGIG, for example, suggested that rather than amending the rules to set out how curtailment will occur, the rules could just prohibit a service provider from favouring its own affiliate in relation to curtailments.[24] AusNet, on the other hand, suggested that service providers could be required to publish their curtailment policy and, in the case of scheme pipelines, have these approved by the relevant regulator as part of the access arrangement process. [25]

Commission analysis

The existing ring-fencing and associate contract provisions, coupled with the prohibition on service providers preventing or hindering access to the pipeline in the NGL,[26] should be sufficient to guard against service providers favouring an affiliate through curtailment. The Commission is therefore not proposing to introduce any specific curtailment rules at this stage.

However, there are likely to be benefits from more transparency on the curtailment methodology that service providers intend to employ when dealing with covered gas suppliers ('supplier related curtailment methodology'). This information could, for example, help prospective suppliers determine whether to connect to a particular pipeline. It would also mean that service providers are more accountable in terms of their approach to curtailment and, in conjunction with the associate contract provisions and the prohibition on preventing or hindering access in the NGL, should minimise the risk of service providers favouring an associate through curtailment.

Therefore, the Commission recommends amending the user access guide provisions to require all service providers to publish their supplier related curtailment methodology as part of their user access guide.

The Commission also recommends amending the NGR to require scheme pipeline service providers to have a supplier related curtailment methodology included in their access arrangement. This will enable the regulator to assess, and make a decision on, the methodology as part of the access arrangement review process. This will provide appropriate regulatory oversight of the methodologies being employed by service providers and would treat supplier related curtailment methodology in the same way as other key service provider policies (such as the queuing, capacity trading and expansion requirements), that the regulator must approve as part of the access arrangement process.

If implemented, these draft recommendations are not expected to impose material costs on service providers, with most service providers noting in their submissions that they already have curtailment methodologies in place. However, the draft recommendations are expected to deliver a range of benefits, including, as noted above, providing for more efficient connection and investment decisions by prospective suppliers and minimising the risk of service providers favouring an associate. These draft recommendations are therefore

24 Submissions to consultation paper: AGIG, p. 6; Bioenergy Australia, p. 3.
25 AusNet, submission to consultation paper, p. 6.
26 See section 136 of the NGL.

expected to promote the NGO. They are also consistent with the efficiency and implementation limbs of the assessment framework in that they are targeted, fit for purpose and proportionate to the issues they are intended to address.

DRAFT RECOMMENDATION 3: REQUIRE SERVICE PROVIDERS TO PUBLISH A SUPPLIER RELATED CURTAILMENT METHODOLOGY

Amend the user access guide provisions in the NGR to require all service providers to publish a supplier related curtailment methodology as part of their user access guide.

DRAFT RECOMMENDATION 4: REQUIRE SCHEME PIPELINE SERVICE PROVIDERS TO INCLUDE A SUPPLIER RELATED CURTAILMENT METHODOLOGY IN THEIR ACCESS ARRANGEMENT

Amend the access arrangement provisions in the NGR to require scheme pipeline service providers to include a supplier related curtailment methodology as part of an access arrangement.

3.2 Information on the type of gas a pipeline is transporting or is proposing to transport

3.2.1 Current framework and issues

Under the current regulatory framework, all pipelines are assumed to transport natural gas. This will not, however, be the case under the proposed reforms.

The consultation paper, therefore, asked stakeholders whether there would be any value in requiring service providers to publish information on the type of gas the pipeline is licensed to transport and any plans the service provider has to conduct a trial, or to transition the pipeline (or part of the pipeline) to another covered gas.

Stakeholders were also asked where this information should be published and if it should be reported on the AEMC's gas pipeline register.[27]

3.2.2 Stakeholder responses

Most stakeholders agreed there would be value in publishing information on the gas a pipeline is licensed to transport and any plans that they may have to conduct a trial or to transition to another gas.

Retailers, for example, noted that this information would support existing and potential market participants, potential suppliers of covered gases, and assist retailers in managing customers. Most pipeline service providers also supported the publication of this information,

27 https://www.aemc.gov.au/energy-system/gas/gas-pipeline-register

although a number did note the need for this to occur in a way that avoids unnecessary duplication of reporting.

The only stakeholders that expressed a contrary view on this matter were ATCO and Jemena, both of whom raised concerns about the publication of information on proposals to conduct a trial or to transition to another gas.[28] ATCO, for example, stated that any plans to conduct a trial would be well communicated and given the low number of customers impacted in trials, having an additional requirement to publish the information appeared onerous.[29] Jemena, on the other hand, stated that while they agreed that it may be helpful to publish information on trials and transition plans, this should not be prescribed in the NGR.[30] Instead, they suggested this information could be included in a scheme pipeline's access arrangement.

In regard to where this information should be published, the majority of stakeholders agreed it should be reported on the AEMC's gas pipeline register.

3.2.3 Commission analysis

Under the proposed reforms, pipeline users and end users, will no longer be able to assume that all pipelines will be transporting natural gas. There is, therefore, a potential information gap that will emerge under the proposed reforms that could adversely affect:

- pipeline users (including retailers) and end-users (particularly those that are unable to use anything other than natural gas)
- the operation of the facilitated and retail markets if the pipeline is used to carry gas to those markets and AEMO, or other market participants, are unaware of any plans to conduct a trial or to transition to another gas product.

For these reasons, the Commission considers it would be beneficial to address this gap by requiring service providers to publish the following information in their user access guides and, in the case of scheme pipelines, in their access arrangement information:

- the gas a pipeline (or part of a pipeline) is licensed to transport
- any limits on blending that may apply to the pipeline (or part of a pipeline)
- the following if the service provider intends to conduct a trial, or to transition the pipeline (or part of a pipeline) to another gas:
  - the type of gas the service provider intends to trial or transition to
  - when the trial or transition is expected to occur
  - if the trial or transition will apply to the whole pipeline, or a part of the pipeline
  - whether approval for the trial or transition has been obtained from the jurisdictional technical regulator and if a transition has been mandated by a jurisdiction.

In relation to concerns raised by Jemena and ATCO regarding the latter of these pieces of information, the Commission does not consider the requirement to publish information on

28 Submissions to consultation paper: ATCO, p. 8; Jemena, pp. 7-8.
29 ATCO, submission to consultation paper, p. 8.
30 Jemena, submission to consultation paper, pp. 7-8.

planned trials and transitions to be an onerous obligation. Especially, given the infrequency with which this is likely to occur and the limited information that would have to be published.

Regarding concerns raised by some service providers about the potential duplication of reporting requirements, the requirement to report the information in both the service provider's user access guide and a scheme pipeline's access arrangement, is required to ensure that:

- prospective users of scheme and non-scheme pipelines understand what gas the pipeline is licensed to transport and current information on any plans the pipeline service provider has to conduct trials or to transition to another gas when they are considering connecting to the pipeline, which is why it should form part of the user access guide
- the relevant regulator and stakeholders participating in a scheme pipeline access arrangement review process have a good understanding of these matters, which is why it should form part of an access arrangement and the access arrangement information.

The publication of the information in these two locations is not expected to impose material costs on service providers, given the relative infrequency with which the information is expected to be updated. The Commission recommends t publishing the above information in the user access guide, and a combination of a scheme pipeline's access arrangements (for information on the gas a pipeline is licensed to transport and any limits on blending) and access arrangement information (for information on trials or proposals to transition to another covered gas).

Additionally, the Commission recommends publishing the information on the AEMC's gas pipeline register. Publishing the information on the register is intended to provide market participants and market bodies with one central location where they can find this information. As the information published on the register will be the same information that is contained in service providers' user access guides, it is not expected to result in any additional reporting costs for service providers.

The Commission considers that publishing this information will provide critical market information to both potential and current market participants that they will require in order to make efficient market and investment decisions.

The Commission expects this draft recommendation, if implemented, to facilitate the publication of relatively low cost critical market information that current and prospective market participants (including users and end-users) require for informed and efficient investment decisions. The Commission also considers that the draft recommendation is in line with the efficiency and implementation criteria of the assessment framework as it should enable consumers, market participants and investors to make efficient decisions and it is fit for purpose, targeted and proportionate to the issues it is intended to address.

DRAFT RECOMMENDATION 5: INTRODUCE REPORTING OBLIGATIONS ON THE GAS A PIPELINE CAN TRANSPORT AND ANY PROPOSED CHANGES TO THIS

Amend the NGR to:

1. require service providers to publish the following information in their user access guides:
   a. the type of gas a pipeline (or part of a pipeline) is licensed to transport
   b. any limits on blending that may apply to the pipeline (or part of a pipeline)
   c. the following if the service provider intends to conduct a trial, or to transition the pipeline (or part of a pipeline) to another gas:
      i. the type of gas the service provider intends to trial or transition to
      ii. when the trial or transition is expected to occur
      iii. if the trial or transition will apply to the whole pipeline, or a part of the pipeline
      iv. whether approval for the trial or transition has been obtained from the jurisdictional technical regulator and, in the case of a transition, if the transition has been mandated by a jurisdiction.
2. require scheme pipeline service providers to include:
   a. the information referred to in (a) and (b) above in their access arrangement
   b. the information referred to in (c) above in their access arrangement
3. specify the information referred to in (a)-(c) above as information to be included in the gas pipeline register.

3.3 Regulatory treatment of government mandated transitions to transporting another covered gas

3.3.1 Current framework and issues

If a government mandates that a pipeline transition from transporting natural gas to transporting another covered gas then, in the case of a scheme pipeline, the mandate will be treated as a regulatory obligation or requirement for the purposes of the NGL and the NGR.[31] The only matter that the regulator or a dispute resolution body would therefore need to be satisfied of when approving any expenditure associated with the transition under Part 9 of the NGR[32] is that the expenditure satisfies the prudent and efficient test, which requires expenditure to be: [33]

31 The term 'regulatory obligation or requirements' is defined in s. 6 in the NGL as: a) in relation to the provision of a pipeline service by a service provider (i) a pipeline safety duty; or (ii) a pipeline reliability standard; or (iii) a pipeline service standard; or b) an obligation or requirement under: this Law or the Rules; the National Energy Retail Law or the National Energy Retail Rules; or an Act of a participating jurisdiction, or any instrument issued under or for the purposes of that Act that: levies or imposes a tax or other levy that is payable by the service provider; regulates the use of land in a participating jurisdiction by a service provider; or relates to the protection of the environment; or materially affects the provision, by a service provider, of pipeline services to which an applicable access arrangement applies.

32 Part 9 of the NGR together with the revenue and pricing principles in s. 24 of the NGL sets out how a scheme pipeline's revenue requirement and reference tariffs are to be determined. The revenue and pricing principles in s. 24 of the NGL state that a service provider should be provided with a reasonable opportunity to recover at least the efficient costs the service provider incurs in "complying with a regulatory obligation or requirement."

> such as would be incurred by a prudent service provider acting efficiently, in accordance with accepted good industry practice, to achieve the lowest sustainable cost of providing services.

However, in the case of non-scheme pipelines, the regulator has no role in approving a non-scheme pipeline service provider's expenditure or prices. These matters are instead negotiated between service providers and users and if a dispute arises, an arbitrator can be called upon to resolve the dispute. The pricing principles arbitrators are required to employ in these disputes do not currently require consideration to be given to any regulatory obligations a non-scheme pipeline may be subject to.

In the consultation paper, stakeholders were asked if any changes needed to be made to the rules applying to either scheme or non-scheme pipelines to accommodate government mandated transitions to covered gases.[34]

3.3.2 Stakeholder responses

The majority of stakeholders that responded to the questions above were of the view that:[35]

- no changes were required to the rules applying to scheme pipelines
- the arbitration principles applying to non-scheme pipelines should be amended to require arbitrators to consider any regulatory obligation the relevant non-scheme pipeline service provider may be subject to in providing pipeline services to which access is sought.

3.3.3 Commission analysis

Scheme pipelines

As noted in section 3.2.1, the rules applying to scheme pipelines already require the relevant regulator and dispute resolution body to take into account any regulatory obligations or requirements that a service provider may be subject to, in providing reference services,[36] which is what a government mandate for a pipeline to transition would constitute. There is therefore no need to amend these rules.

Non-scheme pipelines

In contrast to scheme pipelines, there does appear to be a need to amend the arbitration principles applying to non-scheme pipelines, because there is currently no explicit[37] requirement for an arbitrator to consider any regulatory obligation or requirement a service provider may be subject to in providing the pipeline service to which access is sought.

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33 Rules 79 and 91 of the NGR.

34 Referred to in the consultation paper as NGEs and other gas products.

35 Submissions to consultation paper: APGA, p. 6; APA, p. 6; AGIG, p. 7; ATCO, p. 6; Jemena, p. 7; Engie, p. 4.

36 Under the NGR, the arbitrator of an access dispute in relation to a scheme pipeline must take into account the revenue and pricing principles, as defined in s. 24 of the NGL. The revenue and pricing principles include a principle that a scheme pipeline service provider should be provided with a reasonable opportunity to recover at least the efficient costs the service provider incurs in complying with a regulatory obligation or requirement.

37 The term 'explicit' is used here because while it is possible that an arbitrator could take it into account under the current pricing principles as a 'cost of providing the service', there is some ambiguity surrounding this.

This lack of clarity could undermine a decision by a jurisdiction to mandate that a non-scheme pipeline transition to another covered gas. It would also be contrary to the NGO if it results in the prices a non-scheme pipeline service provider can charge not reflecting the cost of complying with a regulatory obligation or requirement. This is because the inability of a non-scheme pipeline service provider to recover these costs would adversely affect its incentive and/or ability to efficiently operate or invest in the pipeline and could also result in inefficient use of the pipeline, all of which would not be in the long-term interests of gas consumers.

To address this issue, the Commission recommends amending the pricing principles that apply to non-scheme pipeline access disputes to require arbitrators to include the costs associated with complying with any regulatory obligations or requirement.

This draft recommendation, if made, is expected to contribute to the achievement of the NGO, by promoting efficient investment in, and the efficient operation and use of the pipeline where a transition has been mandated. It is also consistent with the efficiency and implementation limbs of the assessment framework in that it is targeted, fit for purpose and proportionate to the issue it is intended to address. It should also provide stability and transparency of the regulatory arrangements required to enable service providers and other market participants to make efficient decisions.

DRAFT RECOMMENDATION 6: REQUIRE ARBITRATORS TO CONSIDER REGULATORY OBLIGATIONS AND REQUIREMENTS IN NON-SCHEME PIPELINE ACCESS DISPUTES

Amend the arbitration pricing principles applying to non-scheme pipelines in new Part 12 of the NGR to require arbitrators to consider any regulatory obligations or requirements when arbitrating non-scheme pipeline access disputes.

3.4 Regulatory treatment of voluntary transitions to transporting another covered gas

3.4.1 Current framework and issues

If a government does not mandate that a pipeline transition to transporting another covered gas, but a service provider elects to do so, then, in the case of a scheme pipeline, the regulator would need to assess the proposal having regard to the expenditure criteria in Part 9 of the NGR. In the case of capital expenditure, the regulator would need to consider whether the proposed expenditure:[38]

- satisfies the prudent and efficient test

38 Rule 79 of the NGR.

- is justifiable on the grounds that either the overall economic value of the expenditure is positive, or the present value of the expected incremental revenue to be generated as a result of the expenditure exceeds the present value of the expenditure.[39]

In the case of operating expenditure, the regulator would need to consider whether the expenditure satisfies the prudent and efficient test.[40]

In the consultation paper, stakeholders were asked whether the expenditure criteria applying to scheme pipelines are fit for purpose, or if the rules should provide more guidance on how a voluntary proposal to transition to another covered gas should be assessed.

Stakeholders were also asked if the principles applying to arbitration of non-scheme pipeline's access disputes should be amended to provide an arbitrator with more guidance on how to assess a voluntary proposal to transition to another covered gas.

3.4.2 Stakeholder responses

Most stakeholders that responded to the questions above were of the view that the expenditure criteria currently applying to scheme pipelines are fit for the intended purpose, which is to assess the prudence and efficiency of the expenditure and consider, in the case of capital expenditure, if it is justifiable on the grounds set out in rule 79(2) of the NGR. However, some stakeholders did note that these criteria may not actively encourage a pipeline to transition.[41] The AER, for example, stated that:[42]

> The regulatory framework may not be as conducive as possible to renewable gas expenditures made by network service providers, unless the expenditure criteria are amended to allow for some consideration of the environmental benefits or optionality provided by renewable-gas related expenditures.

This view was echoed by a number of service providers who suggested that the expenditure criteria be amended to require the regulator to consider consumer preferences, environmental impacts and policies. AGIG and APGA, for example, stated that the rules should be amended to require the regulator to consider consumer preferences,[43] with AGIG noting that:[44]

> While it appears the existing expenditure criteria may be fit for purpose following the definitional changes outlined in the officials' paper, amendments to Part 9 of the NGR would be welcomed to reduce uncertainty…. This would provide the necessary certainty and clarity for service providers rather than leaving the interpretation of the criteria to a regulator's discretion. Amendments could be made… to reflect that the

39 Note rule 79(2)(c) also provides for capital expenditure to be justifiable if it is necessary to maintain and improve the safety of services, maintain the integrity of services, comply with a regulatory obligation or requirement, or maintain the service provider's capacity to meet levels of demand for services existing at the time of the capital expenditure. A voluntary transition to another gas is not expected to be justifiable on any of these grounds.

40 Rule 91 of the NGR.

41 Submissions to consultation paper: AGIG, p. 8; APGA, p. 4; ATCO, p. 4; APA, p. 16; AusNet, p. 7.

42 AER, submission to consultation paper, p. 4.

43 Submissions to consultation paper: AGIG, p. 8; APGA, p. 4.

44 AGIG, submission to consultation paper, p. 8.

> regulator may consider the expenditures as prudent and efficient or necessary to cater for consumer preferences if there is demonstrated strong consumer support.

AusNet, APA and ATCO went a step further and suggested that the regulator also be required to consider environmental impacts and policies.[45] AusNet, for example stated:[46]

> We recommend that the NGR is clarified to allow the AER to consider the policy intent (which may not yet be mandated) of a jurisdictional government to decarbonise gas networks when assessing network expenditures, as well as the extent of consumer support for this expenditure.

As to non-scheme pipelines, most stakeholders noted that if changes are made to the rules applying to scheme pipelines, equivalent changes should be made to the pricing principles applying to arbitration of access disputes in relation to services provided by non-scheme pipelines.[47]

3.4.3 Commission analysis

Scheme pipelines

The Commission considers the expenditure criteria currently applying to scheme pipelines under Part 9 of the NGR do not need to be changed because they can be used in their current form to assess voluntary proposals by service providers to transition to another covered gas.

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.[48] Amending the rules to actively encourage a transition goes beyond the terms of reference.

That is not to say that the regulator could not take into account the matters identified by stakeholders, such as consumer preferences. In effect, recent decisions by the AER have highlighted they are already in a position to do this.

Non-scheme pipelines

For the same reasons as those above, the Commission is not recommending any changes to the principles applying to arbitration of non-scheme pipeline access disputes. Furthermore, the Commission considers any voluntary proposal by a non-scheme pipeline to transition to another covered gas should be considered by an arbitrator using the existing arbitration pricing principles, which appear fit for purpose and consistent with the NGO.

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45 Submissions to consultation paper: ATCO, p. 4; APA, p. 16; AusNet, p. 7.

46 AusNet, submission to consultation paper, p. 7.

47 Submissions to consultation paper: APGA, p. 6; APA, p. 16; AGIG, p. 7; ATCO, p. 6; Jemena, p. 7; Engie, p. 4.

48 DISER, Review of the National Gas and Retail Regulatory Frameworks for the introduction of hydrogen and renewable gas — Terms of reference, 24 August 2021.

3.5 Regulatory treatment of government grants and concessional finance

3.5.1 Current framework and issues

Part 9 of the NGR specifies how user contributions to new capital expenditure are to be treated for regulatory purposes.[49] However, this part of the NGR does not specify how government grants or concessional financing are to be treated for regulatory purposes.

Similarly, the pricing principles that apply to arbitration of non-scheme pipeline access disputes (which will be moved from Part 23 to Part 12 of the NGR under the draft amending rule) provide no guidance on these matters.

In the consultation paper, stakeholders were asked whether the rules relating to scheme and/or non-scheme pipelines should be amended to clarify how grants from governments and agencies, such as the Australian Renewable Energy Agency, should be treated for regulatory purposes. Stakeholders were also asked in the workshops conducted in mid-December, whether the rules should clarify how concessional financing provided by governments and agencies, such as the Clean Energy Finance Corporation, should be treated for regulatory purposes.

3.5.2 Stakeholder responses

Most stakeholders that responded to these questions supported:

- amending Part 9 of the NGR to clarify how government grants are to be accounted for when determining the revenue requirement and reference tariffs for scheme pipelines
- amending the pricing principles that apply to arbitration of non-scheme pipeline access disputes to ensure a consistent approach to the treatment of government grants for scheme and non-scheme pipelines.

PIAC, for example, noted that:[50]

> Generally, grants should reduce the costs recovered from consumers and in any case should not result in recovery of costs related to activities covered by the grants or revenue, from consumers.

ATCO expressed a similar view and noted that there is currently some ambiguity around how government grants should be treated under Part 9 of the NGR, which should be addressed.[51] ATCO also suggested that the non-scheme pipeline arbitration pricing principles be amended to treat government grants similarly to the treatment of capital contributions set out in Part 9 of the NGR.[52]

49 Rule 82 of the NGR.
50 PIAC, submission to consultation, p. 6.
51 ATCO, submission to consultation, p. 6.
52 ATCO, submission to consultation, p. 8.

In contrast, Jemena submitted that it is standard practice to treat government grants as capital contributions, despite the rules not specifically requiring this.[53]

With respect to concessional finance, some stakeholders, principally user groups, supported allowing the regulator to take into account concessional finance when making decisions on price and revenue. Other stakeholders were either silent on this, or thought it was unnecessary to draft a rule to specify how concessional finance is to be treated for regulatory purposes.

3.5.3 Commission analysis

Scheme pipelines

The Commission considers there would be benefit in amending rule 82 of the NGR to make it clearer how government grants and concessional finance can be treated. The term concessional finance is used in this context to refer to a below market rate finance provided to a service provider by a person (other than a related body corporate of the service provider) for particular capital expenditure.

The main benefits in providing this clarity are that it will:

- provide the regulator, dispute resolution body, service provider and investors with a clearer direction as to how government grants and concessional finance can be treated
- prevent service providers from deriving a windfall gain from government grants and concessional finance.

The Commission recommends amending rule 82 of the NGR, which currently deals with user contributions, to:

- require government grants to be treated in the same manner as capital contributions by users (i.e. by rolling into the capital base the capital expenditure net of the capital contribution, or including the capital contribution in the capital base but using another mechanism to prevent the service provider from benefiting from the contribution through increased revenue)
- provide the regulator with discretion to treat concessional finance in the same manner as capital contributions by users.

In relation to the latter of these recommended amendments, it should be noted that it may not be possible for the regulator to convert concessional finance into a capital contribution value in all instances. The regulator would therefore have some discretion on whether to take this into account. It would not have the same discretion for government grants; the Commission recommends that these must be considered.

This draft recommendation, if implemented, is expected to contribute to the achievement of the NGO by ensuring that consumers do not pay pipeline charges to recover the cost of facilities that have been funded through government grants or concessional finance. It is also consistent with the efficiency and implementation limbs of the assessment criteria. This is

53 Jemena, submission to consultation, p. 7.

because the recommended change is fit for purpose, targeted and proportionate to the matters it is intended to address. It should also provide stability and transparency in regulatory arrangements that will enable market participants and investors to make efficient investment decisions.

DRAFT RECOMMENDATION 7: REQUIRE GOVERNMENT GRANTS AND CONCESSIONAL FINANCE TO BE TREATED AS CAPITAL CONTRIBUTIONS

Amend rule 82 of the NGR to:

- require the regulator to treat government grants in the same manner as user contributions under this rule
- provide the regulator with some discretion to treat concessional finance in the same manner as user capital contributions and government grants under this rule.

Non-scheme pipelines

The Commission has considered whether equivalent changes to those outlined above should be made to the arbitration pricing principles for non-scheme pipeline access disputes as suggested by some stakeholders. However, it considers that these pricing principles, which focus on the cost of providing the service, are already sufficiently broad to allow the arbitrator to employ a similar approach to that outlined above for scheme pipelines (i.e. to exclude the effect of government grants and concessional finance) if it considered it appropriate to do so. That is, it would be open to the arbitrator to treat government grants and concessional finance as if they were capital contributions and deduct them from the capital base, when calculating the cost of providing the pipeline service.

Therefore, the Commission does not recommend making any changes to these pricing principles, considering the broad way in which those principles are expressed and the policy intent of avoiding prescription in the pricing principles to try and encourage parties to reach agreement without having recourse to arbitration.[54]

54 Gas Market Reform Group, *Gas pipeline information disclosure and arbitration framework – Final design recommendation*, June 2017, p. 50.

4 RING FENCING FRAMEWORK

BOX 2: SUMMARY OF CHAPTER

The NGL and NGR include a number of mechanisms that are intended to limit the ability of vertically integrated pipeline service providers to adversely affect competition in contestable parts of the market. Among other things, the NGL requires service providers to comply with the ring fencing requirements and associate contract arrangements unless an exemption from the regulator is granted.

This chapter focuses on the advice that the AER has provided in response to a request by Senior Officials on the ring fencing and associate contract arrangements that apply to pipelines under the NGL and NGR.

In its advice, the AER identified a number of potential issues with the existing ring fencing and associate contract arrangements and recommended a range of changes to the NGL and NGR to address these concerns.

The changes identified by the AER principally relate to:

- the exemption framework that applies to the minimum ring fencing requirements
- the regulator's power to impose additional ring fencing requirements
- the associate contract approval process.

The AER's proposed changes to the NGL are being consulted upon by officials through its draft report.

The changes suggested by the AER for the NGR are set out in this chapter. The Commission seeks stakeholder views on the AER's suggestions. Following consideration of the AER's views as well as those of stakeholders, the Commission will set out its recommendations regarding the ring fencing and associate contract provisions in the NGR in its final report.

The NGL and NGR include a number of mechanisms that are intended to limit the ability of vertically integrated pipeline service providers to adversely affect competition in contestable parts of the market. The NGL, for instance, prohibits service providers from preventing or hindering access to the pipeline.[55] It also requires service providers to comply with the ring fencing requirements and associate contract arrangements set out in the NGL.

As part of the broader review of the changes to be made to the national framework, Senior Officials asked the AER to provide its advice on whether there is a need to amend the ring fencing arrangements in the context of the introduction of hydrogen and renewable gas blends. The AER's advice was provided on 21 February 2022 and proposed a number of changes to the ring fencing framework to address its concerns.

55 Section 136 of the NGL.

Given the short amount of time the AER had to provide its advice, officials agreed that the AER did not need to conduct a public consultation process and that its advice would instead by consulted on by officials and the AEMC. In keeping with this, officials are consulting on the AER's proposed changes to the NGL, while the Commission is consulting on the proposed changes to the NGR.

The remainder of this chapter sets out:

- how the current ring fencing and associate contract arrangements operate
- the issues raised by the AER, which relate to:
  - the exemption framework that applies to the minimum ring fencing requirements
  - the regulator's power to impose additional ring fencing requirements
  - the associate contract approval process.

4.1 Overview of the ring fencing framework

The section provides an outline of the current ring fencing framework and the key points of the AER's ring fencing advice.

4.1.1 Current arrangements

The ring fencing and associate contract arrangements have been included in the NGL and NGR to prevent vertically integrated pipeline service providers using the market power they derive from owning a pipeline (a natural monopoly) to foreclose or otherwise hinder competition in contestable parts of market (e.g. in production or retail). This may ultimately impact on consumers through higher prices and lower than efficient levels of productions, consumption and investment.

To minimise the risk of service providers engaging in these behaviours, the NGL requires them to comply with the ring fencing and associate contract arrangements.[56] In brief, these arrangements require service providers to comply with:

- the following minimum ring fencing requirements in the NGL must be complied with unless an exemption is obtained under the NGR:[57]
  - service providers are prohibited from carrying on a related business of producing, purchasing or selling natural gas or processable gas unless necessary for the safe and reliable operation of the pipeline, or to provide pipeline balancing services (legal separation from contestable activities, s. 139 of the NGL)
  - service providers must ensure that marketing staff are not shared with an associate that takes part in a related business (marketing staff segregation, s. 140 of the NGL)

56 Service providers are also prohibited from disclosing confidential information provided by users, and from using that information for a purpose other than for which it is given (rule 137 of the NGR) and from preventing or hindering access to the pipeline (s. 136 of the NGL).

57 These requirements currently only apply to natural gas pipelines. Officials are considering extending their application to pipelines transporting any covered gas. In addition, officials are considering prohibiting service providers from carrying on a related business of — producing, purchasing, or selling covered gases (natural gas, constituent gases and prescribed covered gases) — to include the provision of blend processing services by a blend processing facility.

  - service providers are required to prepare, maintain and keep separate accounts and a consolidated set of accounts for the entire business (accounting separation, s. 141 of the NGL)
- any additional ring fencing requirements that are set out in a regulator's ring fencing determination
- the associate contract provisions in the NGL, unless approval is obtained under the NGR.

The exemption criteria for the minimum ring fencing requirements are set out in rule 31 of the NGR, which are explained in more detail below.

As noted, pipeline service providers are prohibited from carrying on a related business in contestable parts of the market unless they obtain an exemption under the NGR. However, associates of the service provider are not prohibited from carrying on these businesses. To prevent service providers from conferring an unfair advantage on an associate when providing pipeline services, the NGL requires service providers to comply with the following associate contract provisions in the NGL, unless the contracts are approved by the regulator under the NGR:[58]

- service providers must not enter into, vary, or give effect to a provision in, an associate contract that has the purpose, or would have, or be likely to have the effect, of substantially lessening competition in a market for gas services (i.e. contracts must not have an anti-competitive effect)[59]
- service providers must not enter into, vary, or give effect to a provision in, an associate contract that is inconsistent with the competitive parity rule (i.e. pipeline services provided to an associate must be provided as if it was an unrelated entity).[60]

The approval criteria for associate contracts are set out in rule 32 of the NGR. These are explained in more detail in section 4.4.1. The ring fencing framework applies across Australia. References to 'the regulator' in this chapter are to the AER and ERA.

4.1.2 AER advice

In its advice on the ring fencing and associate contract arrangements, the AER identified a number of potential issues with the:

- the exemption framework applying to the minimum ring fencing requirements
- the regulator's ability to impose additional ring fencing requirements
- the associate contract approval process.

It therefore recommended a number of changes to the NGL and NGR to address its concerns. The suggested changes are intended to:

58 The NGL defines "associate contract" as: a) a contract, arrangement or understanding between a service provider and an associate of the service provider in connection with the provision of an associate pipeline service; or (b) a contract, arrangement or understanding between a service provider and any person in connection with the provision of an associate pipeline service: (i) that provides a direct or indirect benefit to an associate; and (ii) that is not at arm's length.

59 Section 147 of the NGL.

60 Section 148 of the NGL.

- provide the regulator with more flexibility and clarity regarding its powers to issue exemptions from minimum ring fencing requirements to accommodate different market development scenarios in appropriate circumstances
- provide the regulator with powers to impose additional ring fencing requirements addressing market-wide competition harms that may not be currently evident
- improve the efficiency and reduce the administrative burden in the regulator's decision making process where possible and appropriate.

Further detail on the issues the AER has identified and the changes it has suggested to the NGR to address these matters is provided in the remainder of this chapter.

4.2 Exemption framework for minimum ring fencing requirements

In its advice, the AER identified the following potential problems with the exemption framework for the minimum ring fencing requirements set out in rule 31 of the NGR:

- the exemption criteria do not provide the regulator with sufficient discretion when deciding whether to grant an exemption
- the exemption framework does not currently provide for class exemptions from the minimum ring fencing requirements
- the rules do not explicitly empower the regulator to impose conditions on minimum ring fencing exemptions
- the rules currently require all minimum ring fencing exemption decisions to be made using the expedited consultative procedure, which may be unnecessary for variations and revocations of exemptions.

This section firstly outlines the current arrangements for exemptions from ring fencing requirements under the NGR and then discusses each aspect of the AER's advice regarding exemptions in turn.

4.2.1 Current arrangements

The exemption criteria for the minimum ring fencing requirements are set out in rule 31, with:

- rule 31(3) allowing service providers to obtain an exemption from the prohibition on carrying on a related business in a contestable part of the market, if the regulator is satisfied that all of the following criteria are met:
  - either:
    i. the pipeline is not a significant part of a jurisdictional pipeline system, or
    ii. the service provider does not have a significant interest in the pipeline and doesn't actively participate in its management or operation
  - the cost of compliance outweighs the public benefit
  - the service provider has, by arrangement with the regulator, established internal controls that substantially replicate the effect achieved if a related business were divested to a separate entity and dealings subject to the associate contract provisions

- rule 31(4) allowing service providers to obtain an exemption from the marketing staff segregation and accounting separation requirements if the regulator is satisfied that the cost of compliance would outweigh the public benefit resulting from compliance.

4.2.2 Exemption criteria for minimum ring fencing arrangements

AER advice

In its advice, the AER stated that the current criteria provide it with limited discretion, particularly in relation to the prohibition on carrying on a related business. Concerned about this limitation, the AER's advice is that rules 31(3)-(4) of the NGR be replaced with a new provision that would set out high level criteria, similar to those set out in its *Ring-fencing guideline (electricity distribution) 2021*, that the regulator would be required to have regard to when granting a ring fencing exemption.

The criteria to which the AER refer in its advice include:

- whether the exemption would better achieve the national electricity objective
- the potential for cross-subsidisation and discrimination if the exemption is granted or refused
- the benefits of the relevant obligation for the long-term interests of consumers and the costs to the service provider of compliance with the obligation
- the effect of granting an exemption on the development of competition in markets for contestable services
- such other matters as the AER considers relevant.

Stakeholder views

In the Commission's consultation paper, stakeholders were asked whether any changes would need to be made to the ring fencing arrangements to accommodate NGEs or constituent gases and/or to allow trials to be conducted. Stakeholders were divided on these issues, with pipelines and their associations advocating for more flexibility in this area. PIAC and retailers expressed concerns about any weakening of the ring fencing arrangements.

APGA, the ENA and pipeline operators, for example, suggested amendments be made to the ring fencing exemption framework to allow pipelines to be involved in the production and supply of natural gas equivalents and constituent gases for trial and early commercial projects, or for ancillary services. In doing so, they noted that ring fencing could 'stifle' or restrict proposed investments in renewable gas projects.[61] Similarly, AusNet stated that:[62]

> As gas networks transition to renewable gas, it is essential that ring-fencing does not slow the speed of the transition by impeding the ability of the gas distributors (either in part or in total) to undertake small and large scale trials to learn and understand the asset, planning and operational implications of switching to renewable gas sources.

61 Submissions to consultation paper: APGA, pp. 20-21; ENA, p. 2.

62 AusNet, submission to consultation paper, p. 2.

PIAC and retailers, on the other hand, were opposed to any weakening of these requirements even for trial purposes because of the impact it could have on competition in contestable parts of the market and on consumers. EnergyAustralia stated that:[63]

> …we would be concerned if regulated gas network businesses were to attempt to recoup costs of constituent gas pipelines and production facilities by seeking to have them subject to economic regulation. For similar reasons... appropriate ring-fencing should be imposed to avoid customers paying for unregulated production, blending and transport activities via regulated network charges.

While Origin commented:[64]

> Ringfencing is an important aspect of the regulatory framework that ensures regulated businesses do not favour their related parties to the disadvantage of competitors operating in these markets.
>
> Consistent with this, it is not clear that ringfencing exemptions should be provided to accommodate trials if the rules prohibit service providers from operating these facilities. As a general principle, trials should be run consistent with the intent of the national framework, with the appropriate checks and balances in place. It is unclear why an exemption would be granted to a party that could not then undertake this activity outside of the trial process.

PIAC similarly stated that:[65]

> The NGR should not be amended to accommodate trials by service providers... It is not appropriate for service providers or related ring-fenced entities to be able to undertake activities that will create a revenue case or an increased cost recovery requirement from their regulated network business, that is not in the long-term interests of consumers.

Issues to consider

The changes suggested by the AER would result in a movement away from the current approach in which the NGR specify a limited set of circumstances in which an exemption from the minimum ring fencing requirements can be granted to the regulator guided by high-level principles in the NGR. This shift is particularly relevant regarding the requirement to not carry on a related business. The suggested change could therefore result in exemptions being granted in a greater number of cases than currently provided for in the NGR. It should be carefully considered, particularly if it is to apply to the specified types of activities for all covered gases.

