Extending the national gas regulatory framework to hydrogen, biomethane and other renewable gases

December 2022
Executive summary

Energy Ministers are extending the national gas regulatory framework to hydrogen, biomethane and other renewable gases. This work supports the development of the domestic hydrogen and biomethane industries by removing barriers for producers to access infrastructure and markets. It also ensures consumers are protected as Australia’s energy system transitions in line with our net zero goals.

The approach to extending the national framework has been refined through two rounds of public consultation and takes into account advice from the Australian Energy Market Commission (AEMC), Australian Energy Market Operator (AEMO), Australian Energy Regulator (AER) and the Western Australian Economic Regulation Authority (ERA).

The National Gas Law (NGL) will be extended from natural gas to ‘covered gases’, while the National Energy Retail Law (NERL) will be extended to ‘natural gas equivalents’ (NGEs) and ‘prescribed covered gases’ (PCGs). These two legislative instruments will also be amended to enable market bodies to exercise their functions and powers in relation to covered gases, NGEs and PCGs and will allow the National Gas Rules (NGR) and National Energy Retail Rules (NERR) to be extended to these gases.

Where appropriate, existing elements of the NGL, such as the new pipeline access regime, market transparency mechanisms, and facilitated and regulated retail gas markets will be extended to covered gases. The NGL will also be amended to include a new light-handed third party access regime for stand-alone blend processing facilities, which recognises the potential contestability of the provision of blend processing services by these facilities.

The consumer protection, retailer authorisations and exemptions and retailer of last resort (RoLR) elements of the NERL will be extended to NGEs and PCGs. The AEMC will also be accorded a new power to make rules relating to the transition of supply to an NGE or a PCG.

Transitional arrangements will also be included in both the NGL and NERL to help facilitate industry transition.

This nationally-consistent approach will foster the development of a competitive and cost-efficient domestic hydrogen and renewable gas industry that promotes economic efficiency in the long-term interests of consumers. It will do so by:

- encouraging competition in contestable parts of the industry
- encouraging innovation and investment
- facilitating informed and efficient decision making by industry participants, market bodies and governments
- allowing existing facilitated and regulated retail markets to function as intended
- ensuring that consumers in those jurisdictions that have implemented the NERL continue to benefit from the consumer protection measures they enjoy as users of natural gas.

Importantly, the reforms are flexible enough to deal with uncertainty and to adapt to change.
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## Acknowledgement of Country

Energy Ministers acknowledge the Traditional Custodians of Australia and their continuing connection to land and sea, waters, environment and community. We pay our respects to the Traditional Custodians of the lands we live and work on, their culture, and their Elders past and present.
Introduction

In December 2018, Energy Ministers agreed to work together to develop and implement a National Hydrogen Strategy (Hydrogen Strategy), build hydrogen export markets and deliver domestic hydrogen projects.¹ In 2019, the Hydrogen Working Group, led by Dr Alan Finkel AO, developed the Hydrogen Strategy,² which was endorsed by Energy Ministers on 22 November 2019.³

The Hydrogen Strategy sets out several government actions to support the development of a hydrogen industry, including the use of hydrogen in gas networks. The Hydrogen Strategy noted, however, that before widespread blending in gas networks could occur, a review of a range of technical, economic, regulatory and legal matters was required,⁴ including on the application of the natural gas regulatory framework to hydrogen blends. The advice emerging from the review of the national gas regulatory framework was provided to Energy Ministers in mid-2021.

On 20 August 2021, Energy Ministers agreed that the national gas regulatory framework (national framework) should be amended and that the amendments should be expedited to ensure that regulatory barriers do not restrict proposed investments in projects and existing regulatory arrangements and protections continue to work as intended where renewable gases are supplied.

Under the expedited process agreed to by Energy Ministers, Jurisdictional officials (Officials), the Australian Energy Market Commission (AEMC) and the Australian Energy Market Operator (AEMO) were responsible for identifying the amendments to be made to the national framework. Tables 1 and 2 provide an overview of the elements of the national framework subject to the reforms, and the allocation of responsibilities under the reforms across governments and market bodies.

Table 1: Elements of the national gas regulatory framework requiring changes under the reforms

<table>
<thead>
<tr>
<th>Law</th>
<th>Subordinate instruments</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Gas Law (NGL) and its subordinate instruments</td>
<td>• Regulations made for the purposes of the NGL (National Gas Regulations)</td>
</tr>
<tr>
<td></td>
<td>• National Gas Rules (NGR)</td>
</tr>
<tr>
<td></td>
<td>• Procedures, guidelines and other subordinate instruments made under the NGL and/or NGR</td>
</tr>
<tr>
<td>National Energy Retail Law (NERL) and its subordinate instruments</td>
<td>• Regulations made for the purposes of the NERL (National Energy Retail Regulations)</td>
</tr>
<tr>
<td></td>
<td>• National Energy Retail Rules (NERR)⁵</td>
</tr>
<tr>
<td></td>
<td>• Procedures, guidelines and other subordinate instruments made under the NERL and/or NERR</td>
</tr>
</tbody>
</table>

¹ COAG Energy Council, Joint Ministerial Statement: Hydrogen, 19 December 2018
² COAG Energy Council, Australia’s National Hydrogen Strategy, November 2019
³ COAG Energy Council, Meeting Communique, 22 November 2019
⁴ COAG Energy Council, Australia’s National Hydrogen Strategy, November 2019, p. 42
⁵ NERR apply to gas in the ACT, NSW, Queensland and SA
Table 2: Allocation of responsibilities under the reforms

<table>
<thead>
<tr>
<th>Body</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy Ministers</td>
<td>Approving the approach to extending the national framework and approving the amendments to the NGL, NERL, National Regulations, NGR and NERR</td>
</tr>
<tr>
<td>South Australian Parliament</td>
<td>Passing amendments to the national framework through the Parliament</td>
</tr>
<tr>
<td>States and territories</td>
<td>Adopting the national framework through their jurisdictional regulatory arrangements</td>
</tr>
<tr>
<td>Officials</td>
<td>Identifying required amendments to the NGL, NERL and National Regulations (i.e. the National Gas Regulations and National Energy Retail Regulations)</td>
</tr>
<tr>
<td>AEMC</td>
<td>Identifying the required amendments to the NGR and NERR for agreement by Energy Ministers and advising Officials on any associated changes to the NGL, NERL and/or the National Regulations</td>
</tr>
<tr>
<td>AEMO</td>
<td>Identifying and implementing the required amendments to the Procedures and other AEMO-made instruments</td>
</tr>
<tr>
<td>Australian Energy Regulator (AER)</td>
<td>Work with staff from ERA to provide advice on whether changes to the ring fencing arrangements applying to pipeline service providers were required.</td>
</tr>
</tbody>
</table>

This document sets out the final policy approach developed by Officials and agreed to by Energy Ministers at their meeting on 28 October 2022.

In developing the final policy approach, Officials published two consultation papers. The initial consultation paper\(^6\) was published on 21 October 2021. Nineteen submissions were received from stakeholders with interests across the natural gas, biomethane and hydrogen industries. This feedback informed the development of the second consultation paper\(^7\), which was published on 31 March 2022. Alongside the consultation paper, Officials also released a draft Bill (the draft National Energy Laws Amendment (Other Gases) Bill 2022) that reflected the refined approach explained in the consultation paper. Seventeen submissions were received in response to this second consultation package. A summary of the feedback provided by these stakeholders is provided in Appendix B.

The final policy takes into account this feedback. It has also been informed by advice from the AEMC and AER, and a review of international approaches. For example, in late 2021 the European Commission recommended the extension of the European Union’s natural gas regulatory framework to hydrogen and other renewable gases.\(^8\)

\(^6\) Initial consultation paper
\(^7\) Second consultation paper
A high level overview of the policy approach is set out in Table 3.

### Table 3: Approach to extending the national framework to hydrogen, biomethane and other renewable gases

<table>
<thead>
<tr>
<th>Component</th>
<th>Approach</th>
</tr>
</thead>
</table>
| Products subject to the national framework                                | The NGL will be extended to ‘covered gases’, while the NERL will be extended to natural gas equivalents (NGEs) and prescribed covered gases (PCGs).  
   A covered gas will be:                                                                 |
|                                                                           | a) a primary gas listed in the NGL (natural gas, hydrogen, biomethane, synthetic methane) or added as a primary gas by the National Gas Regulations or that a jurisdiction has designated by local regulation to be a primary gas when supplied in that jurisdiction  
   b) a blend of primary gases.                                                                 |
| Application of the NGL                                                   | Where a jurisdiction authorises the supply of a covered gas, the NGL will:                                                                                                                                  |
|                                                                           | a) apply the pipeline access regime (including ring-fencing and associate contract provisions) to pipelines transporting a covered gas (unless the pipeline is subject to a remote pipeline exemption)  
   b) apply to any blend processing facilities used to blend a covered gas. Stand-alone blend processing facilities will be subject to a new light handed access regime to facilitate access to these facilities  
   c) clarify how the regulatory sandbox provisions apply where the proposed trial project involves any covered gas, or a potential covered gas  
   d) allow the NGR and associated Procedures to apply other elements of the national framework, such as the market transparency mechanisms, the facilitated and regulated retail markets to the covered gas and its related facilities and activities  
   e) allow the market bodies to exercise their functions in relation to covered gases and related facilities. |
| Application of the NERL^10                                               | If a covered gas is natural gas, an NGE or designated in the National Energy Retail Regulations as a PCG (and not excluded by local regulation), the NERL will:                                                                 |
|                                                                           | a) apply the consumer protections, retailer authorisation & exemption framework, and RoLR provisions to the covered gas and related activities in the same way they applies to natural gas, unless in the case of PCGs the application is modified through the National Energy Retail Regulations  
   b) clarify how the regulatory sandbox provisions apply where a trial project involves any covered gas (or a prospective covered gas) |

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^9 At the date of publication, Bills to give effect to the pipeline access regime and regulatory sandbox provisions were subject to passage through the South Australian Parliament

^10 The NERL applies to gas only in NSW, the ACT, SA and Qld
Component | Approach
--- | ---
f) allow market body functions and powers to be exercised with respect to natural gas/NGEs and each PCG and allow the AEMC to make rules relating to the transition of a gas to an NGE or PCG.

