



3 December 2021

Anna Collyer
Chair
Australian Energy Market Commission
PO Box A2449
Sydney South NSW 1235

Submitted online: www.aemc.gov.au

Dear Ms Collyer

Review into extending the regulatory frameworks to hydrogen and renewable gases – Consultation Paper

Origin Energy Limited (Origin) welcomes the opportunity to provide comments on the Australian Energy Market Commission's (AEMC) Review into extending the regulatory frameworks to hydrogen and renewable gases Consultation Paper.

Origin recognises the role that hydrogen blends and renewable gases can play as we look to reduce emissions in the energy sector. We consider the likely excess of renewable energy generation at certain times of the day is an opportunity to fuel the production of hydrogen which could help to bring forward the growth of the hydrogen market at scale. Origin therefore broadly supports the integration of hydrogen blends and renewable gases into the gas and retail rules.

As noted in our submission to the Officials' paper on this topic, Origin supports ensuring the regulatory framework is fit for purpose in integrating new types of fuels in a timely manner. However, we note there are trade-offs involved in expediently consulting on the required changes, including that market bodies and industry are working on imperfect information that is subject to change. With trials still under way, it is likely that further learnings will emerge that could require additional changes to the rules and regulations in the future as our understanding of hydrogen blends and renewable gases improves.

On the specific aspects of the proposed changes, our key points, are:

- **Economic regulation of pipelines:** We generally support extending existing arrangements for natural gas pipelines to natural gas (NG) equivalent pipelines and facilities. With respect to blending facilities, the most appropriate regulatory framework will depend on who is best placed to operate them. At this stage, it is difficult to be definitive about ownership structure given that technical trials are still under way.
- **Market transparency mechanisms:** We broadly support extending market transparency mechanisms to NG equivalent gases and facilities, to the extent there are net benefits. We consider it may be appropriate to defer extending these mechanisms to constituent gases at this time given they are unlikely to be used at a large scale in the immediate term.
- **Facilitated gas markets:** The review should recognise there will be trade-offs associated with incorporating NG equivalents in facilitated markets, including increased market complexity and potential disruption to existing contractual arrangements. Consideration should be given to aggregated participation for smaller players.
- **Regulatory sandbox framework:** As consumers cannot opt out of the type of gas they receive, trial rules should clarify that this is the case.

- **Regulated retail markets:** We broadly support extending the rules that apply to natural gas to NG equivalents. We consider that the introduction of NG equivalents into distribution systems should not have a material impact on consumers, given that these types of blends would work with existing gas appliances.
- **Consumer protection:** We generally support extending the consumer protection framework that applies to natural gas to NG equivalents. Additional obligations should generally be limited to addressing gaps caused by differences in the physical characteristics of the blend, such as ensuring that consumers understand why their bill is changing.

We expand on these points in Attachment 1.

If you wish to discuss any aspect of this submission further, please contact Sarah-Jane Derby at sarah-jane.derby@originenergy.com.au or on 02 8345 5101.

Yours Sincerely,

A handwritten signature in blue ink, appearing to be 'Steve Reid', with a stylized flourish at the end.

Steve Reid
Group Manager, Regulatory Policy

Area	Feedback
Economic regulation of pipelines	
Overall comments	<p>We broadly support extending the economic regulation framework for natural gas pipelines to pipelines involved in the haulage of natural gas equivalents and constituent gases.</p> <p>In terms of blending facilities, as noted in our submission to the Officials' consultation paper on this topic, the appropriate regulatory regime would depend on who ultimately owns and operates such facilities. Given the emerging nature of NG equivalents and the fact that there are trials still under way, it is difficult to provide a definitive response without first understanding all the technical and practical aspects of blending.</p> <p>Generally, more work is required on identifying the nature of blending facilities, as informed by the trials under way. For example, are they akin to a compression service? If blending occurs via direct injection of hydrogen into a pipeline, is this akin to a pipeline service?</p>
Access to pipelines - Connections	<p>The review contemplates whether there may be value in introducing a new regulatory framework whereby service providers would publish information specifying where connections are technically feasible. This is likely to be of particular benefit to smaller projects, where the cost of individual feasibility studies could be prohibitive, acting as a barrier to entry.</p>
Ringfencing arrangements	<p>We support extending current ringfencing arrangements in the NGL to facilities and activities involved in the production, purchase and sale of NG and their constituent gases, in principle. Ringfencing is an important aspect of the regulatory framework that ensures regulated businesses do not favour their related parties to the disadvantage of competitors operating in these markets.</p> <p>Consistent with this, it is not clear that ringfencing exemptions should be provided to accommodate trials if the rules prohibit service providers from operating these facilities. As a general principle, trials should be run consistent with the intent of the national framework, with the appropriate checks and balances in place. It is unclear why an exemption would be granted to a party that could not then undertake this activity outside of the trial process.</p> <p>We note that these comments are subject to our overall feedback on the need for more work to be done on understanding the technical aspects of blending facilities before decisions can be made on the appropriate level of economic regulation that may be required.</p>
Information on the type of gas a pipeline is transporting	<p>We generally support transparency and additional information provision (including on the pipeline register), subject to confidentiality issues.</p> <p>Clear information around the type of gas a pipeline is transporting or is proposing to transport, access arrangements, and whether the pipeline is being transitioned from natural gas to a blend, would support existing and potential participants in making efficient decisions and promote competition in the market.</p> <p>In addition, we consider it would be useful for service providers to publish broad information on NG equivalent connections to the market, to the extent not captured by the market transparency mechanisms discussed below. This could include information on what is already connected, any intending participants and any</p>