The AER has referred to the exemption framework used in relation to the ring fencing guidelines that apply to DNSPs. This provides stakeholders with an alternative approach to

63 EnergyAustralia, submission to officials consultation paper, p. 3.
64 Origin, submission to consultation paper, p. 3.
65 PIAC, submission to consultation paper, p. 9.

the current regime to consider. However, the fundamental basis of the two frameworks (that relating to DNSPs and to gas pipelines) differs significantly and should be acknowledged when considering future needs.[66]

In addition, it should be noted that questions have previously been raised about sub-rule 31(3)(a) of the NGR; particularly, the requirement for a pipeline not to constitute a significant part of the pipeline system for any participating jurisdiction. In light of broadening the NGL and NGR beyond natural gas, there is a question whether this sub-rule is sufficiently clear and targeted, or if it should be amended to require, for example, the regulator to be satisfied that carrying on a related business would have no effect on competition in a contestable part of the market.

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?
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?

4.2.3 Class exemptions from the minimum ring fencing requirements

AER advice

Consistent with the intent to limit exemptions from the minimum ring fencing requirements, rule 31 of the NGR currently provides for exemptions to be assessed on a case-by-case basis, having regard to the specific circumstances of the service provider and the activity from which it seeks an exemption.

66 The NGL sets out three minimum ring fencing requirements that all service providers are expected to comply with unless they obtain an exemption under the NGR because they satisfy the exemption criteria. In contrast, the National Electricity Law is silent on ring fencing requirements and the National Electricity Rules provide the AER with discretion to determine the scope of the ring fencing arrangements and exemptions through a guideline. The AER's *Ring-fencing guideline (electricity distribution) 2021* also focuses on a much broader range of activities than the minimum ring fencing requirements.

In its advice, the AER commented that a more flexible approach may be beneficial going forward to enable it to "respond to the dynamic nature of the emerging renewable gas market". The AER therefore suggested that it be given the power to grant class exemptions from the minimum ring fencing requirements. The AER's advice did not expand on how this class exemption approach would work.

Issues to consider

The main benefit in allowing the regulator to issue class exemptions is that it can reduce the administrative burden on the regulator if numerous exemption applications are made. It is not, however, clear at this stage that the development of a hydrogen and renewable gas industry will result in many applications for exemptions, even for trials.[67] This is because there are other options available to service providers that minimise the risk to competition and the risk to service providers of having to divest their interests in contestable parts of the market at a later stage, including:

- partnering with unrelated parties to undertake the contestable activities of production, processing and/or supplying these gases
- establishing an associate to carry out the contestable activities, which is what a number of service providers are understood to have already done.

While a class exemption process may be administratively efficient, it may increase the risk that an exemption is granted to a party when it shouldn't be compared to using the current case-by-case approach. This is because under a class process the regulator is no longer considering the specific circumstances of a service provider, or the impact an exemption may have on competition in that case. To aid in mitigating this risk, a class exemption process could also include:

- limitations on the types of activities that could be the subject of a class exemption
- specific criteria in the NGR that the regulator would need to be satisfied of to grant a class exemption.

In addition, the Commission acknowledges there is uncertainty regarding the development of the hydrogen and renewable gas sector. Providing for class exemptions from ring fencing requirements may be more appropriately considered through a review or rule change process in the future if the need for such an exemption power becomes clearer.

67 The experience when the original Gas Code was implemented is also informative in this regard. When it was implemented in 1997, there was far more vertical integration present in the market, with a number of natural gas producers and retailers owning pipelines. Within the first five years, however, there had been only five applications for ring fencing exemptions, of which only three were granted. Productivity Commission, *Review of the Gas Access Regime*, 2004, p. 444.

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?
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?

4.2.4 Conditions on exemptions from minimum ring fencing requirements

AER advice

In its advice, the AER noted that rule 31 of the NGR does not explicitly provide for the regulator to impose any conditions on a minimum ring fencing exemption. The AER therefore suggested that this rule be amended to allow conditions to be imposed on exemptions. Some potential conditions that the AER noted could be imposed on these exemptions included:

- imposing a time, scope and/or volumetric limit on an exemption
- mandating that service providers divest assets once the market has become large enough to attract commercial entry
- requiring key findings and observations from the permitted activity to be made public.

Issues to consider

As the AER noted in its advice, the lack of an explicit ability to impose conditions on minimum ring fencing exemptions contrasts with other parts of the NGR, including the associate contract provisions in rule 32 of the NGR.

Other parts of the NGR that provide for exemptions to be obtained from certain obligations, such as Parts 23 and 24, also specify that the regulator may grant an exemption subject to any conditions determined by the regulator. These provisions also allow conditions to be varied on application by the service provider, or on the regulator's own initiative.[68] Amending rule 31 to clearly state that the regulator may impose conditions on minimum ring fencing exemptions would therefore bring this rule into line with other parts of the NGR.

While not noted by the AER's advice, the issue raised has highlighted two other, potentially more significant, gaps in rule 31 of the NGR. First, that the rule does not currently require the regulator to specify an expiration or review date for an exemption it grants. Second, nor does it require a service provider to alert the regulator if circumstances change such that it is no longer likely to qualify for an exemption.

68 See rules 586(1) and 612(1) of the NGR.

These two potential gaps are in direct contrast to other parts of the NGR which require expiration or review dates to be specified in a decision and also require service providers to inform the regulator if conditions change.[69] It is relevant therefore to consider whether similar provisions should be included in the ring fencing exemption arrangements in the NGR.

QUESTION 3: CONDITIONS ON EXEMPTIONS FROM MINIMUM RING FENCING REQUIREMENTS

1. Should the regulator have the ability to impose conditions on an exemption from the minimum ring fencing requirements and also be able to vary the conditions?
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?

4.2.5 Consultation process for varying or revoking minimum ring fencing exemptions

AER advice

Schedule 2 clause 20 of the NGL currently requires the regulator to employ the same process when varying or revoking a decision as it does when making a decision. This includes ring fencing exemption decisions, which in keeping with rule 31(2) of the NGR must be made using the expedited consultative procedure.

The AER commented in its advice that it may not be appropriate to use the expedited consultative procedure when making minor or uncontroversial variations to an exemption and/or when revoking an exemption. It therefore suggested that the NGR be amended to provide the regulator with more discretion to determine the appropriate level of consultation for these types of decisions.

Issues to consider

The AER's recommendation is similar to the ability the regulator has under rule 68 of the NGR if an access arrangement needs to be varied or revoked as a result of a clerical mistake, an accidental slip or omission, a miscalculation or it , or a defect in form. Rule 68 of the NGR requires the regulator to consult with the relevant service provider and any other persons with whom it considers consultation appropriate but does not provide any further

69 For example, Part 23 of the NGR requires a service provider to notify the regulator without delay if circumstances change such that the non-scheme pipeline no longer qualifies for an exemption. It also sets out the circumstances in which an exemption can be revoked (i.e. when, in the regulator's reasonable opinion, the relevant exemption criteria, are no longer satisfied).

specification on the consultation to be carried out by the regulator. This provides the regulator with a high degree of discretion.

An alternative approach, which provides slightly more prescription and less discretion to the regulator, can be found in Parts 23 and 24 of the NGR. These parts set out how variations to exemptions and revocations of exemptions to particular regulatory requirements are to be consulted upon. In short, these two parts of the NGR require the regulator to:[70]

- notify the affected service provider and invite it to make submissions about the proposed variation or revocation within 20 business days of the notice
- have regard to any submission made by the service provider when deciding whether to vary or revoke the exemption
- provide the service provider with written reasons for its decision if it decides to vary or revoke an exemption.

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?
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?

4.3 Class orders for additional ring fencing requirements

Currently the NGL only allows the regulator to impose additional ring fencing requirements on individual service providers and associates that are named in a ring fencing determination. The AER has suggested the NGL be amended to allow the regulators to make a ring fencing order that would apply to a class of service providers and/or associates.

4.3.1 AER advice

In its advice, the AER stated that while it could, in principle, name all pipeline service providers and/or associates in a ring fencing determination so that it applies on a class basis, this may not be appropriate because:

- it could result in a service provider or an associate being inadvertently missed
- associates may change over time, which would require a variation to such a determination.

The AER therefore suggested that the NGL be amended to allow regulators to make a ring fencing order that apply to a class of service providers and/or associates (e.g. all gas distribution network service providers and their associates).

70 See rules 590 and 616 of the NGR.

4.3.2 Issues to consider

As this suggestion from the AER refers to the NGL, it is being consulted on by officials. If this suggestion was implemented, changes would also need to be made to the NGR to implement the suggestion in full.

The draft Bill published by officials for consultation indicates that the changes would apply to all covered gases, and not limited to NGEs or renewable gases. The changes to the NGL would also allow the regulator to grant individual exemptions from the ring fencing order and allow the NGR to set out:

- any matters the regulator is to have regard to when making a ring fencing order, in addition to those proposed to be set out in the NGL:
  - section 143(2) of the NGL, which requires the regulator to have regard to the following principles when making a ring fencing determination:
    i. where one part of the business of a service provider (business unit A) is providing pipeline services to another part of the business of the service provider (business unit B), the service provider must ensure that business unit A provides the pipeline services to business unit B as if business unit B were a separate unrelated entity
    ii. where a service provider is providing pipeline services to an associate of the service provider, the service provider must ensure that those services are provided as if the associate of the service provider were a separate unrelated entity
    iii. users and prospective users should have sufficient information in order to understand whether a service provider is complying with paragraph (1) or (2)
  - section 144 of the NGL, which requires the regulator to consider the likely compliance costs that may be incurred by an efficient service provider, or an efficient associate.
- the circumstances in which individual service providers or associates could be granted an exemption from the ring fencing order by the regulator
- the procedure to be followed by the regulator when:
  - making a ring fencing order
  - granting an exemption from this order.

As indicated by the draft Bill, the NGR could specify the processes to use when making class additional ring fencing requirements through a ring fencing order as well as when exempting a party from an order. The level of discretion that is suitable for these decisions requires consideration. Part 3 of the NGR provides for two different consultative procedures that can be followed by the regulator:

- expedited consultative procedure: The starting point for consultation under this consultative procedure is the publication of the regulator's draft decision, which stakeholders must be given 15 business days to respond to. The regulator then has 20 business days to make its final decision.

- standard consultative procedure: The starting point for the consultation process is the publication of a notice by the regulator describing the proposal and inviting written submissions within 15 business days. The regulator can then proceed to a draft decision which stakeholders must have at least 15 business days to respond to. Upon completion of the consultation period, the regulator must make its final decision.

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 be required to consider when making a ring fencing order? If so, what are those matters and why are they required?
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?

4.4 Associate contract approval process

In its advice, the AER cited the following problems with the associate contract approval process currently set out in rule 32 the NGR:

- the rules allow, but do not require, service providers to obtain the regulator's approval of an associate contract or variation to an approved associate contract
- the rules require the regulator to approve an associate contract if it is satisfied that it does not have an anti-competitive purpose and is not inconsistent with the competitive parity provisions in the NGL, and do not provide the regulator with the ability to request further information from the service provider
- the rules only provide the regulator with 20 business days to make a decision on whether to approve the associate contract or variation, otherwise they are taken as approved
- the rules and the NGL provide limited guidance on how the regulator is to assess whether the competitive parity rule has been complied with.

This section firstly outlines the current arrangements for associate contracts and then discusses each aspect of the AER's advice regarding exemptions in turn.

4.4.1 Current arrangements

Rule 32(2) of the NGR currently states that the regulator, must on application by a service provider, approve an associate contract or variation if it is satisfied that the contact or variation:

1. does not have the purpose, and is unlikely to have the effect, of substantially lessening competition in a market for gas service

2. is not inconsistent with the competitive parity rule.

In effect, this rule places the onus on the regulator rather than placing the onus on the service provider to demonstrate that the contract or variation would not have these effects.

Rule 32(5) currently states that if the regulator fails to make a decision on a service provider's application within 20 business days, it will be taken to have approved the associate contract or variation unconditionally.

4.4.2 Approval of associate contracts

AER advice

In its advice, the AER noted that rule 32(1) of the NGR currently allows, but does not require, service providers to apply to the regulator for approval of an associate contract, a proposed associate contract or a proposed variation of an approved associate contract.

The AER expressed concern with the current approach and suggested that the regulator be provided with the ability to require service providers with associate contracts of a certain class or kind, to seek the approval of the regulator before entering into an associate contract or variation. The AER stated that its intention would not be to require all associate contracts to be pre-approved. Rather, it would focus on those associate contracts that pose a high risk of contravening the NGL. The advice did not set out any details on how the regulator would determine what types of associate contracts it would require to be pre-approved.

Issues to consider

The current arrangements in the NGR differ from the more proactive approach that was taken under the Gas Code, which prohibited service providers from entering into an associate contract without first obtaining the approval of the regulator.[71] The current framework is instead more reliant on the regulator actively monitoring the associate contracts that it is notified of under rule 33 of the NGR and taking enforcement action if it considers the provisions in the NGL have been breached.

It is unclear from the explanatory material that was published when the Gas Code was transitioned to the NGR why the approach to managing associate contracts changed. It is relevant therefore to consider whether this more reactive approach is the most appropriate to take going forward, given the potential increase in associates carrying on related businesses as the hydrogen and renewable gas industry develops.

The AER's suggestion may be viewed as somewhat of a halfway point between what was originally provided for under the Gas Code and the current rules. While there are likely benefits to implementing the AER's suggestion, it does require considering how the regulator would be able to determine in advance what types of associate contracts are more likely to have an anti-competitive effect and/or be inconsistent with the competitive parity rule and therefore require approval before being entered into.

71 Section 7.1 of the Gas Code.

One potential consideration is that it may be possible to exclude certain types of contracts from the pre-approval process because it provides for an associate to procure a reference service at the reference tariff.

A benefit of excluding some contracts from the pre-approval process is that it should minimise the administrative burden for the regulator and service providers. However, it may not substantially reduce the number of contracts that the regulator would need to review. The practical impact will depend on the extent to which service providers make use of contracts for pipeline services with their associates.

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?
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:
   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?

4.4.3 Onus of demonstrating an associate contract complies with the NGL

AER advice

In assessing associate contract compliance with the NGL, the current arrangement in the NGR requires the AER to approve an associate contract if it is satisfied that the contract does not have an anti-competitive purpose and is not inconsistent with the competitive parity rule.

As noted in its advice, the AER considers that the current approach is problematic because, in contrast to the service provider, the regulator does not have access to the information that would be required to make an informed decision on whether a contract is likely to have an anti-competitive effect, or be inconsistent with the competitive parity rule. For example, the regulator would not have access to all the service provider's contracts to assist it in determining whether the contract breaches the competitive parity rule.

To overcome this information asymmetry, the AER has suggested that the current arrangement be amended to:

- require the service provider, as part of its application for approval of an associate contract, to demonstrate to the regulator's reasonable satisfaction, that the associate contract or variation would not contravene the anti-competitive effect and competitive parity rule provisions in the NGL
- allow the regulator to seek additional information from the service provider if required.

Issues to consider

The potential benefit of implementing the AER's advice is that the regulator should be in a better position to make an informed decision on whether an associate contract satisfies the requirements of the NGL.

If the number of associate contracts for regulatory approval is significant, particularly as the growth of the hydrogen and renewable gases industry continues, then changing the onus to services providers should assist the regulator in managing the number of decisions required as the information relevant to making a decision will be provided with the application for approval. Allowing the regulator to seek additional information to support its decision making could also help in this regard.

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?
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?
3. If the change is made, should the regulator be able to seek additional information from the service provider if required?

4.4.4 Time and consultation process for associate contract decisions

AER advice

Rule 32(5) of the NGR states that if the regulator fails to make a decision on a service provider's application within 20 business days, it will be taken to have approved the associate contract or variation unconditionally.

The AER has expressed concern about the limited time it has under this rule to determine whether an associate contract or variation is likely to substantially lessen competition or contravene the competitive parity rule. It considers these questions are complex matters that require careful review of the contract or variation.

The AER's advice is therefore to extend the 20 business day time limit and/or introduce a 'stop-the-clock' provision to provide it with more time to carry out the necessary assessment and make an informed decision. A stop-the-clock provision could be used if the regulator requests further information from the service provider (that is, the clock stops until the service provider submits the additional information to the regulator).

Issues to consider

The current limited time to carry out a decision making process on this subject may create some risk that contracts are taken to be approved because the regulator has had insufficient time. The implication is that there could be contracts that are impacting on competition in the market, although the significance of the impact is difficult to determine without relevant information.

In addition to the changes included in the AER's advice, there is a question whether any public consultation would assist the regulator in making a decision about an associate contract. Public consultation (subject to confidentiality limitations) was required under the corresponding provisions of the Gas Code.[72] The ability to seek public comment may provide the benefit of the regulator obtaining information relevant to the potential impact of the contract. However, the addition of public consultation may also lengthen the decision making process further.

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?
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?

4.4.5 Clarifying the competitive parity rule

AER advice

In its advice, the AER stated that greater guidance in the NGR on the application of the competitive parity rule (s. 148(2) of the NGL) would assist in clarifying expectations for service providers' dealings with associates. This section of the NGL defines the competitive parity rule as follows:

72 See section 7.3 of the Gas Code.

> the competitive parity rule is the rule that a pipeline service provider must ensure that any pipeline services that the pipeline service provider provides to an associate of the pipeline service provider are provided to that associate as if that associate were a separate unrelated entity.

The AER suggested that the guidance could be based on the obligation to not discriminate provisions in its *Ring-fencing guideline (electricity distribution) 2021*, which state that a DNSP in dealing with an associate, a DNSP must:

- treat an associate as if it were not an associate and had no connection or affiliation with the distribution business
- deal or offer to deal with an associate and a competitor (or potential competitor) on substantially the same terms and conditions
- provide substantially the same quality, reliability and timeliness of service to an associate and a competitor (or potential competitor)
- not disclose to an associate information the distribution business has obtained through its dealings with a competitor (or potential competitor) where disclosure would provide an advantage to an associate.

Issues to consider

While the AER did not identify any specific issues that have emerged with the current drafting of the competitive parity rule, there could be a benefit in amending the NGR to provide greater guidance to service providers, particularly if that amendment will support improved compliance with the requirements.

The Commission considers there could be advantages to providing this guidance in the NGR, but it is also aware that there may be other approaches that could be used to address the AER's concern.

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?

5 MARKET TRANSPARENCY MECHANISMS

BOX 3: SUMMARY OF CHAPTER

This chapter focuses on the five market transparency mechanisms provided for under the NGR (the Gas Statement of Opportunities (GSOO), the Victorian Gas Planning Report (VGPR), the Natural Gas Services Bulletin Board (Bulletin Board), AER gas price reporting and the non-pipeline infrastructure access reporting requirements) and considers whether they should be extended to other covered gases, and if so, how this can be implemented.

Stakeholder feedback and the Commission's own analysis of these matters indicates that if these transparency mechanisms are not extended to other covered gases, material information gaps could emerge which could have a range of adverse effects on the market, economic efficiency and consumers more generally.

The Commission is therefore of the view that the NGR should be amended to extend the application of the five transparency mechanisms to other covered gases. This is reflected in the draft recommendations set out in this chapter which are intended to accommodate the extension and to promote the long-term interests of consumers, consistent with the NGO. A number of consequential changes to the NGR also arise from these decisions.

In making these draft recommendations, the Commission has sought to ensure that they are fit for purpose, targeted and proportionate to the issues they are intended to address and does not result in over-regulation. In addition, the recommended changes are designed to provide the stability and transparency of regulatory arrangements required to enable consumers, market participants and investors to make efficient decisions.

The key draft recommendations made in this chapter are to:

- extend the application of the GSOO, VGPR, Bulletin Board, AER gas price reporting and non-pipeline infrastructure access reporting to other covered gases
- recognise blend processing facilities as distinct facilities and extend the GSOO, VGPR, Bulletin Board and non-pipeline infrastructure access reporting to these facilities
- require gas pipelines transporting a gas blend to report a range of information on the Bulletin Board, including information on:
  - any blending cap that may apply to the pipeline, the level of blending achieved in the last month and the number of times injections of other covered gases have been curtailed
  - the nameplate rating and receipt and/or delivery points at which facilities injecting gas are connected.
- enable AEMO to collect information from unregistered participants for the purposes of the VGPR and use information obtained for the purposes of the VGPR for the GSOO and vice versa.

The NGL and NGR currently provide for the following market transparency mechanisms:

- the Gas Statement of Opportunities (GSOO), which is an annual report published by AEMO that assesses the adequacy (or otherwise) of supply in eastern Australia to meet forecast demand and the outlook for the industry over a 20-year outlook period[73]
- the Victorian Gas Planning Report (VGPR), which is a biennial report published by AEMO that provides a supply and demand outlook and pipeline capacity adequacy assessment for the Victorian Declared Transmission System (DTS) over a five-year outlook period[74]
- the Natural Gas Services Bulletin Board (Bulletin Board or BB), which is a website operated by AEMO that contains market and system information for a range of facilities involved in the supply and use of natural gas in eastern Australia and the Northern Territory.[75]

In 2020, Energy Ministers agreed to implement a range of improvements to the GSOO and the Bulletin Board.[76] They also agreed to amend the NGL and NGR to require:

- the AER to publish a range of gas price information once the Australian Competition & Consumer Commission's (ACCC) Gas Inquiry ceases, which is expected to occur in 2025[77]
- stand-alone compression and storage facility operators to publish information on their standing terms and actual prices paid by other users to help facilitate third party access.[78]

These amendments to the NGL and NGR, which are being implemented through the transparency and pipeline reform packages, are expected to be implemented in 2022-2023. Given Energy Ministers have already agreed to these amendments, this draft report proceeds on the basis that the amendments are made. Further detail on the market transparency mechanisms and the amendments that are being made can be found in Chapter 4 of the Consultation Paper.

This chapter sets out key issues, stakeholder feedback and draft recommendations in relation to:

- extending the transparency mechanisms to other covered gases
- the amendments to the NGR required for each transparency mechanism.

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73 See https://aemo.com.au/en/energy-systems/gas/gas-forecasting-and-planning/gas-statement-of-opportunities-gsoo

74 See https://aemo.com.au/en/energy-systems/gas/gas-forecasting-and-planning/victorian-gas-planning-report

75 See https://aemo.com.au/en/energy-systems/gas/gas-bulletin-board-gbb

76 The changes to the NGL and NGR required to give effect to this are being progressed through the transparency reform package. See https://www.legislation.sa.gov.au/__legislation/lz/b/current/national%20gas%20(south%20australia)%20(market%20transparency)%20amendment%20bill%202021/b_as%20introduced%20in%20ha/national%20transparency%20amendment%20bill%202021.un.pdf

77 The changes to the NGL and NGR required to give effect to this are being progressed through the transparency reform package. See https://www.legislation.sa.gov.au/__legislation/lz/b/current/national%20gas%20(south%20australia)%20(market%20transparency)%20amendment%20bill%202021/b_as%20introduced%20in%20ha/national%20transparency%20amendment%20bill%202021.un.pdf

78 The changes to the NGL and NGR required to implement these reporting obligations are being progressed as part of the gas pipeline reform legal package. See https://energyministers.gov.au/publications/energy-senior-officials-release-gas-pipeline-draft-legal-package-consultation

In addition to the changes identified in this chapter, consequential changes to the NGR are set out in appendix E.

5.1 Extending the transparency mechanisms to other covered gases

5.1.1 Current framework and issues

As noted, Energy Ministers have recently agreed to implement a range of measures to improve transparency in the gas market. Once these reforms are implemented, there will be five market transparency mechanisms provided for under the NGL and NGR, which apply in the east coast and the Northern Territory:[79]

- the GSOO
- the VGPR
- the Bulletin Board
- the AER's gas price reporting function; and
- the non-pipeline infrastructure access reporting requirements.

These five transparency mechanisms currently apply to the facilities and activities associated with the supply of natural gas. The consultation paper therefore asked stakeholders whether the NGR should be amended to extend the application of these transparency mechanisms to NGEs. Stakeholders were also asked whether these transparency mechanisms should be extended to constituent gases as part of this process, or if this should be deferred to a future rule change process given the potential for the volume of these gases to be quite small in the early stages.

5.1.2 Stakeholder responses

Most stakeholders that responded to these questions supported the extension of the transparency mechanisms to NGEs.[80] The notable exception to this was EnergyAustralia who questioned whether it was "worth spending the effort understanding various complexities and drafting detailed rules and procedures" because in its view the supply of these products will "rely significantly on public subsidies or incentives" for the foreseeable future.[81]

In contrast to NGEs, most stakeholders suggested that the extension of the transparency mechanisms to constituent gases be deferred.[82] Origin, for example, stated:[83]

> We consider it may be appropriate to defer extending these mechanisms to constituent gases at this time given they are unlikely to be used at a large scale in the immediate term.

79 The Western Australian Gas Bulletin Board and Gas Statement of Opportunities are established under local legislation and rules, which are out of scope of this review.

80 Submissions to consultation paper: PIAC, p. 7; AEMO, p. 2; Origin, p. 4; AGL, p. 6; Engie, p. 5; AusNet, p. 4.

81 EnergyAustralia, submission to consultation paper, p. 2.

82 Submissions to consultation paper: Origin, p. 1; Engie, p. 6; APGA, p. 26; AGIG, p. 12; Jemena, p. 11; Bioenergy Australia, p. 7.

83 Origin, submission to consultation paper, p. 1.

AGIG similarly stated that:[84]

> We consider that the application of the identified transparency mechanisms to facilities and activities involved in the supply of constituent gas should be deferred until a later process, given the cost of the regulatory burden in meeting the reporting requirements is likely to outweigh the public benefit of transparency, particularly when the volume of natural gas equivalents is expected to be relatively small in the initial stages of the market's development.

AusNet noted in its submission that it was not opposed to the extension of the transparency mechanisms to constituent gases, but observed that the benefits to consumers of imposing reporting requirements on low volume facilities should be balanced against the costs.[85]

In contrast, PIAC and AGL supported the extension of the transparency mechanisms to constituent gases as part of the initial rules. AGL stated that the facilities involved in the supply of constituent gases should be subject to all the transparency mechanisms if they meet the reporting threshold and are not subject to regulatory sandbox framework.[86] PIAC, similarly stated that:[87]

> Facilities and activities involved in the supply of constituent gases should be brought into the transparency mechanisms as part of the initial rules package. These activities contribute to material costs to NGE products even at low levels and should be subject to equivalent transparency measures from the outset. This is crucial to ensure efficient decision making can be informed by transparent information regarding the costs of activities contributing to the supply of NGEs.

AEMO also supported the extension of the GSOO and VGPR to constituent gases, but noted that the number of facilities and participants involved in the supply of these gases may not be sufficient to warrant the extension to the Bulletin Board at this stage.[88] Elaborating on this further, AEMO noted that:

> From a transparency perspective, NGE production facilities will be subject to any reporting obligations that apply under the BB, GSOO or VGPR (either via automatic application of NGL changes or additional requirements established through this Review process). This would mean that NGE production facilities would ultimately be required to provide and update certain types of operational and forecast information based on arrangements with, and information provided by, CG producers. Where CG producers are not directly captured by NGR reporting obligations, NGE producers would be reliant on commercial arrangements with CG producers to meet their reporting obligations. There may be value in placing reporting obligations on CG producers to mandate the provision of information under the NGR, rather than relying on commercial

84 AGIG, submission to consultation paper, p. 2.
85 AusNet, submission to consultation paper, p. 4.
86 AGL, submission to consultation paper, p. 7.
87 PIAC, submission to consultation paper, p. 7.
88 AEMO, submission to consultation paper, p. 9.

> arrangements.
>
> For a shorter-term transparency mechanism such as the BB, the above issues are not anticipated to be material. That is, the number of facilities and participants is not anticipated to warrant CG BB reporting requirements.
>
> For longer-term, forward-looking, transparency mechanisms such as the GSOO and VGPR, direct access to CG production and facility development data may become important with the increase in CG producers and potentially evolving commercial arrangements…
>
> AEMO therefore considers that it may be appropriate for the Rules to formalise the ability of AEMO to capture CG production information for the GSOO and VGPR.

5.1.3 Commission analysis

Extension of the transparency mechanisms to NGEs

Similar to most stakeholders, the Commission considers it appropriate to amend the NGR to extend the application of the five transparency mechanisms to NGEs and to treat the facilities and activities associated with their supply in the same manner as their natural gas counterparts, where it is appropriate to do so.

If this was not to occur, then it could result in material information gaps under all the transparency mechanisms, which could have a range of adverse effects on market participants and economic efficiency. It could, for example result in material gaps in:

- the supply forecasts developed as part of the GSOO and VGPR, which could result in inefficient decisions being made about bringing on new sources of supply and infrastructure
- the Bulletin Board and in the AER's gas price reporting, which could impede the efficient trade of gas and gas services and result in inefficient decisions being made about the provision and use of gas and gas services.

It could also impede access to the infrastructure captured by the Bulletin Board and non-pipeline infrastructure access reporting obligations.

These outcomes would not be in the long term interests of consumers, which is why the Commission considers that the five transparency mechanisms should extend to NGEs.

Extension of the transparency mechanisms to constituent gases

The volume of constituent gas supplied into the market may be relatively small in the initial stages of market development. However, as AEMO points out in its submission, if the GSOO and VGPR only captured the suppliers of NGEs and the facilities and activities involved in their supply, some material information gaps could emerge. This is because the suppliers of NGEs may not have information about the upstream supply of constituent gases or the facilities involved in their supply either for blending or direct injection. This limitation would reduce the reliability of the forecasts produced for the GSOO and VGPR, which could, in turn, result in inefficient planning and investment decisions across the industry. Therefore, the Commission

considers that the GSOO and VGPR should be extended to constituent gases as part of this process.

While the Commission has considered limiting the extension to constituent gases to these two transparency mechanisms, it understands from Jemena's submission and discussions with other service providers that direct injections of constituent gases (e.g. hydrogen) into pipelines will occur, with blending then occurring within the pipeline.[89] Jemena's Western Sydney project is already operating on this basis and AGIG is also considering this method for its HypMurray Valley Project, where hydrogen will move through a separate pipeline and enter into a natural gas pipeline (referred to as in-pipe blending). Thus, if constituent gases are not brought within the scope of all the transparency mechanisms, material gaps may occur in these mechanisms, which could have a range of adverse effects on market participants and economic efficiency.

As a result, the Commission has concluded that all the transparency mechanisms should be extended to constituent gases and that the facilities and activities associated with their supply should be treated in the same manner as their natural gas counterparts, where appropriate.

While the extension of the transparency mechanisms to constituent gases will impose some reporting costs on constituent gas suppliers, opportunities to minimise these costs have been taken by, for example, requiring pipeline service providers to report some information on behalf of these suppliers (see section 5.2.3 and section 5.3.3).

Furthermore, except for the Bulletin Board, the information will only have to be reported on an intermittent basis. For example, the information required by the AER for its gas price reporting is only likely to be two or three times a year, while the information required by AEMO to prepare the GSOO is only collected once a year and the VGPR every two years.[90] As such, the costs associated with these reporting obligations are not expected to be significant. Similarly, most of the information to be reported to facilitate access to non-pipeline infrastructure is standing data and only has to be updated when new contracts are entered into.

In the case of the Bulletin Board, facilities can be subject to daily reporting obligations, but only if they have a nameplate capacity of 10 TJ/day or more. This is equivalent to a hydrogen electrolyser with a nameplate capacity of 130 MW, which, as a number of stakeholders pointed out, is quite large given the level of blending that is likely to occur initially. It could therefore take some years before constituent gas facilities reach this threshold, so the extension of the Bulletin Board to these facilities is unlikely to impose any costs on these facilities for some time.

While this may be viewed as a reason to defer the extension of the Bulletin Board, the Commission's view is that it would be more efficient to implement the reporting obligations as part of this review because it will limit the potential for gaps to emerge if larger facilities are

89 Jemena, submission to consultation paper, p. 8.

90 The information collected by the AER for price reporting is also expected to be provided on a relatively infrequent basis (e.g. quarterly), while facilities subject to Part 18A will only be required to publish information when they change their standing terms or if they enter into new contracts.

developed sooner than expected. It will also provide constituent gas facilities with greater certainty as to the obligations that will apply when they meet the relevant threshold. Extending the Bulletin Board as part of this process will also, as noted in section 5.4, allow some very basic low cost standing information to be collected from constituent gas facilities when they connect.

Therefore, the Commission considers that the five transparency mechanisms should extend to constituent gases.

Impact of the change in the officials' approach to the gases to be specified in the NGL

As outlined in Chapter 1, officials are proposing a refined approach to extending the NGL that provides for the specification of an initial list of primary gases in the NGL. A covered gas would be:

- any primary gases, being natural gas, biomethane, synthetic methane, hydrogen and any other gas specified in the National Gas Regulations to be a primary gas
- a gas blend, which is a blend of any primary gases.

Under the officials' refined approach, the NGL will not draw a distinction between natural gas, NGEs, constituent gases or other primary gases and gas blends. Rather, all of these gases will just be referred to as 'covered gases'. Furthermore, under the refined approach, the access regulation frameworks established by the NGL would apply in respect of all covered gases from the commencement of the reforms.

This has necessitated the Commission considering which covered gases should fall within the scope of each transparency measure. The Commission's draft recommendations reflect the following approach:

- For the GSOO and the Bulletin Board, all covered gases will be in scope, but remote BB facilities, and gas transactions delivered in remote BB facilities will not be required to report because they do not impact on outcomes in the interconnected gas pipeline system across the Northern Territory and east coast.
- For the VGPR, all covered gases will be within scope. This is consistent with the draft recommendations for Part 19 since the DWGM will apply to any covered gas injected into or withdrawn from the market, enabling all quantities of gas to be taken into account in scheduling and settlement.
- In regard to the AER's gas price reporting functions, all covered gas supply and swap transactions would be within scope. However, the AER will need to consult on the information reporting requirements and can consider as part of that process whether to exclude, for example, particular gases or transactions for delivery of gas to remote facilities.
- For the non-pipeline infrastructure access reporting obligations (Part 18A), all covered gases will be within scope, consistent with the proposed approach to other forms of access regulation proposed in the Officials' Consultation paper.[91]

91 Officials, *Extending the national gas regulatory framework to hydrogen and renewable gases — Proposed changes to the NGL, NERL and National Regulations,* consultation paper, 31 March 2022, Chapter 3.

The draft recommendations also provide for the extension of existing measures in the NGR and the implementation of some new measures that are intended to minimise compliance costs. These measures apply to facilities and activities associated with the supply of other covered gas that are likely to have little, if any, impact on the domestic market and to minimise duplication of reporting obligations. For example, the GSOO and Bulletin Board reporting obligations will not apply to remote BB facilities. The Bulletin Board reporting obligation will also not apply to facilities with a nameplate rating less than 10 TJ/day and exemptions will be available where AEMO is satisfied that the information will be provided by another person, or that the BB facility is a lateral gathering pipelines and the information is not material.

These measures provide an appropriate balance between ensuring that market participants and policy makers have access to the information required to make informed and efficient decisions, and minimising compliance costs.

Consistency of the extension with the NGO

For the reasons set out above, the Commission's draft recommendations provide for the extension of the five transparency mechanisms to both other covered gases and for the facilities and activities associated with their supply to be treated in the same manner as their natural gas counterparts.

In the Commission's view, extending the NGR in this manner will, in the case of the:

- **GSOO and VGPR**, help market participants and policy makers make more informed and efficient planning and investment decisions by allowing them to understand the adequacy of supply from all covered gases and associated infrastructure to meet forecast demand.
- **Bulletin Board**, allow market participants to make more efficient decisions about the provision and use of other covered gases and associated services, facilitate the efficient trade of these gases and facilitate access to the facilities involved in their supply, by providing for greater transparency of market and system information.
- **AER's gas price reporting function**, aid the price discovery process, facilitate the efficient trade of other covered gases, and allow market participants to respond in a more efficient manner to price signals, by providing for greater transparency of the prices paid for other covered gases under gas supply agreements and gas swaps.
- **Infrastructure terms and prices**, facilitate access to the compression and storage facilities involved in the supply of other covered gases, by reducing search and transaction costs and the information asymmetries users would otherwise face when negotiating access to these facilities.

The extension of the five transparency mechanisms to other covered gases is therefore expected to contribute to the achievement of the NGO. Specifically, that the draft recommendations are targeted, fit for purpose and proportionate to the issues they are intended to address and will provide stability and transparency of regulatory arrangements required to enable market participants to make efficient decisions.

The amendments to the NGR that would be required to give effect to these draft recommendations are set out for each transparency mechanism in the sections that follow.

5.2 Amendments to the GSOO

5.2.1 Current framework and issues

The objective of the GSOO is to make information available to assist market participants and other persons make informed investment decisions in the natural gas industry and to understand the adequacy of supply to meet forecast demand over a 20-year period. The GSOO provisions in the NGL and Part 15D of the NGR are currently being amended as part of the transparency reform package.[92] Once the amendments are implemented, the GSOO arrangements will set out among other things:

- AEMO's obligation to publish the GSOO
- the content that must be included in the GSOO
- AEMO's powers to issue a GSOO survey to collect information that it considers reasonably necessary for the publication of the GSOO, the scope and application of which is to be set out in GSOO Procedures to be published by AEMO
- the obligations of reporting entities identified in AEMO's GSOO Procedures to participate in the GSOO survey and to comply with both the information standard set out in the Part 15D of the NGR and the GSOO Procedures.