Responsibilities of individual jurisdictions | Jurisdictions are responsible for:
--- | ---
a) authorising the supply of covered gases by pipelines and related safety and quality regulation
b) deciding whether to define any additional primary gases for the purposes of the NGL in that jurisdiction through a local regulation
c) deciding whether to exempt a ‘remote pipeline’ transporting a covered gas (other than an NGE or natural gas) from the NGL, if the remote pipeline criteria are met
d) deciding whether to exclude a covered gas prescribed by National Regulation as a PCG (other than an NGE or natural gas) from the application of the NERL in that jurisdiction through a local regulation.

The remainder of this paper covers Energy Ministers’ policy in greater detail, explaining how the national framework will extend to hydrogen, biomethane and other renewable gases. Appendix A provides an in-depth explanation of how each element of the policy will operate. As previously mentioned, Appendix B provides an overview of stakeholder feedback to the most recent round of stakeholder consultation. Case studies to illustrate how the policy is intended to work in practice are at Appendix C.
Current arrangements

What is the current scope of the NGL?

Table 4 provides an overview of the key elements of the NGL as it applies in the ACT, NSW, the NT, Queensland, SA, Tasmania and Victoria. In WA, a modified version of the NGL and its subordinate instruments applies, which just focuses on the pipeline third party access regime.

Table 4: Key elements of the NGL

<table>
<thead>
<tr>
<th>Mechanism</th>
<th>National Gas Law element</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pipeline access regime</td>
<td>Third party access, including ring-fencing and associate contract arrangements (East coast, NT &amp; WA)</td>
</tr>
<tr>
<td></td>
<td>This is explained further in Box 1.</td>
</tr>
<tr>
<td>Market transparency (East coast &amp; NT)</td>
<td>Bulletin Board, Gas Statement of Opportunities (GSOO), Victorian Gas Planning Report (VGPR), AER gas price reporting &amp; non-pipeline infrastructure access</td>
</tr>
<tr>
<td>Facilitated gas markets (East Coast only)</td>
<td>Short Term Trading Market, Declared Wholesale Gas Market, Gas Supply Hub, Capacity Trading Platform and Day Ahead Auction</td>
</tr>
<tr>
<td>Regulated retail gas markets (East Coast only)</td>
<td>Retail gas markets administered by AEMO in NSW/ACT, SA, Qld &amp; Vic</td>
</tr>
<tr>
<td>Regulatory sandbox</td>
<td>Provisions enabling market participants to test innovative approaches to the provision of services in the gas sector (which will come into effect once the pipeline reforms come into force)</td>
</tr>
<tr>
<td>Market bodies functions &amp; powers</td>
<td>The NGL sets out the functions and powers of the AEMC, AER (or ERA in WA) and AEMO.</td>
</tr>
</tbody>
</table>

Box 1: Gas pipeline access regime

Gas pipelines are often subject to third party access regimes because they exhibit natural monopoly characteristics (i.e. because investments in pipelines are indivisible, economies of scale exist, and sunk costs are large). These characteristics mean that access to an existing pipeline is often more economically efficient than constructing a new pipeline. They can also accord the service provider with substantial market power, the exercise of which can have a detrimental effect on economic efficiency (allocative, productive and dynamic efficiency) and consumers more generally.

There are several ways in which a service provider of an existing pipeline may potentially exercise its market power, which can broadly be categorised as follows:

- Pipelines may be able to exert market power over existing capacity by, for example, engaging in monopoly pricing, or in the case of vertically integrated service providers, restricting or denying access, or favouring an upstream or downstream affiliate through discriminatory terms of access.

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11 The term ‘natural monopoly’ is used to refer to a situation where a single firm can supply a market at a lower overall cost than if it were supplied by multiple firms.

12 Economies of scale exist when there are large fixed costs (costs that are invariant to the volume of output) and low marginal costs (costs that do vary with output). As a consequence, the average cost of producing output (total cost divided by volume) declines as output expands, and a firm producing a large volume can do so at a lower average cost than firms producing smaller volumes.
• Pipelines may be able to exert market power over new capacity and block competition from other pipelines over time by, for example, restricting or denying interconnections, or pricing new capacity below the incremental cost of developing the new capacity.

Irrespective of the form it takes, exercise of market power can have a detrimental effect on economic efficiency and consumers more generally. This is because the exercise of market power can result in prices being set above, and/or the supply of services below, what would occur in a workably competitive market. This can, in turn, have a detrimental effect on the efficient operation of the gas market, upstream and downstream markets and the broader economy, because it can result in lower than efficient levels of production, consumption and investment.

In economic terms, this is referred to as a ‘market failure’ because the market does not work to allocate resources in the most efficient manner across the gas transportation market, upstream and downstream markets, and the broader economy. To address this market failure in the natural gas industry, jurisdictions decided in the 1990s to implement a natural gas pipeline third party access regime.

This regime is in the process of being amended to implement a range of reforms that Energy Ministers agreed to in March 2022, which will provide for a simpler regulatory framework that will continue to support the safe, reliable and efficient use of and investment in pipelines, while also:

• posing a more effective constraint on exercises of market power by pipeline service providers;
• facilitating better access to pipelines that would not otherwise provide such access; and
• providing greater support for commercial negotiations between pipeline users and service providers.

In the new regime, steps have been taken to minimise regulatory costs and risks that new hydrogen and renewable gas pipelines will also now be able to utilise.

The following greenfields determinations can be obtained by a pipeline prior to commissioning:

• A greenfields incentive determination, which provides the pipeline with an exemption from being subject to the stronger form of regulation, but not the lighter form of regulation for up to 15-years. It also provides for some protection in arbitrations in relation to any excess capacity that may be developed, where it is efficient to do so. A pipeline granted such an incentive will be considered a non-scheme pipeline.

• A greenfields price protection determination, which provides the pipeline with protection in an arbitration by requiring the arbitrator to give effect to the prices and non-price terms and conditions specified in the determination if the access seeker is seeking a service that is the same, or substantially the same, as the service specified in the determination. This determination can be obtained if the pipeline has a greenfields incentive determination and the regulator is satisfied that:
  o the pipeline has been developed through a formal or informal competitive process, and the price and non-price terms and conditions arising from that process will be made available to prospective users for the duration of the determination; or
  o there were other factors that constrained the exercise of market power when the prices and other terms and conditions that will be made available to prospective users were determined, and the making of the determination will contribute to the achievement of the NGO.

Note that even if a pipeline does not obtain a greenfields incentive determination, all new pipelines will commence as non-scheme pipelines. Pipelines only become subject to the stronger form of regulation if an application is made to the regulator and it concludes the pipeline should be a scheme pipeline, having regard to

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14 The default incentive period will be 15-years, but the relevant regulator will have the discretion to grant a shorter period.
the market power of the pipeline and the effect the change would have on the promotion of access and the costs to service providers, users and end-users.

If there are no third parties seeking access to a pipeline, then:

- the pipeline service provider can apply to the regulator for an exemption from the ring fencing requirements and the information disclosure obligations (these are the two elements of the framework that could impose costs on the service provider even if there are no users, so the exemption will mean they do not incur these costs); and
- the remaining elements of the lighter-handed form of regulation will be effectively dormant and only enlivened if someone seeks access to the pipeline.

So if nobody ever sought third party access to the pipeline, the service provider will not incur any costs. If, however, someone does seek access then the framework will be enlivened and should ensure access is provided on reasonable terms to both parties.

If the pipeline only has a single user and/or its nameplate capacity is less than 10 TJ/day, the pipeline service provider can also apply to the regulator for an exemption from some of the reporting obligations.

**Box 2: Potential contestability of blend processing services**

Pipeline service providers have advised that hydrogen can be blended with natural gas through either:

- the direct injection of hydrogen into a pipeline carrying natural gas for blending within a pipeline, referred to as in-pipeline blending\(^{15}\); or
- the use of a stand-alone facility, referred to as a blend processing facility, to blend hydrogen and natural gas, with a blended product then injected into the pipeline\(^{16}\).

While the first of these types of blending can only be provided by pipeline service providers, it is possible that other parties, such as hydrogen producers or other infrastructure asset owners, could develop blend processing facilities. It is also possible that competition (or the threat of competition) for the provision of blend processing services could occur, with competition occurring either between blending processing facilities, or between these facilities and in-pipeline blending.

It is not possible to be definitive at this stage about how the market for blending services will evolve, or how credible competition will be. The potential for competition in the provision of blend processing services does, however, appear more credible than it does for pipeline services, where the barriers to entry are far more significant.

As a potentially contestable activity, pipeline service providers will be prohibited from providing this service (but not in-pipeline blending) by the minimum ring-fencing requirements in the NGL.

To facilitate third party access to blend processing facilities, the blend processing service provider will be required to:

- publish basic information on the standing terms for each of the services it offers and the prices actually paid by users of their facility\(^{17}\);
• negotiate in good faith with users and prospective users of blending services;

• comply with a prohibition on:
  o preventing or hindering access to the facility; and
  o vertically integrated service providers setting terms and conditions of access that discriminate in
    favour of its own operations, except to the extent that the cost of providing access is higher.

