



AHC Submission in response to the green hydrogen network charge exemption proposed approach for regulation and implementation.

Australian Hydrogen Council
29 April 2022
Submission to the NSW Government

Joe Kremzer
General Manager Policy
Australian Hydrogen Council
m: +61 413 266 081
e: jkremzer@H2council.com.au
w: H2council.com.au

About the Australian Hydrogen Council

The Australian Hydrogen Council (AHC) is the peak body for the hydrogen industry, with more than 90 members from across the hydrogen value chain.

Our members are at the forefront of Australia's hydrogen industry, developing the technology, skills and partnerships necessary to build Australia's hydrogen economy.



The green hydrogen network charge exemptions scheme

Thank you for providing the opportunity to provide feedback on the NSW Government's green hydrogen network charge exemptions.

Green hydrogen will play a role in Australia's energy future as we seek to reduce emissions. While green hydrogen is highly versatile in its ability to power transport, stationary energy and as a feedstock to reduce emissions from manufacturing, the industry is at this stage pre-commercial and investment incentives such as the green hydrogen network charge exemption are required to enable it to reach the scale needed to become financially sustainable.

We appreciate the NSW Government's open and consultative approach to the implementation of this initiative and provide our views on the questions raised in the paper below.

Spare Capacity – How is spare capacity defined and assessed?

The proposed approach to the definition and assessment of spare capacity provides an adequate blend of flexibility for potential hydrogen producers and certainty for network service providers (NSPs) and their other customers.

The option of both a static and dynamic capacity approach will add to the ability of the scheme to accommodate electrolysers which operate at close to full capacity or others that are more flexible in their approach. Proponents are likely to have differing views on which approach provides a better commercial outcome, particularly as electrolyser costs reduce during the operation of the scheme. We consider that this flexibility will encourage investment from a range of proponents and allow the scheme to achieve its aims.

We further consider that in order to provide certainty to investors, wherever constraints which may trigger curtailment exist, that NSPs should fully describe these constraints (eg historic frequency & duration) and the triggering conditions. This will allow potential proponents to more accurately reflect the likely operation of their asset in the development of their business case.

Do the steps in the application and approval process provide industry with the certainty it needs to take projects to final investment decision and are there any issues we should consider with how this relates to the network connection application process?

As clean hydrogen production is not yet a fully commercial pursuit in Australia, proponents will seek to minimise risk to the greatest extent possible. In light of this, they are unlikely to execute a connection agreement prior to achieving FID. FID would in fact be contingent on an exemption being granted and the process as outlined does not allow for milestones to occur in this sequence. AHC suggest that the sequence be revised to allow an exemption to be granted prior to the execution of a connection agreement.

We also note the uncertain investment scenario which currently exists in the shadow of the COVID pandemic and Ukrainian conflict. The past few years have thrown out considerable challenges to the investment environment and as such we recommend a mechanism to establish an extension beyond the 12 months outlined in step 6 of the process. AHC does not suggest that this will be required, or for that matter that an extension should be easily obtainable however, failure to recognise the potential impact of world events could result in lost opportunities for the industry.

We suggest that the Minister holds a degree of discretion and that be made that the exemption will lapse with 12 unless evidence of FID, *or significant, tangible progress towards FID is provided to the Department*. We suggest that execution of a connection agreement would constitute reasonable evidence of such progress.

This will ensure that parties who are acting in good faith towards achieving FID are not unnecessarily excluded from the scheme if impacted by external events. When assessing the evidence provided, the Minister should have regard to the other projects queued for access to the same spare network capacity as well as the factors which led to the delay in achieving FID.

Similarly, we suggest a 6 month buffer around the commencement of the 12 year period to allow for delays to commissioning to ensure that project proponents are able to maximise the benefit of the exemption.

Is requiring the 90% exemption to be delivered through site specific tariffs the most administratively efficient way to implement the exemptions or are green hydrogen equivalent standard tariffs a better approach?

Site specific tariffs appear to be the simplest way for a project proponent to receive the benefit of the NUoS exemption as these would not require adjustments, true-ups or contra-transactions to ensure the correct outcome. The amount payable by the customer (electrolyser) would simply be reflected on their electricity bill.