In the consultation paper, stakeholders were asked whether Part 15D of the NGR need to be amended to accommodate the supply of other gases.

5.2.2 Stakeholder responses

Stakeholders provided limited feedback on whether any additional information should be included in the GSOO.

Jemena did, however, note that amendments to Part 15D may be required to accommodate blending facilities, because in its view these facilities differ from the other infrastructure currently captured by the GSOO:[93]

> In our view, 'blending' is something distinct from other mid-stream activities such as compression and processing. It does not neatly fall within the current definitions of either production or a pipeline service.

AEMO and AGIG, on the other hand, thought that blending facilities could be treated as production facilities for the purposes of the GSOO.[94]

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92 The changes to the NGL and NGR required to give effect to this are being progressed through the transparency reform package. See https://www.legislation.sa.gov.au/__legislation/lz/b/current/national%20gas%20(south%20australia)%20(market%20transparency)%20amendment%20bill%202021/b_as%20introduced%20in%20ha/national%20transparency%20amendment%20bill%202021.un.pdf

93 Jemena, submission to consultation paper, p. 10.

94 Submissions to consultation paper: AGIG, p. 8; AEMO, p. 8.

AEMO also commented that amendments to Part 15D may be required to:[95]

- expand the scope of the information that AEMO can collect through the GSOO survey, which is currently limited to information on the natural gas industry
- enable the GSOO to include information on the feedstock used by suppliers of NGEs and constituent gases, the factors that may affect the availability of that feedstock and any volatility that may be associated with the production of these gases.

In addition, AEMO suggested that pipeline service providers be required to provide AEMO with information on potential connections by NGE and constituent gas facilities to assist in the development of forecasts for the GSOO and the VGPR. AEMO noted that such an obligation would be akin to the requirement for transmission network service providers to provide it with connection information for distributed energy resources under the NER.[96]

5.2.3 Commissions analysis

Extension of the GSOO to other covered gases

To extend the GSOO to other covered gases, the limitation on the information that AEMO can collect through the GSOO survey posed by the use of the term 'natural gas industry' will need to be removed. This term will instead be replaced by the term 'covered gas industry'. To minimise the compliance costs for remote facilities that are not connected (directly or indirectly) to the facilitated gas markets in the east coast, the application provisions in Part 15D will also need to be amended to exclude remote BB facilities.

In addition to these changes, the rule setting out the content of the GSOO will need to be amended to enable the GSOO to include comparable information on covered gases to that currently published on natural gas, where it is appropriate to do so. This is reflected in Table 5.1.

95 AEMO, submission to consultation paper, pp. 6-7 and 9.

96 AEMO, submission to consultation paper, p. 9. This requirement is set out in rule 3.7F(g) of the NER.

Table 5.1: **Consistent treatment of facilities and activities involved in the supply of different gases under the GSOO**

	NATURAL GAS	OTHER COVERED GASES
Production facilities		
Information on the feedstock used in the production of the gas	Yes	Yes
Production forecasts	Yes	Yes
Contracted production	Yes	Yes
Annual and peak day capacity of, and constraints on, production	Yes	Yes
Committed and proposed new or expanded production facilities	Yes	Yes
Transmission pipelines		
Annual and peak day capacity of, and constraints on, transmission pipelines	Yes	Yes
Committed and proposed new, expanded or augmented pipelines	Yes	Yes
Storage facilities		
Annual and peak day capacity of, and constraints on transmission pipelines	Yes	Yes
Committed and proposed new or expanded storage facilities	Yes	Yes
Proposed information to be reported on blend processing facilities		
Blend production forecasts	n.a.	Yes
Annual and peak day capacity of, and constraints on, blend processing facilities	n.a.	Yes
Committed and proposed new or expanded blend processing facilities	n.a.	Yes

Treatment of blend processing facilities

As Table 5.1 shows, the Commission recommends that blend processing facilities be treated as separate facilities for the purposes of the GSOO. This is because the information to be reported on blend processing facilities will differ from the information to be reported on the production of covered gases that don't require blending. Blend processing facilities would not, for example, be required to provide information to AEMO on contracted production or the feedstock used in the production of the covered gas. This information would instead be collected from the producers of the gases used to create the gas blend.

AEMO and AGIG suggested it may be possible to treat blending facilities as production facilities. In the Commission's view there is value in having greater clarity about the information to be reported on blend processing facilities. The draft recommendations therefore provide for the separate treatment of blend processing facilities and production facilities.

Information on the feedstock used in the production of covered gases

In relation to AEMO's suggestion that the GSOO include information on the feedstock used in the production of covered gases, the Commission recommends allowing, but not requiring, the GSOO to include this information. This differs from the approach taken for natural gas, where information on natural gas reserves and resources must be included in the GSOO. The difference stems from the fact that while natural gas reserves and resources place a cap on the amount of natural gas that can be produced, this may not be the case for other covered gases if they are produced from renewable resources. For example, if hydrogen is produced from:

- electricity generated by a wind turbine, then there would, in principle, be no cap on what can be produced, other than the cap posed by the capacity of the hydrogen electrolyser and the availability of wind
- natural gas, then the availability of natural gas reserves and resources would cap the amount of hydrogen that could be produced.

In the first example, the inclusion of information on feedstock in the GSOO would not be very informative, but in the second example it would be. To accommodate this, the content of the GSOO provisions should be amended to say that AEMO may report information on the feedstock used by suppliers of other covered gases and the factors that may affect the availability of that feedstock, where it is appropriate to do so.

AEMO also suggested that the GSOO include information on the volatility associated with the production of other covered gases. The Commission has considered this and concluded that the existing rules, which allow AEMO to report on production forecasts, are broad enough to allow this. Accordingly, no changes to the NGR are needed to address AEMO's suggestion.

Information on connections by other covered gas suppliers

Like AEMO, the Commission considers that there would be benefits in pipeline service providers being required to provide AEMO with information on connection enquiries and applications to connect by suppliers of covered gases to assist in the development of forecasts for the GSOO and the VGPR. While introducing this requirement may impose some administrative costs on pipeline service providers, it would:

- help to overcome the information asymmetry that AEMO may otherwise face trying to obtain information on connections of new sources of supply and, in so doing, reduce the costs AEMO may otherwise incur
- reduce the reporting burden that may otherwise be imposed on the suppliers of other covered gas facility suppliers if AEMO had to survey these parties.

Based on the Commission's review of the new GSOO rules, it would appear that AEMO could require the provision of this information through its GSOO survey, once the current limitation on the scope of the GSOO survey is removed, if it can demonstrate that it is reasonably necessary for the preparation of the GSOO. No changes to the NGR are therefore expected to be required to give effect to this reporting obligation for the purposes of the GSOO.

Changes to Part 19 of the NGR would, however, be required to allow AEMO to collect the same information for the purposes of the VGPR. Rather than duplicating the reporting obligations across the GSOO and VGPR, the Commission recommends amending Parts 15D and 19 to make it clear that AEMO can use any information that it obtains through a GSOO survey for the purposes of the VGPR and vice versa. Making this change is expected to reduce the reporting and administrative burden for both market participants and AEMO. The Commission's draft recommendation therefore provides for this change.

Conclusion

To summarise, the Commission's draft recommendations for the GSOO provide for:

- the facilities and activities involved in the supply of other covered gases (other than remote BB facilities) to be treated in the same manner as those involved in the supply of natural gas (where appropriate) (see Table 5.1)
- blend processing facilities to be treated separately and required to publish the information in Table 5.1
- AEMO to be allowed, but not required, to report on the feedstock used in the production of other covered gases
- AEMO to be able to use the information it obtains for the purposes of the GSOO when preparing the VGPR and vice versa.

These draft recommendations are expected to contribute to the achievement of the NGO by allowing AEMO to properly assess the adequacy (or otherwise) of the supply side of the market to meet forecast demand over the outlook period. This will, in turn, enable market participants and policy makers to identify the longer-term development needs of the gas market and to make more informed and efficient planning, investment and policy decisions.

These benefits are expected to outweigh the costs that market participants will incur having to report the information to AEMO.

In addition, these draft recommendations are consistent with the efficiency element of the assessment framework set out in appendix C and are targeted, fit for purpose and proportionate to the issues they are intended to address. They will also provide stability and transparency of regulatory arrangements required to enable market participants to make efficient decisions.

DRAFT RECOMMENDATION 8: EXTEND THE GSOO TO OTHER COVERED GASES

Amend Part 15D of the NGR to extend its application to other covered gases by:

- specifying the gases to be covered by the GSOO (i.e. all covered gases)
- excluding remote BB facilities from the scope of the GSOO
- replacing the term 'natural gas industry' with 'covered gas industry' in the GSOO survey rules to align with the extended changes to the NGL
- amending the GSOO content rules and associated definitions to:
  - extend their application to the facilities (other than remote BB facilities) involved in the supply of covered gases so that the GSOO includes information for the following, comparable to the information included for natural gas:
    - primary gas production
    - transmission pipelines carrying an other covered gas
    - storage facilities for other covered gases
  - require the GSOO to include the following information on blend processing facilities:
    - blend production forecasts
    - annual and peak day capacity of, and constraints on, blend processing facilities
    - committed and proposed, new or expanded blend processing facilities
  - allow, but not require, the GSOO to include information on the feedstock used to create primary gases (excluding natural gas) such as biomethane suppliers of other covered gases and the factors that may affect the availability of that feedstock.

DRAFT RECOMMENDATION 9: CLARIFY THAT INFORMATION FROM THE GSOO SURVEY CAN BE USED FOR THE VGPR AND VICE VERSA

Amend Parts 15D and 19 of the NGR to allow AEMO to use information for either purpose by:

- amending the use and disclosure of GSOO survey information rule in Part 15D to allow AEMO to use any information it obtains through this survey for the purposes of the VGPR
- including a comparable use and disclosure of VGPR information rule in Part 19 to allow AEMO to use any information it obtains for the VGPR for the purposes of the GSOO.

5.3 Amendments to the VGPR

5.3.1 Current framework and issues

The objective of the VGPR is to facilitate planning and investment decisions in the DTS and to make information available to assist market participants and other persons make economically efficient investment decisions in natural gas markets.

The planning review provisions in rules 323-325 of Part 19 of the NGR set out:

- AEMO's obligation to publish the VGPR
- the information that AEMO must include in the VGPR and the matters it must take into account when preparing the VGPR
- the obligations of DWGM registered participants, as specified in Part 15A of the NGR, have to provide AEMO with the information specified in rules 324(2)-(4) and to comply with the information standard set out in rule 324(7)
- AEMO's power to exempt DWGM registered participants from some or all of the disclosure obligations.

In the consultation paper, stakeholders were asked whether Part 15A or rules 323-325 of the NGR should be amended to accommodate the supply of other gases.

5.3.2 Stakeholder responses

Stakeholders did not identify any additional information that should be included in the VGPR.

Other stakeholders suggested that amendments to Part 19 of the NGR may be required to accommodate blending facilities,[97] while others considered they could be treated as production facilities for registration purposes.[98]

AEMO noted in its submission that changes to the DWGM registered participant provisions in Part 15A of the NGR would be required if the current approach to collecting information for the purposes of the VGPR is to be maintained.[99]

97 Submissions to consultation paper: Jemena, p. 10; PIAC, p. 7.
98 Submissions to consultation paper: AGIG, p. 8; AEMO, p. 8.
99 AEMO, submission to consultation paper, pp. 8-9.

5.3.3 Commission analysis

To extend the VGPR to other covered gases, two types of changes will be required:

- the persons from whom AEMO can obtain information will need to be extended
- the information to be included in the VGPR and the participant disclosure obligations will also need to be extended.

Persons from whom AEMO can obtain information for the VGPR

The VGPR related reporting obligations in rules 323-324 of the NGR are currently tied to the registration arrangements set out in Part 15A of the NGR. While the list of registration categories will be amended through the distribution connected facilities rule change process, there may be facilities that only have to register to enable AEMO to collect information for the purposes of the VGPR.

This is an unnecessary administrative burden for both AEMO and non-market participants. Therefore, the Commission recommends supplementing the existing approach to collecting information for the VGPR by enabling AEMO to collect information from any person who has possession or control of information that it requires to prepare the VGPR. The obligation to comply with the rules, which would be set out in the NGL, would be similar to the power AEMO has in relation to the STTM (under s. 91FEA of the NGL). This would provide an enforceable framework for AEMO to collect information for the purposes of the VGPR from parties that are not market participants in the DWGM.

To provide some clarity around the type of information that could be collected using this new power, AEMO would be required by the NGR to specify the information to be provided for the purposes of the VGPR in the wholesale market procedures.

Information to be reported in the VGPR and participant disclosure obligations

The scope of the VGPR will need to be extended to allow AEMO to report, where appropriate, comparable information on the facilities and activities associated with the supply of other covered gases to that currently published on natural gas, irrespective of whether it is supplied into the DTS or a DDS. This is reflected in Table 5.2.

Table 5.2: **Consistent treatment of facilities and activities involved in the supply of different gases under the VGPR**

	NATURAL GAS	OTHER COVERED GASES
Information to be provided by producers		
Annual forecasts for next 5 years and monthly forecasts for the next year	Yes	Yes
Available and prospective gas supply and the source of supply	Yes	Yes
Gas supply projects	Yes	Yes
Forecasts of the availability of equipment, details of any constraints and maintenance	Yes	Yes
Information to be provided by pipeline service providers		
Annual forecasts for next 5 years and monthly forecasts for the next year	Yes	Yes
Pipeline capacity	Yes	Yes
Pipeline projects (including extensions and expansions)	Yes	Yes
Availability of equipment, details of any constraints and maintenance	Yes	Yes
Distributors — peak daily demand for 1 in 2 peak demand conditions	Yes	Yes
Distributors — anticipated material constraints that may affect DTS	Yes	Yes
Information to be provided by storage facility operators		
Annual forecasts for next 5 years and monthly forecasts for the next year	Yes	Yes
Storage capacity and inventory availability	Yes	Yes
Storage operating parameters	Yes	Yes
Storage projects	Yes	Yes
Forecasts of the availability of equipment, details of any constraints and maintenance	Yes	Yes
Proposed information to be provided by blend processing service providers		
Annual forecasts for next 5 years and monthly forecasts for the next year	n.a.	Yes
Blend processing capacity	n.a.	Yes
Forecasts of the availability of equipment, details of any constraints and maintenance	n.a.	Yes
Blend processing facility projects (including expansions)	n.a.	Yes

Treatment of blend processing facilities

As Table 5.2 shows, the Commission recommends that blend processing facilities be treated as separate facilities for the purposes of the VGPR. This is consistent with the approach proposed for the GSOO and Bulletin Board and recognises the potential for information on blend processing facilities to differ from the information to be reported on the production of natural gas and other covered gases that don't require blending.[100]

Conclusion

To summarise, the Commission's draft recommendations provide for:

- the AEMC to make rules that allow AEMO to collect information from persons that are not DWGM registered participants for the purposes of the VGPR and to require AEMO to set out any information it intends to collect from non-registered entities in wholesale market procedures, supported by new provisions in the NGL that require the information
- the facilities and activities involved in the supply of other covered gases to be treated in the same manner as those involved in the supply of natural gas (where appropriate) (see Table 5.2)
- blend processing facilities to be treated separately and subject to the reporting obligations set out in Table 5.2

The extension of the VGPR in this manner is expected to contribute to the achievement of the NGO by allowing AEMO to properly conduct the planning review and to assess the adequacy (or otherwise) of supply and transmission infrastructure to meet demand. This will, in turn, enable market participants and policy makers to identify the longer-term development needs of the market and to make more informed and efficient planning, investment and policy decisions across the supply chain. These benefits are expected to outweigh the costs that facilities will incur having to report the information to AEMO.

DRAFT RECOMMENDATION 10: ENABLE AEMO TO COLLECT VGPR INFORMATION FROM PARTIES NOT REGISTERED IN THE DWGM

Amend Part 19 and Part 15B of the NGR to allow AEMO to collect information for the VGPR from persons that are not DWGM registered participants and require any information that AEMO intends to collect using this new power to be set out in the wholesale market procedures.

100 Blend service facilities would not, for example, be required to provide information to AEMO on available and prospective gas supply and the source of supply (i.e. because this information would instead be collected from the producers of natural gas and constituent gases). They would, however, be required to report on the capacity of the blend service facility.

DRAFT RECOMMENDATION 11: EXTEND THE VGPR TO OTHER COVERED GASES

Amend Part 19 and 15B of the NGR to extend the VGPR to other covered gases by:

- specifying the gases to be captured by Part 19 of the NGR (i.e. natural gas, processable gas and other covered gases)
- to the extent not already achieved by the expanded definition of 'gas', amending rule 323 and associated definitions in rule 200 to:
  - extend their application to the facilities involved in the supply of other covered gases
  - require AEMO to take into account committed projects for new or additional blend processing facilities under rule 323(4)
- to the extent not already achieved by the expanded definition of 'gas', amending rule 324 or associated definitions in rule 200 to require the following to provide information to AEMO for the VGPR comparable to the information provided for natural gas or processable gas from the following::
  - producers of an other covered gas
  - pipeline service providers for a pipeline carrying an other covered gas
  - storage facility operators for other covered gases
- blend processing facility operators to provide AEMO with information on:
  - annual forecasts for the next five years and monthly forecasts for the next year
  - blend processing capacity
  - forecasts of the availability of equipment, details of any constraints and maintenance
  - blend processing facility projects (including expansions)
- amending Part 15B to allow wholesale market procedures to deal with the provision of information for planning reviews under rule 323 including the specification of the persons, or classes of persons, who may be required to provide information.

5.4 Amendments to the Bulletin Board

5.4.1 Current framework and issues

The objective of the Bulletin Board is to make information relating to the natural gas industry available to market participants and other persons to facilitate:

1. trade in natural gas and natural gas services
2. informed and efficient decisions in relation to the provision and use of natural gas and natural gas services
3. negotiations for access to BB pipelines and other BB facilities providing third party access.

The Bulletin Board provisions in the NGL and NGR are currently being amended to require a range of additional market and system-related information to be reported as part of the

transparency reform package.[101] Once these amendments are made, Part 18 of the NGR will set out, among other things:

- the obligations of production, compression, storage and pipeline operators, and large users with a nameplate rating of greater than or equal to 10 TJ/day and other parties to register as Bulletin Board reporting entities
- the information Bulletin Board reporting entities are required to provide to AEMO for publication on the Bulletin Board and their obligation to comply with the information standard in Part 18 of the NGR and AEMO's BB Procedures
- AEMO's power to exempt facilities from the requirement to register, or from the obligation to provide some or all of the information specified in Part 18 of the NGR
- AEMO's obligation to publish information on the Bulletin Board.

In the consultation paper, stakeholders were asked whether Part 18 of the NGR should be amended to accommodate the supply of other gases.

5.4.2 Stakeholder responses

Stakeholders suggested a number of changes may be required to Part 18 of the NGR to:

- accommodate blend processing facilities
- require some basic information to be reported on blending levels and the facilities involved in the production of blends that may not meet the reporting threshold.

A number of stakeholders also suggested that amendments be made to the exemption framework and other provisions.

Treatment of blend processing facilities

Similar to the GSOO and VGPR, conflicting views were expressed by stakeholders on how blend processing facilities should be treated for Bulletin Board purposes.

Jemena, for example, noted that specific rules may be required for these facilities, because in its view blending does not fall within the current definitions of BB facilities.[102] AGIG, on the other hand, thought that blending facilities could be treated as production facilities, but noted the production facility definition may need to be amended to make it clear that capacity is based on the maximum amount of hydrogen that can be blended for injection into a pipeline, rather than the electrolyser's capacity.[103]

AEMO also discussed the potential options for the treatment of blending facilities on the Bulletin Board, given the dual activities undertaken by these facilities (i.e. the withdrawal of natural gas and the injection of natural gas equivalents). The options it identified include:[104]

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101 The changes to the NGL and NGR required to give effect to this are being progressed through the transparency reform package. See https://www.legislation.sa.gov.au/__legislation/lz/b/current/national%20gas%20(south%20australia)%20(market%20transparency)%20amendment%20bill%202021/b_as%20introduced%20in%20ha/national%20transparency%20amendment%20bill%202021.un.pdf

102 Jemena, submission to consultation paper, p. 10.

103 AGIG, submission to consultation paper, p. 11.

104 AEMO, submission to consultation paper, p. 8.

- Requiring blending facilities to be registered as both a BB production facility and a BB large user facility, which would require amendments to the definition BB large user.[105]
- Creating additional reporting requirements for BB production facilities that withdraw or consume natural gas in the production of natural gas equivalents.
- Introducing a new BB reporting entity for blending facilities and drafting specific reporting requirements for these facilities.

The main problems that AEMO identified with the first of these options are that:

- the definition of 'BB large user facility' does not extend to facilities that use natural gas to create another gas (because they are not 'consuming' the gas)
- if either the injection or withdrawal activities exceeded the reporting threshold, then the facility would need to report both activities, which would also require some amendments to make this clear.

AEMO therefore suggested that one of the latter two options may be simpler to implement.

Basic information on blending and the facilities involved in the production of blends

Some stakeholders suggested that it may be appropriate to require additional information to be reported on the Bulletin Board on blending and the facilities involved in the production of NGEs or constituent gases.

AGL and Engie considered there could be value in having blending levels reported on the Bulletin Board.[106] In doing so, AGL noted that retailers will have little control over what is actually delivered to customers and need clarity on the products and composition of what is supplied.[107]

AEMO also suggested some transparency around the capacity and volume of NGEs injected into distribution pipelines by facilities that do not meet the Bulletin Board reporting threshold would be useful. It also noted that while individual facilities involved in the supply of NGEs are not expected to reach the Bulletin Board reporting threshold in the foreseeable future, there could be a significant number of small facilities that in aggregate produce a material volume of NGEs.[108] AEMO noted that this could be achieved through a lighter handed reporting obligation that would require the reporting of:

- basic standing data to be reported on the facilities involved in the supply of NGEs and constituent gases
- periodic production data.

AEMO also noted the potential for distribution pipelines to report some of this information to minimise the administrative burden for individual facilities.[109]

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105 AEMO noted that this definition would need to be amended because the use of natural gas by the facility to create the blend would not amount to 'consumption' in the definition of 'user facility'. Further, AEMO also noted that if one of these activities exceeds the reporting threshold but the other does not, it would require information for both activities.

106 Submissions to consultation paper: AGL, p. 6; Engie, p. 8.

107 AGL, submission to consultation paper, p. 6.

108 AEMO, submission to consultation paper, p. 7.

109 AEMO, submission to consultation paper, p. 7.

Changes to existing provisions

In addition to the changes outlined above, some stakeholders suggested that amendments be made to existing provisions in Part 18 of the NGR.

AGIG and Bioenergy Australia suggested that the exemption provisions be extended to provide AEMO with more discretion to grant exemptions if the information is not material having regard to the purpose of the Bulletin Board.[110]

AEMO also suggested that the nameplate rating provisions be reviewed because they are currently defined by reference to 'normal operating conditions', which may not be applicable to all the facilities involved in the supply of NGEs. One approach suggested is to clarify in the NGR that the nameplate rating is to be calculated as the maximum that can be achieved regardless of fuel composition at normal operating conditions.[111]

5.4.3 Commission analysis

Extension of the Bulletin Board to covered gases

To extend the Bulletin Board to other covered gases, a number of changes will need to be made to Part 18 of the NGR. These changes are intended to result in the facilities and activities involved in the supply of other covered gases (excluding remote BB facilities) being treated in the same manner as those involved in the supply of natural gas, where it is appropriate to do so. This is reflected in Table 5.3.

110 Submissions to consultation paper: AGIG, p. 11; Bioenergy Australia, p. 6.

111 AEMO, submission to consultation paper, p. 6.

Table 5.3: Consistent treatment of facilities and activities involved in the supply of different gases under the Bulletin Board

		NATURAL GAS	OTHER COVERED GASES
Production, transmission, compression, storage, LNG import & export facilities (nameplate ≥ 10 TJ/day)			
Nameplate rating and facility information[1]		Yes	Yes
Daily use of, or consumption by, facilities	Production facilities: Quantity of gas injected into one or more pipelines from the production facility	Yes	Yes
	Transmission pipelines: Quantity of gas injected and withdrawn from each receipt and delivery point	Yes	Yes
	Compression facilities: Quantity of gas compressed	Yes	Yes
	Storage: Quantity of gas withdrawn from storage and the quantity received and processed into storage	Yes	Yes
	Import facilities: Quantity of LNG received and processed into storage, quantity withdrawn from storage and quantity of natural gas injected into one or more pipelines	Yes	n.a.
	LNG exports: Quantity of gas delivered to the facility	Yes	n.a.
Transmission pipeline and compressors linepack capacity adequacy indicator[1]		Yes	Yes
Short term capacity outlook for facility and material intra-day changes[1]		Yes	Yes
Medium term capacity outlook for facility		Yes	Yes
Nominations and forecast use of facility[1,2]		Yes	Yes

	NATURAL GAS	OTHER COVERED GASES
36 month outlook of uncontracted firm capacity and shippers with firm capacity (pipelines, compression and storage only)	Yes	Yes
Facility development projects	Yes	Yes
Natural gas reserves and resources (reported by gas field owners)	Yes	n.a.
Allocation method at BB allocation points (reported by allocation agents)	Yes	Yes
Large user facilities (nameplate ≥ 10 TJ/day)		
Nameplate rating and facility information	Yes	Yes
Daily consumption data	Yes	Yes
Transaction reporting		
Short term gas supply and gas swap transactions	Yes	Yes
Transportation & storage capacity trades	Yes	Yes
LNG export transactions & shipments	Yes	n.a.
Proposal for blend processing facilities (nameplate ≥ 10 TJ/day)		
Nameplate rating and facility information	n.a.	Yes
Daily quantity of gas withdrawn from a pipeline and quantity injected into pipeline	n.a.	Yes
Short term capacity outlook and material intra-day changes	n.a.	Yes
Medium term capacity outlook	n.a.	Yes
Nominations and forecast use of facilities	n.a.	Yes
Facility development projects	n.a.	Yes
Outlook for uncontracted capacity and shippers with firm capacity	n.a.	Yes

Note: 1) Different information is required to be reported by different types of facilities.
2) LNG export facilities are not subject to this requirement.

Treatment of blend processing facilities

The Commission's draft recommendation is for blend processing facilities to be treated separately from gas production facilities for the purposes of the Bulletin Board as it does for the GSOO and VGPR. This is because blend processing facilities both withdraw and inject quantities of gas, so the two way operation will need to be properly reflected on the Bulletin Board.

The nameplate rating information for a blend processing facility will need to reflect the amount of gas that can be injected and withdrawn from a pipeline by the facility and the amount of gas that can be blended by the facility. Similarly, the daily use data will need to include information on the quantity of gas withdrawn from a pipeline by the facility and the quantity of gas that is injected into a pipeline.

The separate treatment of these facilities is, as highlighted by Table 5.3, is consistent with the approach taken with other facilities on the Bulletin Board.

Basic information on blending and the facilities involved in the supply of other covered gases

As noted in section 3.1.3, the Commission recommends that pipeline service providers be required to publish some basic information on the Bulletin Board to help facilitate connections by facilities injecting gas other than natural gas suppliers. This reporting obligation would apply to pipelines (including distribution systems) with a nameplate rating of 10 TJ/day (or equivalent for distribution systems) or more that allow for the transportation of a gas blend. It is recommended that the information to be reported to AEMO for publication on the Bulletin Board comprises:

- standing information on the blending cap applicable to the pipeline (or part of the pipeline)
- information on the highest, lowest and average blend level achieved on the pipeline (or part of the pipeline) in the last month
- information on the number of times any injecting facility has been curtailed in the last month to maintain blending limits and the extent of the curtailment.

Note that the latter of these reporting obligations would not apply to the DTS or to a DDS because the injection of gas in those cases is scheduled through the market and the draft DWGM rule change recommends that blending constraints will be taken into account in the scheduling process.

In addition to this information, the Commission's draft recommendation requires some basic standing information to be reported on facilities that inject directly into a distribution system on the Bulletin Board. The term 'standing information' is used in this context to refer to the following information, which would need to be reported for facilities that connect to a distribution system with a nameplate rating of 10 TJ/day (or equivalent) or more:

- the facility's nameplate rating
- the receipt and/or delivery points at which the facility is connected.

This information would need to be reported to AEMO when the facility is commissioned and updated if there are any material changes.

To minimise the reporting burden for small facilities and the administrative burden that would arise if they had to become registered for the Bulletin Board, the Commission recommends that this information be reported by the relevant distributor rather than the facility operator.

The publication of this information on the Bulletin Board is expected to yield a number of benefits. It should enable prospective suppliers of other covered gases to make more informed decisions about whether to try to connect to a particular distribution system (or part of the system) and, if so, to undertake more informed access negotiations. It should also provide greater transparency about the product that is being supplied in the distribution system (or part of the system), which could help retailers, large users, AEMO and other interested parties make more informed decisions about their use of other covered services.

While there will be some costs associated with these two sets of reporting obligations, the costs are expected to be low for the provision of standing data because there is limited information to report and it will only have to be updated if there is a change. The costs associated with pipeline reporting on actual blend levels achieved and curtailments that have occurred in the last month are also expected to be relatively low because this information only has to be reported on a monthly basis. It is expected that the pipeline service providers already have systems in place to report the information to AEMO.

Changes to existing provisions

AGIG and Bioenergy Australia suggested that the exemption provisions in Part 18 of the NGR be extended to provide AEMO with more discretion to grant exemptions if the information is not material having regard to the purpose of the Bulletin Board.[112] In this regard, it should be noted that Part 18 of the NGR currently includes the following measures to minimise the reporting burden associated with the Bulletin Board:

- The application provisions exclude remote BB facilities, which are defined as facilities that are connected to a transmission pipeline that:
  - is not an STTM facility or part of a declared transmission system
  - is not a pipeline on which natural gas sold through the gas trading exchange may be physically delivered or received or through which such natural gas may be transported
  - is not a Part 24 facility
  - is not connected directly or indirectly to a pipeline
- This carve out is intended to minimise the regulatory burden for facilities that are not connected (directly or indirectly) to a facilitated market in the east coast.
- A reporting threshold of 10 TJ/day has been adopted for facility reporting to minimise the regulatory burden for smaller facilities.

112 Submissions to consultation paper: AGIG, p. 11; Bioenergy Australia, p. 6.

The exemption framework currently allows AEMO to grant:[113]

- a full exemption from the Bulletin Board reporting obligations to lateral gathering pipelines (i.e. a pipeline operated as part of an upstream producing operation and used to transport gas for injection into another Bulletin Board facility forming part of that operation), where AEMO is satisfied the information is not material having regard to the purpose of the Bulletin Board
- an exemption from one or more of the Bulletin Board reporting obligations, where AEMO is satisfied the information will be provided to it by another person.

In the Commission's view, these existing measures in Part 18 of the NGR provide an appropriate balance between:

- ensuring that market participants have access to the market and system information they require to make informed decisions
- minimising compliance costs in those limited cases where the information is either reported by another person, or, in the case of remote facilities, lateral gathering pipelines and small facilities, is immaterial.

If this framework were to be amended in the manner suggested by AGIG and Bioenergy Australia, there is a risk that material gaps could start to emerge on the Bulletin Board. Such gaps could have a range of adverse effects on the operation of the market, trade and the efficiency with which decisions are made. The Commission therefore considers the exemption framework should be retained and does not recommend any changes to it.

The Commission has considered AEMO's suggestion on the nameplate rating provisions. However, rather than amending these provisions, the it considers that it would be preferable to allow (but not require) AEMO to provide further detail on how the nameplate rating is to be measured in the Bulletin Board Procedures. Allowing this to be specified in the procedures will provide more flexibility than could be achieved by amending the NGR.

Separately, but relatedly, the Commission has considered whether the 10 TJ/day nameplate rating reporting threshold that applies to the Bulletin Board would remain appropriate once it is extended to other covered gases. This issue has been considered in response to the speculation by some stakeholders that there could be a proliferation of small facilities that do not meet the reporting threshold, but which in aggregate could have a material effect on the market. It is difficult at this stage to know whether this scenario will eventuate. However, the Commission considers the developing market structure should be monitored. Consequently, AEMO should monitor this as part of its biennial review of the Bulletin Board and, if it finds that material gaps are emerging in the Bulletin Board, it can submit a rule change request seeking to address those gaps.

Conclusion

To summarise, the Commission's draft recommendations provide for:

113 Rule 164 of the NGR.

- the facilities and activities involved in the supply of other covered gases to be treated in the same manner as those involved in the supply of natural gas (where appropriate) (see Table 5.3)
- blend processing facilities that meet the reporting threshold to be treated separately and subject to the reporting obligations set out in Table 5.3
- the following information to be reported on the Bulletin Board by gas distribution and transmission pipelines that meet the Bulletin Board reporting threshold:
  - standing information on any blending cap that applies and the lowest, highest and average blending achieved in the last month
  - the number of times any covered gas suppliers have been curtailed in the last month
  - the nameplate rating and receipt and/or delivery points at which producers and blend processing facilities are connected
- AEMO to provide further guidance on how nameplate rating is to be measured through the Bulletin Board Procedures.

In the Commission's view, these draft recommendations are consistent with the purpose of the Bulletin Board and will contribute to the NGO, by enabling market participants to make more informed and efficient decisions.

DRAFT RECOMMENDATION 12: EXTEND THE BULLETIN BOARD TO OTHER COVERED GASES

Amend Part 18 to:

- Replace the term 'Natural Gas Services Bulletin Board' with 'Gas Bulletin Board' and align this part with the extended scope of the Gas Bulletin Board under the NGL by replacing the terms 'natural gas services', 'natural gas industry' and 'natural gas industry facilities' with 'covered gas services', 'covered gas industry' and 'covered gas industry facilities'
- Extend the application of Part 18 to other covered gases by defining 'gas' to mean any covered gas and using the term 'gas' in place of 'natural gas'. This will result in reporting of information comparable to the information reported for natural gas on:
  - primary gas production
  - transmission pipelines carrying other covered gases
  - storage facilities for any covered gas
  - stand-alone compression facilities providing compression for other covered gases
  - large facilities using other covered gas
  - transactions relating to other covered gas
- Accommodate blend processing facilities with a nameplate rating of 10 TJ/day or more by:
  - including these facilities as a new type of BB facility in rule 141 and excluding them from the definition of 'production facility' in rule 141

    - recognising blend processing facilities in the definitions of 'daily capacity', 'reporting threshold' and 'nameplate rating' in rule 141
    - amending Division 5 to set out the new reporting obligations that will apply to blend processing facilities which will include information on:
        - the nameplate rating and facility information
        - the daily quantity of gas withdrawn from a pipeline and injected into a pipeline
        - short term capacity outlook and material intra-day changes
        - medium term capacity outlook
        - nominations and forecast use of facilities
        - facility development projects
        - the outlook for uncontracted capacity and shippers with firm capacity
- Accommodate gas distribution pipelines with a nameplate rating of 10 TJ/day or more by:
    - including these pipelines as a new type of BB facility in rule 141
    - recognising distribution pipelines in the definitions of 'daily capacity', 'reporting threshold' and 'nameplate rating'
- Amending Division 5 to set out the reporting obligations that will apply to BB distribution pipelines and BB transmission pipelines that carry a gas blend, which will include reporting on:
    - any blending cap that applies to the pipeline and the lowest, highest and average blending achieved in the last month
    - the number of times any covered gas supplier has been curtailed in the last month
    - the nameplate rating and receipt and/or delivery points at which facilities that inject into the pipeline are connected

Amend Part 15B to allow AEMO to provide guidance on the determination of nameplate ratings through the BB Procedures.

5.5 Amendments to the AER's gas price reporting function

5.5.1 Current framework and issues

The objective of this new function is to provide for greater transparency on gas prices and the factors that may affect these prices and, in so doing, aid the price discovery process, facilitate the efficient trade of gas and allow market participants to respond efficiently to the signals reflected in these prices.

As part of the transparency reform package,[114] the AER will have the power to issue a price information order to collect information relating to its gas price reporting functions and Part 17 of the NGR will set out:

- the gas price information to be published by the AER, which includes information on the prices payable under gas supply and gas swap agreements, LNG netback prices, LNG export prices and LNG import prices, if any import facilities are developed
- the AER's obligation to publish information obtained through a price information order in an anonymised and aggregated form
- the requirement for the AER to publish a determination that sets out, amongst other things, the intervals at which the information will be published and, the methods and inputs to be used to calculate prices.

In the consultation paper, stakeholders were asked whether Part 17 of the NGR should be amended to accommodate the supply of other gases.

5.5.2 Stakeholder responses

Stakeholders were silent on whether any other amendments needed to be made to Part 17 of the NGR.

5.5.3 Commission analysis

To extend this new transparency mechanism to other covered gases, some small changes will need to be made to Part 17 of the NGR. These changes are intended to result in other covered gases being treated in the same manner as natural gas, as highlighted in Table 5.4.