This access regime is lighter handed than what applies to pipelines because it is not clear at this stage that these
facilities will be natural monopolies. Rather, as noted above there is the potential for competition to emerge in this
area. If competition does not emerge and it becomes clearer that these facilities are natural monopolies, the NGL
will allow the NGR to be amended to implement a formal negotiation framework, an access dispute mechanism and
equivalent ring fencing and associate contract arrangements to those that apply to pipelines.
Extending the national framework to hydrogen, biomethane and other renewable gases

Objectives and guiding principles

The National Gas Objective (NGO) and National Energy Retail Objective (NERO) have guided the extension of the national framework to hydrogen and renewable gases, consistent with the standard approach to assessing amendments to the national framework. The extension has also been guided by Energy Ministers’ vision for the gas market and for hydrogen, the relevant actions agreed to by Energy Ministers in the Hydrogen Strategy, the policy objectives of existing elements of the national framework and the following principles:

- investment decisions and risks should sit with those best placed to manage them
- competition and market signals will generally lead to better outcomes than regulation, but if regulation is required, it should be targeted, fit for purpose and proportionate to the issues it is intended to address, and
- market and regulatory frameworks should:
  - be as simple and well-integrated as possible
  - promote clarity and consistency by providing clear objectives, rules and guidance for regulators and other decision-makers and support effective compliance monitoring and enforcement
  - minimise administrative burdens and compliance costs, and
  - be flexible enough to adjust to changing market conditions.

Table 5: Policy principles guiding the policy approach

<table>
<thead>
<tr>
<th>Source</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Gas Objective (section 23 of the NGL)</td>
<td>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, quality, safety, reliability and security of supply of natural gas.</td>
</tr>
<tr>
<td>National Energy Retail Objective (section 13 of the NERL)</td>
<td>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.</td>
</tr>
<tr>
<td>Energy Ministers’ vision for the Australian gas market(^1^8)</td>
<td>“...the establishment of a liquid wholesale gas market that provides market signals for investment and supply, where responses to those signals are facilitated by a supportive...”</td>
</tr>
</tbody>
</table>

\(^{18}\) Energy Ministers, Australian Gas Market Vision, December 2014
Policy approach

At a high level, the approach to extending the national framework involves the following:

1. The NGL will be extended from natural gas to covered gases. An initial list of covered gases will be specified in the NGL (natural gas, biomethane, synthetic methane and hydrogen, along with blends of these gases) and provision made for this list to be added to over time through the National Gas Regulations, or local regulation if the gas will only be a covered gas in that jurisdiction.

2. The NERL will be extended to natural gas equivalents\(^\text{21}\) (NGEs). It will also be extended to other prescribed covered gases (PCGs), which can be designated through jurisdictional agreement in the National Energy Retail Regulations over time. In keeping with the flexibility that already exists in the NERL, individual jurisdictions will be able to exclude a PCG from the application of the NERL in that jurisdiction.

3. The NGL will be amended to:
   a. extend the new pipeline access regime (see Box 1) to transmission and distribution pipelines transporting a covered gas and make related amendments to the regime;
   b. implement a new blend processing access regime that can be made stronger over time if required;
   c. allow the existing market transparency mechanisms and facilitated and regulated retail gas markets to be extended to covered gases;
   d. clarify how the new regulatory sandbox provisions apply where a market participant wishes to test innovative concepts in relation to a covered gas or before a gas becomes a covered gas; allow market bodies to exercise their existing functions and powers in relation to covered gases.

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\(^{19}\) Energy Ministers, Joint Ministerial Statement: Hydrogen, 19 December 2018

\(^{20}\) COAG Energy Council, Australia’s National Hydrogen Strategy, 22 November 2019

\(^{21}\) A covered gas that is suitable for use as natural gas in natural gas appliances
The NGL will also include transitional arrangements to allow renewable gas pipelines commissioned between the time Energy Ministers approve the package and for 90 days after the NGL amendments commence to apply under the new greenfields incentives regime.

4. The NERL will be amended to:
   a. extend the consumer protection, retailer authorisations and exemptions, and retailer of last resort (RoLR) elements of the NERL to NGEs and PCGs;
   b. clarify how the new regulatory sandbox provisions apply where a market participant wishes to test innovative concepts in relation to a gas product that is not yet an NGE or PCG;
   c. allow market bodies to exercise their existing functions and powers in relation to NGEs and PCGs; and
   d. provide the AEMC with a new power to make rules relating to the transition of supply to an NGE or a PCG. The NERL will also include transitional arrangements to extend existing natural gas authorisations, exemptions and default RoLRs to NGEs.

Importantly, the extension of the national framework will not result in any change in the allocation of responsibilities between the NGL, NERL and jurisdictions. Jurisdictions will therefore retain responsibility for licensing, safety and technical regulation and product certification. In those jurisdictions that have not adopted the NERL for natural gas (i.e. WA, Victoria, NT and Tasmania), the jurisdictions will also remain responsible for consumer protections.

Under the extended framework, jurisdictions will also be responsible for:
   • deciding whether to define any additional primary gases for the purposes of the NGL in that jurisdiction through a local regulation
   • deciding whether to exempt a ‘remote pipeline’ transporting a covered gas (other than an NGE or natural gas) from the NGL, if the remote pipeline criteria are met
   • deciding whether to exclude a covered gas prescribed by the National Energy Retail Regulation as a PCG (other than an NGE or natural gas) from the application of the NERL in that jurisdiction through a local regulation.

Case studies to illustrate how the extension of the national framework is intended to work in practice are at Appendix C.

How is the extension consistent with the guiding objectives and principles?

As outlined in Table 5, the focus of both the NGO and NERO is on the promotion of economic efficiency in the long-term interests of gas consumers. Consistent with these objectives, the extension of the national framework to covered gases is intended to foster the development of a

22 A corresponding rule-making power would also be included in the NGL, since instruments made under the NGL rather than the NERL may be relevant to the transition.
competitive and cost-efficient hydrogen and renewable gas industry that promotes economic efficiency in the long-term interests of consumers. It is expected to do so by:

- **Encouraging competition** in those parts of the industry that are expected to be contestable (e.g. hydrogen and renewable gas production and retailing) and minimise the risk of inefficient infrastructure duplication by:
  - extending the pipeline access regime to transmission and distribution pipelines transporting covered gases,
  - limiting the ability of pipeline service providers to use any market power they derive from owning key infrastructure to foreclose or otherwise impede competition in contestable parts of the industry through ring-fencing and associate contract arrangements, and
  - implementing a new third party access regime for blend processing facilities, which in recognition of the potential contestability of this service, is lighter handed than the pipeline access regime and so is not expected to impose a significant burden on these facilities.

The application of these access regimes is expected to underpin the development of a competitive and cost-efficient hydrogen and renewable gas industry by providing confidence to:

- producers, retailers and other prospective users that they will be able to get access to this infrastructure on reasonable terms and without unnecessary delays in the early stages of industry development and over the longer term, which will help to underpin their own investments in production and end-user facilities, and
- owners of and investors in this infrastructure about the regulatory arrangements that will apply to these facilities from the outset.

- **Encouraging innovation and investment**, by clarifying the application of the regulatory sandbox provisions and extending the strengthened greenfield incentive mechanism that is being implemented through the pipeline reforms to pipelines transporting covered gases.

- **Facilitating informed and efficient decision making** by industry participants, market bodies and governments about planning, investment, the supply and use of covered gases and associated services, through changes to the NGL, which enable the existing market transparency mechanisms to be extended to covered gases though the NGR.

- **Ensuring markets** continue to operate as intended (i.e. so that wholesale and retail markets can be accurately settled when covered gases are injected or withdrawn), through changes to the

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23 The pipeline access regime has recently been subject to a detailed review by Energy Ministers and reforms are currently being implemented that are intended to constrain market power, while also encouraging efficient investment in pipelines and minimising the costs and risks associated with regulation. The extension of the pipeline access regime to pipelines transporting covered gases is not therefore expected to impose material costs on these pipelines, or deter investment.

24 For example, the Short Term Trading Market, Declared Wholesale Gas Market and regulated retail gas markets.
NGL, which enable the facilitated and regulated retail gas markets to be extended to covered gases where appropriate through the NGR.

- **Ensuring consumers continue to benefit from consumer protections** in jurisdictions that have implemented the NERL when supplied with NGEs and PCGs approved by jurisdictions to be supplied to small customers.

The extension is also expected to provide for a nationally consistent approach to the economic regulation of covered gases that is flexible enough to deal with uncertainty and to adapt to change.

In extending the regulatory framework, Energy Ministers have taken steps to ensure that where regulation is applied, it is fit for purpose, targeted, proportionate and minimises the costs and risks associated with regulation. This includes extending measures already in the national framework to minimise regulatory costs and burden for market participants.

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25 In developing the approach for Energy Ministers, Officials have, for example, taken steps to minimise the regulatory costs associated with the blend processing and pipeline access regimes. Allowing the AEMC to make rules to allow AEMO to collect information for the VGPR from any person is intended to reduce the administrative costs that may otherwise be associated with requiring all persons that hold information to become DWGM registered participants.

26 For example, the pipeline access regime contains a number of mechanisms that are intended to minimise the costs and risks associated with regulation, particularly for greenfield pipelines (with an exemption from the stronger form of regulation available to greenfields pipelines for up to 15-years), pipelines with no third party users (with exemptions available from key parts of the framework), and single user and small pipelines (with exemptions available from the more costly information disclosure). The Bulletin Board also adopts 10 TJ/day reporting threshold and provides for exemptions for remote facilities.
Gases and blends in scope of the extended framework

As outlined above, the extension of the national framework will not affect the current allocation of responsibilities between the national framework and jurisdictions. The retention of the existing allocation of responsibilities means that jurisdictions will retain responsibility for authorising the gases that can be transported by pipeline or other means and supplied to customers in their jurisdiction. The consequences of this include the following:

- While a gas or blend may fall within the scope of the NGL, it does not mean that a pipeline is permitted to transport the gas or blend. The decision as to what gas a pipeline can transport remains with the jurisdiction.
- While a gas or blend may fall within the scope of the NERL, it does not mean that supply of the gas to customers in those jurisdictions that have adopted the NERL is permitted. The decision to permit a particular gas or blend to be supplied to small customers remains with the jurisdiction.

What gases and blends will be in scope of the NGL?