	information around pipeline utilisation, particularly where congestion limits may be reached.
Market transparency mechanisms	
NG equivalents and facilities	<p>We generally support applying transparency mechanisms to NG equivalent gases and facilities, to the extent that the benefits to market participants outweigh the administrative/compliance costs.</p> <p>We understand that some of these mechanisms have minimum thresholds for application, which we support given that the administrative costs of providing information for small facilities may outweigh the benefits.</p>
Constituent gases	<p>We support deferring applying these mechanisms to constituent gases given that they are unlikely to be used at a large scale in the immediate term.</p> <p>As noted in our submission to the Officials' consultation paper, changes to constituent gases should be limited to those that are necessary to ensure that NG equivalents can be appropriately integrated.</p>
Facilitated gas markets	
Overall comments	<p>Integrating NG equivalents into facilitated markets could potentially facilitate more transparent and effective trading of hydrogen and other renewable gases in the DWGM and STTMs. The review should, however, recognise there will be trade-offs associated with revising the existing framework to facilitate this approach, including increased market complexity and potential disruption to existing contractual arrangements.</p> <p>We provide more detailed information on facilitated gas market issues in our submission to the DWGM rule change.</p>
Registration and participation	<p>Origin considers it would be preferable to establish a new registration category for NG equivalent and facilities rather than expand existing categories, where they have different characteristics from natural gas production facilities (as would be the case for distribution-connected facilities in the DWGM). Establishing a separate registration category would allow any requirements/arrangements specific to these facilities to be transparently applied.</p> <p>Given the likely size and scale of NG equivalent participants, at least initially, the AEMC should also consider aggregation for registration and participation in markets. This could be worthwhile where each single facility is too small to participate in bidding, or if scheduling requirements are too onerous for individual facilities to do so.</p>
Regulatory sandbox	
Change of product trials	<p>We understand that the regulatory sandbox trial rules currently being implemented require that a retail consumer must be allowed to opt out of a trial project.</p> <p>Given that it is not practical for consumers to choose the type of gas they receive, we support changes aimed at removing this requirement. Consumers should be indifferent, from a safety and technical perspective, to this particular "change of product" trial given that NG equivalent gases are, by definition, suitable for use in existing appliances.</p>
Retail issues	
Overall approach	We generally support an approach whereby existing rules for natural gas retailing are extended to NG equivalents.

	Origin expects that metering arrangements and any necessary changes in heating values will be addressed to ensure that consumers are charged correctly. Our view is that the introduction of NG equivalents into distribution systems should not have a material impact on consumers, given that these types of blends would be suitable for use in existing appliances.
Responsibility	It is not clear how retailers could be the responsible party for creating an NG equivalent given that they do not have visibility of injections into and withdrawals from the system. In any case, the rules should specify who is the responsible party (rather than left to contracts), to provide regulatory certainty.
Consumer protection	
Overall approach	<p>We generally support extending the consumer protection framework that applies to natural gas to NG equivalents.</p> <p>At a high level, additional protections may not be needed for NG equivalents, given that these types of blends would not have an impact on consumer appliances. However, we recognise that the physical properties of NG equivalent gases mean that consumers will experience changes in energy density. Some changes may therefore be warranted to address any gaps caused by this to ensure consumers are protected, e.g., to inform and educate customers on why they are being charged differently once the blend is injected.</p>
Physical properties of NG equivalents	<p>We support the AEMC exploring the proposed changes to the consumer protection framework discussed in the consultation paper, noting that there may be costs and practical implications associated with some of the changes that will need to be worked through.</p> <p>As an example, issuing an actual bill prior to the switch to NG equivalent may be logistically challenging as this would need to occur for all customers with accumulation meters at the same time, given that an individual customer cannot opt in or out of the blend once it is in the distribution system.</p>