Table 5.4: Consistent treatment of facilities and activities involved in the supply of different gases under the AER's price reporting function

	NATURAL GAS	OTHER COVERED GASES
Prices under gas supply agreements	Yes	Yes
Prices under gas swap agreements	Yes	Yes
Non-price information	Yes	Yes

These recommended changes will impose some reporting costs on market participants and the AER. However, it is important to recognise that in the absence of this transparency mechanism, the markets for the supply of other covered gases are likely to be quite opaque, which could have a detrimental effect on both:

114 The changes to the NGL and NGR required to give effect to this are being progressed through the transparency reform package. See https://www.legislation.sa.gov.au/__legislation/lz/b/current/national%20gas%20(south%20australia)%20(market%20transparency)%20amendment%20bill%202021/b_as%20introduced%20in%20ha/national%20transparency%20amendment%20bill%202021.un.pdf

- the efficient operation of the markets
- the efficiency with which these gases are allocated.

This is because an opaque market can hinder the price discovery process, impede competition and the efficient trade of gas and limit the ability of market participants to respond in a timely and efficient manner to the demand, supply and investment signals reflected in prices.

Reducing the opaqueness of these markets is therefore expected to contribute to the achievement of the NGO.

The Commission's draft recommendations therefore provide for Part 17 to be extended to other covered gases. This draft recommendation is consistent with the efficiency element of the assessment framework set out in appendix C and is targeted, fit for purpose and proportionate to the issues it is intended to address, and will provide stability and transparency of regulatory arrangements required to enable market participants to make efficient decisions.

> DRAFT RECOMMENDATION 13: EXTEND THE AER'S GAS PRICE REPORTING FUNCTION TO OTHER COVERED GASES
>
> Amend Part 17 of the NGR to enable the AER to publish information on the prices and non-price terms and conditions for other covered gases under gas supply agreements and gas swap agreements.

5.6 Amendments to the non-pipeline infrastructure access reporting obligations

5.6.1 Current framework and issues

The objective of these new provisions is to facilitate access to compression and storage facilities through the publication of information on standing prices and terms and the prices paid by users of these facilities.

As part of the pipeline reform package,[115] a new Part 18A Compression and storage terms and prices will set out:

- the obligation that the service providers of stand-alone compression and storage facilities (referred to as 'Part 18A facilities') will have to publish information on:
  - the standing terms for each service offered by the facility (i.e. the standard terms and conditions, the standing price and other prices and charges applicable to the service)
  - the methodology and inputs used to calculate the standing price
  - the prices actually payable by facility users and key non-price terms and conditions

115 The changes to the NGL and NGR required to implement these reporting obligations are being progressed as part of the gas pipeline reform legal package. See https://energyministers.gov.au/publications/energy-senior-officials-release-gas-pipeline-draft-legal-package-consultation

- the publication requirements, information standard and price reporting guidelines that service providers must comply with
- the AER's power to exempt service providers from the obligation to publish this information if they are not providing third party access.

In the consultation paper, stakeholders were asked whether Part 18A of the NGR should be amended to accommodate the supply of other gases.

5.6.2 Stakeholder responses

Stakeholders were silent on whether any other changes needed to be made to Part 18A of the NGR.

5.6.3 Commission analysis

To extend this transparency mechanism to other covered gases some small changes will need to be made to the new Part 18A of the NGR. These changes are intended to result in stand-alone compression facilities and storage facilities involved in the supply or storage of other covered gases being treated in the same manner as their natural gas counterparts. That is, if they are providing third party access and meet the other requirements in Part 18A of the NGR they will need to report the information in Table 5.4 on their website.

Table 5.5: Consistent treatment of facilities and activities involved in the supply of different gases under Part 18A of the NGR

	NATURAL GAS	OTHER COVERED GASES
Standing terms and prices for each service	Yes	Yes
Methodology used to calculate standing prices	Yes	Yes
Actual prices paid and key non-price terms	Yes	Yes

While the recommended extension of Part 18A will impose some reporting costs on the service providers of these facilities, the benefits associated with these reporting obligations are expected to exceed these costs. The main benefit of these reporting obligations is that it should facilitate more efficient third party access to these facilities by:

- reducing search and transaction costs
- enabling prospective users to make more informed decision about whether to seek access
- reducing the information asymmetries users can face when negotiating access to these facilities.

The extension of Part 18A in this manner is therefore expected to contribute to the achievement of the NGO.

In addition to this change, officials are proposing to amend the NGL to subject blend processing facilities to equivalent reporting obligations to those set out in Part 18A of the NGR. Similar to storage and stand-alone compression facilities, the publication of this information is expected to contribute to the achievement of the NGO by facilitating more efficient third party access to blend processing facilities.

The Commission's draft recommendations therefore provide for Part 18A of the NGR to be extended to blend processing facilities as well as to the storage and stand-alone compression facilities involved in the supply of other covered gases. If implemented, these draft recommendations are, as noted above, expected to contribute to the NGO. They are consistent with the efficiency element of the assessment framework set out in appendix C and is targeted, fit for purpose and proportionate to the issues it is intended to address, and will provide stability and transparency of regulatory arrangements required to enable market participants to make efficient decisions.

DRAFT RECOMMENDATION 14: EXTEND THE NON-PIPELINE INFRASTRUCTURE ACCESS REPORTING OBLIGATIONS TO OTHER COVERED GASES

Amend Part 18A of the NGR to extend its application to other covered gases by:

- requiring storage and compression facilities involved in the supply of other covered gases to report the same information as their natural gas counterparts
- requiring facility operators to identify the type of gas the facility is used to supply
- making drafting changes to update 'natural gas industry facility' and 'natural gas service' with 'facility' or 'covered gas industry facility' and 'covered gas services' where applicable.

DRAFT RECOMMENDATION 15: EXTEND THE NON-PIPELINE INFRASTRUCTURE ACCESS REPORTING OBLIGATIONS TO BLEND PROCESSING FACILITIES

Amend Part 18A to extend its application to blend processing facilities by:

- changing the name of Part 18A to 'Non-pipeline infrastructure access terms and prices' to reflect its broader application
- amending the definition of a Part 18A facility to include a blend processing facility
- amend the definition of user to include a person who is a party to a contract with a service provider for the provision of a blend processing service
- amending the actual prices payable information rule to:
  - recognise blend processing services as an example of the type of service a facility may provide
  - recognise the manner in which contracted quantities will be measured for blend processing facilities (i.e. as injection and withdrawal capacities, expressed as a maximum daily quantity)

6 SHORT TERM TRADING MARKET

BOX 4: SUMMARY OF CHAPTER

This chapter covers the short term trading market (STTM), a facilitated market for wholesale gas trading with hubs in Adelaide, Brisbane and Sydney. The chapter examines key issues regarding the integration of covered gases into the STTM, including:

- registration and facility categories
- settlement and reporting obligations for distribution-connected facilities
- the establishment of custody transfer points
- the matched allocation mechanism at the Sydney hub
- gas quality specification and responsibility for gas quality.

The STTM market design already provides for distribution-connected gas injection facilities. Consequently, the draft recommendations set out in this chapter build on these existing arrangements, but aim to adapt and streamline these to cater for the larger number of smaller facilities that may arise from the injection of other covered gases into the relevant STTM distribution system.

In making these draft recommendations, the Commission has sought to ensure that they are fit-for-purpose, promote efficiency and transparency, do not add complexity to current arrangements, and minimise implementation costs.

The key draft recommendations made in this chapter are to:

- clarify that the STTM Shipper registration category extends to injections from blend processing facilities
- introduce a single facility category ('STTM injection facility') to cover all injections from distribution-connected facilities, which will replace the existing STTM production facility and STTM storage facility categories
- modify the obligation for facility operators to provide expected capacity information
- allow for facility aggregation by STTM injection facilities and for the submission of offers by STTM Shippers and settlement on an aggregated facility basis
- streamline the process for establishing new custody transfer points (CTPs)
- make no changes to the matched allocated arrangement in Sydney
- allow distributors to agree an alternative gas quality specification at a CTP.

The national gas regulatory framework provides for facilitated markets for wholesale gas and gas transportation capacity trading in eastern Australia. These facilitated markets complement the trading of wholesale gas and gas transportation capacity through bilateral contracts, providing greater transparency and improved price discovery.

This chapter focuses on the STTM, which uses participant offers and bids to schedule deliveries from gas pipelines and other facilities at three distinct hubs in Adelaide, Brisbane and Sydney for the next gas day. The STTM is a facilitated market operated by AEMO and participation in it is mandatory. The objectives of the STTM are to:

- provide participants with a transparent and efficient market-based mechanism to trade imbalances, purchase gas on a short-term basis and efficiently allocate gas during system constraints and emergencies
- provide the market with clearer signals about the nature and cost of supply and transmission constraints.

For more information on the background of the STTM and how it relates to this review please see the consultation paper, Chapter 5 'Facilitated gas markets'.[116]

This chapter sets out key issues, stakeholder feedback and draft recommendations in relation to:

- registration and facility categories
- settlement and reporting obligations for distribution-connected facilities
- the establishment of custody transfer points
- the matched allocation mechanism at the Sydney hub
- gas quality specification and responsibility for gas quality.

In addition to the changes identified in this chapter, consequential changes to the NGR are set out in appendix E. Relevantly to the STTM, this includes all instances of the term 'natural gas' in Parts 15A and 20 being replaced with 'gas'. 'Gas' will be defined in Part 20 as 'covered gas'. The NGL will be amended to introduce the term 'covered gas' which will encompass natural gas, hydrogen, biomethane, synthetic methane, etc, and any blends of these gases.

The purpose of this consequential change to the NGR is to enable the STTM to accommodate injections and withdrawals of these "new" gases (even if only natural gas or NGEs are supplied to customers). This consequential change does not cause any issues in terms of settlement within the STTM. This is because natural gas is currently settled on an energy content basis, so it is irrelevant (for settlement purposes) what type of gas is traded through the STTM so long as energy content can be measured.

6.1 Registration and facility categories

6.1.1 Current framework and issues

In the STTM, gas is traded at 'custody transfer points' (CTPs) between 'STTM Shippers' and 'STTM Users' (collectively, 'Trading Participants').

A CTP is a point at which gas passes from an 'STTM facility' to an STTM distribution system or transmission connected end-user. An STTM facility can fall into one of three facility categories:

116 AEMC, *Review into extending the regulatory frameworks to hydrogen and renewable gases*, consultation paper, 21 October 2021, p. 27.

- an STTM pipeline, that is a transmission pipeline, which delivers gas to or receives gas from an STTM distribution system (or delivers gas to a transmission-connected user)
- an STTM production facility, which is a facility at which gas is produced for injection directly from that facility into an STTM distribution system at a CTP included in the hub
- an STTM storage facility, which is a facility (other than a pipeline) for storing gas for injection directly from that facility into an STTM distribution system at a CTP included in the hub.

STTM Shippers are generally parties supplying gas to the market from STTM facilities (i.e. an STTM pipeline, STTM production facility or STTM storage facility), although they may also bid to withdraw gas from the hub by means of an STTM pipeline.

The definition of 'STTM Shipper' in rule 135ABA in the NGR includes:

> A person that:
>
> > (ii) is a party to a contract with a storage provider or a producer for the delivery of natural gas to an STTM hub from a storage or production facility that is directly connected to that STTM hub;
> >
> > ...
> >
> > (iv) is a producer or storage provider who supplies natural gas on its own behalf to an STTM hub from its production or storage facility that is directly connected to that STTM hub.

STTM Users are retailers or self-contracting users that have a contract to use a distribution system, or to withdraw gas for consumption from a transmission pipeline, connected at an STTM hub. It is noteworthy that a party withdrawing gas into a storage facility directly connected to a hub would need to be registered as an STTM User for this activity.

Persons who supply and withdraw gas at an STTM hub must register with AEMO as STTM Shippers or STTM Users under rule 135ABA of the NGR and s. 91BRC of the NGL. STTM Shippers are typically parties who ship gas to the STTM hubs by means of a transmission pipeline. STTM Users are typically retailers, but also include some large end use customers.

In contrast, consistent with s. 91FEA of the NGL, obligations are placed on STTM facility operators directly through various rules in Part 20 of the NGR. That is to say that there is no registration process for facility operators. Facility operators include parties such as APA, Jemena and Epic, who operate transmission pipelines. For distribution connected facilities, in particular, it is possible for the same party to be both the STTM facility operator and STTM Shipper.

The consultation paper asked stakeholders whether new registration categories are required to accommodate facilities and participants involved in the creation of NGEs, including through injection of blends into the distribution system.

However, through submissions to the consultation paper and subsequent discussions with stakeholders it became clear that the more pertinent issue related to facility categories. Even once the definition of natural gas has been changed, facilities injecting gases that are not

produced onsite and facilities injecting gas blends, for example, are unlikely to fall within either of the existing distribution-connected STTM facility categories (STTM production facility and STTM storage facility) because production, processing and blend processing are distinct activities.

Stakeholder submissions are summarised in the following section. Section 6.1.3 then presents the Commission's analysis of the issues associated with registration categories and facility categories, highlighting the distinction between the two.

6.1.2 Stakeholder responses

Most stakeholders agreed that NGEs should be traded within the STTM, as opposed, for example, to implementing separate arrangements governing the introduction of NGEs into distribution systems covered by STTM hubs. However, there was some divergence in submissions with regard to whether new registration categories should be established to capture facilities involved in the creation of NGEs.

Some stakeholders considered existing registration categories to be fit-for-purpose, with Alinta Energy stating that using existing registration categories would limit complexity at the early stage of development of distribution-connected facilities.[117] AGIG and Bioenergy Australia suggested that, where appropriate, existing definitions and categories could be expanded to accommodate facilities involved in the creation of NGEs.[118]

In contrast, some other stakeholders suggested that new registration categories may be required. Origin proposed that new registration categories should be implemented if distribution-connected facilities injecting NGEs have different characteristics to natural gas production facilities.[119] This would also allow any requirements specific to these facilities to be transparently applied.

In the views of Jemena and APGA, small facilities (including those injecting renewable gas blends and constituent gases) should be exempted from participation in the STTM.[120] They further suggested that it could be worthwhile introducing a small producer registration category with less onerous obligations. For Jemena: [121]

> This would recognise the small impact these facilities are likely to have in the near future, while avoiding unnecessary cost which could deter new entrants from establishing production facilities in the STTM.

EDL submitted that registration obligations (and associated regulatory and cost burdens) for small biomethane production facilities, for example, should be commensurate with their size.[122]

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117 Alinta Energy, submission to consultation paper, p. 7.
118 Submissions to consultation paper: AGIG, p. 10; Bioenergy Australia, p. 8.
119 Origin, submission to consultation paper, p. 4.
120 Jemena, submission to consultation paper, p. 12; APGA, submission to consultation paper, p. 10.
121 Jemena, submission to consultation paper, p. 12.
122 EDL, submission to consultation paper, p. 2.

6.1.3 Commission analysis

Registration categories

In general, under the existing registration categories for the STTM, injections are attributed to STTM Shippers and withdrawals to STTM Users.[123]

The Commission does not agree with the suggestion made by some stakeholders that flows from small distribution-connected facilities should be excluded from participation in the STTM. All gas flows, regardless of their size, should be settled through the market for transparency purposes and to facilitate dispatch of the least-cost mix of gas supply (i.e. productive efficiency).

A specific issue arises with regard to blend processing facilities, which may need to withdraw gas from the distribution system before re-injecting a gas blend. This situation mirrors that of storage facilities under the current arrangements, where gas is both withdrawn and injected at the same physical facility. Under the existing market arrangements, the withdrawal of gas requires registration as an STTM User and injection requires registration as an STTM Shipper.

The same approach could be taken for blend processing facilities as is currently taken for storage — that is, a market participant associated with new blend processing facilities could withdraw natural gas as an STTM User and then inject blended gas back into distribution systems as an STTM Shipper.

It is not clear that there would be sufficient difference in the operation of distribution-connected blend processing facilities as compared to storage facilities to warrant the introduction of a new registration category. The Commission does not consider that maintaining this existing 'dual registration' approach will be overly burdensome for these facilities.

The Commission therefore considers that no new registration categories are required to facilitate the trading of other covered gases in the STTM, including flows from blend processing facilities and facilities directly injecting covered gases other than natural gas. Using the existing registration categories will avoid adding complexity to the current registration framework. It will also avoid possible implementation costs associated with changes to AEMO's systems that may be required if new registration categories were introduced, and ensure that transparency is maintained over all gas flows (even from small facilities).

However, changes will be needed to the 'STTM Shipper' registration category in rule 135ABA of the NGR to clarify that it extends to injections from blend processing facilities, in the same way it extends to injections from gas storage and production facilities. This is because, as outlined in section 5.1.1, 'STTM Shipper' is relevantly defined under rule 135ABA as a "party to a contract with a storage provider or a producer for the delivery of natural gas …" or a "producer or storage provider who supplies natural gas …". Since the NGL will introduce the concept of 'blending processing facility', and to reflect the distinction between this activity

123 See Part 15A of the NGR. Note that STTM Shippers may withdraw gas by means of STTM pipelines.

and storage and production, the Commission recommends amending the definition of STTM Shipper to also cover blend processing facilities.

DRAFT RECOMMENDATION 16: EXTEND THE STTM SHIPPER REGISTRATION CATEGORY TO INJECTIONS FROM BLEND PROCESSING FACILITIES

Amend the NGR to extend the definition of STTM Shipper in rule 135ABA to include a person that:

- is a party to a contract with a blend processing facility operator for the delivery of gas to an STTM hub from a blend processing facility that is directly connected to that STTM hub (rule 135ABA(1)(a)(ii)), or
- is a blend processing facility operator who supplies gas on its own behalf to an STTM hub from its blend processing facility that is directly connected to that STTM hub (rule 135ABA(1)(a)(iv)).

Facility categories

Distribution-connected facilities are already provided for in the STTM in the form of STTM production facilities and STTM storage facilities. These facility categories are defined in Part 20 of the NGR, and there is currently one example of each of these types of facilities: the Camden production facility and the Newcastle storage facility, both of which are operated by AGL and are part of the Sydney hub.

However, it is unclear whether some or all distribution-connected facilities that will be associated with the production or injection of other covered gases would fall within the existing categories of STTM production facility and STTM storage facility. To address this uncertainty, the Commission recommends creating a single facility category ('STTM injection facility') to replace all current distribution-connected facility types and to also capture new facility types that will inject other covered gases.

The rationale for this recommendation firstly stems from the view that blend processing is distinct from the activity of production. Secondly, even if these are not distinct activities (for example if production and blending occur at the same site as part of one integrated process) the current definition of STTM production facility may still not be met since it requires that the "gas is produced for injection directly into an STTM distribution system" and the blending process may mean that requirement is not met. While the relevant definition contemplates that the gas could be transported by means of an 'associated pipeline', it does not cover other eventualities associated with a constituent gas being produced off-site, for instance road transportation.

As a result, there is a need to either expand the scope of existing STTM facility definitions or to introduce one or more new facility categories. Under the Commission's preferred approach, a single new facility category (an STTM injection facility) would cover all injections from facilities (other than pipelines) made directly from that facility into an STTM distribution system at a CTP included in the hub.

This approach would be technology neutral, providing clarity that all injections from distribution-connected facilities were covered, irrespective of the technical characteristics of any given facility.[124]

The Commission further considers that introducing a new facility category to capture all types of distribution-connected facilities injecting gas in an STTM hub would be consistent with the NGO in that it would:

- ensure that transparency of gas flows from all facilities is maintained
- avoid adding complexity through the creation of additional facility categories
- simplify existing arrangements, as there is no difference in the obligations that apply to STTM production facilities and STTM storage facilities in Part 20 of the NGR.

While the Commission is generally cautious is making changes to existing obligations in the rules, it notes that, in this case, the existing STTM production facility and STTM storage facility terms are used relatively few times in the NGR and apply to only two existing facilities. AEMC staff have discussed this potential change with both AGL (as the operator of the facilities in question) and AEMO, and the Commission understands that system changes are unlikely to be required if the draft recommendation was implemented.

The Commission recognises stakeholder concerns regarding obligations associated with participation in the STTM as potentially overly onerous for small facilities injecting other covered gases. The Commission considers that these concerns are addressed by Draft recommendation 18 and Draft recommendation 19.

DRAFT RECOMMENDATION 17: CREATE A SINGLE INJECTION FACILITY CATEGORY

Amend the NGR to:

- introduce the definition of 'STTM injection facility' as a facility at which gas is injected directly from that facility into an STTM distribution system at a custody transfer point included in a hub, and includes an associated pipeline connecting that facility directly to the hub
- remove the definitions of 'STTM production facility' and 'STTM storage facility'
- replace all instances of 'STTM production facility' and 'STTM storage facility' with 'STTM injection facility'.

124 As previously mentioned, withdrawals of gas at storage and blending facilities would not be covered, being dealt with through the regulated retail market instead.

6.2 Settlement and reporting obligations for distribution connected facilities

6.2.1 Current framework and issues

Under Part 20 of the NGR, both trading participants and facility operators are subject to a number of obligations governing the operation and settlement of the market.

Trading participants are subject to a wide range of obligations, including:

- an STTM Shipper is required to submit an ex ante offer for a quantity of gas it intends to supply to a hub on a gas day[125]
- an STTM User is required to submit an ex ante or price taker bid (if applicable) for a quantity of gas it intends to withdraw.[126]

These offers and bids must comply with the requirements set out in the STTM Procedures. Under rule 464(3) of the NGR, trading participants must pay settlement amounts to AEMO. Settlement amounts include a range of charges, including ex ante market charges and variation charges.[127]

STTM facility operators are equally subject to range of obligations, many of which relate to the provision of information. These include that STTM facility operators must:

- ensure that quantities of gas are measured over a period corresponding to the gas day (rule 360A)
- provide certain information to AEMO when gas is first delivered (e.g. default and maximum capacity), and update AEMO of any changes to this information (rules 376, 378)
- notify AEMO of expected capacity for gas days D+1, D+2 and D+3 (rule 414)
- attend a contingency gas assessment conference if required by AEMO (rule 442).

The consultation paper asked stakeholders a range of questions related to settlement and operational issues, in particular regarding the treatment of facilities that will inject NGEs into the distribution system, given their likely small size. Stakeholder responses focused mainly on the information that would need to be provided to AEMO by such facility operators and whether these requirements would be overly onerous.

6.2.2 Stakeholder responses

Some stakeholders said it may be beneficial if smaller facilities were subject to less stringent reporting requirements.[128] ENA and Jemena suggested using the Gas Bulletin Board reporting threshold (10 TJ/day) as a materiality threshold.[129] AusNet considered that applying existing

125 Rule 406(1) of the NGR. Under rule 406(2), an STTM Shipper is required to submit an ex ante bid for a quantity of gas it intends to withdraw — which it may do by means of an STTM pipeline only.

126 Rule 406(3) of the NGR.

127 Rule 461(2) of the NGR.

128 Submissions to consultation paper: APGA, p. 11; EDL, p. 2; Jemena, p. 12; Bioenergy Australia, p. 8.

129 Submissions to consultation paper: ENA, p. 4; Jemena, p. 12.

reporting requirements to low volume facilities may not be efficient, and that the associated benefits of these requirements must be balanced with the costs.[130]

Some stakeholders suggested that aggregation of facilities might have a role to play in mitigating the impact of reporting requirements on smaller facilities injecting NGEs, and may additionally have benefits for trading participants. For example, according to Jemena, aggregated registration and reporting should be permitted for multiple small facilities under common ownership.[131] Origin echoed this view, stating that the Commission should consider aggregation for registration and participation in the STTM:[132]

> This could be worthwhile where each single facility is too small to participate in bidding, or if scheduling requirements are too onerous for individual facilities to do so.

6.2.3 Commission analysis

Facility operator obligations

Although some stakeholders referred to reporting requirements on facility operators as having the potential to be overly onerous for small facilities to comply with, the only specific obligation that was explicitly identified was the obligation under rule 414 of the NGR to report capacity information for the next three gas days on a daily basis.

The Commission notes that biogas facilities, for example, may be unable to predict and report easily on future short-term capacity on a daily basis, particularly at the beginning of production. More generally, it may be burdensome and relatively costly for small facilities to report on expected capacity with such frequency and the benefits of this information may not be significant given the low market impact of small variations in their capacity forecasts.

However, caution must be applied when relaxing obligations of this nature, since the impact of minor inaccuracies for each facility could still be significant in aggregate across many facilities.

The Commission therefore recommends amending the current obligations under rule 414 of the NGR in two ways:

- Firstly, a facility operator would only be required to provide updated capacity information if it expects there to be a difference in capacity compared to the 'substitute information' that is used by AEMO in the event of any failure to report. Under the STTM Procedures, this is the capacity value last reported on previous gas days (D-2 and D-3), or the facility's default capacity provided under rule 376 of the NGR if there is no recent capacity data.[133]
- Secondly, any difference in capacity would be subject to a materiality threshold. Any change below this materiality threshold would mean that capacity information would not need to be updated (and AEMO would therefore use the substitute information).

130 AusNet, submission to consultation paper, p. 4.
131 Jemena, submission to consultation paper, p. 12.
132 Origin, submission to consultation paper, p. 4.
133 See clause 7.1.3C of the STTM Procedures.

Defining a materiality threshold for this purpose is not straightforward. It needs to balance the value to the market of accurate and timely information against the reporting burden for the facility operator. At the same time, any specific value will suffer from a degree of arbitrariness.

The Commission recommends that a 'material difference' should be defined as any value exceeding the greater of 600 GJ and five per cent of the facility's nameplate capacity. These values (600 GJ and five per cent) are already used in rule 463 of the NGR to determine the minimum variation levels which attract non-zero variation charges, and the Commission considers this to be a reasonable indicator of market impact.

This definition would be subject to an additional bound (to cap the level of materiality that would be allowed), as the impacts of even five per cent of the capacity of a very large facility could be significant. The Commission recommends that this additional bound for what would be considered a material change should be 10 TJ, which corresponds to the Bulletin Board reporting threshold.[134]

Among other things, this recommended approach would mean that a facility with a nameplate capacity of less than 600 GJ/day would never be required to report updated capacity information. The threshold would increase above 600 GJ for facilities with a nameplate rating of 12 TJ/day and greater (and would be 10 TJ for facilities with a nameplate rating of 200 TJ/day and greater).

The Commission considers that this approach would, if implemented, be consistent with achieving the NGO as it would reduce the reporting burden for injection facilities, including those injecting other covered gases, which would initially be expected to be relatively small facilities. This should make it easier for these facilities to participate in the STTM and reduce barriers to entry (promoting dynamic efficiency). At the same time, the potential impact on the productive efficiency of the market is minimal since the market impact of small variations in capacity forecasts would be low.

Finally, the Commission understands that there are likely to be minimal (if any) implementation costs for AEMO. This is because its systems already automatically assume future short-term capacities for facilities to be the substitute information outlined in the STTM Procedures if no new information is provided. That is, reported values on previous gas days (D-2 and D-3), or the facility's default capacity provided under rule 376 if no recent capacity data is available.[135]

134 'Material difference' would therefore be defined in Part 20 as a change that exceeds the greater of A and B, where A is 600 GJ and B is the lesser of five per cent of the nameplate rating of the STTM facility and 10 TJ. This is consistent with the structure adopted in the revised materiality threshold agreed by Energy Ministers' to be used for the reporting of intra-day changes on the Bulletin Board. Energy Ministers, *Measures to Improve Transparency in the Gas Market*, Regulation Impact Statement for Decision, March 2020, p. 120.

135 See clause 7.1.3C of STTM Procedures.

DRAFT RECOMMENDATION 18: MODIFY THE OBLIGATION FOR FACILITY OPERATORS TO PROVIDE EXPECTED CAPACITY INFORMATION

Amend the NGR in order to modify rule 414 by:

- specifying that a facility operator is not required to notify AEMO of expected capacity in respect of the following three gas days if there is no 'material difference' between the quantity of gas which the facility operator expects that the facility will be able to deliver to the relevant hub and the substitute information that would be generated, in accordance with the STTM Procedures, by AEMO in the event that the facility operator does not provide this data.
- defining 'material difference' as the magnitude of difference exceeding the greater of A and B, where:
  a. A is 600 GJ; and
  b. B is the lesser of 5% of the nameplate rating of the STTM facility (determined in accordance with Part 18) and 10 TJ.

Facility aggregation

The possibility of aggregating facilities was raised by a number of stakeholders in submissions to the consultation paper and was also discussed by AEMO in its consultation paper on the Procedures.[136]

The Commission considers this approach may have benefits. Firstly, under current arrangements, individual offers would have to be submitted for each facility, so STTM Shippers may need to submit offers for several facilities injecting other covered gases, each of very small quantities. Allowing for offers to be submitted on an aggregated basis would therefore have benefits in terms of administrative simplicity and lower transaction costs.

Secondly, allowing for facilities to be settled on an aggregated basis would enable deviations to be netted automatically within a group of facilities, reducing the need for the shipper to submit market schedule variations to AEMO.

Finally, aggregation may also have some benefits for facility operators. Only having to report a single set of data for an aggregated 'notional facility' as opposed to multiple sets of data for numerous physical facilities may help reduce reporting burdens.

The Commission therefore recommends allowing facility operators to elect to aggregate some, or all, of the STTM injection facilities they operate in an STTM hub. In addition, all the physical facilities being aggregated would need to have the same facility operator and allocation agent. AEMO would then treat the aggregated notional facility as though it were an individual facility for the purposes of Part 20 of the NGR.

136 AEMO, *Extending the national gas regulatory framework to hydrogen blends & renewable gases*, AEMO consultation paper on the Procedures, October 2021, p. 22.

There would be no upper or lower size thresholds to the STTM injection facilities being aggregated, and all information reported would be aggregated by the relevant facility operator prior to submission to AEMO. As far as the Commission is aware, AEMO does not require the individual capacity and location of facilities to perform its role in the STTM. The resultant aggregated notional facilities would then be used by shippers when making offers and when being settled by AEMO.

It would not be possible to apply capacity charges and capacity payments at aggregated facilities. However, these charges are normally only relevant to transmission pipelines. Consequently, the capacity of aggregated STTM injection facilities would not be taken into account for the purpose of determining capacity charges or capacity payments.

Overall, this recommendation, if implemented, is expected to offer benefits to shippers and facility operators, while ensuring that AEMO still has sufficient visibility of gas flows. Since the aggregation of facility data would be done outside of AEMO's market systems, little or no changes would be required to AEMO's systems. The Commission considers that this draft recommendation would promote the NGO by enhancing productive efficiency, as well as minimising barriers to entry thereby promoting dynamic efficiency over the longer term.

DRAFT RECOMMENDATION 19: ALLOW FOR FACILITY AGGREGATION AND SUBMISSION OF OFFERS BY AGGREGATED FACILITY

Amend the NGR to:

- introduce a new rule that:
  - allows a facility operator to apply to AEMO to aggregate any of its STTM injection facilities
  - requires AEMO to approve applications for aggregation if the applicant is the facility operator for all relevant STTM injection facilities, these have a common allocation agent, and any requirements for aggregation in the STTM Procedures have been fulfilled
  - requires AEMO to evaluate applications for aggregation and reply within 20 business days of receipt of the application
  - allows the facility operator to end the aggregation.
- introduce a new rule that:
  - specifies that for the purposes of Part 20, a reference to an STTM injection facility is taken to be a reference to two or more aggregated STTM injection facilities
  - the capacity of an STTM injection facility aggregated is not to be taken into account for the purpose of determining capacity charges or capacity payments.
- amend rule 377(3) to require AEMO to identify which facilities have been aggregated in the list of STTM facilities and STTM distribution systems it maintains.

6.3 Establishment of custody transfer points

6.3.1 Current framework and issues

As noted in section 6.1.1, in the STTM, gas is traded at CTPs. This means that for a distribution-connected facility to participate in the STTM, a CTP must be established at the point where the facility is connected to the distribution system. CTPs are specified in section 2 of the STTM Procedures, as provided for by rule 135EA(4)(a) of the NGR.

If a new CTP is commissioned (or an old CTP is decommissioned), AEMO must follow the consultation process to amend the STTM Procedures as set out in NGR Part 15B. The ordinary consultation process involves (rule 135EE of the NGR):

- AEMO completing an impact and implementation report.
- AEMO publishing a notice (within 10 days of completing the report) outlining the proposed changes and the impact and implementation report, and inviting registered participants and other interested persons to submit written comments on the proposed changes before at least 20 business days after the date of the notice.
- AEMO then publishing a decision within 20 business days after the closing date for submissions that summarises any comments received and sets out the proposed changes if they have been revised.
- At least 15 business days before the day on which the new procedures are to take effect, AEMO giving notice to participants of, and publishing, the new procedures.

Amending the STTM Procedures through this ordinary consultation process typically takes three months to complete. There is an expedited consultation process (outlined in rule 135EF of the NGR), which is similar to the ordinary consultation process, but which allows AEMO to fix a date for the changes to take effect, and interested parties have a minimum of 15 business days to comment on the proposed changes (as opposed to 20 days).

With the emergence of distribution-connected injection facilities for NGEs, significantly more CTPs may be required. This issue was highlighted in AEMO's consultation paper on the procedures, in which AEMO noted that:[137]

> while the procedure change process is relatively straightforward, given NGE facilities are expected to be (relatively) small and there could be numerous facilities connecting to an STTM hub over a short period of time it could be onerous to require multiple consultations to update the STTM Procedures.

AEMO suggested the possibility that a more streamlined approach might be developed, for example where CTPs are specified in an instrument outside of the STTM Procedures, with this document (rather than the entire STTM Procedures) being updated to reflect any change to connections through a more direct consultation process.

137 AEMO, *Extending the national gas regulatory framework to hydrogen blends & renewable gases*, AEMO consultation paper on the Procedures, October 2021, p. 20.

6.3.2 Stakeholder responses

This issue was not raised in submissions to the consultation paper, but has been discussed by AEMC staff with AEMO and Jemena. In AEMO's view, the establishment of a new CTP typically does not raise controversial issues, and AEMO notes that the STTM distribution systems specified in rules 371, 372 and 372A of the NGR, in general, prevent the establishment of CTPs outside of the STTM hubs.

Jemena, AGIG, ENA and Bioenergy Australia all expressed general support for a more streamlined approach in their submissions to AEMO's consultation paper on the procedures.[138] AGIG supported AEMO's suggestion that CTPs should sit in an instrument outside of the STTM Procedures which can be more readily updated than the STTM Procedures.[139] While Jemena suggested that, STTM hub definitions should sit in a separate document which only requires agreement from the relevant network operator, with a 30 business day notice period of an update being appropriate.[140]

6.3.3 Commission analysis

There have been two consultation processes conducted by AEMO in relation to CTP definitions (for which the notice of the decision can be publicly accessed).[141] Both of these related to the Newcastle Gas Storage Facility. Jemena, as the relevant distributor, made a brief submission to one of these two consultations; no other submissions were received. Considering the nature of the issue, the Commission considers it unlikely that any party other than the distributor in question would provide the type of technical feedback that would be relevant.

In addition, the current process risks being unduly onerous, or even unworkable, if AEMO is required to undertake multiple consultations over a short period. This suggests that a more streamlined process for the commissioning (and decommissioning) of CTPs would be beneficial.

However, relying on the expedited process for amending the STTM Procedures under rule 135EF of the NGR would not address these concerns, since an impact and implementation report would still need to be published and interested persons would need to have the opportunity to comment on the proposed changes for at least three weeks.

To better address the issues, the Commission recommendation to streamline the process is to remove the requirements in rules 371, 372 and 372A of the NGR for the CTPs relevant to each hub to be defined in the STTM Procedures. AEMO would instead be required to maintain a register of CTPs.

Where AEMO proposes to update the register to include a new CTP (or to remove an existing CTP), it will be required to provide a notification to the market and invite feedback from the

138 Submissions to AEMO consultation paper: AGIG, p. 6; Bioenergy Australia, p. 3; ENA, p. 4; Jemena, p. 5.
139 AGIG, submission to AEMO consultation paper, p. 6.
140 Jemena, submission to AEMO consultation paper, p. 5.
141 https://aemo.com.au/consultations/current-and-closed-consultations/sttm-iir-14-003-addition-of-hexham-ctp-and-mos-validation

relevant distributor. The Commission considers that a notification period of 20 business days would be sufficient to gain this feedback.

As highlighted by AEMO, the NGR (rules 371, 372 and 372A) already set outs the distribution systems covered by each hub. Rules 371 and 372 of the NGR limit the CTPs that can be created for the Adelaide and Sydney hubs to those that are connected to the specified distribution systems.

Uniquely, the Brisbane hub includes CTPs where gas passes straight from a transmission pipeline (the Roma Brisbane Pipeline) to an end-user directly connected to that transmission pipeline. These CTPs are currently specified in clause 2.3 of the STTM Procedures and are not limited by the NGR. The Commission's recommended approach in this instance involves stipulating in rule 372A that further CTPs not connected to the specified STTM distribution systems can only be added with the consent of the facility operator at that CTP (as well as the service provider for the STTM pipeline). This would appropriately govern AEMO's ability to add CTPs not connected to STTM distribution systems.