To provide more certainty about the gases that could be subject to the NGL, the extension provides for the following gases to be considered a covered gas from the commencement of the reforms (see Figure 1):

- Primary gases: Natural gas, biomethane, synthetic methane and hydrogen, and
- Gas blends: Blends of primary gases.

The extension of the NGL also provides for the list of primary gases to be added to over time through the National Gas Regulations, which all jurisdictions would need to agree to.\(^\text{27}\) Individual jurisdictions will also be able to identify additional primary gases in local regulations that will apply in that jurisdiction only.\(^\text{28}\)

In addition, because biogas is an input into the production of biomethane, provisions that apply to processable gas, have been extended to biogas. This principally affects the pipeline ring fencing provisions and the definition of the covered gas industry (which is used to define the scope of the Bulletin Board arrangements).

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\(^\text{27}\) Because it would result in the gas becoming subject to the NGL in all jurisdictions

\(^\text{28}\) This flexibility may, for example, be required to deal with a new gas that is only being developed in a single jurisdiction, or where its development is more advanced in one jurisdiction and the jurisdiction wants some certainty as to how the gas will be treated until such time as the National Gas Regulations can be amended.
What gases and blends will be in scope of the NERL?

The scope of the NERL will be extended to:

- **NGEs:** In general terms, an NGE is a covered gas that is suitable for use as natural gas in natural gas appliances. NGEs will be subject to the NERL from the commencement of the reforms and regulated in the same manner as natural gas. A covered gas will be taken to be an NGE for the purposes of the NERL as follows:
  - where an existing natural gas pipeline converts from natural gas, the gas it is carrying will be assumed to be an NGE, and
  - where a jurisdiction, by local Regulation, designates the supply of a primary gas or gas blend to be an NGE.

  Where a primary gas or gas blend is an NGE, it will automatically be a ‘gas’ under the NERL.

- **PCGs:** In general terms, a PCG is a covered gas (excluding natural gas and NGEs) that Energy Ministers agree should be subject to the NERL. Under the approach:
  - a covered gas will become a PCG if it is designated as a ‘gas’ in the National Energy Retail Regulations, which will require jurisdictional agreement
  - when deciding to designate a covered gas as a PCG, relevant jurisdictions will also be able to determine whether the NERL/NERR should apply in the standard way to the PCG, or if the application of the NERL/NERR to that PCG should be modified in any way, and

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**Figure 1: Gases and blends in scope of the NGL**

<table>
<thead>
<tr>
<th>Covered Gases</th>
<th>Gas Blends</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Primary Gases</strong></td>
<td><strong>Any blend of primary gases</strong></td>
</tr>
<tr>
<td>Natural gas</td>
<td>Hydrogen</td>
</tr>
<tr>
<td>Synthetic methane</td>
<td>Biomethane</td>
</tr>
<tr>
<td>A gas or blend of gases specified in the National Gas Regulations</td>
<td></td>
</tr>
<tr>
<td>A gas or blend specified in local regulations*</td>
<td></td>
</tr>
</tbody>
</table>

*Applicable in that jurisdiction only*
individual jurisdictions will be able to decide not to apply the NERL to a particular PCG through a local regulation. 29

The extension also provides for natural gas and NGEs to be treated as one group of gases for the purposes of the NERL, so that NGEs (and related facilities and activities) are treated in the same way as their natural gas counterparts, and for each PCG to be treated as a separate product.

The approach to extending the NERL differs from the approach for the NGL because the customer protection framework in the NERL assumes a relatively mature retail market, which may not be appropriate for all of the covered gases other than natural gas and NGEs. 30 Jurisdictions will therefore have the flexibility to extend the customer protections to other covered gases where it is appropriate to do so. Jurisdictions may, for example, agree at a future point when the supply of pure hydrogen to small customers has become more likely, that hydrogen should be a PCG and subject to the NERL and NERR. They may also agree that the NERL/NERR should apply in a modified way to reflect the stage of development of the market for pure hydrogen.

The extension of the NERL in this manner is intended to provide flexibility to accommodate PCGs over time, without having any unintended consequences. That is, by requiring a National Energy Retail Regulation to be made to designate a covered gas as a PCG, the jurisdictions that have adopted the NERL for gas can consider in a coordinated manner the changes that might be needed to the NERR or Procedures, or the NERL itself, to accommodate the retail supply of a proposed PCG.

29 This recognises the flexibility that exists in section 3 of the NERL to decide the extent to which the NERL applies in a jurisdiction to a particular gas under the NERL (including to potentially opt out of the application to a particular PCG in that jurisdiction).

30 The retailer of last resort provisions, for example, assume there is a retailer that can step in to supply in the event of a retailer failure, which may not be the case for new products.
Approach to extending the NGL

What is the approach to extending the NGL?

Table 6 provides an overview of the approach to extending the NGL to covered gases and other changes to the NGL framework. Further detail on the approach to extending the NGL, including the rationale for the changes is provided at Appendix A in Table A.1.

Table 6: Approach to extending the NGL

<table>
<thead>
<tr>
<th>Element</th>
<th>How the extension will work</th>
</tr>
</thead>
</table>
| Pipeline access regime (incl. ring fencing and associate contract arrangements) | Pipeline access regime to be extended to all transmission and distribution pipelines transporting a covered gas. The regime will also be amended to:  
  a) provide jurisdictions a power to exempt pipelines transporting covered gases (other than natural gas or an NGE) from the access regime if it satisfies the remote pipeline criteria  
  b) extend the minimum ring-fencing requirements to prohibit pipeline service providers (but not associates) from:  
    o producing primary gases, processable gases or biogas  
    o purchasing or selling covered gas, processable gas or biogas (except to the extent necessary for the safe and reliable operation of the pipeline or to enable the service provider to provide balancing services), and  
    o providing blend processing services (but not from providing in-pipeline blending).  
  Transitional arrangements will also allow pipelines transporting a covered gas (other than natural gas) that are commissioned between the time Energy Ministers approve the package and 90 days after the NGL amendments commence, to apply for the new greenfields incentives after they are commissioned. |
| Blend processing services light handed access regime | Blend processing facilities used for blending or deblending of covered gases to be recognised as a potentially contestable activity and subject to a new light handed access regime that:  
  a) requires service providers to publish standing terms and information on the prices paid by users  
  b) requires service providers and prospective users to negotiate in good faith  
  c) prohibits service providers from:  
    – preventing or hindering access to the facility  
    – prohibits vertically integrated service providers from discriminating in favour of their own operations.  
  The NGL will also allow this access regime to be strengthened over time if required through changes to the NGR. |
| Market transparency | Market transparency provisions to be amended to enable them to be extended to covered gases (where appropriate) through changes to the NGR and AEMO Procedures.  
  NGL also amended to allow the AEMC to make rules allowing AEMO to collect VGPR information from any person. |
<table>
<thead>
<tr>
<th>Element</th>
<th>How the extension will work</th>
</tr>
</thead>
<tbody>
<tr>
<td>Markets</td>
<td>Facilitated and regulated retail gas market provisions to be amended to enable them to be extended to covered gases (where appropriate) through changes to the NGR and AEMO Procedures.</td>
</tr>
<tr>
<td>Regulatory sandbox</td>
<td>Clarify how the new regulatory sandbox provisions apply where a market participant wishes to test innovative concepts in relation to a covered gas or before a gas becomes a covered gas.</td>
</tr>
<tr>
<td>Market bodies’ functions and powers</td>
<td>Market bodies’ functions and powers to be extended to covered gases and their related facilities and activities.</td>
</tr>
</tbody>
</table>

Further detail on the approach to extending the NGL, including the rationale for the changes, is provided at Appendix A in Table A.1.
Approach to extending the NERL

What is the current scope of the NERL?

The NERL and its subordinate instruments currently apply to natural gas in the ACT, NSW, Queensland and SA. The key elements of the NERL are:

- consumer protections
- retailer authorisation and exemptions
- retailer of last resort (RoLR) provisions
- the regulatory sandbox, and
- market bodies’ functions and powers.

What is the approach to extending the NERL?

Table 7 provides an overview of how these elements of the NERL will be extended.

Table 7: Approach to extending the NERL

<table>
<thead>
<tr>
<th>Element</th>
<th>How the extension will work</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumer protections</td>
<td>• Consumer protection provisions to be extended to NGEs and PCGs.</td>
</tr>
<tr>
<td></td>
<td>• Natural gas/NGEs to be treated as a single product so that NGEs are treated in same manner as natural gas.</td>
</tr>
<tr>
<td></td>
<td>• Jurisdictions to have the flexibility to modify the application of the consumer protections to each PCG.</td>
</tr>
<tr>
<td>Retailer authorisation &amp;</td>
<td>• Retailer authorisation and exemption provisions to be extended to NGEs and PCGs.</td>
</tr>
<tr>
<td>exemptions</td>
<td>• Natural gas/NGEs (as one group) and each PCG to be treated as a separate product for retailer authorisation and exemption purposes. The AER will also have</td>
</tr>
<tr>
<td></td>
<td>the discretion to either require separate authorisations (or exemptions) for each product, or to extend an existing authorisation (or exemptions) to more than one</td>
</tr>
<tr>
<td></td>
<td>product.</td>
</tr>
<tr>
<td>RoLR</td>
<td>• RoLR provisions to be extended to NGEs and PCGs.</td>
</tr>
<tr>
<td></td>
<td>• Natural gas/NGEs to be treated as a single product and each PCG to be treated as separate products for RoLR purposes (including RoLR procedures).</td>
</tr>
<tr>
<td></td>
<td>• The AER will be able to direct a blend processing service provider to make capacity contracted to a failed retailer available of the RoLR.</td>
</tr>
<tr>
<td>Regulatory sandbox</td>
<td>Application of the regulatory sandbox provisions clarified for trial projects that involve a change in gas or a product that is not yet an NGE or PCG.</td>
</tr>
<tr>
<td>Transition to another</td>
<td>New provisions to be included in the NERL to enable the AEMC to make rules relating to the transition of supply from natural gas to an NGE or a PCG, including the power to</td>
</tr>
</tbody>
</table>
| gas                     | make a transition scheme and give the AER functions in connection with the scheme.  

