

8 November 2022

Our Ref: CWF-20221108

Mr Jai Thomas Acting Coordinator of Energy Energy Policy WA Level 1, 66 St Georges Terrace PERTH WA 6000

Dear Mr Thomas

RE: COMMENTS ON RENEWABLE HYDROGEN TARGET CONSULTATION PAPER

Thank you for the opportunity to comment on the Renewable Hydrogen Target consultation paper (the Consultation Paper).

Collgar Wind Farm (Collgar) supports the energy transition and development of lower carbon technologies. It is foreseeable that hydrogen will form part of that energy transition in the South West Interconnected System (SWIS) however the rationale for a renewable hydrogen target (RHT), or support for the hydrogen industry in any form, is unclear.

EPWA explained at its consultation forum that hydrogen is not currently economic and hence it is necessary to stimulate demand to enable the development of the hydrogen industry. While it may be the case that hydrogen is not currently economic in the SWIS, that in itself does not necessitate an industry development scheme nor demonstrate a business case for mandatory targets. Collgar considers demonstration that a hydrogen industry is of benefit to the state, and that it would not develop at sufficient pace without assistance, is necessary prior to the State Government committing to any RHT or other scheme.

Further, Collgar is concerned that the RHT is not aligned with the Wholesale Electricity Market (WEM) objectives to 'avoid discrimination...against particular energy options and technologies', and 'minimise the long-term cost of electricity supplied to customers'.

The recent Economic Regulation Authority Triennial review of effectiveness of the Wholesale Electricity Market Discussion Paper (the Effectiveness Paper) found that 'existing price signals do not provide an adequate commercial justification for investing in the new, low-emission generation and storage that would meet the WEM Objectives'.¹ It is unclear why the hydrogen industry ought to be supported whereas other necessary technologies, including wind generation and energy storage, are not also receiving support and will, under the proposed RHT, actually cross subsidise the hydrogen industry. This includes subsidisation through increased Market Fees to administer

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¹ <u>D249712-WEM.Rep.2022---Triennial-review-of-the-effectiveness-of-the-Wholesale-Electricity-Market-2022.pdf (erawa.com.au)</u>, page 2.





the scheme, the cost to purchase certificates and other administrative costs (e.g. to amend and execute new contracts). These costs will likely be passed through to end-users, where possible.

Collgar recommends the State Government reconsider its proposed RHT. However, in the case it is to be implemented, there are various challenges Collgar requests are considered in the detailed design.

- Cost of implementation (including administering the certificate scheme)
- Equity across technologies (both existing and future)
- Implementation timing (the existing 2024 target is not achievable)
- Existing contractual obligations (retailers likely already have long-term contracts for their entire demand)
- Implications for the broader energy transition (Market Participants already have substantial reforms and project development challenges they need to focus resources on).

Collgar has included responses to the consultation questions, where relevant, in the table below.

No.	Question	Feedback	
Renewable Hydrogen Target for electricity generation			
1	What are some examples of an objective or objectives that could be used to assess the benefits, costs and impacts of a Renewable Hydrogen Target for electricity generation?	Any RHT should be at no cost to other market participants.	
Considering hydrogen			
3	What role do you believe renewable hydrogen can play in the decarbonisation of electricity generation? To what extent will a Renewable Hydrogen Target for electricity generation in the SWIS assist in achieving the decarbonisation objectives of the State Government?	While renewable hydrogen may be a suitable technology to support decarbonisation, there has been no business case presented that it is essential to enable the SWIS to decarbonise and why it should be selected as a 'winner' over other technologies. Given this, it isn't clear that the RHT will support decarbonisation because hydrogen may just erode the market for other technologies that would have otherwise contributed to decarbonisation.	
Certificate schemes for Renewable Hydrogen Target for electricity generation in the SWIS			
6	Do you believe a renewable hydrogen electricity generation certificate-based scheme represents an efficient and effective means to deliver a Renewable Hydrogen	The cost of administering such a scheme – both for government and the private sector – is unclear. However, Collgar anticipates the cost to be material and strongly recommends government	





	Target for electricity generation in the SWIS? Please explain your answer.	consider this in its decision to implement the RHT.	
7	What are some other approaches which could be considered alongside a renewable hydrogen electricity generation certificate scheme that would provide a framework to deliver on the objectives or outcomes sought?	An economy-wide carbon policy and scheme would be a more efficient way of achieving decarbonisation goals rather than picking winners and levying the cost (both directly and indirectly) on existing market participants.	
Scheme commencement and ramp up			
15	How soon do you believe a Renewable Hydrogen Target for electricity generation in the SWIS could be feasibly delivered from a technical perspective (i.e. if cost was not a consideration)? Please reflect on your own organisation and/or sector when providing your answer.	When the RHT was announced, it was planned for implementation in 2024. That timeline is very unrealistic given that hydrogen projects need to be developed and constructed. Given the cumulative timelines for access approval and capacity credit applications, and worker and supply chain shortages that can cause further delays, it is likely that a hydrogen project would not be operational for five to seven years after the RHT scheme design is finalised.	
16	Similar to the above, how soon do you believe a Renewable Hydrogen Target for electricity generation in the SWIS could be feasibly delivered from a commercial or economic perspective (i.e. if cost was a consideration)? Please reflect on your own organisation and/or sector when providing your answer.	Power Purchase Agreements are generally long term. Any obligation to replace a portion of contracted energy with energy produced by renewable hydrogen would need very long lead times to allow for existing contracts to be renewed with that additional requirement.	
17	Over what period of time do you believe is an appropriate ramp up period for the Renewable Hydrogen Target for electricity generation in the SWIS? In providing your answer reflect on the actions your organisation and / or sector would need to take to participate in the scheme.	See comments for items 15 and 16 above.	
Hydrogen demand and electrolyser capacity			
21	Would you expect one very large renewable hydrogen producer, a number of very small renewable hydrogen producers, or some other combination, to emerge in the State as a result of the scheme? Alternatively, would a domestic-focused producer have sufficient scale to operate in a domestic market only?	It is likely that this Scheme will benefit one large first mover given the economies of scale for hydrogen and that the overall market size being small. This is similar to what Collgar has observed in the battery storage market.	





Collgar appreciates the opportunity to comment and is available to discuss its comments if needed.

Yours sincerely

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REBECCA WHITE REGULATORY AND TRADING MANAGER