

11 November 2021

Mr Westerman
Chief Executive Officer
Australian Energy Market Operator
530 Collins Street
Melbourne VIC 3000

Dear Mr Westerman

Re: AEMO's role in building an Australian hydrogen sector

I write to suggest how AEMO's planning of Australia's interconnected electricity and gas systems can build on the important work you have already done to plan the transition of those networks under decarbonisation targets.

As you may be aware, the Australian Hydrogen Council (AHC) is an industry association which strives to increase public understanding of hydrogen's role in Australia's future energy mix. While we recognise that hydrogen's role is subject to uncertainty, it will be a crucial pillar of a net zero energy system. We are encouraged by AEMO's growing focus on the future role of hydrogen in our electricity and natural gas systems. However, we recognise that statutory limits preclude AEMO from assessing the full role of hydrogen across the economy and over time.

AHC has recently released a white paper, *Unlocking Australia's hydrogen opportunity*, which contains recommendations for growing the hydrogen sector in pursuit of net zero emissions. Among them is a recommendation to establish a new body which would plan for future energy supply and demand pathways in a broader sense to assist governments, the private sector, and the public to make informed decisions about their options and actions. This broad purview would include visibility of energy exports, commodities and the impacts of government policy which would assist AEMO and other stakeholders to undertake the planning activities within their respective specific remits.

We have analysed your planning documents in detail, including the draft 2021 Inputs Assumptions and Scenarios Report (IASR). One observation this has prompted is that sector coupling – the impact that a decision in one sector has on another sector – will become more important as pathways to decarbonise multiple, interlinked, sectors are explored more fully by policymakers, investors and stakeholders. Hydrogen's versatility and capacity to interact with Australia's energy system and markets in a number of ways (eg, as long-term storage, for grid firming or direct use through gas pipelines etc) mean that decision making related to any of these applications will necessarily alter the opportunity cost in relation to any of the others and potentially change the hydrogen sector's path to commerciality. It is important that any modelling AEMO relies upon to inform its IASR scenarios explicitly accounts for the cross sector, system-wide costs of any fuel switching.

We also have questions about the IASR's treatment of energy supply for aviation, which is a major source of demand that is particularly hard to abate. The IASR's assumption that this need not be factored into electricity and gas system planning is open to question in our view.

We would welcome a discussion with you about our planning proposal, including consideration of how AEMO would interact with such a body and whether changes to AEMO's governance or statutory

obligations under the National Energy Law would be required. A discussion of our responses to the IASR would also be valuable.

I enclose a copy of the white paper and look forward to your response.

Should you have any questions regarding this matter please contact me (t: 0474 028 740 or e: fsimon@H2council.com.au).

Yours sincerely,



Dr Fiona Simon
Chief Executive Officer
Australian Hydrogen Council