31 A corresponding rule-making power will also be included in the NGL, since instruments made under the NGL rather than the NERL may be relevant to the transition.
<table>
<thead>
<tr>
<th>Element</th>
<th>How the extension will work</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market bodies’ functions and powers</td>
<td>Market bodies’ functions and powers under the NERL to be extended to natural gas/NGEs (as a group) (and their related facilities and activities) and any other PCGs (and related facilities and activities) defined in the National Energy Retail Regulations.</td>
</tr>
</tbody>
</table>

Further detail on the extension of the NERL can be found at Appendix A in Table A.2, which also sets out the rationale for the changes to the NERL.
### Table A.1: How key elements of the NGL will apply and rationale for the changes

<table>
<thead>
<tr>
<th>Mechanism</th>
<th>Description of proposed changes to the NGL</th>
<th>Rationale for the changes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pipeline access regime - General application</strong></td>
<td>The NGL will be amended to extend the application of the pipeline access regime to transmission and distribution pipelines involved in the transportation of covered gases (see Box 1 for further detail on the regime and the measures that hydrogen and renewable pipelines may be able to avail themselves of to reduce regulatory costs).</td>
<td>The extension of the pipeline access regime to all pipelines transporting covered gases is expected to:                                                     • foster the development of competition in the contestable parts of the hydrogen and renewable gas industry by facilitating third party access by producers, retailers and other prospective users (including C&amp;I customers and generators) on reasonable terms and shielding prospective users from the exercise of market power, and • minimise the risk that these pipelines are inefficiently duplicated due to the inability of access seekers to obtain access on reasonable terms.</td>
</tr>
<tr>
<td><strong>Pipeline access regime - Remote pipeline exemption power</strong></td>
<td>The NGL will be amended to allow the relevant Minister in a jurisdiction to grant ‘remote pipelines’ (including proposed pipelines) an exemption if the remote pipeline criteria are met. The remote pipeline criteria, which are intended to minimise any impact that an exemption may have on the broader market, are as follows: • the pipeline (or part of the pipeline) is not transporting natural gas or an NGE, and • the pipeline (or part of the pipeline) is not a cross border pipeline, and • the pipeline (or part of the pipeline) is not part of the interconnected gas system (i.e. the system of transmission pipelines and distribution)</td>
<td>This power, which is expected to be used in very limited circumstances, is intended to provide jurisdictions with some flexibility to deal with stand-alone projects that are not connected to the broader market. This exemption will not be automatic. Rather, the relevant Minister will have to consider whether the remote pipeline criteria are met and if the exemption will promote the NGO. In this regard, it is worth noting that even if a pipeline satisfies the remote pipeline criteria, the application of the pipeline access regime to that pipeline could still</td>
</tr>
<tr>
<td>Mechanism</td>
<td>Description of proposed changes to the NGL</td>
<td>Rationale for the changes</td>
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<tr>
<td></td>
<td>pipelines used to convey gas within and between the participating jurisdictions). In deciding whether or not to grant an exemption, the relevant Minister will be required to have regard to the NGO. The exemption will lapse if the pipeline ceases to satisfy the remote pipeline criteria, or the jurisdiction decides to revoke the exemption.</td>
<td>promote the NGO. This could, for example, occur if there were other prospective users of the pipeline in the area, because the application of the pipeline access regime to these pipelines will promote access on reasonable terms and will minimise the risk of the pipeline being inefficiently duplicated.</td>
</tr>
<tr>
<td>Pipeline access regime - Ring-fencing and associate contract arrangements</td>
<td>The NGL will be amended to: - extend the application of the ring-fencing and associate contract arrangements to pipeline service providers transporting any covered gas, and - extend the minimum ring-fencing requirements in the NGL to the following potentially contestable activities: o the production of any primary gas, processable gas or biogas o the purchase or sale of any covered gas, processable gas or biogas o the provision of blend processing services by means of a blend processing facility.</td>
<td>The extension of these arrangements in this manner is expected to: - facilitate the development of a competitive and cost-efficient hydrogen and renewable gas industry by ensuring that pipeline service providers do not use the market power derived from the ownership of pipelines to foreclose or hinder competition in potentially contestable parts of the industry, and - allow service providers to provide in-pipeline blending services.</td>
</tr>
<tr>
<td>Treatment of blending and deblending services</td>
<td>There are two ways in which blending can occur: - in-pipe blending (if permitted by jurisdictional technical regulators), and</td>
<td>The amendment of the NGL in this manner is intended to recognise the potential for competition for the provision of blend processing services to emerge (including as a</td>
</tr>
</tbody>
</table>

Note that this criterion will not capture what will be required in WA. The WA Government is considering how to adopt the reforms it will use WA legislation to achieve a consistent policy outcome.
To recognise the potential contestability of the second of these, the definition of ‘pipeline’ will be amended so that a blend processing facility does not form part of a pipeline and blend processing services are not a pipeline service.

This change will mean that pipeline service providers (except through associate contracts) cannot provide blend processing services by way of a stand-alone blend processing facility, but they will still be able to provide in-pipe blending services (if permitted by jurisdictional technical regulators).

If a pipeline service provider provides an in-pipe blending service as a pipeline service, it will be subject to the pipeline third party access regime and the same form of regulation that applies to the pipeline.

The inclusion of a light-handed blend processing access regime in the NGL is expected to foster the development of a competitive and cost-efficient hydrogen and renewable gas industry, in a targeted and proportionate manner, by:

- facilitating third party access to blend processing facilities by producers, retailers and other prospective users of these facilities and limiting the

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33 The publication of access related information is in line with what Energy Ministers have agreed compression and storage facility operators should publish through the pipeline reform package.
<table>
<thead>
<tr>
<th>Mechanism</th>
<th>Description of proposed changes to the NGL</th>
<th>Rationale for the changes</th>
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<tbody>
<tr>
<td>o preventing or hindering access to the facility, and o vertically integrated service providers setting terms and conditions of access that discriminate in favour of its own operations (except to the extent that the cost of providing a service to another person is higher). 34</td>
<td>potential for inefficient duplication of these facilities, and • preventing vertically integrated blend processing service providers from using the ownership of these facilities to impede competition in other contestable parts of the market (e.g. production and retailing) by preventing or hindering access, or engaging in inefficient price discrimination.</td>
<td></td>
</tr>
<tr>
<td>The NGL will also be amended to allow the regime to be made stronger over time (for instance, if competition does not emerge) through amendments to the NGR to implement a negotiation framework, a dispute resolution mechanism and/or ring fencing arrangements.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Market transparency mechanisms</strong></td>
<td>The NGL will be amended to allow the AEMC to extend the application of the market transparency mechanisms (i.e. the GSOO, Bulletin Board, VGPR, AER gas price reporting functions and non-pipeline infrastructure terms and prices) to the facilities and activities involved in the supply of covered gases.</td>
<td>The extension of the NGL in this manner is intended to prevent any material gaps emerging in the market transparency mechanisms and to enable industry participants, market bodies and governments to make informed and efficient decisions about: • planning and investment in the covered gas industry • the supply and use of covered gases and associated services • trading in covered gases and associated services, and • infrastructure access.</td>
</tr>
<tr>
<td><strong>Regulated retail gas markets</strong></td>
<td>A retail market for any covered gas will remain a retail gas market within the meaning of the NGL. The permitted registrable capacities in the NGL will be modified to accommodate activities specific to particular covered gases. The NGL will also allow rules to be made to require registration</td>
<td>The extension of the NGL in this manner is intended to prevent any gaps emerging in the regulated retail gas markets that could otherwise undermine the operation of these markets.</td>
</tr>
</tbody>
</table>