The recommendation to remove the definition of the CTPs from the STTM Procedures would remove the requirement to use the procedure change process for each change to the list of CTPs, which has the potential to become unduly onerous while adding little value. The Commission considers that a notification process would still enable participants to be informed of market changes in an administratively efficient way while allowing any relevant feedback to be provided to AEMO by distributors.

Overall, the Commission considers that, if implemented, the recommended process would be fit-for-purpose and likely reduce AEMO's administration costs, particularly if multiple new facilities injecting other covered gases are established over a similar time frame. For these reasons, the Commission considers it would be consistent with the NGO.

DRAFT RECOMMENDATION 20: STREAMLINE THE PROCESS FOR ESTABLISHING NEW CTPS

Amend the NGR to:

- specify in rule 135EA(4) that the STTM Procedures may deal with the arrangements for determining proposals for CTPs to be included in or removed from a hub
- introduce a new rule in Part 20 that requires AEMO to specify the CTPs comprised in each hub in a register maintained by AEMO under the STTM Procedures. The CTP for a facility from which gas is injected into an STTM distribution system must be included in the relevant hub. The STTM Procedures must set out the arrangements for AEMO to determine changes to CTPs for a hub, which must:
  - specify the time frame and process for AEMO to consider and determine a proposal, which must include notice to the relevant STTM distributor and must allow 20 business days for the STTM distributor to respond
  - require AEMO to publish notice of its determination on the proposal.

- amend rules 371, 372 and 372A to refer to the CTP register instead of the STTM Procedures
- amend rule 372A to specify that additional CTPs not connected to one of the STTM distribution systems specified in that rule can only be added with the consent of the STTM facility operator and the service provider of the STTM pipeline at the CTP.

6.4 Matched allocation mechanism

6.4.1 Current framework and issues

Unaccounted for gas (UAFG) refers to gas supplied into the gas pipeline or system that is unaccounted for in deliveries from the pipeline or system. It is calculated as the difference between the measured quantity of gas entering the system (receipts) and metered gas withdrawals (deliveries). The underlying causes for UAFG arise from gas measurement and calculation errors and physical losses.

The arrangements for managing UAFG in the STTM vary between each hub:

- in the Adelaide and Sydney STTM hubs, distributors are responsible for supplying UAFG
- in the Brisbane STTM hub, the local retailer is responsible for supplying UAFG, with the costs of this recovered from the relevant distributor.

However, the arrangements in Adelaide and Sydney are not identical. Notably, in Sydney, use is made of the matched allocation mechanism under which gas purchased by the distributor to offset UAFG can be excluded from the operation of the STTM.[142]

'Matched allocation agreement' is defined by Part 20 of the NGR as:

> … an agreement between Jemena, one or more STTM pipeline operators and one or more STTM Shippers providing for the matched allocation of quantities of natural gas purchased by Jemena to meet the operational requirements for its STTM distribution system at the Sydney hub.

Accordingly, a matched allocation agreement must involve the operator of an STTM pipeline, which is defined as a transmission pipeline connected to the STTM. This means that an arrangement involving Jemena purchasing renewable gas to meet part of its UAFG needs from a facility injecting at the distribution level would not fall within the definition of matched allocation agreement.

Initial trials of other covered gases are likely to involve only very small volumes, within the levels of UAFG. The consultation paper noted that, where UAFG is provided by distributors, one way to accommodate the introduction of such trials could involve amending the arrangements for UAFG. The consultation paper asked stakeholders:

142 Rule 500A of the NGR.

- whether initial trials involving the injection of NGEs into the distribution system should be accommodated by amending jurisdictional arrangements for UAFG
- specifically whether the matched allocation mechanism in Sydney should be amended to allow injections of NGEs to be excluded from the operation of the STTM.

6.4.2 Stakeholder responses

Some stakeholders suggested that allowing distributors to provide UAFG from their own operations or to procure this directly would help facilitate trials of NGEs.[143] AGIG suggested that this would represent a relatively simple mechanism that would allow distributors to decarbonise the gas they transport.[144]

With regard to the matched allocation mechanism in the Sydney hub specifically, AGIG agreed that the issues identified in the consultation paper would need to be resolved.[145] Jemena, who is the Sydney distribution system service provider, also supported broadening the operation of the matched allocation mechanism in the Sydney hub to apply to UAFG purchases from distribution-connected facilities.[146]

Other stakeholders cautioned against long-term reliance on the use of UAFG arrangements as a means of sourcing renewable gas or gas blends. AusNet suggested that such an approach should not be seen as a substitute for the full inclusion of renewable gas into regulated gas networks.[147] PIAC suggested that strong incentives should be implemented to transparently identify, monitor and reduce UAFG to ensure emissions are minimised and excess costs to consumers removed. For PIAC:[148]

> linking UAFG to NGE injection trials may create a perverse incentive to not be transparent in accurately identifying UAFG or working to reduce it.

6.4.3 Commission analysis

By definition in Part 20 of the NGR, a 'matched allocation agreement' — an arrangement unique to the Sydney STTM hub, allowing Jemena to procure UAFG outside of the market — must involve an STTM pipeline operator. This means that Jemena purchasing renewable gas from a distribution-connected facility, such as its Malabar biogas facility, would not currently fall within the definition of matched allocation agreement.

In general, the Commission considers that all distribution-connected facilities should participate in the STTM, whether their injections are intended to provide UAFG or not. All gas supplied should be done so through the market to facilitate dispatch of the least-cost mix of gas supply. This would also promote transparency of gas flows and avoid any barriers to

143 Submissions to consultation paper: AGIG, p. 13; Alinta Energy, p. 7; APGA, p. 10; Bioenergy Australia, p. 8; Jemena, p. 13.
144 AGIG, submission to consultation paper, p. 13.
145 AGIG, submission to consultation paper, p. 13.
146 Jemena, submission to consultation paper, p. 13.
147 AusNet, submission to consultation paper, pp. 4, 9.
148 PIAC, submission to consultation paper, p. 8.

entry or exit that would result from injection facilities transitioning into and out of the STTM as they moved away from supplying UAFG to the relevant distributor and vice versa.

In addition, the Commission notes that were the matched allocation mechanism to be expanded in Sydney, to allow injections of covered gases from distribution-connected facilities to be excluded from the operation of the STTM, this would raise whether the approach should also be permitted in the other STTM hubs (where gas to meet UAFG is currently procured by either retailers or distributors from volumes traded through the market). The Commission has considered this and concluded that the current UAFG approaches in Adelaide and Brisbane are consistent with its general view that the market should be used to manage UAFG. It does not consider that excluding injections of covered gases from distribution-connected injection facilities from the operation of the STTM would enhance the NGO.

For these reasons, the Commission recommends that the matched allocation arrangement in Sydney not be extended to cover distribution-connected facilities, and that no changes should therefore be made to the NGR to this effect. The Commission acknowledges that the implication of this decision is that Jemena will have two processes for purchasing UAFG in the Sydney STTM: the matched allocation mechanism for natural gas supplied from STTM pipelines and participation in the STTM (or purchase from an STTM User) for distribution injections (of any type of covered gas). Nevertheless, to the extent that there may be a cost to Jemena as a result, the Commission does not consider that other market participants or gas consumers should also incur a cost.

6.5 Gas quality specification and responsibility for gas quality

6.5.1 Current framework and issues

Part 20 of the NGR defines the 'gas quality specification' in the STTM as:

> (a) the gas quality specification contained in Australian Standard AS 4564 – 2005, Specification for general purpose natural gas (as amended or replaced from time to time); and
>
> (b) any additional gas quality specifications contained in the applicable access arrangement for an STTM distribution system at that hub.

Further, rule 418(3) of the NGR provides that:

> each STTM Shipper must ensure that natural gas supplied by it to a hub complies with the gas quality specification for that hub, unless otherwise agreed in writing by the relevant STTM distributor or specifically authorised under a law of the relevant adoptive jurisdiction.

In the STTM, gas quality is managed contractually including through distributors' access arrangements and reference service agreements.

The consultation paper asked stakeholders whether:

- Part 20 of the NGR should be amended to clarify that AS 4564 – 2005 can be augmented or replaced to accommodate blending in certain parts of STTM distribution systems

- changes are required on the responsibility for ensuring compliance with the gas specification is assigned under the NGR if blending occurs in distribution systems.

6.5.2 Stakeholder responses

Many stakeholders stated that it would be helpful to clarify in Part 20 of the NGR that AS 4564 –2005 can be augmented or replaced to accommodate blending in certain parts of STTM distribution systems.[149] APGA suggested that the replacement or augmentation of the gas quality specification should only be permitted if this aligns with the guidance of the relevant jurisdictional safety regulator.[150] While AGL supported amending the NGR, it was concerned that the gas standard should not be a fluid standard but, rather should be firm to ensure that customers are supplied with a known specification of gas.[151]

There was, however, some divergence of views in relation to who should be responsible for ensuring compliance with the gas quality specification as mixtures of different types of covered gas move through the network. According to Energy Australia, the party injecting gas into the distribution system should be responsible for compliance with the gas specification, not the shipper of the gas (as stipulated in rule 418(3) of the NGR and reflected in reference service agreements) which has contractual agreements with gas producers to ensure compliance.[152]

In contrast, APA stated that the current framework should not be changed — shippers should continue to be responsible for managing gas quality through contractual arrangements.[153] APA did suggest, however, that operating agreements will need to be established to manage blending limits as gas molecules move through the system.

6.5.3 Commission analysis

Gas quality specification

The Commission understands that, initially at least, any hydrogen blending is likely to be undertaken within the envelope permitted by Australian Standard AS 4564–2005 and that blends of this nature will therefore comply with the existing STTM gas quality specification. However, consistent with many stakeholder submissions, the Commission considers that it would be beneficial to provide a clearer mechanism for the establishment of alternative gas specifications than is currently the case in order to allow for the full range of covered gases that may need to be provided for over time.

The current definition of 'gas quality specification' in Part 20 of the NGR comprises two limbs — firstly, "the gas quality specification contained in Australian Standard AS 4564 – 2005, Specification for general purpose natural gas …" and secondly, "any additional gas quality specifications contained in the applicable access arrangement for an STTM distribution

149 See, for example: Submissions to consultation paper: AGIG, p. 11; APGA, p. 11; AGL, p. 10; Alinta, p. 8; Bioenergy Australia, p. 9.
150 APGA, submission to consultation paper, p. 11.
151 AGL, submission to consultation paper, p. 10.
152 Energy Australia, submission to consultation paper, p. 5.
153 APA, submission to consultation paper, pp. 12-13.

system at that hub". This rule allows a distributor to supplement AS 4564-2005 but does not allow a gas quality specification inconsistent with it. Direct injections of hydrogen, for example, could not therefore be allowed for by an additional gas quality specification, as they would not also be compliant with AS 4564 – 2005.

This issue could be resolved by expressly allowing distributors (at the request of a facility operator) to make agreements permitting the injection of gas that does not comply with the standard gas quality specification (that is, AS 4564 – 2005 and any additional gas quality specifications) at a CTP and outlining the quality standard with which such gas must comply. Such an agreement would include the distributor, facility operator proposing to inject gas that does not comply with the standard gas quality specification, and each STTM Shipper proposing to supply gas to the CTP.

To support the continued safe operation of facilities, a distributor would not be permitted to enter into an agreement outlining such an alternative gas quality specification unless it was satisfied that the injection of gas in accordance with the agreement was consistent with any applicable pipeline safety duty or pipeline service standard (each as defined in the NGL).

The Commission notes that STTM Shippers would not be in breach of rule 418(3) of the NGR for injecting other covered gases (or other gases falling outside of the gas quality specification) if this was agreed with the relevant distributor or specifically authorised under jurisdictional legislation. However, this rule should not be relied on to accommodate the injection of other covered gases into the STTM for two reasons:

- Firstly, it is preferable for there to be an explicit mechanism by which distributors can establish an alternative gas quality standard, with which relevant STTM Shippers must then comply. This provides for a more effective compliance framework and will better allow distributors to meet their obligations in relation to gas quality and safety.
- Secondly, expressly allowing distributors to make agreements permitting the injection at specific CTPs of gas that is not compliant with the standard gas quality specification is likely to make it more transparent to prospective market participants that the injection of other covered gases is not prohibited, as compared to the use of the existing mechanism under rule 418(3) of the NGR.

For these reasons, the Commission considers that the draft recommendation set out below will allow for injections of other covered gases to be more efficiently integrated into the STTM. This approach, if implemented, would be expected to reduce barriers to entry and would support the discharge of distributors' responsibilities in relation to the quality and safety of gas (that is, of all covered gases).

DRAFT RECOMMENDATION 21: ALLOW DISTRIBUTORS TO AGREE TO AN ALTERNATIVE GAS QUALITY SPECIFICATION AT A CTP

Amend the NGR to:

- introduce the definition of 'standard gas quality specification' for a hub to reflect the current definition of 'gas quality specification'
- introduce a new rule that:
  - allows the relevant distributor (at the request of a facility operator of an STTM injection facility connected at a CTP) to enter into a written agreement that:
    - (a) provides for the injection at a CTP of gas that does not comply with the standard gas quality specification; and
    - (b) sets out the quality standard with which that gas must comply.
- specifies that such an agreement must include the distributor, operator proposing to inject the gas, and each STTM Shipper proposing to supply gas to the CTP
- states that a distributor must not approve such an agreement unless it is satisfied that the injection of gas is consistent with any applicable pipeline safety duty or pipeline service standard (each as defined in the NGL)
- allows the distributor to revoke the agreement if it is breached, or the distributor is satisfied that the injection of the gas is no longer consistent with any applicable pipeline safety duty or pipeline service standard
- modify the definition of 'gas quality specification' to:
  - clarify that this relates to a CTP
  - means the standard gas quality specification or the alternative gas quality standard approved by the distributor in accordance with the above new rule.
- modify rule 418(3) such that shippers must ensure that gas supplied to a CTP (rather than a hub) complies with the gas quality specification for that CTP.

Responsibility for gas quality

As noted above, stakeholder views vary with regard to the responsibility for ensuring gas supplied is within specification. It has been noted that this obligation currently falls to shippers.

The Commission has no evidence to suggest that there are issues associated with the current contractual approach to managing gas quality in the STTM. Nor does it appear that there would be an issue, when injecting or blending other covered gases, in ensuring that gas remains within specification that could not similarly be managed contractually between all relevant parties (that is, injection facilities, shippers, and distributors). However, if an entity other than the STTM Shipper was allocated primary responsibility, this could create unwarranted complexity.

Following on from the above draft recommendation in relation to the establishment of alternative gas quality specifications, the Commission recommends that rule 418(3) of the NGR be amended such that STTM Shippers would be responsible for ensuring gas supplied to a particular CTP (rather than the STTM hub generally) complies with the gas quality specification for that CTP, unless specifically authorised under jurisdictional legislation.

Notwithstanding this amendment, overall the Commission considers that responsibility for ensuring compliance with the gas quality specification should continue to rest with STTM Shippers as currently provided under rule 418(3) of the NGR. Maintaining the existing approach of using contractual arrangements between shippers and injecting facilities for managing gas quality avoids introducing additional complexity and associated implementation costs. As a result, the Commission is satisfied that this approach is consistent with achieving the NGO.

7 DECLARED WHOLESALE GAS MARKET

BOX 5: SUMMARY OF CHAPTER

This chapter covers the Declared Wholesale Gas Market (DWGM), a facilitated market for wholesale gas and gas transportation in Victoria.

In the consultation paper the Commission raised a number of issues regarding the facilitated markets, including the DWGM. These issues were in relation to registration, UAFG arrangements, settlement and allocation, metering and heating values, gas specification and management of blending constraints.

All the issues related to the settlement of distribution connected facilities in the DWGM, including registration, settlement, metering, gas specification and blending constraints, are being addressed through the Commission's consideration of the DWGM distribution connected facilities rule change request.

The issue of heating values, and the need for more granular heating values to be determined in Victoria for use in settling non-daily metered customers in the presence of hydrogen blends, is specific to the review. This issue is discussed further in the regulated retail markets chapter (chapter 8) of this draft report.

Where issues fall outside the scope of the rule change, or are not addressed in other sections of the review as noted above, they are addressed in this chapter.

The chapter examines two issues:

- whether changes should be made to UAFG arrangements to accommodate initial trials involving the injection of NGEs
- the treatment of parts of Declared Distribution Systems (DDSs) that are connected to non-Declared Transmission System (DTS) pipelines with respect to the introduction of NGEs.

In making recommendations in relation to these issues, the Commission has sought to promote efficiency and minimise implementation costs.

The key recommendations made in this chapter are to:

- make no changes to the UAFG arrangements in the DWGM
- review arrangements for the regional gas distribution systems that are not connected to the DTS, in relation to heating values, gas quality, metering, competition and pricing principles, as and when renewable gas projects are considered for development in these distribution systems.

The Victorian Declared Wholesale Gas Market (DWGM) is a wholesale gas market that operates on an intra-day basis and uses participant injection and withdrawal bids to manage supply, demand and linepack on the Declared Transmission System (DTS) in Victoria. The DWGM is a regulated market and participation in it is mandatory.

In contrast to the STTM — where gas is traded at the intersection of transmission pipelines and distribution systems — the Victorian DWGM encompasses the entire DTS. The DTS is subject to an open access regime (referred to as market carriage), instead of the contract carriage arrangements used elsewhere in Australia. Under this model, the pipeline owner makes its pipeline available to AEMO, with access to it being allocated in line with market (the DWGM) outcomes. As a result, AEMO operates the DTS.

From an operational perspective, the physical characteristics of the DTS (specifically, that it is essentially a meshed network, the amount of gas it can store is relatively small such that it cannot be relied upon to manage significant deviations between demand and supply) mean it must be closely managed by AEMO to ensure that gas flows in the manner required and system integrity and safety is maintained.

For more information on the background of the DWGM and how it relates to this review see the consultation paper, Chapter 5 'Facilitated gas markets'.[154]

This chapter sets out the key issues that were consulted on in relation to the DWGM, provides a summary of stakeholder submissions and outlines how these issues are being progressed:

- Section 7.1 gives an overview of the issues raised in the consultation paper and explains the interactions between these issues and both the broader review and the DWGM distribution connected facilities rule change process
- Section 7.2 focuses specifically on issues associated with UAFG
- Section 7.3 discusses the treatment of Declared Distribution Systems (DDSs) in Victoria that are connected to transmission pipelines other than the DTS with respect to the introduction of NGEs.

Consequential changes to the NGR that are relevant to the DWGM are set out in appendix E. This includes the amendment of the term 'gas' as defined in Part 19 to comprise 'covered gas and processable gas'.

7.1 Overview of issues raised in the consultation paper

7.1.1 Current framework and issues

A key difference between the STTM and DWGM is that the STTM market design provides for injections directly into distribution systems. In contrast, the DWGM does not, providing only for the scheduling of injections at system injection points on the DTS.

154 AEMC, *Review into extending the regulatory frameworks to hydrogen and renewable gases*, consultation paper, 21 October 2021, p. 27.

This led the Victorian Minister for Energy, Environment and Climate Change to submit the *DWGM distribution connected facilities* rule change request.[155] The Commission initiated the rule change process with a consultation paper published concurrently with the consultation paper for this review.[156]

Many of the issues highlighted for consultation in the review consultation paper related to how gas (of whatever type) injected by facilities connected at the distribution level should be traded in the DWGM and to the operational implications of gas being directly injected into distribution systems. There was consequently a degree of overlap between the issues consulted on through the review and those being addressed through the rule change process.

The full range of issues included in the review consultation paper was:

- registration categories required for distribution-connected facilities injecting renewable gases into the facilitated markets
- how distribution-connected facilities should be settled within the facilitated gas markets, including if they are exempted from registration
- whether jurisdictional arrangements for UAFG should be amended to accommodate the injection of NGEs into the distribution system
- whether the NGR should be amended to give AEMO (or another party) the ability to directly determine the gas specification on distribution systems
- who should be responsible for ensuring that the creation of NGE blends remains consistent with the gas specification and whether AEMO should have operational control over the distribution system to manage blending constraints
- whether amendments are required to the NGR to facilitate the determination of more granular heating values for use in settling non-daily metered customers.

An overview of stakeholder responses to the issues raised in the review consultation paper is provided in the following section, except for those views relating to UAFG. Section 7.1.3 explains that each of these issues is being progressed by the DWGM rule change. Issues relating to UAFG are covered separately in section 7.2.

7.1.2 Stakeholder responses

Registration categories

Most stakeholder submissions regarding registration categories were made in relation to facilitated markets generally, with comments applying to both the DWGM and the STTM. As summarised in the STTM chapter (see section 6.1.2), there was a mix of views, with some stakeholders suggesting that new registration categories may be required or that some smaller facilities should be exempt from registration.

155 Victorian Minister for Energy, Environment and Climate Change, DWGM distribution connected facilities, rule change request

156 AEMC, *DWGM distribution connected facilities*, consultation paper, 21 October 2021

In contrast, other stakeholders considered existing registration categories to be fit-for-purpose or that they could be expanded to accommodate facilities involved in the creation of NGEs. In particular, APA suggested that distribution-connected facilities should be treated consistently with production facilities connected at the transmission level.[157]

Settlement of distribution-connected facilities

Stakeholders generally considered that distribution-connected facilities should be accounted for in settlement. Alinta Energy stated that if the penetration of blend processing facilities reaches a non-trivial scale, excluding them from settlement would be inefficient and not provide appropriate signals for investment or pricing and settlement in the market.[158] Further, according to AGL, an issue that needs to be resolved is how facilities injecting renewable gases or hydrogen should be treated in the operational and market schedules of the DWGM, including impacts on prices.[159]

Gas specification, gas quality management and blending constraints

AGIG and Bioenergy Australia stated that Part 19 of the NGR should be amended to clarify how the gas specification for the DDS should be governed.[160] AGIG and Engie suggested that AEMO may be best placed to manage gas quality at the DDS level and therefore manage blending constraints.[161] Conversely, APGA did not support AEMO taking these roles, but did not provide reasons for this.[162]

Heating values

AGIG and APGA suggested that no amendments to the NGR are required to facilitate the determination of more granular heating values.[163] In contrast, AGL and AusNet both considered that amendments to the NGR were required but did not provide further details.[164]

7.1.3 Commission analysis

As noted, given that the majority of the issues identified in the review consultation paper related in some way to the fact that the DWGM market design does not currently accommodate injections directly into the distribution system, there was a large degree of overlap between the issues outlined and those being considered by the DWGM distribution connected facilities rule change process.

The Commission is now satisfied that all the issues related to registration categories and the settlement of distribution-connected facilities are being addressed through its consideration of the DWGM distribution connected facilities rule change request. That is to say, if the market framework is updated to allow for distributed-connected injection facilities in the

157 APA, submission to consultation paper, p. 20.
158 Alinta Energy, submission to consultation paper, p. 7.
159 AGL, submission to consultation paper, p. 8.
160 Submissions to consultation paper: AGIG, p. 5; Bioenergy Australia, p. 9.
161 Engie, submission to consultation paper, p. 10.
162 APGA, submission to consultation paper, p. 11.
163 Submissions to consultation paper: APGA, p. 11; AGIG, p. 11.
164 Submissions to consultation paper: AGL, p. 9; Ausnet, p. 10.

manner set out in the draft rule determination, and the draft rule published with it, no further amendments will be required to accommodate other covered gases (such as renewable gas or hydrogen blends) in respect of direct injection into a DDS.

Although gas specification is an issue that might be expected to have particular relevance for the review and less so for the rule change, the changes that the Commission has identified as required on this issue are part of the rule change process. The Commission is satisfied that no further changes need to be made to accommodate other covered gases through this review.

The issue of heating values, and the need to for more granular heating values to be determined in Victoria for use in settling non-daily metered customers in the presence of hydrogen blends, is specific to the review. This issue is discussed further in the regulated retail markets chapter (section 8.2) of this draft report. This is because Part 19 of the NGR, which relates to the DWGM, does not place any restriction on the use of multiple heating values in the settlement of non-daily metered customers (as opposed to the single state-wide value that is currently used), and so no changes to this part of the rules are required.

The Commission also notes that in response to a request from the Victorian Minister, [165] AEMO has commenced with the implementation of a zonal approach to determining gas heating values in Victoria. AEMO will undertake a joint consultation with the Essential Services Commission (ESC) to amend relevant Market procedures as a well as the Gas Distribution Code of Practice. Formal consultation on the amendments to the Market Procedures is expected to commence in May 2022.[166]

Issues related to UAFG are a matter for the review rather than the rule change process. These are discussed in detail in the following section.

7.2 Unaccounted for gas

7.2.1 Current framework and issues

In the DWGM, in addition to gas for customer consumption, retailers are required to purchase sufficient gas to cover forecast UAFG. Under rule 235(8) of the NGR, market participants' withdrawals are adjusted using a fixed UAFG benchmark factor to account for the impact of UAFG.

The assignment of UAFG benchmarks for this purpose is determined by the Essential Services Commission (ESC) and is outlined in the ESC's *Gas Distribution System Code*.

AEMO is required by rule 317(1) of the NGR to make *Distribution UAFG Procedures* that require it to calculate UAFG in a DDS and to determine reconciliation payments between retailers and distributors. This annual reconciliation of forecast against actual UAFG administered by AEMO results in payments to each distributor by retailers if the actual UAFG

165 https://aemo.com.au/-/media/files/initiatives/renewable-gas-blending-in-vic/letter-to-mr-westerman—-request-to-implement-zonal-heating-values.pdf?la=en

166 AEMO, Renewable Gas Blending in Victoria - Gas Heating Values. https://aemo.com.au/initiatives/trials-and-initiatives/renewable-gas-blending-in-victoria.

is less than the benchmark, and payments by the distributor to retailers if it exceeds the benchmark.

In the consultation paper, the Commission asked stakeholders whether initial trials involving the injection of NGEs into a DDS should be accommodated by amending jurisdictional arrangements for UAFG and whether any other changes to UAFG arrangements in the DWGM would be required.

7.2.2 Stakeholder responses

AGIG supported allowing distributors to offset UAFG with NGEs. It suggested that, in the DWGM, distributors (rather than retailers) could be allowed to be responsible for supplying UAFG, either through their own operations or by contracting with a third party. AGIG further suggested that such changes could allow for the replacement of the UAFG benchmark framework, and that the current provisions governing UAFG in the NGR could be shifted to AEMO's Procedures.[167]

APA, in its combined submission to the rule change and the AEMC and AEMO reviews, similarly supports allowing distributors to arrange their own UAFG. It suggested that this would provide flexibility should a distributor want to provide for some or all UAFG through NGE injection facilities within the distribution system.[168]

AusNet considered that UAFG has the potential to be supportive during the early stages of the transition but was cautious about recommending significant regulatory and market changes.[169] While, in AusNet's view, distributors procuring NGEs as UAFG might be a relatively simple solution at relatively low levels of renewable gas volumes, this was not AusNet's preferred approach. This is because it is not scalable to the point where renewable gases become cost-competitive with natural gas and would require jurisdictional changes to the Victorian UAFG arrangements.

7.2.3 Commission analysis

Consistent with the reasoning set out in relation to the STTM, the Commission considers that allowing UAFG to be procured by distributors outside of the DWGM market arrangements would not promote economic efficiency. All gas procured — whether it be for offsetting UAFG or otherwise — should be done so through market mechanisms to facilitate dispatch of the least-cost mix of gas supply. This would be consistent with achieving the NGO.

Consequently, the Commission does not consider that the use of UAFG arrangements represents the most appropriate way of facilitating trials involving the injection of other covered gases into a distribution system. The Commission recognises that, initially, most other covered gases are unlikely to be cost competitive with natural gas. Trial projects would therefore require financial support in order for their injection bids to be scheduled in the market. However, the Commission considers it preferable for this support to be provided

167 AGIG, submission to consultation paper, p. 10.
168 APA, submission to consultation paper, p. 36.
169 AusNet, submission to consultation paper, pp. 4, 8.

through an extrinsic mechanism, as opposed to being implicitly funded by consumers through payments to meet the costs of UAFG. Otherwise, distributors would need to cover the costs of procuring UAFG through their access arrangements, which would be passed on to customers in the form of reference tariffs (subject to approval by the AER).

The Commission, therefore, recommends that no changes be made to the UAFG arrangements in Part 19 of the NGR. Continuing with the existing arrangements would promote productive efficiency and avoid the implementation costs associated with the development and introduction of alternative arrangements.

Further, since the Commission considers that no changes should be made to the UAFG arrangements in the DWGM, there is no reason to shift the detail surrounding UAFG in Part 19 of the NGR to AEMO Procedures as suggested by AGIG.

7.3 Non-DTS pipelines

7.3.1 Current framework and issues

The Victorian DTS can be broadly described as a network-like system that has evolved over time. As a result, it comprises a number of pipelines that can be identified individually such as the Longford to Melbourne Pipeline, the South West Pipeline, the Wollert-Albury-Wodonga pipeline, the Interconnect and the Western Transmission System.

In addition to these pipelines that comprise the DTS, there are a number of transmission pipelines in Victoria that are not part of the DTS (non-DTS pipelines), but that connect the DTS to NSW, Tasmania, South Australia or to gas production and storage facilities or to other distribution systems in Victoria.

These non-DTS transmission pipelines (and their service providers) include:

- BassGas pipeline (Beach Energy)
- Carisbrook-Horsham Pipeline (Gas Pipelines Victoria (GPV))
- Eastern Gas Pipeline (EGP) (Jemena)
- Port Campbell-Iona Pipeline (PCI) (SEAGas)
- Port Campbell to Adelaide Pipeline (PCA) (SEAGas)
- northern half of the Interconnect (Culcairn-Wagga) (part of Moomba Sydney Pipeline) (APA Group)
- Tasmanian Gas Pipeline (TGP) (Palisade).

Connected to some of these non-DTS transmission pipelines are distribution systems that deliver gas to end-users. As a consequence of not being directly connected to the DTS, these distribution systems are out of scope of the DWGM connected facilities rule change process.

The review, therefore, seeks to address the question of how the sale of NGEs and other covered gases may occur within these locations, and whether there are any gaps remaining in the regulatory framework that need to be addressed.

Table 7.1 below summarises distribution networks in Victoria that are connected to non-DTS pipelines and the extent to which changes being considered under the review would apply to these networks.

Table 7.1: Distribution networks in Victoria connected to non-DTS pipelines

DISTRIBUTION SYSTEM	TRANSMISSION PIPELINE	DDS/ NON-DDS	METERING, HEATING VALUES AND GAS QUALITY ADMINISTRATION
Bairnsdale/Paynesville network (AGN) (Note this is part of AGN's Vic regulated network)	Eastern Gas Pipeline (EGP) (Jemena)	DDS	AEMO under ASA
South Gippsland network (AGIG) (Note this is part of Multinet's Vic regulated network)	BassGas pipeline (Beach)	DDS	AEMO under ASA
Horsham/Stawell/Ararat network (Note this is part of AusNet's regulated Vic Network). Also known as Grampians	Carisbrook-Horsham pipeline (CHP) (TGN)	DDS	AEMO under ASA
Mildura (AGIG)	MAPS	Non-DDS	AEMO under ASA
Regional Networks: Swan Hill, Kerang, Robinvale, Nathalia, Heathcote, Marong, Maldon, Invermay, Terang, Orbost, Lakes Entrance	None	Non-DDS	Administered by service provider.

Source: AEMC and Brookfield Regional Networks Victoria Ltd Gas Distribution Licence Application. https://www.esc.vic.gov.au/sites/default/files/documents/Brookfield-Regional-Networks-Victoria-Pty-Ltd-Gas-Distribution-Licence-Application.pdf

Note: The 11 regional networks listed are not connected to the DTS. Instead, gas is purchased via a retailer from the Victorian market and supplied by a 'virtual pipeline'. That is, gas is compressed, then trucked to the individual networks, stored and depressurised before being supplied to end users. The network passes a total of 12,500 households and small businesses, although not all these businesses and households are connected. Gas Networks Victoria operates the regional networks.

7.3.2 Stakeholder feedback

No question was specifically asked in the consultation paper in regard to non-DTS connected distribution systems. Ausnet, however, in its submission to the DWGM distribution connected facilities rule change consultation paper,[170] referred to non-DTS areas of the network where other retailers have title for gas. This reference prompted further engagement with market participants on the arrangements for non-DTS areas of the market, and non-DTS connected distribution networks in Victoria.

170 AEMC, *DWGM distribution connected facilities*, consultation paper, 21 October 2021.

7.3.3 Commission analysis

The extent to which the recommendations considered under the key policy areas of the review address these distribution systems is set out below.

Economic regulation of pipelines

All the non-DTS pipelines are currently subject to either full regulation or the access regime under Part 23 of the NGR. While some changes will occur to the regulatory framework with the introduction of the pipeline regulation reforms, economic regulation will still apply to these pipelines. Consequently, these pipelines will also be impacted by the draft recommendations made in this area.

Facilitated markets

Changes recommended in the *DWGM distribution connected facilities draft rule determination* to include distribution connected facilities in DDSs for settlement in the DWGM will not apply to distribution systems that are not directly connected to the DTS.[171]

Regulated retail markets

Non-DTS connected distribution systems, except the regional networks operated by Gas Networks Victoria, do participate in regulated retail markets and are administered in that capacity by AEMO. Changes that have been recommended to retail market participant categories in this draft report will therefore also apply in these locations.

The *Victorian Retail Market Procedures* (RMPs) apply to non-DTS systems and these distributors have to register as a participant under rule 135AB(5) of the NGR. The procedure changes being considered as part of AEMO's hydrogen blends and renewable gases procedures review will apply to these systems and their participants.[172]

AEMO has agreed services agreements (ASAs) in place with all the distributors for the non-DTS systems listed except the regional networks operated by Gas Networks Victoria. These agreements cover the services that are required to facilitate the retail market, and they also help to bridge the gap that would otherwise be filled by the data AEMO receive through operating the DWGM if these locations were directly connected to the market.

For the non-DDS locations operated by Gas Networks Victoria, these networks do not participate in regulated retail markets.

Transparency measures

The Bulletin Board, GSOO and VGPR do not currently extend to distribution systems. However, the draft recommended amendments introduce some new reporting obligations on distribution systems and some facilities in distribution systems. As Bulletin Board requirements are independent of the market or economic regulation arrangements applied to

171 AEMC, *DWGM distribution connected facilities*, draft determination, 31 March 2022.

172 AEMO, *Extending the national gas regulatory framework to hydrogen blends and renewable gases*, consultation paper, October 2021.

a particular pipeline, non-DTS connected distribution systems may be impacted by changes to the transparency measures under the NGL and NGR.

Consumer protections

All the non-DTS connected distribution systems located in Victoria are subject to the Victorian consumer protection framework. As a result, changes that may be made to that framework will also apply to these pipelines in the same way they apply to the DTS connected systems.

Regulatory sandbox framework

All the non-DTS connected distribution systems fall under the NGL and therefore will have the ability to use the regulatory sandbox framework when it becomes available. As a result, changes to that framework recommended by this review will also be relevant to those pipelines.

Metering

In most non-DTS connected distribution systems, metering is administered by AEMO under an ASA with the service provider. In the regional networks this is not the case, with metering in these networks administered by the network operator. As a result, any rules regarding metering in the NGR and any AEMO metering procedures will not apply in these locations.

Heating values and gas quality

Non-DTS connected distribution systems with an ASA with AEMO have the heating value and gas quality arrangements administered by AEMO and are, with the exception of Mildura, also subject to Victorian legislation.

Mildura is subject to South Australian procedures in relation to the calculation and application of heating values and gas quality.

The regional networks operated by Gas Networks Victoria are not administered by AEMO. However, Victorian legislation still applies.

Conclusion

Declared distribution systems not directly connected to the DTS will not be included in the operation of the DWGM. It was not recommended that injections into these systems are to form part of the operation of the DWGM under the *DWGM distribution connected facilities draft rule determination*.[173]

However, as outlined above, declared distribution systems connected to non-DTS transmission pipelines, despite not being part of the DWGM, will still be included in the recommended changes made under the review.

The Commission has considered the application of its draft recommendations to these locations and considers that the recommendations are relevant and proportionate to the needs of these distribution systems, and flexible to their governance arrangements. However,

173 AEMC, *DWGM distribution connected facilities*, draft determination, 31 March 2022.

further analysis on a case by case basis may help to determine any potential regulatory gaps with respect to competition, metering, gas quality and heating vales, as and when that need arises.

8 REGULATED RETAIL MARKETS

BOX 6: SUMMARY OF CHAPTER

Regulated retail markets are in operation in New South Wales, the Australian Capital Territory, Queensland, South Australia and Victoria supplied by distribution systems. They facilitate retail competition by enabling retailers to sell natural gas to residential and business customers. This is achieved by setting out provisions for registering as a retail market participant, procedures for the transfer of customers between retailers, as well as processes in relation to the retailer of last resort scheme, metering. In states other than Victoria, there are also arrangements for gas allocation, settlement, balancing and processes to deal with unaccounted for gas.

The provisions under the NGR regulate retail gas markets in relation to retail market participation, requirements for registration and retail market procedures.