It is crucial however that NSW Government and NSPs engage with electricity retailers early to ensure that this approach can be implemented. While it appears to provide retailers with clarity in terms of GST treatment and simplicity in the sense that no credits need be provided on bills and then claimed from the NSP, the development of new tariffs can be labour intensive and the seamless cooperation of all stakeholders is required to enable the development of a hydrogen industry in Australia.

We urge broader consultation on this matter and sufficient lead times to ensure that all parties are able to work towards an effective solution.

Is requiring the hydrogen production loads to have a dedicated national metering identifier (NMI) the best way to maintain visibility and control over the load and ensure the benefit of the

exemption is limited only to hydrogen production and not some other purpose? Or are sub-metering arrangements or a prorating of the exemption to account for mixed loads within a NMI a more appropriate approach?

If a site specific tariff is employed to deliver the exemption, dedicated metering is the simplest approach to ensuring that the benefit is limited to the hydrogen production component of the project's energy consumption. Applying a discounted site specific tariff to a single metering installation allows for complete transparency in billing and avoids any confusion or dispute about whether or not the exemption is being applied to the eligible load.

It is critical however that regulations are clear in terms of what constitutes hydrogen production. In our view, this extends to not only the direct production infrastructure (ie the electrolyser and associated equipment) but also storage facilities and water infrastructure and monitoring and control equipment required to operate the installation.

While we understand that dedicated metering for ineligible load may incur additional costs, these are unlikely to be significant in relation to the overall project cost.

Is the minimum 10 MW and/or 40 GWh annual consumption threshold at the right level to support pilot projects while incentivising scale?

10MW is larger than the largest electrolyser currently operating in Australia however, as outlined in the paper, ARENA has awarded grants to electrolysers of this size and they will likely be operational by the commencement of this scheme. In light of, this there appears to be little value in opening the exemption to smaller projects if the objective of the scheme is to incentivise scale.

Although pilot projects in excess of 10MW in size may be the norm by the proposed 30 June 2029 close date, AHC does not see a need to ramp up the minimum threshold during the operation of the scheme. Maintaining the minimum threshold at this level for the entirety of the scheme's operation will allow greater flexibility in terms of locating projects as it is likely that spare network capacity will diminish over time and the larger an electrolyser is required to be, the harder it will be to obtain a suitable location with sufficient spare capacity.

Are there any other issues the Government should consider in relation to the proposed approaches set out in this paper for the implementation of the network charge exemptions?

The NSW government obviously recognises the pre-commercial nature of the green hydrogen industry. We believe however that this scheme to incentivise the growth of the industry could be refined to ensure that barriers to its development are as low as possible.

AHC is concerned the requirement for the voluntary surrender of renewable energy certificates to be undertaken through the Greenpower program may disincentivise investment. While the exemption scheme is aimed at effectively reducing the cost of one of the key inputs of electrolyser produced hydrogen (namely electricity), the Greenpower requirement appears at odds with this and may add cost (albeit much less than is saved through the exemption) as proponents may be able to source LGCs more cheaply through non-Greenpower accredited sources.

While the GreenPower scheme is a trusted and credible brand, the broader RET framework, by virtue of its administration by the Clean Energy Regulator is similarly credible and in our view, an ability to surrender non-Greenpower LGCs does not diminish the green credentials of the hydrogen being produced.

We consider this approach preferable as AHC members have identified the development of a uniform national approach to regulating the hydrogen industry as being a key enabler to achieving scale. We suggest the NSW government adopt the Hydrogen Go definition of green hydrogen as the production requirement for the scheme and allow voluntary LGC surrenders outside the Greenpower scheme.

In the early stages of the development of Australia's green hydrogen industry, governments have an opportunity build a regulatory framework based on a harmonised approach with a common set of definitions and requirements and we believe that the NUoS exemption scheme is an example of where this principle of harmonisation can be enacted. We appreciate that the GreenPower requirement is slated as a requirement across the range of NSW hydrogen initiatives and that an internal consistency exists on this level, however we consider that harmonisation with national approaches would be beneficial in developing the industry.

AHC looks forward to continuing to work with the government on the development and implementation of this scheme and on the delivery of its hydrogen strategy more broadly.

We welcome the opportunity to provide further detail about any aspect of this submission via GM Policy, Mr Joe Kremzer who can be contacted by email on jkremzer@H2council.com.au or telephone 0413 266 081