34 This is consistent with the requirement that applies under Part IIIA of the Competition and Consumer Act 2010 and in various state-based access regimes.
<table>
<thead>
<tr>
<th>Mechanism</th>
<th>Description of proposed changes to the NGL</th>
<th>Rationale for the changes</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>under the Retail Market Procedures (RMP) for activities relating to covered gases. AEMO will also have the power to deal with covered gases in the RMP if required.</td>
<td></td>
</tr>
<tr>
<td><strong>Facilitated markets</strong></td>
<td>Declared Wholesale Gas Market (DWGM) and (Short Term Trading Market) STTM: The NGL will allow these markets to deal with the wholesale supply of any covered gas with corresponding registration obligations and market body powers and functions. Gas Supply Hub (GSH): The NGL will allow the GSH (including the Capacity Trading Platform) to be used to buy and sell any covered gas and transportation capacity on covered gas transmission pipelines and stand-alone compression facilities. Day Ahead Auction (DAA): The NGL will allow the DAA to extend to covered gas transmission pipelines and stand-alone compression facilities.</td>
<td>The extension of the NGL in this manner is intended to: • prevent any gaps emerging in the DWGM and STTM, which could undermine the settlement and general operation of these markets, and • enable other facilitated markets to be extended to covered gases (other than natural gas) where appropriate.</td>
</tr>
<tr>
<td><strong>Regulatory sandbox</strong></td>
<td>The regulatory sandbox is a framework within which market participants can test innovative concepts under relaxed regulatory requirements on a time-limited basis and with appropriate safeguards. These provisions in the NGL will be clarified so that it remains clear that: • jurisdictional authorisations are needed where a proposed trial project involves a change of covered gases or a gas that may become covered gases, and</td>
<td>The extension of the regulatory sandbox provisions is intended to clarify how the new regulatory sandbox provisions will apply where a market participant wishes to test innovative concepts in relation to a covered gas, or before a gas becomes a covered gas.</td>
</tr>
<tr>
<td>Mechanism</td>
<td>Description of proposed changes to the NGL</td>
<td>Rationale for the changes</td>
</tr>
<tr>
<td>--------------------</td>
<td>-------------------------------------------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>• Market bodies’ powers</td>
<td>The NGL will be amended to extend market bodies’ existing functions and powers to covered gases and their related facilities and activities. It will also be amended to allow the AEMC to make rules that require information to be given to AEMO for the purposes of the VGPR from any person.</td>
<td>The new rule making power was recommended by the AEMC and is required because the VGPR currently only allows AEMO to collect information from DWGM registered participants. It is, however, possible that new facilities will be developed that will not directly participate in the DWGM but could still affect the demand-supply balance in Victoria. Requiring all of these facilities to become registered participants for the purpose of collecting information for the VGPR would impose unnecessary costs on these parties and AEMO. The rule-making power, which is consistent with the power the AEMC has in relation to the STTM, is intended to ensure this does not occur.</td>
</tr>
<tr>
<td>Transitional arrangements</td>
<td>Transitional arrangements will also allow pipelines transporting a covered gas (other than natural gas) that are commissioned between the time Energy Ministers approve the package and 90 days after the NGL amendments commence, to apply for the new greenfields incentives after they are commissioned.</td>
<td>The transitional arrangements have been included to prevent any unnecessary delays in the development of renewable gas pipelines. Delays may otherwise occur without a transitional arrangement because the NGL requires applications for a greenfields incentive determination and a greenfields price protection determination to be made prior to commissioning, which means that any new covered gas pipelines commissioned prior to the amendments commencing would be unable to apply for these incentives.</td>
</tr>
<tr>
<td>Element</td>
<td>Description of changes to the NERL</td>
<td>Rationale</td>
</tr>
<tr>
<td>---------------------------------</td>
<td>---------------------------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Consumer protections – NGEs</td>
<td>The NERL will be amended to apply to the sale and supply of NGEs in the same way it does to natural gas.</td>
<td>The extension of the NERL in this manner is intended to ensure that no gaps emerge in the consumer protection framework as a result of consumers being supplied an NGE.</td>
</tr>
</tbody>
</table>
| Consumer protections – PCGs     | The NERL will be amended to apply to the sale and supply of any covered gas that is designated as a PCG under the National Energy Retail Regulations.  
The NERL will also allow the National Energy Retail Regulations to amend the way the NERL/NERR applies to a PCG. | The extension of the NERL in this manner is intended to provide flexibility to accommodate PCGs over time, without having any unintended consequences. That is, by requiring a National Energy Retail Regulation to be made to designate a covered gas as a PCG, the jurisdictions that have adopted the NERL for gas can consider in a coordinated manner the changes that might be needed to the NERR or Procedures, or the NERL itself, to accommodate the retail supply of a PCG. |
| Retailer authorisation and exemptions | Natural gas and NGEs (as one group) and each PCG will be treated as a separate product for retailer authorisation and exemption purposes.  
The AER will also have the discretion to either require separate authorisations (or exemptions) for each product, or to extend an existing authorisation (or exemption) to more than one gas product. | This approach is intended to give the AER discretion to determine whether a separate authorisation (or exemption) will be required for each gas product, or if an existing authorisation (or exemption) can be extended. This discretion is required because it is not clear at this stage whether the organisational and technical capacity and required resources will be the same across each gas. Similarly, for exemptions, it cannot be assumed that the circumstances in which an exemption is appropriate for natural gas or NGEs, and the applicable conditions, are also appropriate for each type of PCG. |
<p>| RoLR                            | The RoLR provisions will apply to NGEs and PCGs and the RoLR procedures made by AEMO will be able to apply separately to natural gas/NGEs (as one group) and each PCG. | This approach will ensure the RoLR provisions can continue to work as intended and that there are no unintended gaps in this part of the framework. |</p>
<table>
<thead>
<tr>
<th>Element</th>
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<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regulatory sandbox</td>
<td>The new regulatory sandbox provisions will be clarified so that it remains clear jurisdictional authorisations are needed where a proposed trial project involves a change in gas or a covered gas that is not yet an NERL ‘gas’.</td>
<td>This approach is intended to clarify that the regulatory sandbox regime is subject to jurisdictional authorisation requirements and that a proposal trial project involving a change in gas is subject to the innovative trial principles in the usual way.</td>
</tr>
<tr>
<td>Transition to an NGE or a PCG</td>
<td>The NERL will be amended to allow the AEMC to make rules to accommodate a change in the product being supplied to consumers from one type of gas to another.</td>
<td>Transition to an NGE or PCG may require coordination among distributors and retailers, and information may need to be provided to customers, in order to ensure a smooth transition in which customer interests are protected. The AEMC is well placed to address this through the NERR, which can also be adapted if transition issues emerge over time.</td>
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<tr>
<td>Transitional arrangements</td>
<td>Transitional arrangements will be provided for in the NERL to extend existing natural gas authorisations, exemptions and default RoLRs to NGES.</td>
<td>This change is intended to reduce the administrative burden for market participants and is consistent with the broader treatment of natural gas and NGES as a single product.</td>
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</table>
### Appendix B: Stakeholder feedback from March 2022 consultations

#### Table B.1: Feedback on changes to the National Gas Law in the March 2022 consultation package

<table>
<thead>
<tr>
<th>Issue</th>
<th>Stakeholder feedback</th>
<th>Response</th>
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<tbody>
<tr>
<td><strong>Extension of the pipeline access regime to hydrogen and renewable gas pipelines</strong></td>
<td>Stakeholders, including some pipelines, supported the extension of the pipeline access regime. The exceptions were APA and the Australian Pipelines and Gas Association (APGA), both of whom indicated the extension would present risks to investment in hydrogen and other renewable gas pipelines. APGA, for example, stated that it would inhibit investment in efficiently oversized pipelines. It suggested that one way the investment risk could be addressed is to provide automatic greenfields incentives and an automatic price protection determinations to all new hydrogen and renewable gas pipelines (outside the Victorian Transmission System). Jemena and Australian Gas Infrastructure Group (AGIG) supported this suggestion. The arguments that APGA made in favour of this suggestion are that it would:</td>
<td>While APGA suggested the extension of the pipeline access regime will discourage investment in efficiently oversized pipelines, it is worth noting that:</td>
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<td></td>
<td>• reduce the administrative costs and burden pipelines would otherwise face if they instead had to apply for the greenfields incentive and greenfields price protection, and • provide them with greater confidence that they would receive such an incentive.</td>
<td>• service providers do not generally build excess capacity and the revised greenfield incentive that Energy Ministers have agreed to implement has been designed to address the risks APGA has cited in this respect • the administrative costs associated with applying for a greenfields incentive and a greenfields price protection are not expected to be significant, particularly when compared to the overall project, and • the risk that a new pipeline will not be granted a greenfields incentive is low because new pipelines are unlikely to have substantial market power when commissioned and are therefore expected to meet the incentive criteria.</td>
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<tr>
<td><strong>Ability of pipeline service providers to participate in contestable parts of the hydrogen and renewable gas market</strong></td>
<td>The Public Interest Advocacy Centre (PIAC), the National Environmental Law Association (NELA) and retailers expressed concerns about the potential for pipeline service providers to operate in contestable parts of the hydrogen and renewable gas industries.</td>
<td>As retailers, PIAC and NELA observed, allowing pipeline service providers to operate in contestable parts of the market (even in the early stages) is likely to discourage entry into these parts of the market, which is not in the</td>
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<tr>
<td>Issue</td>
<td>Stakeholder feedback</td>
<td>Response</td>
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<td>A number of stakeholders also noted that effective ring fencing is required to prevent service providers using monopoly services to cross-subsidise contestable activities, and to promote the development of competition in contestable parts of the market. Pipeline suggested that greater flexibility should be provided for in this area, but did not provide an explanation of why service providers needed to undertake these activities, rather than an associate of the service provider doing so. APGA did, however, note, that if service providers were able to undertake these activities, they could recover the costs from all pipeline users, rather than just the users of the contestable service.</td>
<td>long-term interests of consumers and could stymie the development of the hydrogen and renewable gas industry. The approach therefore provides for the extension of the minimum ring-fencing requirements to contestable parts of the hydrogen and renewable gas industry (e.g. production, retailing and blend processing by means of a blend processing facility). It is worth noting that while the extension of the minimum ring fencing requirements prohibit pipeline service providers from undertaking these activities, they will not prohibit an associate of the service provider from doing so. Those pipeline companies that want to test or trial these activities, or want to carry out these activities on a permanent basis, will therefore still be able to do so, they just need to set up or utilise a separate entity to do so. If they do so, then any contract the associate entity entered into with the service provider to use the pipeline will need to comply with the associate contract provisions in the NGL. These provisions are designed to prevent the pipeline service provider from foreclosing or otherwise impeding competition by favouring their associate (e.g. through favourable access to the pipeline).</td>
<td></td>
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<tr>
<td>Additional ring fencing requirements</td>
<td>The NGL currently allows the regulator to impose additional ring-fencing requirements on named service providers and/or associates. In its advice to Officials, the AER suggested this power be extended to enable it to impose additional ring-fencing requirements on a class of service providers and/or associates (e.g. all distribution network service providers).</td>
<td>Noting that the AER can achieve the desired outcome under the current framework, it was not clear whether the proposed power is required for this reform package. The amendments to the NGL do not therefore provide for this power.</td>
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</table>
In doing so, the AER noted that while it could achieve this outcome under the current framework (i.e. by naming all service providers and associates), there is a risk that:

- it could inadvertently miss a service provider or associate in the determination, and
- associates may change over time, which could result in gaps in the application of the ring-fencing requirements until such time as they are identified and the determination is varied.

The AER also noted that the ability to impose additional ring-fencing requirements on a class would enable it to address market-wide concerns more efficiently.

Stakeholders across multiple industry categories were not supportive of the proposal. Most pipeline service providers were opposed, with a number claiming it could inadvertently capture service providers and associates that should not be subject to the requirements.