The question raised in the consultation paper was whether any changes needed to be made to these provisions to address:

- changes to the retail market registration provisions to accommodate other covered gases
- whether any changes to the NGR or NERR are needed, to address any concerns about competition, consumer choice and cost pass through of renewable gases in the regulated retail markets
- whether any changes are needed in relation to metering provisions, and the governance of heating values to accommodate the injection of other covered gases.

The Commission has found that other covered gases can be accommodated in the retail market registration provisions by the expansion of existing categories. Concerns expressed with respect to the cost of gas and competition will be managed by existing competitive processes in the market in operational timescales and over investment time frames, through third party access provisions that will enable the entry of competitors. Furthermore, the existing governance arrangements in relation to the calculation of heating values are fit for purpose and the Commission recommends that these remain unchanged.

The Commission's draft recommendations in relation to regulated retail markets are that:

- existing registration categories for the withdrawal of gas from the regulated retail market should be expanded
- the governance arrangements for heating values in regulated retail markets should remain unchanged
- no additional mechanisms need to be introduced to address cost of gas or competition concerns, given existing competitive processes within wholesale and retail markets.

The regulated gas retail markets facilitate gas retail competition by enabling retailers to sell natural gas to residential and business customers in New South Wales, the Australian Capital Territory, Queensland, South Australia and Victoria supplied by distribution systems. Anyone that functions as a distributor, retailer or self-contracting user must register in the applicable retail gas market.

For more information on the background of the regulated retail market and how it relates to this review see the consultation paper, Chapter 6 'Regulated retail markets'.[174]

This chapter sets out the current framework, discusses key issues and makes draft recommendations in relation to:

- changes to the retail market registration provisions required to accommodate other covered gases
- governance arrangements for local heating values
- competition, consumer choice and cost pass through of renewable gases in the retail market.

In addition to the changes identified in this chapter, consequential changes to the NGR are set out in appendix E.

8.1 Registration categories

8.1.1 Current framework and issues

Retail markets facilitate retail competition by enabling retailers to sell natural gas to residential and business customers.

This is achieved by setting out provisions for registering as a retail market participant, procedures for the transfer of customers between retailers, as well as processes in relation to the retailer of last resort scheme, metering, and in states other than Victoria, arrangements for gas allocation, settlement, balancing and processes to deal with unaccounted for gas.

Rule 135AB (1) and (2) of the NGR sets out the registrable capacities in the retail markets of NSW/ACT and Queensland as:

- network operator
- retailer
- self contracting user
- distributor

Rule 135AB (3) of the NGR similarly sets out registrable capacities in the retail market of South Australia:

- network operator
- retailer
- self contracting user

174 AEMC, *Review into extending the regulatory frameworks to hydrogen and renewable gases*, consultation paper, October 2021, p. 46.

- transmission system operator
- swing service provider
- shipper

The registrable capacities in the retail market of Victoria are listed in rule 135AB(4) as:

- transmission system service provider
- distributor
- market participant — retailer
- market participant — other

The consultation paper raised the issue that registration categories may need to be amended to capture new types of retail market participants, and that consideration needed to be given to the need for new registered participant categories, to accommodate constituent gas producers or facility operators who supply the constituent gases to create the NGE blend. The NGL and NGR together identify who must register with AEMO for the retail market procedures (RMP).

Registration may depend on how injections of other covered gases are accounted for in settlement and who is responsible for providing injection information to AEMO. If other covered gas producers or facility operators are required to participate in retail markets, then changes would be required to:

- the regulations made under the NGL to prescribe additional classes of retail market participants
- the retail market participant provisions of the NGR, to specify other covered gas producers or facility operators as new registrable capacities for each relevant retail market.

The consultation paper asked whether any changes to the retail market registration provisions were required to accommodate NGEs and whether there are any other changes required to the retail market provisions in the NGR to accommodate NGEs.

8.1.2 Stakeholder responses

Stakeholders in general did not think new categories for the retail markets were needed or did not express a view. Jemena considered that the activities of additional facilities and services involved in creating NGEs do not require registration recognition. In its view, the existing framework is fit for purpose and the new activities do not require registration recognition in the retail markets.[175]

AGIG stated that the initial issues identified by the AEMC may need to be dealt with as part of the review.[176] However, AGIG did not elaborate further on how the issues might be resolved.

175 Jemena, submission to consultation paper, p. 17.
176 AGIG, submission to consultation paper, p. 14.

Stakeholder feedback in workshops on regulated retail markets suggested if a gas blending operation is withdrawing gas from the system, then it should be treated as a gas user. However, stakeholders were unsure whether a two-way participant category is needed.

8.1.3 Commission analysis

The Commission has considered the registration categories in the context of injections and withdrawals for the regulated retail markets.

First, the Commission considers no changes are required to the registration categories in the rules to accommodate injections by blend processing service providers or direct injection of other covered gases. To the extent required for balancing and settlement in the relevant market, injection information is provided by pipeline operators who are registered. Changes required to the facilitated market registration provisions to accommodate injections by blend processing service providers or direct injection of other covered gases are considered in the context of the STTM and DWGM (chapter 6 and AEMC, *DWGM distribution connected facilities rule*, draft determination, 31 March 2022).

Second, the Commission's draft recommendation is that the existing registration categories for withdrawals of gas be expanded to include blend processing facilities. To achieve this in the retail markets of NSW, ACT, Queensland and South Australia the relevant registrable category of self contracting user should be amended to include blend processing facilities.

In the Victorian regulated retail market the draft recommendation can be implemented by expanding the existing retail market category of 'market participant other' to include blend processing facilities.

The Commission considers that the draft recommendation will, or is likely to contribute to the achievement of the NGO, as the draft recommendation:

- expands the existing categories of retail market participant to cover new services and commodities that could not otherwise be priced or traded within the gas market. The recommended change considered is likely to encourage the delivery of a new service or commodity and thereby encourage allocative, productive and dynamic efficiency in the provision of those services to end users.
- provides for the implementation of the required changes in a manner that is targeted, fit for purpose and proportionate to the issues that need to be addressed in order that the sale of other covered gases is incorporated in Regulated retail markets.

DRAFT RECOMMENDATION 22: EXPAND EXISTING REGISTRATION CATEGORIES IN REGULATED RETAIL MARKETS

Amend the NGR definition of 'self-contracting user' for the NSW-ACT (rule 135AB(1)(C)), South Australia (rule 135AB(3)(D)) and Queensland (rule 135AB(2)(C)) regulated retail markets to include blend processing facilities.

Amend the NGR definition of 'market participant other' for the Victorian regulated retail market (rule 135AB(4)(D)) to include blend processing facilities.

8.2 Metering and heating values

8.2.1 Current framework and issues

Metering

Metering procedures in relation to regulated retail markets cover processes for metering installations, meter reads, and the data flows required between AEMO, distributors, retailers and other parties to facilitate the retail market. The metering procedures in relation to regulated retail markets are summarised in AEMO's consultation paper on the Procedures.[177]

In relation to the regulated retail markets regulatory framework, the AEMC's consultation paper asked whether metering arrangements needed to be reviewed to ensure consumers are charged correctly. The consultation paper suggested that at a minimum, amendments may require:

- that existing gas chromatographs be tested and, if required, recalibrated, modified or replaced, to ensure they can measure the heating value of NGEs throughout the distribution systems
- changes to the metering requirements in relevant jurisdictional instruments to ensure that gas monitoring systems on distribution systems can accurately measure the energy content of NGEs at different times and locations.

Heating value governance

The table below summarises the existing arrangements in relation to heating value calculations and governance in regulated retail markets. These requirements are defined in the RMP and state laws and regulations. In Victoria, Part 19 of the NGR also sets out detailed requirements in relation to the calculation of the energy content of gas.

177 AEMO, *Extending the national gas regulatory framework to hydrogen blends and renewable gases,* consultation on the Procedures, October 2021, p. 24.

Table 8.1: **Heating value governance in regulated retail markets**

	VICTORIA	QUEENSLAND	SOUTH AUSTRALIA	NSW/ACT
AEMO	Calculate heating values Determine heating value zones	Publish heating values	Verify and publish new heating value zones	Publish heating values
Distributor	Calculate energy data using HVs from AEMO	Calculate Heating Values and energy data	Calculate Heating Values and energy data	Calculate Heating Values and energy data
Retailer	Use energy data to bill customers	Use energy data to bill customers	Use energy data to bill customers	Use energy data to bill customers
State body	Essential Services Commission – Maintains Gas Distribution system code which sets out process by which AEMO calculates heating values	Department of Energy and Public Works administers and monitors legislation affecting the Queensland gas sector	Essential Services Commission of South Australia (ESCOSA) – Maintains ESCOSA gas metering code – sets out arrangements for calculating heating values	NSW Government - Distributors are required to lodge safety and operating plans with the Director-General of the Department of Trade and Investment, Regional Infrastructure and Services

Source: AEMO Procedures, state legislation

The consultation paper asked whether any changes should be made to the governance of heating values in the regulated retail markets, in particular whether local heating values need to be determined for specific parts of the system and calculated more often than under current arrangements.

8.2.2 Stakeholder responses

EnergyAustralia noted in its submission that changes to metering regulations should be postponed until appropriate regulatory determination processes can be completed to confirm customers' acceptance of the investment required to replace existing metering.[178]

178 EnergyAustralia, submission to consultation paper, p. 4.

Stakeholder feedback in workshops on regulated retail markets indicated that it is important that heating values need to be accurate enough so customers are not over or underpaying for gas. Stakeholders also noted that it might be appropriate to have a system, following the introduction of NGEs to reassess heating values and introduce a trigger for reassessment. Some stakeholders also observed that the question on heating value calculation may be one for the future, and the degree to which the industry grows in practice.

Stakeholders at the workshops did see some benefit in a heads of power for AEMO in relation to the RMP.

8.2.3 Commission analysis

Metering

The issues the Commission identified and noted above in relation to potential changes to metering requirements are addressed through the AEMO consultation process for the RMP.

AEMO stated in its consultation paper that it did not expect these processes would need to change when the regulatory framework is expanded to cover NGEs. Further, no consequential changes to the NGR have been identified by the Commission following AEMO's consultation on the procedures.

AEMO also noted that any distribution-connected supply for NGEs would be metered by distributors according to jurisdictional regulations and subject to any changes made to the RMP. Meter data for the facilities will be provided to AEMO by distributors, similar to information currently provided for transmission pipeline meters that connect to a distribution system.[179]

Governance of heating values

The Commission has considered the roles and responsibilities for determining heating values. It is of the view that a change of roles in relation to the governance of heating values is not justified given existing responsibilities and the work of jurisdictions to date to develop gas measurement monitoring frameworks.

While consistency between jurisdictions might be served by new rules and arrangements, differences in the speed and nature of market development entail differences in governance arrangements which jurisdictions are best placed to manage.[180]

Even with different arrangements in place for different jurisdictions, there is a question whether the role of managing and implementing the arrangements could be tasked to a single body, such as AEMO. However, this potential change raises the issue of information and information flows. In managing their pipeline systems, distributors have access to the

179 AEMO, *Extending the national gas regulatory framework to hydrogen blends and renewable gases*, consultation on the Procedures, October 2021, p. 28.

180 In response to a request from the Victorian Minister, AEMO has commenced with the implementation of a zonal approach to determining gas heating values in Victoria. AEMO will undertake a joint consultation with the Essential Services Commission (ESC) to amend relevant Market Procedures as a well as the Gas Distribution System Code of Practice. Formal consultation on the amendments to the Market Procedures is expected to commence in May 2022. AEMO, Renewable Gas Blending in Victoria — Gas Heating Values. https://aemo.com.au/initiatives/trials-and-initiatives/renewable-gas-blending-in-victoria

relevant information. Putting obligations on an additional party would likely increase the flow of information and reporting required to accurately calculate heating values and heating value zones.

For this reason, the Commission has concluded that there is little justification for expanding AEMO's role or providing AEMO with a specific heads of power for making procedures in relation to heating values given the current scope of AEMO's role and access to information.

Consequently, the Commission's draft recommendation is that the governance arrangements for heating value calculations and zone determination should remain unchanged with jurisdictional bodies retaining responsibility.

The Commission also recommends that jurisdictions review measures for heating value calculations at injection and withdrawal points and consider the degree of consistency in requirements between jurisdictions in the process of this review. The Commission in making this draft recommendation considers that no specific heads of power is required for AEMO to change or introduce new procedures in relation to the calculation of heating values. AEMO already has the ability to make procedures in relation to heating values under the NGR.

The Commission expects that the draft recommendation would, if implemented, contribute to the achievement of the NGO, as it:

- provides a clear allocation of roles and responsibilities in relation to the quality and safety of supply of NGEs to consumers, by maintaining the existing jurisdictional responsibilities as currently relevant for natural gas
- provides stability and transparency in regulatory arrangements that will enable consumers, market participants and investors to make efficient decisions.

8.3 Settlement and balancing

8.3.1 Current framework and issues

AEMO is the retail market operator in the regulated retail markets. AEMO is responsible for managing the daily allocation of gas to retailers to enable settlement. The retail market procedures determine how user injections and withdrawals into/from a distribution network are defined, calculated, provided to AEMO and used to determine balancing, allocation, settlement and any reconciliation that is required.

The consultation paper raised the issue that the settlement and balancing arrangements will need to be amended to accommodate the injection of constituent gases at a distribution level. Injecting other covered gases into distribution systems has the potential to distort settlement in the RMP. The consultation paper put forward that the market rules and procedures need to be reviewed to:

- ensure the constituent gas injections are taken into account when determining the allocation and settlement of natural gas between users in the relevant network
- provide a mechanism for allocating constituent gas injections to market participants and for those injections to be allocated to users in the relevant network section and balanced against withdrawals.

8.3.2 Stakeholder responses

There were no stakeholder responses in relation to settlement and balancing in the retail market.

8.3.3 Commission analysis

AEMO's consultation paper for its review of procedures has also considered the issues noted above. AEMO's preliminary analysis was that the existing processes in the RMPs for balancing, allocations, settlement and reconciliation should remain fit for purpose for the introduction of NGEs. Accordingly, AEMO concluded that bespoke arrangements for NGEs would not be required.[181]

Any further analysis of these issues will be considered by AEMO as part of its procedures review. As a result, the Commission has not carried out any further assessment of issues relating to settlement and balancing in the regulated retail markets.

8.4 Cost of gas and competition concerns

8.4.1 Current framework and issues

In its consultation paper the Commission set out additional aspects of gas retail markets that may need to change to accommodate NGEs. It also indicated its preliminary view that these issues are not a high priority and could be assessed in the future. These additional market issues were:

- the treatment of the cost of the renewable component of NGEs
- consumer choice in relation to the ability of consumers to opt in or out of a renewable blend
- competition between blending projects in a particular network such that renewable gases are provided on a competitive basis to end users.

The introduction of other covered gases may lead to changes in the cost of gas in those distribution systems in which they are introduced. While volumes of renewable gases may be small in the initial phases, the cost of producing renewable gases may also be higher than the cost of producing or procuring natural gas. As such, the issue of how the cost of producing other covered gases is passed through to consumers is important when considering the market frameworks and the retail market design.

The consultation paper asked whether the Commission should consider any issues in relation to the recovery of the cost of the renewable component of the blend or any issues in relation to retail competition and consumer choice.

181 AEMO, *Extending the national gas regulatory framework to hydrogen blends and renewable gases*, consultation on the Procedures, October 2021, p. 27.

8.4.2 Stakeholder responses

Generally, stakeholders suggested that issues on the cost of gas, consumer choice and competition can be tackled either by the introduction of renewable gas targets or by the fact that there is still retail contestability in locations where NGEs have been introduced. Transparency was also seen as an important factor.

On the cost of gas, Jemena stated that this issue is solved by the new market for the renewable component of the blend, similar to the way the renewable component is managed in electricity.[182]

In contrast, Energy Australia suggested that the rules should prescribe cost allocation and transparency around flow through costs and what notifications there are around the use of NGEs and renewable gases. It also stated that there should not be an increase in the cost of gas to end users as a consequence of trials and that the cost of trials should be absorbed by the party undertaking the trial.[183]

While AGIG considered cost of gas issues to be outside the scope of the review, it suggested that there should be changes in the retail market for cost pass-through if there are mandated gas targets.[184]

APGA suggested that the renewable component of the gas be separately identified and billed.[185]

In relation to competition, the AER suggested that all retailers serviced by the distributor will be offering the same blended product, and therefore there is still retail contestability and customers will still be able to switch retailers. The AER maintained that transparency is key — if the distributor is using blended fuels, customers will not be able to opt out of blended gas and higher prices.[186]

AGL put forward that there needs to be a consistent framework across regions to support competition.[187]

8.4.3 Commission analysis

The Commission does not recommend any changes to the NGR or NERR to address the cost of gas impact or the impact on retail competition as part of this review.

In terms of the cost of producing renewable gases, the retail markets should continue to operate as they do now with natural gas. Absent state-wide mandated renewable gas targets, the issue is best managed by the ability of retailers to decline to contract for the other covered gas from the supplier. Projects will need a contract with at least one retailer to proceed. Alternatively, the project will need to bid competitively into the spot market at a price that dispatch equivalent to the desired production level can be achieved. That is, either

182 Jemena, submission to consultation paper, p. 19.
183 Energy Australia, submission to consultation paper, pp. 2, 4.
184 AGIG, submission to consultation paper, p. 14.
185 APGA, submission to consultation paper, p. 14.
186 AER, submission to consultation paper, p. 3.
187 AGL, submission to consultation paper, p. 12.

through retailers or the market, the sale of other covered gases will need to be price competitive for retailers to be able to sell gas to customers. Retailers will need to compete with each other to supply customers either with a contracted natural gas product or a contracted other covered gas product, in order for the blended physical product to then be supplied to all customers in a particular network.

As noted above, the Commission does not recommend any changes to the NGR or NERR to address potential competition concerns. This is because existing market mechanics will continue to support retail competition. There is no indication at this stage that competition in the markets will decline as a result of the introduction of other covered gases.

In investment timescales, pipelines transporting covered gases will be subject to the economic regulation framework in the NGR. In addition, third party access will apply through the new Chapter 5A in the NGL on blend processing facilities. These regulatory arrangements are designed to support efficient use of infrastructure and it is appropriate that they be extended to these new types of facilities. In addition, it would be reasonable to expect competition for new gas projects to continue across the jurisdictions as the gas sector reduces its reliance on natural gas. This competition should result in some pressure on the cost of other covered gases.

In operational timescales, where there are multiple hydrogen and renewable gas projects located within a retail market then competitive pressure can continue to apply to the projects as retailers can compete with each other in order to supply their customers. The Commission's draft recommendations on consumer protections and market transparency will support a competitive environment for other covered gases.

9 CONSUMER PROTECTIONS

BOX 7: SUMMARY OF CHAPTER

The NERL and NERR establish a national framework for the provision of a range of energy specific consumer protections to customers. The NERL and NERR have been adopted in the Australian Capital Territory, New South Wales, South Australia and Queensland.

The consultation paper identified potential gaps in the national consumer protection framework for gas if the NERL and NERR are extended to NGEs. The identified gaps related to the different physical properties or price of NGEs compared to natural gas.

The key issues examined in this chapter relate to:

- customer notifications in relation to the transition of a pipeline or part of a pipeline to a NGE
- customer notifications of changes to customer prices as a result of a transition to a NGE
- arrangements for billing on transition to a NGE
- gas quality risks, being the increased risk that customers could be supplied with gas that is unsuitable for use in their appliances if they are supplied with NGEs instead of natural gas.

The key draft recommendations made in this chapter are to:

- require a transition notice be provided prior to the transition of a pipeline to a NGE
  - from distributors to retailers and AEMO, and
  - from retailers to small customers.
- amend the model terms and conditions for standard retail contracts and market retail contracts to require retailers to specify whether gas sold by the retailer includes a NGE
- require retailers to indicate the date of a transition to a NGE in historical billing information provided to a customer in relation to gas.

The Commission has not recommended any changes to the NERR in relation to notifications of price changes, requirements for bills or gas quality risks.

The NERL and NERR establish a national framework for the provision of a range of energy specific consumer protections to customers. The NERL and NERR have been adopted in the Australian Capital Territory, New South Wales, South Australia and Queensland. Local legislation regulates energy retail matters in Victoria, Tasmania and Western Australia.[188] The consumer protections under the NERL and NERR that relate to the sale and supply of natural gas are complemented by Part 12A of the NGR which relates to gas connections for retail

188 The Northern Territory's gas reticulation and retail sale sectors are very small and there is no specific regulation of the retail sale and supply of natural gas in the Northern Territory. The *Dangerous Goods Regulations 1985* made under the *Dangerous Goods Act 1998* (NT) regulate gas works, gas installations (including meters) and appliances and gas fitters. The NERL also applies as a law of the Commonwealth in the offshore area of each state.

customers and Part 21 of the NGR which relates to retail support obligations between distributors and retailers (together the national gas consumer protection framework).-

For more information on the national gas consumer protection framework and how it relates to this review see the consultation paper, Chapter 7 'Consumer protections'.[189]

Based on the approach to extending the NER in the Official's paper, the Commission has considered the changes to consumer protections in the NERR that would be required if the NERL is extended to NGEs. It has not considered the changes to the NERR that might be required if the NERL was extended to covered gases that are not suitable for use in customer's existing appliances.[190]

In the consultation paper stakeholders were asked whether, if the NERL and NERR were extended to NGEs, the consumer protection framework in the NERR required amendment to reflect the different physical properties and price of NGEs compared to natural gas.

This chapter sets out key issues, stakeholder feedback and draft recommendations in relation to:

- customer notifications in relation to the transition of a pipeline or part of a pipeline to a NGE
- customer notifications of changes to customer prices because of a transition to a NGE
- arrangements for billing on transition to a NGE
- gas quality risks, being the increased risk that customers could be supplied with gas that is unsuitable for use in their appliances if they are supplied with NGEs instead of natural gas.

9.1 Notice of transition to a NGE

9.1.1 Current framework and issues

The physical properties of NGEs and natural gas may differ in several respects. From a consumer perspective, the difference in energy density (the calorific or heating value) is perhaps the most important[191] and the energy density of NGEs may be higher or lower than natural gas.[192] This means that greater or lesser volumes of the NGE may need to be supplied to a customer's premises to deliver the same heating value as natural gas.[193]

189 AEMC, *Review into extending the regulatory frameworks to hydrogen and renewable gases*, consultation paper, 21 October 2021, p. 52.

190 Under the proposed changes to the NERL outlined in the Official's paper, the NERL and NERR will be extended to a NGE supplied in a pipeline as if it were natural gas. The NERL and NERR will only be extended to a covered gas other than natural gas and NGEs if that gas is designated as a prescribed covered gas under the NERL.

191 This review assumes that NGEs will not be supplied to customers unless it is safe for use in existing appliances and processes.

192 For example, the heating value of hydrogen is lower than that of natural gas. GPA Engineering estimated the heating value of a 10% hydrogen blend would be around 6.8% lower than natural gas (if differences in lean and rich natural gases are considered, GPA Engineering estimates that the difference in heating value would range from between 6% and 8%): GPA Engineering, *Hydrogen in the gas distribution networks — A kickstart project as an input into the development of a National Hydrogen Strategy for Australia*, 2019, p. 42. However, other constituent gases may have a higher heating value than natural gas.

193 Heating value is a key component in the calculation of consumed energy. Metered gas volumes are turned into a measure of consumed energy (in megajoules) by multiplying the volume of gas used by a pressure factor and a heating value. It is assumed for the purposes of this chapter that the consumed energy calculated for customers supplied with a NGE will be accurate as (1) existing meters at a customer's premise will be able to accurately measure the volume of gas supplied to a customer and (2) any adjustments to gas chromatographs on distribution systems required to enable the accurate measurement of the heating value of

In the consultation paper, the Commission considered whether amendments were required to the national consumer protections framework to reflect the physical properties of different gas products.

Specifically, stakeholders were asked whether:

- a new requirement should be introduced for retailers to notify existing customers prior to the transition from the supply of a natural gas to a NGE
- the model terms and conditions for standard retail contracts and the minimum requirements for market retail contracts should be amended to specify when the supply of gas under that contract is a NGE.[194]

At the workshops held by the AEMC in December 2021, stakeholders were also asked which party is best placed to provide the transition notice and whether its contents should be prescribed in detail or at a principles level in the NERR.

9.1.2 Stakeholder responses

Most stakeholders agreed that customers have a right to be appropriately informed of the type of gas they are being supplied. AGIG stated that this proposal would:[195]

> promote transparency and build social acceptance for renewable gas with customers

Only a few stakeholders provided feedback on whether the model terms and conditions should be changed to indicate the type of gas supplied under standard retail contracts and market retail contracts but those that did, supported the proposal.[196]

PIAC suggested that the contracts should set out the range of impacts resulting from the use of a NGE including any cost, quality or efficiency impacts.[197] Alinta Energy also agreed, subject to a minimum threshold being applied, and commented that cooperation between suppliers, gas distributors and retailers is central to providing accurate and relevant information to customers.[198]

Several stakeholders commented on the physical properties of different gas blends.

AGL noted that natural gas is bound by strict technical specifications and while it may vary in composition, its fundamental properties for use are well-established and closely monitored to prevent risks to public safety. It stated:[199]

> In the absence of any adjustments, hydrogen blends will provide less energy for consumers at the same volume, leading to an increase in costs for participants that purchase gas on a volumetric basis (i.e., most customers).

NGEs will be made.

194 AEMC, *Review into extending the regulatory frameworks to hydrogen and renewable gases*, 21 October 2021, pp. 58-59.
195 AGIG, submission to consultation paper, p. 15.
196 Submissions to consultation paper: AGIG, p. 15; AGL, p. 13; Jemena, p. 18.
197 PIAC, submission to consultation paper, p. 10.
198 Alinta Energy, submission to consultation paper, p. 12.
199 AGL, submission to consultation paper, p. 13.

Similarly, Origin noted that NGEs would not have an impact on current appliances but recognised that their physical properties could mean consumers experience changes in energy density.[200] Further, PIAC commented that if a NGE product is not a genuine or direct equivalent, and there may be changes in efficiency, quality, consistency or affordability of the gas, then:[201]

> retailers must be required to provide clear and consistent information to consumers regarding the reason for this.

On that basis, AGL, Origin and PIAC agreed that changes need to be made to the consumer protection framework to reflect the difference in gas products.

Conversely, Jemena submitted that the existing protections are fit for purpose and no amendments to the framework are required because NGEs will be supplied to customers on the same terms and for the same purposes as natural gas.[202]

Stakeholder responses also differed as to:

- which party should provide the notice
- whether a principles-based approach is more appropriate than a prescriptive approach
- the contents of the notice.

EnergyAustralia agreed that retailers should be a conduit for information regarding NGEs to ensure adequate advice is provided to customers.[203]

The Australian Hydrogen Council and Alinta Energy expressed similar views that retailers should only be required to give notice where the blended NGE reaches a material threshold and customers should not have to engage with the transition unless there is a material impact on them.

Alinta Energy gave an example that:[204]

> if the blend contains less than 0.5% hydrogen (for example), the impact on customers will be negligible and notifying customers would simply drive-up cost to serve with no benefit.

The AER encouraged the Commission to consider a principles-based approach to achieving the consumer outcomes rather than a prescriptive approach. It noted that there are other possibilities to providing consumers with important information other than as part of the user's bill.[205]

At the workshops in December 2021, most stakeholders supported a principles-based approach. However, some stakeholders believed that more prescription in the NERR would

200 Origin, submission to consultation paper, p. 5.
201 PIAC, submission to consultation paper, p. 10.
202 Jemena, submission to consultation paper, p. 18.
203 EnergyAustralia, submission to consultation paper, p. 3.
204 Alinta Energy, submission to consultation paper, p. 12.
205 AER, submission to consultation paper, p. 3.

achieve a degree of standardisation that is beneficial to customers, as it will help avoid a customer receiving different or even conflicting messages regarding the transition and its potential impacts.

Following the stakeholder workshops, the Commission sought further feedback on the transition notice issue from the AER and the form of the draft recommendations.

9.1.3 Commission analysis

In developing its draft recommendation, the Commission has taken into account stakeholder feedback including in relation to the appropriate party to give transition notices, the appropriate level of prescription regarding the contents of transition notices and the parties who will hold the information about a transition to natural gas.

It has also considered whether requiring transition notices to be provided to customers is:

- compatible with the development and application of consumer protections for small customers, including, but not limited to protections relating to hardship customers
- appropriately targeted, fit for purpose and proportionate to the issues they are intended to address
- provide stability and transparency in regulatory arrangements to enable consumers to make efficient decisions.

The Commission's recommendation is that, prior to the transition of a pipeline (or part of a pipeline) to a NGE, the NERR should include requirements for the following transition notices:

- a notice from distributors to retailers and AEMO including the transition date, the type of NGE the distributor is licensed to transport and any limits on blending that may apply
- a notice from retailers to their customers on the transitioning pipeline including the transition date, a copy of the notice provided by the distributor, contact information for the retailer and distributor and any other information relevant to the customer's understanding of how the transition may impact the customer.

In addition, customer retail contracts should specify if a customer is being (or permitted to be) supplied with a NGE.

The Commission considers the draft recommendation is compatible with existing consumer protections under the NERL and NERR,[206] and jurisdictional instruments which require customers to be provided with accurate and relevant information about how they consume energy. The provision of a transition notice and the recommended changes to customer retail contracts is expected to enhance transparency and should promote confidence of gas consumers in the market. Additionally, a transition notice should help to mitigate or alleviate safety concerns consumers may have about NGEs by providing an avenue for consumers to access information and raise concerns with their retailer or distributor.

The Commission also considers retailers are best placed to communicate with customers as they manage the customer relationship. However, as distributors will likely hold key

206 For example, see rules 32, 46A, 48A, 56, 59 of the NERR.

information in relation to the transition to a NGE, they should provide a transition notice to retailers and AEMO including this information.

In developing its draft recommendation on the contents of transition notices, the Commission contemplated whether prescription in the provision of a transition notice would lead to greater clarity and increased efficiency or would increase administrative and regulatory burdens on parties. In doing so, it took into account whether the recommended requirements were appropriately targeted, fit for purpose and proportionate to the issues they are intended to address and provided for stability and transparency in regulatory arrangements. Additionally, the Commission considered stakeholder feedback that messaging consistency is crucial and more standardisation would likely occur if there were prescriptive obligations in the NERR.

The Commission considers its draft recommendation strikes a balance between the benefits of prescription against the benefits provided by a more principles-based and flexible approach. Prescribing the key contents of transition notices will provide some certainty and standardisation of transition notices. However, this draft recommendation, if implemented, will also require retailers to provide to customers any other information that is relevant to a customer's understanding of how the transition to a NGE will impact them. This approach should afford retailers the flexibility to inform customers of all relevant impacts related to a specific transition.

For the reasons outlined above, the Commission considers these draft recommendations would promote the NERO.

DRAFT RECOMMENDATION 23: REQUIRE DISTRIBUTORS AND RETAILERS TO PROVIDE NOTICES OF A TRANSITION TO A NGE

Introduce a new Part 8B 'transition to natural gas equivalents' in the NERR which includes:

New rule 147C which requires distributors to notify retailers and AEMO in writing of a transition to a NGE. The notice must:

- be in simple and concise language
- include:
  - the date of transition to the NGE
  - the type of NGE that they are licensed to transport and any limits on blending that may apply
  - the potential impact of the supply of the NGE on the quantity of gas consumed by customers and heating values compared to the supply of natural gas. In the case of a NGE which is a gas blend, the potential impact may be expressed as a range, but must include the impact at the highest permitted blend limit.
- otherwise be provided in the form and manner required by the guidelines made by the AER under new rule 147F (if any).

New rule 147D which requires a distributor:

- prior to issuing a transition notice, to consult with retailers and AEMO in relation to the transition date to be specified in a notice under new rule 147C
- in specifying a transition date in a notice under new rule 147C, have regard to:
  - any submissions received from retailers and AEMO during consultation
  - the obligations on a retailer to notify customers of the transition
  - the reasonable requirements of retailers and AEMO to review their systems and processes to ensure compliance with the national energy legislation following the transition.

New rule 147E which would require retailers to notify their small customers in writing of a transition to a NGE. The notice must:

- be in simple and concise language
- be provided no later than 5 business days before the transition date specified in the notice from the distributor
- include:
  - the transition date
  - a copy of the notice from the distributor or a link to the notice on the distributor's or retailer's website and details of how the customer may request a copy of the notice
  - contact details of the retailer and/or distributor
  - any other information relevant to the customer's understanding of how the transition may impact the customer
- otherwise be provided in the form and manner required by the guidelines made by the AER under new rule 147F (if any).

New rule 147F that:

- empowers (but not requires) the AER to make guidelines in relation to the form and content of the transition notices required under new rules 147C or 147E (transition notice guidelines)
- requires the AER to make any transition notice guidelines in accordance with the retail consultation procedure.

DRAFT RECOMMENDATION 24: REQUIRE RETAILERS TO SPECIFY IN CUSTOMER RETAIL CONTRACTS IF A NGE IS BEING SOLD

Amend clause 3.3 of the model terms and conditions for standard retail contracts in schedule 1 of the NERR to introduce a requirement for a retailer to specify, as a required alteration, whether gas sold by the retailer includes a NGE.

Amend Part 2 Division 7 of the NERR by introducing a rule requiring market retail contracts for the sale of gas to specify whether gas sold by the retailer includes a NGE.

Amend Schedule 3 of the NERR by inserting a new savings and transitional rule specifying that the new rule in Part 2 Division 7 applies only to market retail contracts that are entered into or varied after the commencement of the rule.

9.2 Notice of price changes because of a transition to a NGE

9.2.1 Current framework and issues

Retailers may seek to increase the prices it charges to customers connected to a distribution system that has transitioned to a NGE because there may be higher costs associated with supplying a NGE compared to supplying natural gas.

The variation of price provisions in s. 23 of the NERL set out:

- the power of the retailer to vary standing offer prices from time to time
- the obligation that the retailer and AER publish standing offer prices and any variation of those prices on their websites
- the requirement for a retailer to publish a notice about the variation, and inform affected customers during the next billing period
- information on the date the variation takes effect.

Rule 46 of the NERR contains the rules relating to tariffs and charges including:

- the retailer obligation to give notice of any variation that may affect customers
- the timing of delivery of the notice and content such as specifying the date the variation takes effect and the existing and future tariffs and charges
- the exemptions to providing a notice, for example, in circumstances where the customer has entered into a market retail contract within 10 business days before the variation date.

In the consultation paper, it was noted that these provisions raise the issue of whether retailers that change prices because of the transition should be required to disclose this as a reason for a variation at the time the relevant changes are notified.[207] Stakeholders were asked whether customers should be notified of a potential price variation or change as a result of the transition from a natural gas to a NGE. Their responses are summarised below.

207 AEMC, *Review into extending the regulatory frameworks to hydrogen and renewable gases*, consultation paper, 21 October 2021, p. 56.

9.2.2 Stakeholder responses

AGL and Bioenergy supported notifying customers of price variations.[208] Similarly, the AER noted that the objective of transparency should extend to informing customers as early as possible on the implications of the transition, including around price.[209] PIAC also considered that any cost impact of the use of a NGE product should be clearly indicated to consumers and said:[210]

> Consumers must have access to the information required to make informed decisions and understand their usage and costs… to enable this assessment and effective decision making

EnergyAustralia also supported notifying customers when NGEs become a commonly supplied product and customers are actively procuring it. It commented that:[211]

> how the price for a natural gas equivalent product is presented to the customer should remain a retailer decision.

Some stakeholders, like AGIG, considered that the existing requirements for notifying changes in price such as for tariffs and charges were sufficient.[212] Similarly, EWON stated that any price variations passed on to customers should be treated the same as normal variations, hence the current regulatory requirements for notification of changes should be applicable.[213]

The Australian Hydrogen Council submitted that only material changes in price needed to be notified to customers because the costs of additional retailer interactions with customers may outweigh the benefits. It suggested that the AEMC:[214]

> not make pre-emptive changes to the customer/retailer relationship and instead to consider whether existing provisions in the National Energy Retail Rules are suitable to capture any price variations which result from a change

In contrast, some stakeholders considered that at this stage changes to the framework are not necessary. Alinta Energy stated that:[215]

> Unless price variations are material, there may be limited value in informing customers of changes. Retailers make their own decisions on how to price their products and compete on this basis.

208 Submissions to consultation paper: AGL, p. 13; Bioenergy, p. 13.
209 AER, submission to consultation paper, p. 3.
210 PIAC, submission to consultation paper, p. 11.
211 EnergyAustralia, submission to consultation paper, p. 4.
212 AGIG, submission to consultation paper, p. 15.
213 EWON, submission to consultation paper, p. 4.
214 AHC, submission to consultation paper, p. 4.
215 Alinta Energy, submission to consultation paper, p. 12.

Further, Jemena stated that:[216]

> No transition is required as natural gas and NGEs are interchangeable. Retailers will be able to continue to source these for their customers. As a result, there will be no price variation directly due to the transition.

