

2 December 2021

Ms Anna Collyer Chair AEMC GPO Box 2603 Sydney NSW 2001

Via online submission lodging process

Dear Anna

Project EMO0042 Review into extending the regulatory frameworks to hydrogen and renewable gases

Thank you for the opportunity to make a submission in response to the Commission's consultation paper for the review into extending the regulatory frameworks to hydrogen and renewable gases published on 21 October 2021 (the Consultation Paper).

As you are aware, EDL is a Brisbane headquartered company that owns and operates over one GigaWatt of power stations globally. In Australia, we operate 28 landfill gas (LFG), coal mine waste gas and wind-fueled National Electricity Market (NEM) connected sites totalling just over 400 MegaWatts (MW) capacity.

EDL has extensive experience with LFG to zero emissions biomethane production and injection into gas transmission and distribution networks in North America. We currently own and operate three large scale plants with another two expected to be operational in the first half of 2023 for a combined capacity of around 7.5 PetaJoules (PJ) a year.

EDL supports extending the coverage of the National Gas Rules and National Energy Retail Rules to biomethane and other renewable gases. Doing so is essential to the development of a viable biomethane industry. The Federal Government's recent Bioenergy Roadmap stated that Australia has the potential to generate up to 105 PJ of biomethane a year¹. It can also be used to make transport biofuels, green hydrogen, commercial CO₂ and digestate for improving soil quality. The Roadmap stated that a biomethane industry would help reduce Australia's carbon emissions, make beneficial use of waste, assist the utilisation of the existing gas networks and generate regional investment and jobs². It is also a ready to go product while hydrogen begins the multiyear journey towards commercialisation.

¹ ARENA, <u>Australia's Bioenergy Roadmap</u>, November 2021, p 10.

² Ibid, p 16.



EDL looks forward to participating in the Commission's consultation process on the detailed draft Rule change package over the coming months. At this stage, we have several brief comments to make in response to the questions raised in the Consultation Paper.

Facilitated markets

Question 10 (p 36) asks whether renewable gases should be traded through the facilitated gas markets (the Short Term Trading Market or STTM and the Victorian Declared Wholesale Gas Market or DWGM). EDL agrees that initial renewable gas volumes are likely to be relatively small and able to be covered through the Unaccounted For Gas (UAFG) mechanism rather than via those markets. However, the potential for biomethane as a natural gas replacement projected in the Bioenergy Roadmap exceeds UAFG volumes. EDL therefore recommends that provision should be made in the Rules to trade biomethane via the STTM and DWGM.

EDL also submits that the costs and regulatory burden involved in doing so (for example, registration and ongoing data reporting obligations) need to be right sized to reflect the emergent scale of biomethane production facilities. For at least the short to medium term, these are likely to be relatively small (less than 10 Terajoules or TJ of green gas a day) compared with those of natural gas.

Connection and network procurement

Question 3 in the Consultation Paper (p 13) refers to principles that include the right of new production facilities connecting to the gas grid being on the condition that the producer is prepared to fund the cost of doing so. EDL submits that care should be taken as to how this principle is reflected in the Rules. For example, it may be the case that a government or the network chooses to fund some or all of the connection cost to support the development of the supply of renewable gases as a substitute for, or complement to, natural gas.

EDL notes that, as end use customers decarbonise their energy supply, the natural gas grid risks declining utilisation, raising unit costs for remaining customers and potentially leading to network asset stranding. A network contribution to the cost of connecting hydrogen and renewable gas production facilities, or otherwise directly purchasing the gas itself, can maintain or improve that utilisation and so avoid higher customer costs. The Australian Energy Regulator has already taken steps to allow networks to recoup any additional costs involved in procuring renewable gases to meet their UAFG obligations³ and EDL has direct experience of similar, more flexible regulatory approaches with its biomethane grid injection projects in the United States⁴. We would be happy to discuss those approaches with you in greater detail.

See, for example, AER, <u>Final Decision: Australian Gas Networks (SA) Access Arrangement 2012-2026</u> Overview, April 2021, pp 6-9.

For example, gas utilities in Oregon are currently <u>incentivised</u> to procure 5% renewable gas with that proportion rising to 30% by 2050. Similar arrangements are in effect in states such as <u>California</u>, <u>Minnesota</u> and <u>Pennsylvania</u> with another dozen jurisdictions currently considering their own laws. These regulatory innovations have contributed to the US biomethane industry's <u>rapid development</u> with nearly 200 projects currently operating and another 150 under construction.



Flexible and fit for purpose regulation

The foregoing points reflect an important wider consideration. This is that, in addressing the Energy Ministers' objective to deliver a hydrogen and renewable gas industry to serve the best interests of customers, the Rules need to be flexible and fit for purpose. It is essential that they do not impose regulatory barriers to the development of that emergent industry and the Commission may need to revisit some of the assumptions underpinning aspects of the current Rules to achieve this. The Commission recognises this elsewhere in the Consultation Paper, for example, when it proposes to introduce flexible regulatory sandboxes. It is also consistent with the Energy Security Board's broad approach to ensuring the post-2025 National Electricity Market (NEM) design is fit for purpose given the rapid emergence of the renewable electricity generation industry.

Please feel free to contact me on 0428 062 845 or james.harman@edlenergy.com should you wish to discuss any of the above.

Yours sincerely

James Harman

Chief Executive Officer

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