### Application of ring fencing to blend processing facilities

The approach set out in the March 2022 consultation paper provided for blend processing facilities to be subject to similar ring-fencing and associate contract provisions to those that pipelines are subject to.

APGA, Bioenergy Australia and Jemena were opposed to the application of equivalent ring-fencing and associate contract arrangements to blend processing facilities. Jemena noted that preventing producers from owning blend processing facilities would be of limited market benefit.

As some stakeholders noted, there is a risk the application of the ring-fencing and associate contract provisions to blend processing facilities could limit competition in the provision of blend processing services by discouraging hydrogen producers or suppliers of covered gases from owning these facilities. That is not to say that there is no value in employing some vertical integration safeguards. However, the costs associated with ring-fencing may discourage entry and competition in this part of the market.

The case for applying ring-fencing to blend processing facilities also appears weak given blend processing is a
potentially contestable activity and ring fencing is typically only applied to monopoly services to prevent service providers using their monopoly position to foreclose or otherwise impede competition in contestable parts of the market.

The extension of the NGL therefore provides for a more step wise approach to dealing with vertical integration concerns for blend processing facilities by providing for the application of the following safeguards in the first instance:

• a prohibition on service providers of blend processing facilities preventing or hindering access (as already contemplated), and
• a prohibition on vertically integrated service providers setting terms and conditions of access that discriminate in favour of its own operations (except to the extent that the cost of providing a service to another person is higher).

The approach allows for these safeguards to be strengthened over time (e.g. if competition does not emerge), by allowing rules to be developed to implement ring-fencing arrangements for blend processing facilities if required.

**Transitional arrangements for greenfield pipelines**

The new greenfields incentive framework that is being implemented through the pipeline reforms will allow service providers to apply to the regulator for a greenfields incentive determination and a greenfields price protection determination prior to the pipeline being commissioned.

As AGIG has observed, the requirement to apply for these determinations prior to commissioning means that any new hydrogen or renewable gas pipelines commissioned prior to the hydrogen and renewable gas reforms being implemented would be ineligible for these protections. This is a gap in the framework that could result in projects
AGIG suggested that transitional arrangements be included to allow new greenfield hydrogen and renewable gas pipelines that may be commissioned prior to the implementation of reforms to apply for both a greenfields incentive determination and a greenfields price protection determination.

To address this gap, transitional arrangements will be included in the NGL. These transitional arrangements will also allow pipelines transporting a covered gas (other than natural gas) that are commissioned between the time Energy Ministers approve the package and 90 days after the NGL amendments commence, to apply for the new greenfields incentives after they are commissioned.

Table B.2: Feedback on changes to the National Energy Retail Law in the March 2022 consultation package

<table>
<thead>
<tr>
<th>Issue</th>
<th>Stakeholder feedback</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retailer authorisation and exemptions</td>
<td>Alinta noted that while it understood the reasoning behind separate authorisations, the requirement to duplicate processes, compliance and reporting may affect the willingness of retailers to supply PCGs. The AER also questioned the need for separate authorisations and noted that it did not consider the supply of PCG would be sufficiently unique to necessitate the creation of a new authorisation class.</td>
<td>To address the issues raised by Alinta and the AER, the NERL will provide the AER with discretion to determine whether a separate authorisation (or exemption) is required for each gas product, or if an existing authorisation (or exemption) can be extended. This discretion is required because it is not clear at this stage whether the organisational and technical capacity and required resources will be the same across each gas. Similarly, for exemptions, it cannot be assumed that the circumstances in which an exemption is appropriate for natural gas or NGEs, and the applicable conditions, are also appropriate for each type of PCG.</td>
</tr>
</tbody>
</table>
Appendix C: Case studies

Several case studies have been prepared to provide more insight into how the approach is intended to work in practice, and what it means for potential participants in a hydrogen or renewable gas industry. The first five of these examples (i.e. case studies 1A-1E) build upon each other, while the last three (case studies 2-5) represent distinct situations.

For case studies 1A-1E, it is assumed that:

- hydrogen is supplied to a distribution pipeline that has converted to transporting a natural gas-hydrogen blend, which is an NGE
- the distribution pipeline forms part of an STTM and a regulated retail gas market, and
- in the jurisdiction, the NERL and NERR apply to the sale and supply of the NGE.

Case Study 1A: Distribution pipeline converts to transporting an NGE

Assumptions: This case study assumes that a natural gas distribution pipeline with a nameplate capacity of 200 TJ/day is a scheme pipeline that is subject to full regulation and obtains approval from the jurisdictional technical regulator to convert the distribution pipeline to transporting a natural gas-hydrogen blend, which is an NGE.

What will the distribution pipeline be subject to under the national framework?

As the distribution pipeline is still transporting a covered gas, it would still be subject to:

- the pipeline access regime, with the pipeline continuing to be subject to full regulation
- the ring-fencing and associate contract arrangements in the NGL/NGR, which prohibit the service provider (but not an associate of the service provider) from:
  - producing primary gases, processable gases or biogas
  - purchasing or selling covered gas, processable gas or biogas (except to the extent necessary for the safe and reliable operation of the pipeline or to enable the service provider to provide balancing services)
  - providing blend processing services (but not from providing in-pipeline blending).
- the GSOO and Bulletin Board reporting obligations in the NGL/NGR/AEMO Procedures
- the STTM rules in the NGL/NGR/AEMO Procedures
- the retail market procedures (RMPs) for that retail market, and
- the distribution related consumer protection provisions in the NERL/NERR and NGL/NGR.

Case Study 1B: A new pipeline transports hydrogen to the distribution pipeline

Assumptions: This case study builds on from Case Study 1A, by assuming a new pipeline with a nameplate capacity of 5 TJ/day is built to transport hydrogen to the distribution pipeline in Case Study 1A, which allows in-pipeline blending in parts of the distribution pipeline.

What will the hydrogen pipeline be subject to under the national framework?

As the pipeline is transporting a covered gas, the pipeline will be subject to:

- the pipeline access regime in the NGL/NGR
• the ring-fencing and associate contract arrangements in the NGL/NGR, as outlined in Case study 1A

• the GSOO reporting obligations in the NGL/NGR/AEMO Procedures, but not the Bulletin Board because it does not meet the reporting threshold (i.e. its nameplate capacity is less than 10 TJ/day), and

• the STTM rules in the NGL/NGR/AEMO Procedures.

**What mechanisms will be available to the hydrogen pipeline to reduce regulatory costs and risks?**

The service provider of the hydrogen pipeline will be able to have recourse to the following elements of the pipeline access regime to minimise the costs and risks associated with regulation:

• prior to commissioning the service provider could apply to the regulator for a:
  - greenfields incentive determination, which, if granted, will provide it with certainty that it will not be subject to the stronger form of regulation (but not the lighter handed form of regulation) for up to 15-years, and
  - greenfields price protection determination, which, if granted, will provide it with more certainty in an arbitration about the prices that will be applied for the duration of the determination, and

• if the pipeline:
  - has no third party users, it could apply to the regulator for an exemption from the ring-fencing, associate contract and pipeline access regime transparency obligations under the NGR,35 or
  - has third party users, it will be subject to all elements of the pipeline access regime, but will be able to apply to the regulator for an exemption from publishing financial information under the NGR, because its nameplate capacity is less than 10 TJ/day.

**What protections will be available to the hydrogen pipeline under the national framework?**

The service provider of the hydrogen pipeline will be able to have recourse to the pipeline access regime (including the access dispute mechanism) when negotiating its connection to the distribution pipeline.

**Case study 1C: A blend processing facility supplies NGE into distribution pipeline**

**Assumptions:** This case study builds on from Case Study 1A and 1B, by assuming the pipeline in Case Study 1B connects into a blend processing facility rather than directly to the pipeline. The blend processing facility has a nameplate capacity of 15 TJ/day and withdraws natural gas from the distribution pipeline, and injects the blended product back into the distribution pipeline.

**What will the blend processing facility be subject to under the national framework?**

The blend processing facility service provider will be subject to:

• the light-handed blend processing access regime in the NGL/NGR, which means it has to:
  - publish its standard terms and information on the prices paid by other users
  - negotiate in good faith with users and prospective users

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35 The remaining elements of the access regime will only be enlivened if a third party sought access
comply with the prohibition on:

- preventing or hindering access, and
- vertically integrated service providers setting terms and conditions of access that discriminate in favour of its own operations (except to the extent that the cost of providing a service to another person is higher)

- the GSOO and Bulletin Board reporting obligations in the NGL/NGR/AEMO Procedures
- the STTM rules in the NGL/NGR/AEMO Procedures, and
- the RMPs for that retail market.

**What protections will be available to the blend processing facility under the national framework?**

When the blend processing facility is seeking access to connect to the distribution pipeline in Case Study 1A, it could have recourse to the pipeline access regime (including the access dispute mechanism) when negotiating its connection to the distribution pipeline.

**Case Study 1D: A hydrogen producer supplies hydrogen via blend processing facility**

**Assumptions:** This case study builds on from Case Study 1C, by looking at what will apply to the hydrogen producer that is supplying hydrogen via the pipeline in Case Study 1B to the blend processing facility for onward supply of the NGE into the distribution pipeline. The hydrogen producer in this case study is assumed to have a nameplate capacity of 10 TJ/day, with:

- 3 TJ/day supplied to the distribution pipeline with the hydrogen producer participating in the STTM, and
- 7 TJ/day supplied to an export facility.

**What will the hydrogen producer be subject to under the national framework?**

The hydrogen producer will be subject to:

- the STTM rules in the NGL/NGR/AEMO Procedures, and
- the GSOO and Bulletin Board reporting obligations in the NGL/NGR/AEMO Procedures. 36

In relation to the latter of these obligations, it is worth noting that the hydrogen producer could be required to report on its activities relating to the supply of hydrogen to both the STTM and the export facility. As the AEMC has recommended extending the transparency mechanisms, then the reporting obligations will extend to the export activities, because, in a similar manner to the Queensland LNG facilities, the supply of hydrogen to an export facility by a facility that is also supplying the domestic market could have implications for the domestic market. For example, if an export facility is out for maintenance the producer may seek to supply more gas into the domestic market, which can directly affect the supply and price of gas in the domestic market.