9.2.3 Commission analysis

In line with the view expressed by the majority of stakeholders, the Commission considers it appropriate that any variation in price due to the change in supply of a gas product should be disclosed to customers.

However, the Commission recommends making no changes to the NERR.

In the Commission's view, this recommendation is consistent with the NERO and the implementation considerations criteria of the assessment framework because it is a proportionate response and provides stability in regulatory arrangements. Creating new arrangements to notify customers of possible price impacts (as opposed to actual price impacts) due to a transition will add unnecessary administrative burden on retailers. The Commission considers that, the potential costs outweigh the benefits and, the existing notification process for variations to prices and tariffs and charges are sufficient in addressing this issue.

9.3 Arrangements for billing on transition to a NGE

9.3.1 Current framework and issues

As noted in section 9.1.1 above, the energy density of NGEs may be higher or lower than natural gas and therefore different volumes of the NGE may need to be supplied to a customer's premises to deliver the same heating value as natural gas. Following the transition to a NGE at their premises, a customer will continue to be billed based on the energy content of the gas supplied to their premises however their bill may indicate an increase, or decrease, in the metered consumption (volume) of gas that is related to the supply of the NGE, rather than a change in the consumption pattern of the customer.[217]

The consultation paper noted that changes may be required to arrangements for billing under the NERR to reflect the different physical properties of NGEs compared to natural gas.[218] The consultation paper sought feedback on whether changes should be made to the NERR to introduce new requirements for:

- retailers who receive requests for historical billing data from a customer to state in the billing information provided if there was a transition from natural gas to a NGE during the billing history period for which information is requested, and the date at which the transition occurred

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216 Jemena, submission to consultation paper, p. 19.

217 Note that billing is calculated on MJ consumed and not on volume of gas.

218 AEMC, *Review into extending the regulatory frameworks to hydrogen and renewable gases*, consultation paper, 21 October 2021, p. 56.

- if the NGE to be supplied has a different heating value from natural gas, a requirement for retailers to issue a bill based on an actual meter read for customers with accumulation (non-interval meters) before supply is transitioned to a NGE.

9.3.2 Stakeholder responses

Limited feedback was received from stakeholders in relation to the requirement to indicate the date of a transition to a NGE in historical billing information. AGIG and EWON supported the requirement[219] and Alinta Energy considered the requirement had some merit.[220] EWON noted:[221]

> Most consumers are not familiar with reading or interpreting meter data and should also be provided with explanatory information from their retailer including about any significant changes in data. This should include provision of additional information regarding calculation factors or the date of transition from natural gas to an equivalent, which will increase clarity about the data.

However, AGL commented that the proposal needed to be explored further as the amount of blend in the network may change from day to day.[222] Jemena considered that existing billing requirements and existing historical billing rules and procedures are sufficiently flexible to take into account different heating values.[223]

There was little support from stakeholders in relation to the requirement for customers to be issued with a bill on transition to a NGE. Alinta Energy and Origin considered that requiring an out-of-cycle bill based on an actual meter read to be issued on transition to a NGE would be administratively burdensome.[224] Alinta Energy commented:[225]

> The transition will be gradual over time and would need to reach a threshold point before having a material impact on the consumer. In this sense there would be an accumulation of natural gas blending over time, rendering a binary 'before' and 'after' heating value less meaningful to small consumers.

AGIG also considered that the requirement for a bill on transition could result in costs that outweigh the benefits.[226]

However, EWON supported the transparency of an approach whereby a bill is issued to a customer for the period where natural gas usage finished and a new bill from the start date of NGE billing.[227]

219 Submissions to consultation paper: AGIG, p. 15; EWON, p. 3.
220 Alinta Energy, submission to consultation paper, p. 12.
221 EWON, submission to consultation paper, p. 3.
222 AGL, submission to consultation paper, p. 13.
223 Jemena, submission to consultation paper, p. 18.
224 Submissions to consultation paper: Alinta Energy, p. 12; Origin, p. 5.
225 Alinta Energy, submission to consultation paper, p. 12.
226 AGIG, submission to consultation paper, p. 15.
227 EWON, submission to consultation paper, p. 3.

9.3.3 Commission analysis

In relation to historical billing information, the Commission considers that requiring retailers to indicate the date of a transition to a NGE in historical billing information provided under rule 28 of the NERR would provide customers and customer advocates with information that may assist in resolving issues and disputes.[228] These insights will also be assisted by the receipt of a transition notice recommended in section 9.1.4 above.

The Commission considers that, if implemented, the requirement to include the date of the transition on historical billing information would promote the NERO by promoting the efficient use of energy services by customers and would be compatible with the development and application of consumer protections for small customers.[229] This is because the requirement would provide customers (and their advocates) with information that will enable them to better understand their use of energy. The recommended change is considered proportionate to the issue it is intended to address and should not impose significant cost on retailers.

> DRAFT RECOMMENDATION 25: INCLUDE NGE TRANSITION INFORMATION IN HISTORICAL BILLING INFORMATION
>
> Amend rule 28 of the NERR to introduce a requirement that retailers include the date of a transition to a NGE (if any) in historical billing information provided to a gas customer.

In relation to the potential requirement for retailers to issue a bill to customers on transition to a NGE ('transition bills'), the Commission has considered stakeholder submissions that this requirement may be logistically challenging and costly. It has also undertaken further analysis on how customer bills are calculated where customers have accumulation meters. Based on this analysis, the Commission has concluded that, although issuing a bill on transition might have some benefits to customers in relation to additional transparency regarding the transition, it is unlikely to materially improve the accuracy of customer bills.

This is because customers with accumulation meters are billed based on their total consumption over the meter read period multiplied by the average of the daily heating value over that period. The use of average daily heating values over the meter reading period means that the changes in the energy content of the gas consumed by customers over the meter read period will be taken into account in customers' bills despite a transition to a NGE during the meter read period. For this reason, provided the daily heating value of gas delivered to customers is measured accurately,[230] a requirement for a transition bill would not materially increase the accuracy of customer billing.

Therefore, the Commission is not recommending the introduction of a requirement for retailers to issue transition bills to customers as it considers the costs incurred by retailers in

228 For example, if the date of a transition to a NGE is indicated on historical billing information, customers or their advocates may have greater insight as to the reasons for a change to inputs to customers' bills such as changes to heating values or volumes of gas consumed.

229 Section 236(2)(b) of the NERL.

230 See section 8.2 of this report for a discussion on heating value and metering in retail markets.

issuing transition bills would likely outweigh the benefits to customers and would not promote the efficient operation and use of energy services.

9.4 Gas quality risk issues

9.4.1 Current framework and issues

In the consultation paper, it was noted that once the national gas regulatory framework accommodates NGEs, the quality of the gas stream may be more variable than it currently is because NGEs may be made up of a blend of natural gas and other gases or gases other than natural gas.[231]

Under s. 316(1) of the NERL, retailers and distributors have no civil monetary liability for loss or damage suffered by a customer due to the defective supply of energy unless they have acted in bad faith or through negligence. The potential liability of retailers and distributors for negligence is capped under Regulations made under the NERL. In addition, some jurisdictions have further limited the liability of distributors to customers under local regulations.

The consultation paper sought stakeholder views on whether the existing allocation of risk for gas quality and protections for consumers under the national gas regulatory framework are appropriate when the framework is extended to NGEs.

In stakeholder workshops held in December 2021, the Commission also asked stakeholders to consider whether distributor guaranteed service level schemes would be an appropriate mechanism to enable customers to access payment for loss suffered as a result of gas quality issues.

9.4.2 Stakeholder responses

In relation to gas quality risks for customers, stakeholders provided little feedback in submissions to the consultation paper on whether customers were adequately protected against potential loss or damage due to gas quality risks. However, in later discussions with the Commission Energy Consumers Australia emphasised that any framework for dispute resolution and making claims should include a clear and simple process for customers to follow.

In addition, at the workshops some stakeholders noted that customers might not easily identify issues relating to gas quality. This same issue was raised by the New South Wales Energy and Water Ombudsman (EWON) in discussions with the Commission following the stakeholder workshops.

In relation to appropriate mechanisms for compensating customers, several workshop participants expressed the view that guaranteed service level schemes were not an appropriate mechanism for compensating customers for loss due to gas quality issues. This is because the guaranteed service level schemes have not been applied to gas distributors in most jurisdictions that apply the NERL and, when they are applied to aspects of distributor

231 AEMC, *Review into extending the regulatory frameworks to hydrogen and renewable gases*, consultation paper, 21 October 2021, p. 57.

performance, they operate as service performance incentives rather than being designed to compensate for loss suffered by customers. EWON subsequently indicated that Ombudsmen will have a role to play in facilitating the resolution of disputes or complaints in relation to gas quality but that in order for customers to raise and support a complaint or dispute in relation to gas quality they will require access to data about the quality of gas supplied to them.

In relation to allocation of risk for gas quality, some retailer stakeholders (and retailer peak bodies)[232] expressed concern with the current allocation of risk for gas quality between retailers and distributors under existing access arrangements. They queried whether this was appropriate given that distributors will manage the injections of NGEs and constituent gases into their gas networks. For example, EnergyAustralia noted:[233]

> this should reflect that the responsibility for any liability resulting from gas specification, blending, or the quality of NGE injection is solely that of the party injecting the gas into the distribution network; existing Reference Service Agreements place the liability on the shipper of the gas, a party that only has contractual agreements with gas producers to ensure compliance with requirements.

On the other hand, Jemena did not consider there is a greater risk of distributors not adequately managing 'off spec' gas under a NGE model compared to the provision of natural gas. It also considered that if there are any issues relating to the quality of service as a result of the inclusion of NGEs there is an existing jurisdictional mechanism for managing the level of distributor service.[234]

9.4.3 Commission analysis

The immunity in s. 316(1) of the NERL applies to failure to supply both electricity and gas and includes the defective supply of gas. Making changes to the immunity could represent a significant reallocation of risk between retailers, distributors and customers. The Commission does not consider a change to the scope of the immunity under the NERL would promote the NERO.

A change to the allocation of risk under the immunity is likely to require retailers and distributors to review and potentially change their approach to risk management, potentially resulting in additional costs that will flow through to consumers as higher prices. However, the Commission does not currently have sufficient evidence that a change to the allocation of risk under the immunity in s. 316(1) of the NERL would promote more efficient operation and use of energy services in the long-term interests of consumers.

However, the Commission considers it important that customers are able to access adequate compensation if they suffer loss as a result of gas quality issues that arise due to the negligence of distributors in monitoring gas quality in their networks.

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232 Submissions to consultation paper: EnergyAustralia, p. 5; AGL, p. 14; Alinta Energy, pp. 12-13.

233 EnergyAustralia, submission to consultation paper, p. 5.

234 Jemena, submission to consultation paper, p. 19.

For the reasons outlined in section 9.4.2, distributor guaranteed service level schemes do not appear to be the appropriate mechanism to compensate customers for such loss.

The Commission considers that the existing mechanisms to manage customer disputes and complaints under the NERL and NERR framework[235]can be utilised by customers who have suffered loss or damage due to gas quality issues. However, the limits on distributors' liability for negligence applied by some jurisdictions under local regulations may prevent customers accessing appropriate levels of compensation for loss or damage due to defective gas quality (e.g., the liability cap in NSW is $5,000). In addition, it may be difficult for customers (or the Ombudsman acting on their behalf) to access data relating to gas quality that would be required to support a claim for compensation.

In relation to allocation of liability for gas quality between retailers and distributors, these are matters that will need to be resolved through the contractual arrangements between retailers and pipeline service providers,[236] rather than through the NERL or NERR. Hence, the Commission recommends no changes to the NERL or NERR to deal with this issue.

For the reasons outlined above, the Commission recommends no change to the immunity under s. 316(1) of the NERL in relation to defective gas supply or changes to the NERR in respect of gas quality. The Commission does however recommend that jurisdictions:

- review liability caps that apply to distributors under local legislation as these limits may prevent customers accessing appropriate levels of compensation for loss or damage due to defective gas quality, and
- review their gas composition measurement and monitoring frameworks to consider whether those frameworks enable the collection of information about the quality of gas supplied to customers (at network withdrawal points).

235 Part 4 of the NERL.

236 Including in the review of access arrangements including the form of reference service agreements.

10 REGULATORY SANDBOX FRAMEWORK

BOX 8: SUMMARY OF CHAPTER

The new regulatory sandbox framework will enable energy market participants to trial innovative concepts in the market on a time-limited basis and with appropriate safeguards in place.

The Commission identified gaps in the draft regulatory sandbox rules that could emerge if the NGL and NERL allowed the trial supply of NGEs or other gas products to customers in a pipeline or part of a pipeline (a 'change of product trial') under the regulatory sandbox framework.

The main issues considered were:

- the practicality of a retailer's customer opting out of a 'change of product trial'
- whether the current consultation requirements were appropriate and adequate
- whether more stringent assessments of the safety, security and reliability impacts of a 'change of product trial' should be introduced.

Having considered the issues further, as well as stakeholder views, the Commission has determined that the new regulatory sandbox framework will not be used for 'change of product trials'. This is because under the Officials' proposed approach to extending the NGL and NERL to covered gases, jurisdictions will retain control over whether a gas may be supplied in a pipeline as part of a trial or on a permanent basis. The effect of this is that a gas or gas blend, such as a NGE, will not be a covered gas that falls within the scope of the national gas regulatory framework (including the regulatory sandbox framework) unless its supply has been approved by the relevant jurisdiction.

As a result of this approach, the potential issues discussed in the Commission's consultation paper will not arise; change of product trials will not be required in order to supply a covered gas instead of natural gas.

Therefore, the Commission's recommendation is to make no changes to the draft regulatory sandbox rules.

A regulatory sandbox is a framework within which market participants can test innovative concepts in the market under relaxed regulatory requirements at a smaller scale, on a time limited basis and with appropriate safeguards in place. The regulatory sandbox framework will provide:

- the AEMC with power to make rules in relation to trial projects, and
- the AER with powers to grant waivers in relation to trial projects. These waiver powers will be in addition to the AER's existing powers to grant waivers and exemptions under

the National Energy Laws and Rules, such as exemptions from the ring-fencing requirements in the NGL.[237]

A bill to amend the NEL, NGL and NERL has been introduced into the South Australian House of Assembly[238] and when passed by the South Australian Parliament, will empower the South Australian Minister for Energy to make amendments to the NER, NGR and NERR in relation to a regulatory sandbox framework.

For more information on the regulatory sandbox framework and how it relates to this review see the consultation paper, Chapter 8 'Regulatory sandbox framework'.[239]

This chapter sets out key issues, stakeholder feedback and draft recommendations in relation to:

- changes to the draft regulatory sandbox rules required to accommodate trials involving the supply of NGEs
- the applicability of the regulatory sandbox framework to 'change of product trials'.

10.1 Supply of natural gas equivalents in trials

10.1.1 Current framework and issues

In the consultation paper, it was assumed that:

- the extension of the national gas framework to NGEs might allow the trial supply of a NGE to customers in a pipeline or part of a pipeline
- the regulatory sandbox framework might be used for such a trial supply.

Under the current draft regulatory sandbox rules, the trial project guidelines made by the AER must provide for processes by which, and grounds upon which, a person to whom a trial waiver is granted must allow a retail customer to opt out of a trial project.[240] If a trial project involved the trial supply of a NGE in a pipeline, all customers connected to the relevant pipeline would be supplied with that gas product for the duration of the trial. It is not practical for an individual customer to have the ability to opt out of these trials (referred to as 'change of product trials').

The AER is also required to carry out public consultation for trial waivers unless satisfied the proposed project is unlikely to have an impact on other registered participants and, is unlikely to have a direct impact on retail customers other than those who provide explicit informed consent to participate.[241] While it appears that the current consultation obligations are sufficient, the consultation paper asked stakeholders whether additional measures should be introduced for trials involving the trial supply of NGEs.

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237 The trial waiver provisions in the draft regulatory sandbox amendments do not empower the AER to give trial waivers in relation to the ring fencing requirements in the NGL (see Chapter 4). Under the draft regulatory sandbox amendments to the NGL, the AER is only empowered to give waivers of specified registration requirements in the NGL and provisions of the NGR (new s. 30W of the NGL, introduced by s. 35 of the Statues Amendment (National Energy Laws) (Regulatory Sandboxing) Bill 2021).

238 Statutes Amendment (National Energy Laws) (Regulatory Sandboxing) Bill 2021.

239 AEMC, *Review into extending the regulatory frameworks to hydrogen and renewable gases*, consultation paper, consultation paper, 21 October 2021, p. 60.

240 Draft NER clause 8.17.3, NGR rule 135OB and NERR rule 184.

241 Draft NER clause 8.15.3, NGR rule 135MB and NERR rule 177.

In addition, the draft regulatory sandbox rules require the AER to consider the safety, security and reliability impacts of a trial waiver before making its decision on the trial waiver.[242] The Commission considered whether trials involving the sale and supply of NGEs and other gas blends would require imposing more stringent impact assessments before the trial is approved.

In the consultation paper, stakeholder responses were sought on:

- whether it is practicable for a retail customer to opt out of a change of product trial and, if not, whether changes should be made to explicit informed consent requirements for retail customers participating in trials
- if any changes to the consultation requirements regarding proposed trial waivers for supply of NGEs are needed
- if amendments should be made to specify certain pre-conditions to the granting of a trial waiver.

At the stakeholder workshops conducted by the AEMC in mid-December 2021, stakeholders were also asked in what circumstances the regulatory sandbox framework would be utilised for 'change of product trials' by distributors and retailers.

10.1.2 Stakeholder responses

There was broad consensus among stakeholders that if the regulatory sandbox framework could be used for 'change of product trials', changes would be required to the customer opt-out arrangements, as opt-outs during a trial supply of a NGE would not be practicable.

However, views differed on what additional protections should be included in the framework. AGIG and ATCO supported changes to the explicit informed consent provisions for change of product trials to require trial proponents to inform customers that they will not be able to opt out of the trial.[243]

Rheem suggested that the regulatory sandbox rules be amended to impose requirements on trial proponents to:[244]

- display a warning to gas installers and technicians of the gas blend being supplied
- conduct a safety assessment prior to the transition to a new gas product
- assign responsibility for the maintenance and replacement of trial gas appliances (both new and existing)
- issue public notices of any such trials.

The AER also suggested additional protections were needed, such as:[245]

- an assurance of no price increases during the trial if the gas supplied is a NGE compared to a supply of natural gas

242 Draft NER clause 8.15.4, NGR rule 135MC and NERR rule 178.
243 Submissions to consultation paper: AGIG, p. 16; ATCO, p. 15.
244 Rheem, submission to consultation paper, p. 4.
245 AER, submission to consultation paper, pp. 1-2.

- mitigation of losses that are associated with the impact of the trial on customers like damage to appliances.

Like the AER, EnergyAustralia raised specific concerns about price increases and stated that:[246]

> any trial of NGEs should not result in an increased price to customers, with this cost absorbed by the party responsible for the trial.

In contrast, Jemena submitted that a trial supply of a NGE will not necessarily require the regulatory sandbox framework to provide regulatory relief as the gas products are interchangeable.[247] Similarly, Origin commented that consumers should be indifferent from a safety and technical perspective to this type of trial given that a NGE are supposed to be suitable for use in existing appliances.[248]

Most stakeholders who responded on the issue of consultation considered that the AER's discretion in relation to consultation processes would be appropriate and does not require change.

The Commission also received other comments from stakeholders on the operation of the regulatory sandbox framework. Alinta Energy commented that if the trial involves a material number of small customers, public consultation would be valuable if the process does not unduly consume the AER's time and resources. It provided examples of information trial proponents should be required to provide consumers as part of their engagement such as the duration of the trial, changes to gas quality or gas specifications and any impacts on appliances.[249]

The AER also commented on regulatory sandbox consultation and stated:[250]

> We would expect that sufficient community consultation has been undertaken, there is broad support of the trial and that a consumer will not be made worse off before prior to a trial occurring.

Stakeholders also expressed diverging views on whether a precondition to using the regulatory sandbox framework for supplying NGEs or other gases should be introduced. The AER commented:[251]

> consultation could be supplemented with a requirement that approval from the relevant jurisdictional technical regulator is a precondition to the lodgement of a trial waiver.

246 EnergyAustralia, submission to consultation paper, p. 4.
247 Jemena, submission to consultation paper, p. 20.
248 Origin, submission to consultation paper, p. 4.
249 Alinta Energy, submission to consultation paper, p. 14.
250 AER, submission to consultation paper, pp. 1-2.
251 AER, submission to consultation paper, pp. 1-2.

In contrast, Jemena and ATCO shared the view that introducing additional requirements would be a barrier to innovation and create unnecessary regulatory hurdles. They noted that all trial projects will need to comply with the relevant laws and regulations, and that the jurisdictional technical regulator already ensures that the safety, security and reliability of the network is paramount.[252]

At the workshops, several stakeholders queried whether the regulatory sandbox framework would apply to 'change of product trials' if the jurisdictional technical regulation, including licensing arrangements, would govern whether a NGE could be supplied to customers premises. Subsequently, the Commission undertook further consultation with the AER on this issue.

10.1.3 Commission analysis

The Commission's recommendation is to make no changes to the draft regulatory sandbox rules.

The regulatory sandbox framework will still be able to be used if a gas or gas blend is a covered gas and trial proponents want to test innovative approaches to the provision of covered gas services.[253] However, following further consideration of stakeholder views and consultation with the AER, the Commission has concluded that the framework will not be used for 'change of product trials'.

This is because jurisdictions will retain control over whether a gas may be supplied in a pipeline on either a trial or permanent basis. A gas or gas blend, such as a NGE, will not fall within the scope of the regulatory sandbox framework unless its supply has been approved by the relevant jurisdiction. The implication is that if a distributor wants to conduct a trial of a gas or gas blend in a pipeline that is not a 'covered gas' under the NGL, then it will need jurisdictional approval for the trial.

Once the jurisdiction has approved the supply of the covered gas, the sale and supply of that covered gas will be subject to the NGL and NERL,[254] including the regulatory sandbox framework (once it is introduced). As a result, the simple supply of that new gas itself does not require the use of the regulatory sandbox framework. However, where trial proponents have genuinely innovative projects they wish to conduct in relation to covered gas services, they will be able to utilise the regulatory sandbox framework to seek any trial waivers or trial rules required for their proposed project.

Because the Commission has concluded that the regulatory sandbox framework will not be used for 'change of product trials, it follows that the gaps in the draft NGR and NERR identified in respect of such trials will not emerge. The Commission has not identified any other gaps that will emerge in the draft regulatory sandbox rules as a result of the extension of the NGL and NERL to covered gases.

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252 Submissions to consultation paper: ATCO, p. 15; Jemena, p. 20.

253 Covered gas services will mean a pipeline service, the supply of a covered gas or a service ancillary to the supply of covered gas.

254 Under the changes to the NERL outlined in the Official's paper, the NERL and NERR will be extended to a NGE supplied in a pipeline as if it were natural gas. The NERL and NERR will only be extended to covered gases other than natural gas and NGEs if such gases are designated as a prescribed covered gas under the NERL.

Although no changes are required to the draft regulatory sandbox rules, the regulatory sandbox framework can still be used to trial innovative concepts. The Commission considers that the recommended approach is consistent with the NGO and NERO as the regulatory sandbox framework will enable innovation in the supply of new gas services, which will include the supply of NGEs and renewable gases, that meet the needs and interests of consumers.

ABBREVIATIONS

AA	Access Arrangement
ACCC	Australian Competition and Consumer Commission
AEC	Australian Energy Council
AEMA	Australian Energy Market Agreement
AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
AGIG	Australian Gas Infrastructure Group
AMDQ	Authorised Maximum Daily Quantity
AMDQ cc	Authorised Maximum Daily Quantity Credit Certificates
APGA	Australian Pipelines and Gas Association
ARENA	Australian Renewable Energy Agency
ASAs	Agreed Services Agreements
BB	Bulletin Board
BoD	Beginning of Day
Commission	See AEMC
CTP	Capacity Trading Platform
DAA	Day Ahead Auction
DDS	Declared Distribution System
DTS	Declared Transmission System
DTS SP	Declared Transmission System Service Provider
DWGM	Declared Wholesale Gas Market
ERA	Economic Regulation Authority
ESC	Essential Services Commission
GAMAA	Gas Appliance Manufacturers Association of Australia
GDSC	Gas Distribution System Code
GJ	Gigajoule
GRCF	Gas Retail Consultative Forum
GSH	Gas Supply Hub
GSOO	Gas Statement of Opportunities
LNG	Liquefied Natural Gas
MCE	Ministerial Council on Energy
MJ	Megajoule
MJ/h	Megajoule-hour
MOS	Market Operator Services
MSVs	Market Schedule Variations
NEL	National Electricity Law

NEO	National Electricity Objective
NERL	National Energy Retail Law
NERO	National Energy Retail Objective
NERR	National Energy Retail Rules
NG	Natural Gas
NGE	Natural Gas Equivalent
NGL	National Gas Law
NGO	National Gas Objective
NGR	National Gas Rules
PIAC	Public Interest Advocacy Centre
RMP	Retail Market Procedures
SEA	Service Envelope Agreement
STTM	Short Term Trading Market
TJ	Terajoule
UAFG	Unaccounted For Gas
VGPR	Victorian Gas Planning Report

A SUMMARY OF OTHER ISSUES RAISED IN SUBMISSIONS

This appendix sets out the issues raised in the first round of consultation on this review process and the AEMC's response to each issue. If an issue raised in a submission has been discussed in the main body of this document, it has not been included in this table.

Table A.1: Summary of other issues raised in submissions

STAKEHOLDER	ISSUE	AEMC RESPONSE
OTHER ISSUES		
Rheem, pp. 2, 4.	There has not been enough testing yet of blends. A 10% blend may not be suitable to all appliances. Rheem recommended introducing national regulatory requirements for safety.	The issue of safety remains the responsibility of jurisdiction technical and safety regulators.
AEC, p. 2.	Consultation bypasses technical and economic feasibility of the proposed blends and as a consequence the efficiency criteria of the NGO. AEC considers, given the assessment criteria, that changes to the frameworks are premature, given the review presupposes that the economic benefit of NGE will be positive. It also notes the AER process for trial waivers is all that is needed in this phase.	The purpose of this review is to enable new gases to be included within the gas regulatory framework rather than sit outside it. Whether a new gas is used in pipelines and in the facilitated markets will only be possible after the relevant jurisdiction determines it is safe to do so.(1) In relation to the use of the regulatory sandbox framework, see chapter 10.
GAMAA, p. 2.	There is a need for a timetable roadmap by markets segment (residential, commercial and industrial) supported by governments, state/territory regulators and industry. A roadmap to 100%, as an ever increasing blend is not commercially viable or technically feasible. There is also a need for a structured plan away from gas networks, appliances and components.	Other covered gases will not be supplied unless the relevant jurisdiction approves. The AEMC understands all governments are working together on the transition for the gas sector, this review is one part of that process.

Note: 1) Energy Ministers, Extending the national gas regulatory framework to hydrogen and renewable gases proposed changes to NGL, NERL and National Regulations, consultation paper, March 2022, chapter 2.

B OVERVIEW OF THE REGULATORY FRAMEWORKS REVIEW

This appendix provides additional detail on:

- the broader review framework — including what is in and out of scope of the AEMC review
- governance of the reviews.

B.1 Overarching review framework and its workstreams

The AEMC's review is one workstream within the broader review framework. Each workstream's purpose is to support the Energy Ministers' goal of integrating low-level hydrogen and renewable gas blends into the national regulatory frameworks.

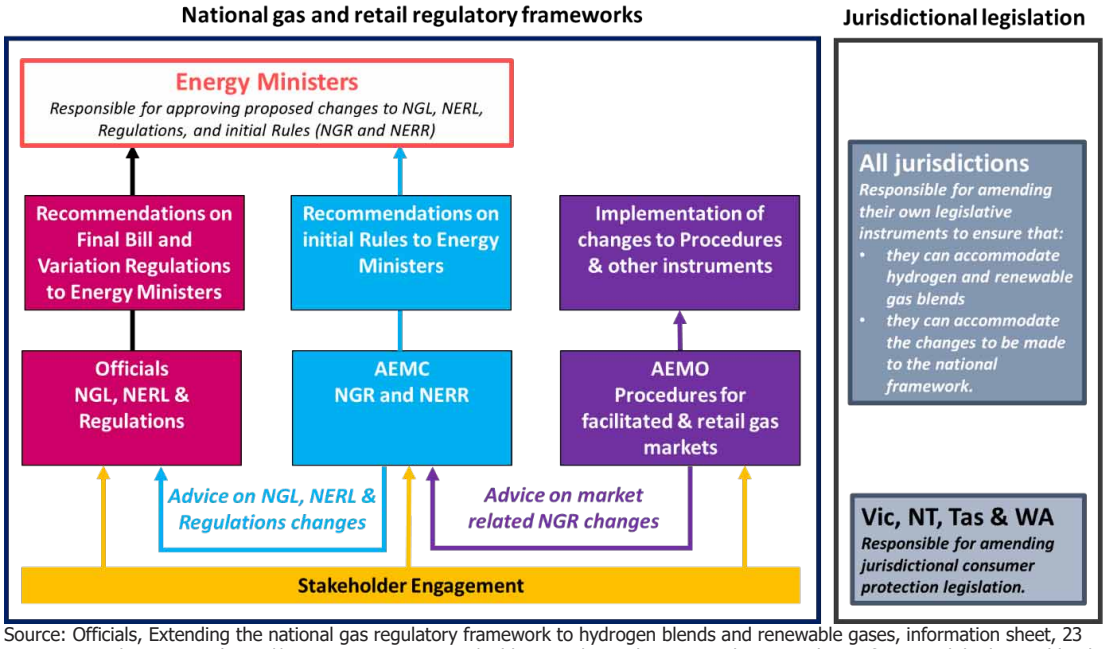
Under the approach set out by Energy Ministers the workstreams will consist of:

- Commonwealth, state and territory officials are responsible for identifying the required amendments to the NGL, NERL and regulations (the National Gas Regulations and National Energy Retail Regulations).
- The AEMC is responsible for identifying the amendments to the NGR and NERR required to accommodate other covered gases.
- AEMO is responsible for identifying the amendments to its procedures and other AEMO-made instruments required to ensure settlement and metering in the facilitated and regulated retail gas markets can accommodate other covered gases.

The figures below illustrate how these workstreams form part of the total review process.

In addition to amending the gas and energy retail instruments noted above, amendments will need to be made to jurisdictional legislation and regulations to accommodate other covered gases. The changes required at a jurisdictional level are not part of the AEMC's review. Rather, each jurisdiction will be responsible for amending their local legislation and regulations as necessary.

Figure B.1: Overarching review framework



Source: Officials, Extending the national gas regulatory framework to hydrogen blends and renewable gases, information sheet, 23 September 2021 at https://energyministers.gov.au/publications/extending-national-gas-regulatory-framework-hydrogen-blends-and-renewable-gases

B.1.1 Scope of the AEMC review

The figure and table below set out the scope of the AEMC's review of the NGR and NERR. It also identifies those areas that are being reviewed by jurisdictional officials and AEMO.[255] In this figure the scope of the current workstreams is indicated by blue:[256]

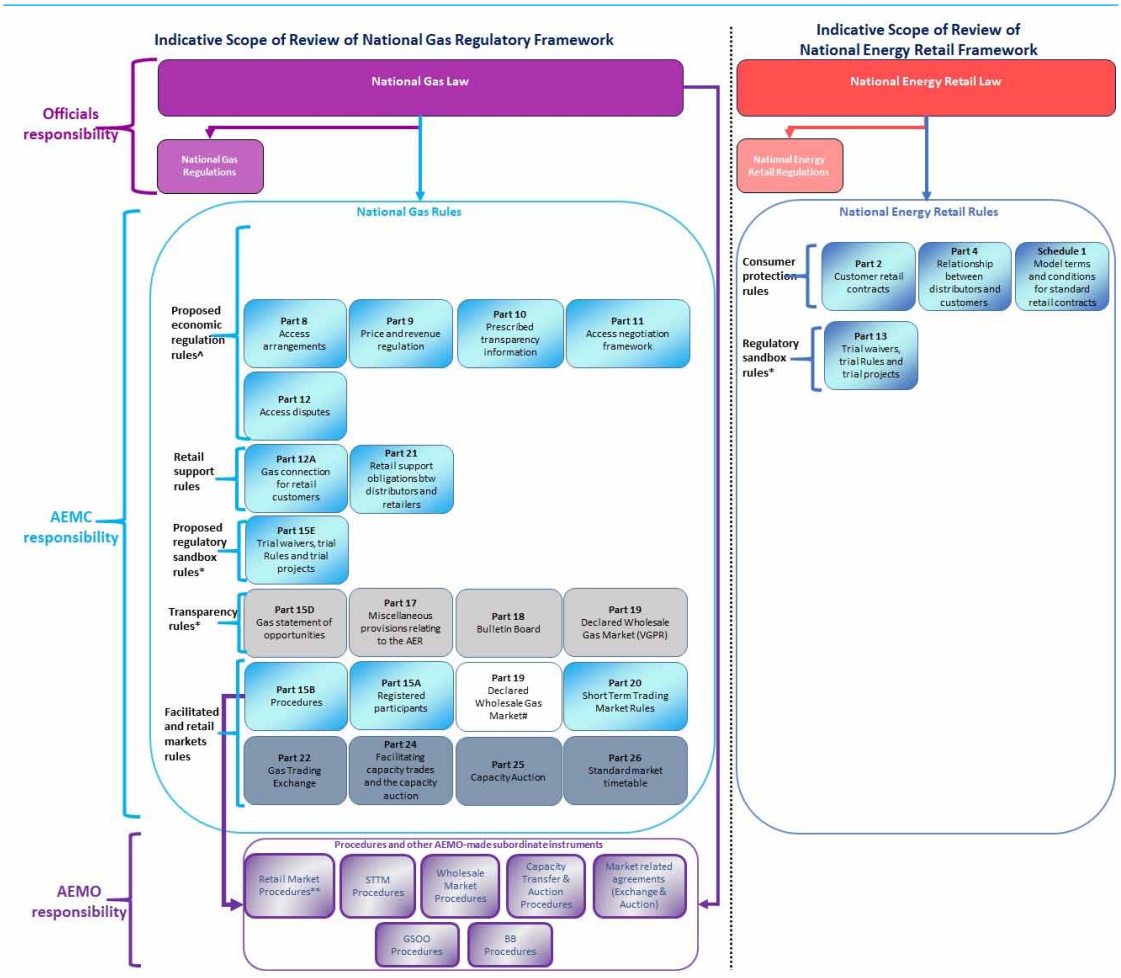
- Dark grey has been used to identify those parts of the NGR that do not appear to be a high priority to amend as part of the initial rules package from this review process because they apply at a transmission level rather than a distribution level. Potential amendments to these parts of the NGR can be considered as part of a future process.
- Light grey has been used to identify those parts of the NGR where there is a question whether they should be amended as part of the initial rules package, or deferred until a future process. This is because it is unclear whether the supply of other covered gases into distribution pipelines in the early stages of the industry's development will be sufficient to require these parts of the NGR to be activated.
- White has been used to identify that part of the NGR that is the subject of the DWGM distribution connected facilities rule change process. However, some aspects of Part 19 of the NGR that may require amendment may fall outside the scope of the rule change

255 Table B.1 and Table B.2 provide further detail on what sections of the NGR and NERR are in and out of scope

256 See also Chapter 1.

process. In those instances, the specific issues will be considered under the AEMC's review.

Figure B.2: Indicative scope of the review workstreams



Source: Officials, Extending the national gas regulatory framework to hydrogen blends and renewable gases, information sheet, 23 September 2021 at https://energyministers.gov.au/publications/extending-national-gas-regulatory-framework-hydrogen-blends-and-renewable-gases

Table B.1: Indicative scope of the AEMC review

CHAPTER OF THIS PAPER	PART OF THE NGR OR NERR
Economic regulation of pipelines[1]	NGR, Part 6 (Pipeline interconnection principles) NGR, Part 8 (Access arrangements)

CHAPTER OF THIS PAPER	PART OF THE NGR OR NERR
	NGR, Part 9 (Price and revenue determinations) NGR, Part 10 (Pipeline information disclosure requirements) NGR, Part 11 (Access negotiation framework) NGR, Part 12 (Access disputes)
Ring fencing	NGR, Part 5 (Ring fencing)
Market transparency mechanisms[2]	NGR, Part 15D (Gas statement of opportunities) NGR, Part 17 (Miscellaneous provisions relating to the AER) NGR, Part 18 (Bulletin board) NGR, Part 18A (Compression and storage terms and prices) NGR, Part 19 (Declared wholesale gas markets (VGPR))
Short term trading market	NGR, Part 15A (Registered participants) NGR, Part 15B (Procedures) NGR, Part 20 (Short term trading markets rules) NGR, Part 26 (Standard market timetable)
Declared wholesale gas market	NGR, Part 19 (Declared wholesale gas market rules)[3]
Regulated retail markets	NGR, Part 15A (Registered participants) NGR, Part 15B (Procedures)
Consumer protections	NGR, Part 12A (Gas connection for retail customers) NGR, Part 21 (Retail support obligations between distributors and retailers) NERR, Part 2 (Customer retail contracts) NERR, Part 4 (Relationship between distributors and customers) NERR, Schedule 1 (Model terms and conditions for standard retail contracts) NERR, Schedule 2 (Model terms and conditions for deemed standard connection contracts)
Regulatory sandboxes[4]	NGR, Part 15E (Trial rules, trial waivers, and trial projects) NERR, Part 13 (Trial waivers, trial rules and trial projects)

Note: 1) These references reflect changes to the economic regulation framework agreed by Energy Ministers.
2) These references reflect changes to the market transparency mechanisms currently before SA Parliament.
3) While the AEMC is conducting a separate DWGM rule change process, some issues (such as the Victorian Gas Planning Report) will be in scope of the review.
4) These references reflect amending rules expected to be made by the SA Minister following the changes to the NGL and NERL before the SA Parliament to introduce the regulatory sandbox framework.
Separate Retail Market Procedures are in place in NSW/ACT, Victoria, Queensland and SA.