**What protections will be available to the hydrogen producer under the national framework?**

The hydrogen producer will be able to have recourse to:

- the pipeline access regime (including the access dispute mechanism) when negotiating access to the hydrogen pipeline and the distribution pipeline, and

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36 It could also become subject to the AER’s price information order once the ACCC’s Gas Inquiry ceases.
The various measures that are being implemented through the blend processing facility access regime, which are intended to facilitate third party access (see Case Study 1D for more detail).

The ring-fencing and associate contract arrangements applying to the pipelines also mean that the producer is competing on an equitable basis with other producers. This is because these arrangements will:

- prohibit pipeline service providers from producing hydrogen (unless they obtain a ring-fencing exemption under the NGR), and
- require any contracts that a pipeline service provider may have with an associate for use of a pipeline service to comply with the competitive parity rule and not have an anti-competitive effect.

**Case Study 1E: A retailer decides to supply an NGE**

**Assumptions:** This case study builds on from Case Study 1D, by assuming a retailer decides to meet 10% of its demand with an NGE. The retailer in this case study decides to procure the hydrogen directly from the hydrogen producer in Case Study 1D and to separately procure capacity on the hydrogen pipeline in Case Study 1B and the blend processing facility in Case Study 1C.

**What will the retailer be subject to under the national framework?**

The retailer will be subject to:

- the STTM rules in the NGL/NGR/AEMO Procedures
- the RMPs applicable to that retail market, and
- the NERL/NERR as it applies to NGEs.

**What protections will be available to the retailer under the national framework?**

The retailer will be able to have recourse to:

- the pipeline access regime, including the access dispute mechanism, when negotiating access to the hydrogen pipeline and the distribution pipeline that is used to supply its retail customers, and
- the various measures that are being implemented through the blend processing facility access regime, which are intended to facilitate third party access (see Case Study 1D for more detail).

The ring-fencing and associate contract arrangements applying to the pipeline service provider also mean that the retailer is competing on an equitable basis with other retailers. This is because these arrangements:

- prohibit pipeline service providers from retailing (unless they obtain a ring-fencing exemption under the NGR), and
- require any contracts that a pipeline service provider may have with an associate that is a retailer for use of a pipeline service to comply with the competitive parity rule and not have an anti-competitive effect.

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37 If the retailer is entering into trades for covered gases, or pipeline capacity, then it may also be subject to some trade-related reporting obligations under the Bulletin Board and the AER’s gas price reporting function.
Case Study 2: A new distribution pipeline transports hydrogen to small customers

**Assumptions**: In this case study, a new distribution pipeline with a nameplate capacity of 5 TJ/day is assumed to be built to supply residential and small commercial and industrial (C&I) customers in a new development with pure hydrogen. The distribution area is a stand-alone network and does not form part of a regulated retail market and is in a jurisdiction that does not apply the NERL/NERR. The distribution pipeline has obtained the relevant authorisations from the jurisdictional technical regulator and the jurisdiction has decided not to grant a remote pipeline exemption.

**What will the new distribution pipeline be subject to under the national framework?**

As the pipeline is transporting a covered gas, the distribution pipeline will be subject to:

- the pipeline access regime and subject to the lighter handed form of regulation,\(^{38}\) and
- the ring-fencing and associate contract arrangements in the NGL/NGR (see Case Study 1A for more detail).

**What will be available to the distribution pipeline to reduce regulatory costs and risks?**

The service provider of the new distribution pipeline will be able to try and minimise the costs and risks associated with regulation in the following ways:

- prior to commissioning the service provider can apply to the regulator for:
  - a greenfields incentive determination, which, if granted, will provide it with certainty that it will not be subject to the stronger form of regulation (but not the lighter handed commercially-oriented form of regulation) for up to 15-years, and
  - a greenfields price protection determination, which, if granted, will provide it with more certainty in an arbitration about the prices that will be applied for the duration of the determination, and
- the service provider can also apply to the regulator for an exemption from publishing financial information under the NGR, because its nameplate capacity is less than 10 TJ/day.

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\(^{38}\) Under the reforms agreed to by Energy Ministers all new pipelines will be non-scheme pipelines and will only become scheme pipelines and so subject to the stronger form of regulation if the regulator decides it should be having regard to the form of regulation test
Case Study 3: A hydrogen producer supplies hydrogen to an export facility and domestic users

Assumptions: In this case study, a hydrogen producer with a nameplate capacity of 50 TJ/day is operating within a hydrogen hub and supplies its hydrogen via an independently owned hydrogen pipeline to an export facility, an electricity generator and some other large C&I users. The hydrogen pipeline used by the hydrogen producer is connected indirectly to the facilitated gas markets. That is, the hydrogen pipeline interconnects with a pipeline carrying a natural gas-hydrogen blend, which supplies gas to an STTM.

What will the hydrogen producer be subject to under the national framework?

As the AEMC has recommended extending the transparency mechanisms, the hydrogen producer will be subject to the GSOO and Bulletin Board reporting obligations in the NGL/NGR/AEMO Procedures.\(^39\) It will not, however, be subject to any other elements of the NGL or NERL.

What protections will be available to the hydrogen producer under the national framework?

If the:

- hydrogen producer is responsible for transporting its hydrogen to end-users, it will be able to have recourse to the pipeline access regime (including the access dispute mechanism) when negotiating access to the hydrogen pipeline, or

- buyers of hydrogen are responsible for transporting the hydrogen from the hub, the buyers will be able to have recourse to the pipeline access regime (including the access dispute mechanism) when negotiating access to the hydrogen pipeline.

\(^{39}\) It could also become subject to the AER’s price information order once the ACCC’s Gas Inquiry ceases.
Case Study 4: A hydrogen project supplies an export facility

**Assumptions:** In this case study, a hydrogen proponent is assumed to develop a 300 TJ/day hydrogen production facility, hydrogen storage facility and dedicated hydrogen pipeline that supplies hydrogen directly from the production facility to an export facility only. The pipeline in this case satisfies the 'remote pipeline' criteria because it is:
- transporting a covered gas other than natural gas or an NGE, and
- not interconnected with any other pipelines and is located wholly within one jurisdiction.

**What will the hydrogen project be subject to under the national framework?**

The relevant jurisdiction will have the ability to grant a remote pipeline exemption to the hydrogen pipeline by making a local regulation. If the jurisdiction decides:
- to grant the remote pipeline exemption, the project will not be subject to any elements of the national framework, until such time as it no longer satisfies the definition of a remote pipeline, or the jurisdiction decides to revoke the exemption, or
- not to grant the remote pipeline exemption, the following will occur:
  - the hydrogen production, hydrogen storage and export facilities will not be subject to any obligations because they are attached to a remote pipeline, so would be exempt from the Bulletin Board and GSOO reporting obligations, and
  - the pipeline will be subject to the pipeline access regime, but the service provider will be able to minimise the costs and risks associated with regulation in the following ways:
    - prior to commissioning the service provider can apply to the regulator for:
      - a greenfields incentive determination, which, if granted, will provide it with certainty that it will not be subject to the stronger form of regulation (but not the lighter handed commercially-oriented form of regulation) for up to 15-years, and
      - a greenfields price protection determination, which, if granted, will provide it with more certainty in an arbitration about the prices that would be applied for the duration of the determination, and
    - if the pipeline has no third party users, it can apply to the regulator for an exemption from the ring-fencing, associate contract and pipeline access regime transparency obligations under the NGR (the remaining elements of the access regime would be dormant until a third party seeks access).

In relation to the latter of these points, it is worth noting that if the pipeline received an exemption but subsequently started to supply third party users, the exemption will lapse and it will be required to comply with the ring fencing, associate contract and pipeline access regime transparency obligations. The rules provide service providers with 12 months to start complying with these obligations, or such longer time allowed for by the regulator.
Case Study 5: A retailer decides to supply a PCG

Assumptions: In this case study, a retailer is assumed to be supplying small customers with hydrogen via a hydrogen distribution pipeline that does not form part of the STTM or DWGM, but is part of a regulated retail gas market in a jurisdiction that applies the NERL/NERR. The retailer intends to procure the hydrogen directly from a hydrogen producer and then separately procure capacity on the hydrogen pipeline.

In this case study it is assumed that:

• hydrogen has become a PCG under the National Energy Retail Regulations, and hydrogen has not been excluded from the operation of the NERL in that jurisdiction
• where necessary, the National Energy Retail Regulations provide for a modified application of the NERL to hydrogen and the NERR have been amended to extend to hydrogen, and
• the NGR and AEMO Procedures have been amended to extend the market transparency mechanisms and regulated retail markets to hydrogen.

What will the retailer be subject to under the national framework?

The retailer will be subject to:

• the RMPs applicable to that retail market, and
• the consumer protection framework under the NERL and NERR, as modified for hydrogen under the National Energy Retail Regulations.

What protections will be available to the retailer under the national framework?

The retailer will be able to have recourse to the pipeline access regime (including the access dispute mechanism), when negotiating access to the hydrogen pipeline and the distribution pipeline that is used to supply its retail customers.

The ring-fencing and associate contract arrangements applying to the pipelines also mean that the retailer is competing on an equitable basis with other retailers in the area. This is because:

• the pipeline service provider will be prohibited from retailing (unless it obtains a ring-fencing exemption under the NGR), and
• if the service provider has any associates operating as retailers, any contracts the service providers has in place with that associate that provides for the use of the pipeline must comply with the competitive parity rule and not have an anti-competitive effect.

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40 If the retailer is entering into trades for covered gases, or pipeline capacity, then it may also be subject to some trade-related reporting obligations under the Bulletin Board and the AER’s gas price reporting function.