B.1.2 Out of scope of the AEMC review

The Commission has formed the preliminary view that the following parts of the NGR and NERR are either not within the scope of this review under the terms of reference, are not expected to be impacted by the proposed changes or are unlikely to be a priority for this review.

Table B.2: **Indicative out of scope of the AEMC review**

AREA	PART OF THE NGR AND NERR	REASON
Preliminary, AER information and decision making	NGR, Parts 1-3	No impact expected
Regulatory determinations and elections	NGR, Part 4 (new proposed part)	No impact expected
Prohibition against increasing charges to subsidise particular developments	NGR, Part 7 (new proposed part)	No impact expected
Classification and reclassification of pipelines	NGR, Part 13 (new proposed part)	No impact expected
Non-access dispute resolution, confidential information, service provider performance reports	NGR, Parts 15C, 16, 17	No impact expected
Gas supply hub provisions	NGR, Part 22	Outside terms of reference as this review focuses on supply into distribution systems
Capacity trading and day ahead auction provisions	NGR, Parts 24, 25	Outside terms of reference as this review focuses on supply into distribution systems
Transparency mechanisms	NGR, Parts 15D, 17, 18, 18A, 19 (VGPR)	For constituent gases at low level the priority is unclear
Preliminary, customer hardship	NERR, Parts 1, 3	No impact expected
Relationship between distributors and retailers	NERR, Part 5	No impact expected
De-energisation (or disconnection) of premises	NERR, Part 6	No impact expected
Life support obligations, prepayment meters	NERR, Parts 7, 8	No impact expected
Electricity generation in the distribution system	NERR, Part 8A	Applies to electricity generator connections only

AREA	PART OF THE NGR AND NERR	REASON
Exempt selling regime, retail market performance reports	NERR, Parts 9, 10	No impact expected
Electricity customer benchmarks	NERR Part 11	Applies to electricity residential customers only
National energy retail consultation	NERR, Part 12	No impact expected
Savings and transitionals	NERR, Part 13	No impact on existing transitional arrangements. New transitional arrangements may be identified as a result of this review

B.2 Overarching review governance

Each workstream that forms part of the broader review of the regulatory frameworks has a significant crossover with other workstreams, and all inform each other. As such, the overarching process has been designed so that each workstream can share information to enable a consistent position across each aspect.

Examples of this information sharing, and cross-body collaboration, that has been built into the process include:

- The market bodies will all be providing input to jurisdictional officials who have been charged with the legislative change required to the NGL and NERL.
- The AEMC review will provide suggested legislation changes to the officials' review, and take on board the considerations from AEMO's review regarding potential rule changes.
- AEMO will be providing input to both the AEMC and officials on any identified issues from its review of the AEMO made procedures and other subordinate instruments with regard to the rules and the laws respectively.

The AEMC review team will also be working closely with the DWGM Distribution connected facilities rule change team.

The DWGM Distribution connected facilities rule change request was submitted by the Victorian Minister for Energy, Environment and Climate Change. It seeks to amend Part 19 of the NGR to allow gas production and storage facilities connected to the declared distribution system to participate in the DWGM. If made, the rule will have implications for enabling hydrogen and renewable gas to be injected into gas distribution systems in Victoria. This complements the work of the broader national review. For this reason, the AEMC is progressing the rule change request concurrently with the review.

C ASSESSMENT FRAMEWORK

The terms of reference from Energy Ministers are made under the NGL and the NERL. Under the terms of reference the purpose of the review is for the AEMC to:[257]

> advise Energy Ministers on the initial rules required in the national gas and retail regulatory frameworks to accommodate low level hydrogen blends and renewable gases, and advise on any changes to the law required to enable these rules.

This appendix outlines the:

- decision-making framework the Commission must apply to determine whether the proposed rules contribute to the NGO and the NERO
- assessment framework.

C.1 Achieving the NGO and NERO

In light of the purpose of this review, the Commission's advice to Energy Ministers will reflect its considerations of what amendments to the NGR and NERR should be made to achieve the Energy Ministers' objective but also be consistent with achieving the relevant energy objectives.

The Commission may only make a rule if it is satisfied that the rule will, or is likely to, contribute to the achievement of the national gas objective (NGO)[258] and the national energy retail objective (NERO).[259]

The NGO is:[260]

> to promote efficient investment in, and efficient operation and use of, natural gas services for the long term interests of consumers of natural gas with respect to price, safety, reliability and security of supply of natural gas.

The NERO is:[261]

> to promote efficient investment in, and efficient operation and use of, energy services for the long term interests of consumers of energy with respect to price, quality, safety, reliability and security of supply of energy.

In relation to the NERO, the Commission must also, where relevant, satisfy itself that the rule is "compatible with the development and application of consumer protections for small customers, including (but not limited to) protections relating to hardship customers" (the "consumer protections test").[262]

257 Energy Ministers, terms of reference, 24 August 2021, p. 3.
258 Section 291(1) of the NGL.
259 Section 236(1) of the NERL.
260 Section 23 of the NGL.
261 Section 13 of the NERL.
262 Section 236(2)(b) of the NERL.

Where the consumer protections test is relevant in the making of a rule, the Commission must be satisfied that both the NERO test and the consumer protections test have been met.[263] If the Commission is satisfied that one test, but not the other, has been met, the rule cannot be made.

There may be some overlap in the application of the two tests. For example, a rule that provides a new protection for small customers may also, but will not necessarily, promote the NERO.

C.2 Assessment framework

To determine whether the review's recommendations would be likely to promote the NGO and the NERO, the Commission will carry out its assessment against the framework outlined below. This framework may be refined during the process of the review.

The assessment framework includes the following criteria:

- **Efficiency**: By expanding an existing market to cover new services and commodities that could not otherwise be priced or traded within the gas market, do the changes being considered encourage the delivery of a new service or commodity and thereby encourage:
  - Allocative efficiency — do the changes being considered enable market prices which facilitate the allocation of gas, including natural gas equivalents, to their highest valued uses.
  - Productive efficiency — do the changes being considered enable operational signals to facilitate dispatch of the least-cost mix of gas supply, including natural gas equivalents, to meet demand.
  - Dynamic efficiency — do the changes being considered minimise barriers to entry and promote efficient investment in the gas market, including investment in production and storage facilities as well as investment in the distribution and transmission systems to meet gas demand over time.
- **Innovation:** whether the proposed changes facilitate innovation in the development of gas production, storage, transmission and distribution facilities and in the provision of gas services to end users.
- **Implementation considerations**: Are the proposed changes targeted, fit for purpose and proportionate to the issues they are intended to address. Do the proposed changes provide the stability and transparency in regulatory arrangements to enable consumers, market participants and investors to make efficient decisions. Consideration will be given to existing and prospective production facilities and the impact of any changes recommended on their actual and planned operations. Consideration of implementation factors will include considering whether and how future production facilities can be incorporated into the existing market design without introducing excessive complexity.

263 That is, the legal tests set out in s. 236(1) and (2)(b) of the NERL.

- **Decarbonisation**: Whether market arrangements will enable the decarbonisation of the energy market.
- **Quality, safety, reliability and security of supply of natural gas**: Whether the changes provide a clear allocation of roles and responsibilities in relation to the quality and safety of supply of natural gas equivalents to consumers.
- **Consumer protections**: Whether changes being considered under the review are compatible with the development and application of consumer protections for small customers, including, but not limited to protections relating to hardship customers. Whether the changes being considered allow for additional protections for the supply of natural gas equivalents.

D DRAFT LAW RECOMMENDATIONS

D.1 Draft law recommendations to Official's review

As part of the terms of reference for the review, the AEMC was tasked by Energy Ministers to provide its views on any required changes to the NGL and NERL and the prioritisation of any identified gaps so these can be reflected in the legislation to be prepared, for Energy Ministers by officials. The AEMC has worked closely with officials and other market bodies in carrying out this task.

Separately, officials were tasked to assess the existing legal framework and consider the nature of legislative changes required to extend the regulatory frameworks to low-level hydrogen-natural gas blends and renewable gases.

On 3 February 2022, Senior Officials were provided with drafting instructions for the following proposed amendments to the laws and regulations:

National Gas Law

- New terms to define the new gases and gas blends and identify when they are 'covered' by the NGL
- Amendment of existing terms (including the national gas objective) and other provisions to extend the framework to covered gases
- New concept of blend processing services with associated light-handed access framework
- Extension of pipeline ring fencing provisions to the new gases
- Extension of facilitated market provisions to allow for markets relating to any covered gas and blend processing service providers
- Changes to the DWGM provisions to allow for injections into declared distribution systems
- Changes to permissible registration categories for facilitated markets and regulated retail markets to extend the relevant categories to covered gases and permit the registration of blend processing service providers in the DWGM and regulated retail markets where required
- Changes to regulatory sandboxing to allow trial projects relating to gases or gas blends before they are 'covered'
- Some new heads of power for rules, including rules with respect to transition of supply to new gas products

National Gas Regulations

- A new regulation to define prescribed covered gases — hydrogen, biomethane, synthetic methane and gas blends that aren't natural gas equivalents
- The list of civil penalty and conduct provisions to be updated

National Energy Retail Law

- Changes to defined terms to extend the NERL to 'natural gas equivalents' and any prescribed covered gas specified by the National Energy Retail Regulations to be a gas under the NERL

- Allow for separate authorisation, exemption, Retailer of Last Resort (RoLR) appointments, Rules, etc for natural gas/natural gas equivalents as a group and other gases
- Enable rules to be made with respect to transition of supply to new gas products
- Transition existing gas authorisations, exemptions and RoLRs to natural gas equivalents

National Energy Retail Regulations

- Amend transitional provisions to clarify the application of regulations to different gas products.

The AEMC strongly supports these proposed amendments and considers that these will be necessary in order for the AEMC and other market bodies to properly exercise their functions and powers with respect to covered gases.

As part of the review and the DWGM distribution connected facilities rule change process, the AEMC also considered, across the workstreams, whether any further changes need to be made to the NGL and NERL in addition to those contemplated by the current drafting instructions for the laws and regulations. On 24 February 2022, the AEMC recommended to Senior Officials three additional changes to the NGL, which are intended to:

- allow the AEMC to make rules in relation to pipeline service providers' curtailment methodology, namely to require service providers of scheme and non-scheme pipelines to publish their related curtailed methodology in their user access guide and that service providers of scheme pipelines have their curtailment methodology approved by the regulator as part of the access arrangement
- limit the potential for unintended application of the GSOO requirements to prescribed covered gases
- enable AEMO to collect information for the purposes of the VGPR and capacity modelling from facilities that do not otherwise participate directly in the DWGM.

It is worth noting that following the next round of consultation the AEMC may identify other changes that need to be made to the Law and Regulations (including to the list of civil penalty and conduct provisions in the regulations). If this occurs, the AEMC will advise officials of the required changes so they can be considered prior to submitting the final package to Energy Ministers.

E CONSEQUENTIAL RULE CHANGES REQUIRED

Beyond the rule changes specific to the focus areas of the review that have been outlined in this draft report, there are also consequential changes required to the NGR. Table E.1 outlines these consequential changes.

Table E.1: Consequential changes to the NGR

PART	CHANGES
Part 1: Preliminary	References to 'natural gas' would be changed to 'covered gas'. This would ensure all the definitions extend to all covered gas. Where relevant, a Part will have its own definition of 'gas'.
Part 4: Regulatory determinations and elections	References to 'natural gas' would be changed to 'gas' (and defined as 'covered gas') or 'covered gas'.
Part 5: Ring fencing	References to 'natural gas' would be changed to 'gas' (and defined as 'covered gas') or 'covered gas'. The reference to 'natural gas services' would be changed to 'covered gas services'.
Part 7: Prohibition against increasing charges to subsidise particular development	References to 'natural gas' would be changed to 'gas' (and defined as 'covered gas') or 'covered gas'.
Part 8: Access arrangements for scheme pipelines	References to 'natural gas' would be changed to 'gas' (and defined as 'covered gas') or 'covered gas'.
Part 10: Prescribed transparency information	References to 'natural gas' would be changed to 'gas' and 'gas' would be defined as 'covered gas'. The reference to the Natural Gas Services Bulletin Board would be changed to 'Gas Bulletin Board'.
Part 12A: Gas connection for retail customers	References to 'natural gas' would be changed to 'gas' and 'gas' would be defined as 'covered gas'.
Part 15A: Registered participants	In Division 1, all references to 'natural gas' would be changed to gas and would be given: • in rule 135A, the meaning in Part 19; • in rule 135ABA, the meaning in Part 20. The definition of 'gas processing facility' in new 135A(2), proposed to be added by the DWGM rule change would be removed, since the NGL term would apply once the NGL is amended.

PART	CHANGES
	In rule 135AB, the term *retailer* should not be italicised given the definition in the NGR is being deleted and the definition in the NGL will be used. Rule 135AB(3)(f) provides for the registrable capacity of 'swing service provider' in the South Australia regulated retail market. This category is no longer used in the retail market procedures and so rule 135AB(3)(f) is redundant. The reference to the Natural Gas Services Bulletin Board in rule 135CF would be changed to 'Gas Bulletin Board'. The reference to 'natural gas' in rule 135D would be changed to 'gas'.
Part 15B: Procedures	All references to 'natural gas' would be changed to 'gas' and rule 135E could indicate that gas includes any covered gas. The references to the Natural Gas Services Bulletin Board in rule 135EA(3) would be changed to 'Gas Bulletin Board'.
Part 15C: Dispute resolution	Rule 135G(2)(c) (which currently refers to the natural gas industry) would be amended to refer to 'the relevant parts of the covered gas industry'.
Part 15D: Gas statement of opportunities	Except where the reference is to natural gas reserves or to natural gas being used for LNG, references to 'natural gas' would be changed to gas and would be given the meaning in Part 18.
Part 15E: Trial waivers, trial Rules and trial Projects	In rule 135MB(2) and 135N(1)(j), the reference to AEMO's 'operation and administration of markets for natural gas' would be amended to refer to AEMO's operation and administration of 'wholesale or retail gas markets'. Otherwise, reference to 'natural gas' would be changed to ' covered gas'.
Part 17: Miscellaneous provisions relating to the AER	Except where the reference is to natural gas reserves or to natural gas being used for LNG, references to 'natural gas' would be changed to 'gas' and would be given the meaning in Part 18.
Part 18: Natural Gas Bulletin Board	Except where the reference is to natural gas reserves or to natural gas being used for LNG, references to 'natural gas' would be changed to 'gas'. Gas would mean any covered gas. The exclusion of 'remote BB facilities' from Part 18 would already exclude reporting for facilities that are not natural gas, NGE or CG facilities, and related transactions (because 'covered gas' is a broad term that in general terms covers the gas in any facility directly or indirectly connected to the STTM or DWGM).

PART	CHANGES
	The reference to the 'Natural Gas Services Bulletin Board' in the Bulletin Board definition in rule 141 would be changed to 'Gas Bulletin Board'. The references to the 'natural gas industry', 'natural gas services' and 'natural gas industry facility' in the Part would be replaced with 'covered gas industry', 'covered gas services' and 'covered gas industry facility'
Part 18A: Compression and storage terms and prices	The name of the Part would be changed to 'Non-pipeline infrastructure access terms and prices'. References to natural gas would be changed to 'gas'.
Part 19: DWGM	The definition of 'gas processing facility' in rule 200, proposed to be added by the DWGM rule change would be removed, since the NGL term would apply once the NGL is amended. The definition of 'gas' would be amended so it includes 'any covered gas and processable gas'.
Part 20: STTM	References to 'natural gas' would be replaced with 'gas' and gas would mean 'any covered gas'.
Part 24: Facilitating capacity trades and the capacity auction	References to natural gas in this Part would not be amended. The definition of 'Part 24 facility' would be limited to facilities providing services in relation to natural gas or NGEs. The reference to the 'Natural Gas Services Bulletin Board' in the Bulletin Board definition in rule 629 would be changed to 'Gas Bulletin Board'.
Part 25: Capacity auction	References to 'natural gas' or 'natural gas industry' in this Part would not be amended. The definition of 'auction facility' would be limited to facilities providing services in relation to natural gas or NGEs.
Part 26: Standard market timetable	The term 'natural gas facility' would be changed to 'covered gas facility' and would be expanded to include a blend processing facility and would be used in place of 'natural gas facility' in the Part. In 'gas storage facility', the reference to 'natural gas' would be replaced with 'covered gas'. In 'production facility', the reference to 'natural gas' would be replaced with 'primary gas'. Other references to 'natural gas' would be replaced with 'covered gas'.

F DRAFT RULE RECOMMENDATIONS

DRAFT RECOMMENDATION 1: CLARIFY THE RIGHT TO CONNECT TO A PIPELINE AND CONNECTION COST RECOVERY FOR SERVICE PROVIDERS

Amend the interconnection rules in the NGR to:

- also state that a person will only have a right to connect a facility to a pipeline where the connection is consistent with the safe and reliable supply of gas to end-users
- enable a service provider (where it has developed an interconnection or part of an interconnection), to recover as part of its interconnection fee the costs of metering and monitoring the quality of the gas injected by the connecting facility that are directly attributable to the interconnection.

DRAFT RECOMMENDATION 2: INTRODUCE A REGISTER OF COVERED GAS SUPPLIER PIPELINE CONNECTIONS

Amend the prescribed transparency information provisions in the NGR to introduce a requirement that service providers publish a register of covered gas supply facilities connected to the pipeline including the location of those facilities.

DRAFT RECOMMENDATION 3: REQUIRE SERVICE PROVIDERS TO PUBLISH A SUPPLIER RELATED CURTAILMENT METHODOLOGY

Amend the user access guide provisions in the NGR to require all service providers to publish a supplier related curtailment methodology as part of their user access guide.

DRAFT RECOMMENDATION 4: REQUIRE SCHEME PIPELINE SERVICE PROVIDERS TO INCLUDE A SUPPLIER RELATED CURTAILMENT METHODOLOGY IN THEIR ACCESS ARRANGEMENT

Amend the access arrangement provisions in the NGR to require scheme pipeline service providers to include a supplier related curtailment methodology as part of an access arrangement.

DRAFT RECOMMENDATION 5: INTRODUCE REPORTING OBLIGATIONS ON THE GAS A PIPELINE CAN TRANSPORT AND ANY PROPOSED CHANGES TO THIS

Amend the NGR to:

1. require service providers to publish the following information in their user access guides:
   a. the type of gas a pipeline (or part of a pipeline) is licensed to transport
   b. any limits on blending that may apply to the pipeline (or part of a pipeline)
   c. the following if the service provider intends to conduct a trial, or to transition the pipeline (or part of a pipeline) to another gas:
      i. the type of gas the service provider intends to trial or transition to
      ii. when the trial or transition is expected to occur
      iii. if the trial or transition will apply to the whole pipeline, or a part of the pipeline
      iv. whether approval for the trial or transition has been obtained from the jurisdictional technical regulator and, in the case of a transition, if the transition has been mandated by a jurisdiction.
2. require scheme pipeline service providers to include:
   a. the information referred to in (a) and (b) above in their access arrangement
   b. the information referred to in (c) above in their access arrangement
3. specify the information referred to in (a)-(c) above as information to be included in the gas pipeline register.

DRAFT RECOMMENDATION 6: REQUIRE ARBITRATORS TO CONSIDER REGULATORY OBLIGATIONS AND REQUIREMENTS IN NON-SCHEME PIPELINE ACCESS DISPUTES

Amend the arbitration pricing principles applying to non-scheme pipelines in new Part 12 of the NGR to require arbitrators to consider any regulatory obligations or requirements when arbitrating non-scheme pipeline access disputes.

DRAFT RECOMMENDATION 7: REQUIRE GOVERNMENT GRANTS AND CONCESSIONAL FINANCE TO BE TREATED AS CAPITAL CONTRIBUTIONS

Amend rule 82 of the NGR to:

- require the regulator to treat government grants in the same manner as user contributions under this rule

- provide the regulator with some discretion to treat concessional finance in the same manner as user capital contributions and government grants under this rule.

DRAFT RECOMMENDATION 8: EXTEND THE GSOO TO OTHER COVERED GASES

Amend Part 15D of the NGR to extend its application to other covered gases by:

- specifying the gases to be covered by the GSOO (i.e. all covered gases)
- excluding remote BB facilities from the scope of the GSOO
- replacing the term 'natural gas industry' with 'covered gas industry' in the GSOO survey rules to align with the extended changes to the NGL
- amending the GSOO content rules and associated definitions to:
  - extend their application to the facilities (other than remote BB facilities) involved in the supply of covered gases so that the GSOO includes information for the following, comparable to the information included for natural gas:
    - primary gas production
    - transmission pipelines carrying an other covered gas
    - storage facilities for other covered gases
  - require the GSOO to include the following information on blend processing facilities:
    - blend production forecasts
    - annual and peak day capacity of, and constraints on, blend processing facilities
    - committed and proposed, new or expanded blend processing facilities
  - allow, but not require, the GSOO to include information on the feedstock used to create primary gases (excluding natural gas) such as biomethane suppliers of other covered gases and the factors that may affect the availability of that feedstock.

DRAFT RECOMMENDATION 9: CLARIFY THAT INFORMATION FROM THE GSOO SURVEY CAN BE USED FOR THE VGPR AND VICE VERSA

Amend Parts 15D and 19 of the NGR to allow AEMO to use information for either purpose by:

- amending the use and disclosure of GSOO survey information rule in Part 15D to allow AEMO to use any information it obtains through this survey for the purposes of the VGPR
- including a comparable use and disclosure of VGPR information rule in Part 19 to allow AEMO to use any information it obtains for the VGPR for the purposes of the GSOO.

DRAFT RECOMMENDATION 10: ENABLE AEMO TO COLLECT VGPR INFORMATION FROM PARTIES NOT REGISTERED IN THE DWGM

Amend Part 19 and Part 15B of the NGR to allow AEMO to collect information for the VGPR from persons that are not DWGM registered participants and require any information that AEMO intends to collect using this new power to be set out in the wholesale market procedures.

DRAFT RECOMMENDATION 11: EXTEND THE VGPR TO OTHER COVERED GASES

Amend Part 19 and 15B of the NGR to extend the VGPR to other covered gases by:

- specifying the gases to be captured by Part 19 of the NGR (i.e. natural gas, processable gas and other covered gases)
- to the extent not already achieved by the expanded definition of 'gas', amending rule 323 and associated definitions in rule 200 to:
  - extend their application to the facilities involved in the supply of other covered gases
  - require AEMO to take into account committed projects for new or additional blend processing facilities under rule 323(4)
- to the extent not already achieved by the expanded definition of 'gas', amending rule 324 or associated definitions in rule 200 to require the following to provide information to AEMO for the VGPR comparable to the information provided for natural gas or processable gas from the following::
  - producers of an other covered gas
  - pipeline service providers for a pipeline carrying an other covered gas
  - storage facility operators for other covered gases
- blend processing facility operators to provide AEMO with information on:
  - annual forecasts for the next five years and monthly forecasts for the next year
  - blend processing capacity
  - forecasts of the availability of equipment, details of any constraints and maintenance
  - blend processing facility projects (including expansions)
- amending Part 15B to allow wholesale market procedures to deal with the provision of information for planning reviews under rule 323 including the specification of the persons, or classes of persons, who may be required to provide information.

DRAFT RECOMMENDATION 12: EXTEND THE BULLETIN BOARD TO OTHER COVERED GASES

Amend Part 18 to:

- Replace the term 'Natural Gas Services Bulletin Board' with 'Gas Bulletin Board' and align this part with the extended scope of the Gas Bulletin Board under the NGL by replacing the terms 'natural gas services', 'natural gas industry' and 'natural gas industry facilities' with 'covered gas services', 'covered gas industry' and 'covered gas industry facilities'
- Extend the application of Part 18 to other covered gases by defining 'gas' to mean any covered gas and using the term 'gas' in place of 'natural gas'. This will result in reporting of information comparable to the information reported for natural gas on:
  - primary gas production
  - transmission pipelines carrying other covered gases
  - storage facilities for any covered gas
  - stand-alone compression facilities providing compression for other covered gases
  - large facilities using other covered gas
  - transactions relating to other covered gas
- Accommodate blend processing facilities with a nameplate rating of 10 TJ/day or more by:
  - including these facilities as a new type of BB facility in rule 141 and excluding them from the definition of 'production facility' in rule 141
  - recognising blend processing facilities in the definitions of 'daily capacity', 'reporting threshold' and 'nameplate rating' in rule 141
  - amending Division 5 to set out the new reporting obligations that will apply to blend processing facilities which will include information on:
    - the nameplate rating and facility information
    - the daily quantity of gas withdrawn from a pipeline and injected into a pipeline
    - short term capacity outlook and material intra-day changes
    - medium term capacity outlook
    - nominations and forecast use of facilities
    - facility development projects
    - the outlook for uncontracted capacity and shippers with firm capacity
- Accommodate gas distribution pipelines with a nameplate rating of 10 TJ/day or more by:
  - including these pipelines as a new type of BB facility in rule 141
  - recognising distribution pipelines in the definitions of 'daily capacity', 'reporting threshold' and 'nameplate rating'

- Amending Division 5 to set out the reporting obligations that will apply to BB distribution pipelines and BB transmission pipelines that carry a gas blend, which will include reporting on:
  - any blending cap that applies to the pipeline and the lowest, highest and average blending achieved in the last month
  - the number of times any covered gas supplier has been curtailed in the last month
  - the nameplate rating and receipt and/or delivery points at which facilities that inject into the pipeline are connected

Amend Part 15B to allow AEMO to provide guidance on the determination of nameplate ratings through the BB Procedures.

DRAFT RECOMMENDATION 13: EXTEND THE AER'S GAS PRICE REPORTING FUNCTION TO OTHER COVERED GASES

Amend Part 17 of the NGR to enable the AER to publish information on the prices and non-price terms and conditions for other covered gases under gas supply agreements and gas swap agreements.

DRAFT RECOMMENDATION 14: EXTEND THE NON-PIPELINE INFRASTRUCTURE ACCESS REPORTING OBLIGATIONS TO OTHER COVERED GASES

Amend Part 18A of the NGR to extend its application to other covered gases by:

- requiring storage and compression facilities involved in the supply of other covered gases to report the same information as their natural gas counterparts
- requiring facility operators to identify the type of gas the facility is used to supply
- making drafting changes to update 'natural gas industry facility' and 'natural gas service' with 'facility' or 'covered gas industry facility' and 'covered gas services' where applicable.

DRAFT RECOMMENDATION 15: EXTEND THE NON-PIPELINE INFRASTRUCTURE ACCESS REPORTING OBLIGATIONS TO BLEND PROCESSING FACILITIES

Amend Part 18A to extend its application to blend processing facilities by:

- changing the name of Part 18A to 'Non-pipeline infrastructure access terms and prices' to reflect its broader application
- amending the definition of a Part 18A facility to include a blend processing facility

- amend the definition of user to include a person who is a party to a contract with a service provider for the provision of a blend processing service
- amending the actual prices payable information rule to:
  - recognise blend processing services as an example of the type of service a facility may provide
  - recognise the manner in which contracted quantities will be measured for blend processing facilities (i.e. as injection and withdrawal capacities, expressed as a maximum daily quantity)

DRAFT RECOMMENDATION 16: EXTEND THE STTM SHIPPER REGISTRATION CATEGORY TO INJECTIONS FROM BLEND PROCESSING FACILITIES

Amend the NGR to extend the definition of STTM Shipper in rule 135ABA to include a person that:

- is a party to a contract with a blend processing facility operator for the delivery of gas to an STTM hub from a blend processing facility that is directly connected to that STTM hub (rule 135ABA(1)(a)(ii)), or
- is a blend processing facility operator who supplies gas on its own behalf to an STTM hub from its blend processing facility that is directly connected to that STTM hub (rule 135ABA(1)(a)(iv)).

DRAFT RECOMMENDATION 17: CREATE A SINGLE INJECTION FACILITY CATEGORY

Amend the NGR to:

- introduce the definition of 'STTM injection facility' as a facility at which gas is injected directly from that facility into an STTM distribution system at a custody transfer point included in a hub, and includes an associated pipeline connecting that facility directly to the hub
- remove the definitions of 'STTM production facility' and 'STTM storage facility'
- replace all instances of 'STTM production facility' and 'STTM storage facility' with 'STTM injection facility'.

DRAFT RECOMMENDATION 18: MODIFY THE OBLIGATION FOR FACILITY OPERATORS TO PROVIDE EXPECTED CAPACITY INFORMATION

Amend the NGR in order to modify rule 414 by:

- specifying that a facility operator is not required to notify AEMO of expected capacity in respect of the following three gas days if there is no 'material difference' between the quantity of gas which the facility operator expects that the facility will be able to deliver to the relevant hub and the substitute information that would be generated, in accordance with the STTM Procedures, by AEMO in the event that the facility operator does not provide this data.
- defining 'material difference' as the magnitude of difference exceeding the greater of A and B, where:
  a. A is 600 GJ; and
  b. B is the lesser of 5% of the nameplate rating of the STTM facility (determined in accordance with Part 18) and 10 TJ.

DRAFT RECOMMENDATION 19: ALLOW FOR FACILITY AGGREGATION AND SUBMISSION OF OFFERS BY AGGREGATED FACILITY

Amend the NGR to:

- introduce a new rule that:
  - allows a facility operator to apply to AEMO to aggregate any of its STTM injection facilities
  - requires AEMO to approve applications for aggregation if the applicant is the facility operator for all relevant STTM injection facilities, these have a common allocation agent, and any requirements for aggregation in the STTM Procedures have been fulfilled
  - requires AEMO to evaluate applications for aggregation and reply within 20 business days of receipt of the application
  - allows the facility operator to end the aggregation.
- introduce a new rule that:
  - specifies that for the purposes of Part 20, a reference to an STTM injection facility is taken to be a reference to two or more aggregated STTM injection facilities
  - the capacity of an STTM injection facility aggregated is not to be taken into account for the purpose of determining capacity charges or capacity payments.
- amend rule 377(3) to require AEMO to identify which facilities have been aggregated in the list of STTM facilities and STTM distribution systems it maintains.

DRAFT RECOMMENDATION 20: STREAMLINE THE PROCESS FOR ESTABLISHING NEW CTPS

Amend the NGR to:

- specify in rule 135EA(4) that the STTM Procedures may deal with the arrangements for determining proposals for CTPs to be included in or removed from a hub
- introduce a new rule in Part 20 that requires AEMO to specify the CTPs comprised in each hub in a register maintained by AEMO under the STTM Procedures. The CTP for a facility from which gas is injected into an STTM distribution system must be included in the relevant hub. The STTM Procedures must set out the arrangements for AEMO to determine changes to CTPs for a hub, which must:
  - specify the time frame and process for AEMO to consider and determine a proposal, which must include notice to the relevant STTM distributor and must allow 20 business days for the STTM distributor to respond
  - require AEMO to publish notice of its determination on the proposal.
- amend rules 371, 372 and 372A to refer to the CTP register instead of the STTM Procedures
- amend rule 372A to specify that additional CTPs not connected to one of the STTM distribution systems specified in that rule can only be added with the consent of the STTM facility operator and the service provider of the STTM pipeline at the CTP.

DRAFT RECOMMENDATION 21: ALLOW DISTRIBUTORS TO AGREE TO AN ALTERNATIVE GAS QUALITY SPECIFICATION AT A CTP

Amend the NGR to:

- introduce the definition of 'standard gas quality specification' for a hub to reflect the current definition of 'gas quality specification'
- introduce a new rule that:
  - allows the relevant distributor (at the request of a facility operator of an STTM injection facility connected at a CTP) to enter into a written agreement that:
    - (a) provides for the injection at a CTP of gas that does not comply with the standard gas quality specification; and
    - (b) sets out the quality standard with which that gas must comply.
- specifies that such an agreement must include the distributor, operator proposing to inject the gas, and each STTM Shipper proposing to supply gas to the CTP
- states that a distributor must not approve such an agreement unless it is satisfied that the injection of gas is consistent with any applicable pipeline safety duty or pipeline service standard (each as defined in the NGL)

- allows the distributor to revoke the agreement if it is breached, or the distributor is satisfied that the injection of the gas is no longer consistent with any applicable pipeline safety duty or pipeline service standard
- modify the definition of 'gas quality specification' to:
  - clarify that this relates to a CTP
  - means the standard gas quality specification or the alternative gas quality standard approved by the distributor in accordance with the above new rule.
- modify rule 418(3) such that shippers must ensure that gas supplied to a CTP (rather than a hub) complies with the gas quality specification for that CTP.

DRAFT RECOMMENDATION 22: EXPAND EXISTING REGISTRATION CATEGORIES IN REGULATED RETAIL MARKETS

Amend the NGR definition of 'self-contracting user' for the NSW-ACT (rule 135AB(1)(C)), South Australia (rule 135AB(3)(D)) and Queensland (rule 135AB(2)(C)) regulated retail markets to include blend processing facilities.

Amend the NGR definition of 'market participant other' for the Victorian regulated retail market (rule 135AB(4)(D)) to include blend processing facilities.

DRAFT RECOMMENDATION 23: REQUIRE DISTRIBUTORS AND RETAILERS TO PROVIDE NOTICES OF A TRANSITION TO A NGE

Introduce a new Part 8B 'transition to natural gas equivalents' in the NERR which includes:

New rule 147C which requires distributors to notify retailers and AEMO in writing of a transition to a NGE. The notice must:

- be in simple and concise language
- include:
  - the date of transition to the NGE
  - the type of NGE that they are licensed to transport and any limits on blending that may apply
  - the potential impact of the supply of the NGE on the quantity of gas consumed by customers and heating values compared to the supply of natural gas. In the case of a NGE which is a gas blend, the potential impact may be expressed as a range, but must include the impact at the highest permitted blend limit.

- otherwise be provided in the form and manner required by the guidelines made by the AER under new rule 147F (if any).

New rule 147D which requires a distributor:

- prior to issuing a transition notice, to consult with retailers and AEMO in relation to the transition date to be specified in a notice under new rule 147C
- in specifying a transition date in a notice under new rule 147C, have regard to:
  - any submissions received from retailers and AEMO during consultation
  - the obligations on a retailer to notify customers of the transition
  - the reasonable requirements of retailers and AEMO to review their systems and processes to ensure compliance with the national energy legislation following the transition.

New rule 147E which would require retailers to notify their small customers in writing of a transition to a NGE. The notice must:

- be in simple and concise language
- be provided no later than 5 business days before the transition date specified in the notice from the distributor
- include:
  - the transition date
  - a copy of the notice from the distributor or a link to the notice on the distributor's or retailer's website and details of how the customer may request a copy of the notice
  - contact details of the retailer and/or distributor
  - any other information relevant to the customer's understanding of how the transition may impact the customer
- otherwise be provided in the form and manner required by the guidelines made by the AER under new rule 147F (if any).

New rule 147F that:

- empowers (but not requires) the AER to make guidelines in relation to the form and content of the transition notices required under new rules 147C or 147E (transition notice guidelines)
- requires the AER to make any transition notice guidelines in accordance with the retail consultation procedure.

DRAFT RECOMMENDATION 24: REQUIRE RETAILERS TO SPECIFY IN CUSTOMER RETAIL CONTRACTS IF A NGE IS BEING SOLD

Amend clause 3.3 of the model terms and conditions for standard retail contracts in schedule

1 of the NERR to introduce a requirement for a retailer to specify, as a required alteration, whether gas sold by the retailer includes a NGE.

Amend Part 2 Division 7 of the NERR by introducing a rule requiring market retail contracts for the sale of gas to specify whether gas sold by the retailer includes a NGE.

Amend Schedule 3 of the NERR by inserting a new savings and transitional rule specifying that the new rule in Part 2 Division 7 applies only to market retail contracts that are entered into or varied after the commencement of the rule.

DRAFT RECOMMENDATION 25: INCLUDE NGE TRANSITION INFORMATION IN HISTORICAL BILLING INFORMATION

Amend rule 28 of the NERR to introduce a requirement that retailers include the date of a transition to a NGE (if any) in historical billing information provided to a gas customer.