29 April 2022

Mr Tim Stock

Director, Hydrogen and Clean Energy

NSW Office of Energy and Climate Change

Email: hydrogen@planning.nsw.gov.au

Green Hydrogen network charge exemptions – Proposed approach for regulation and implementation

Dear Mr Stock,

Energy Networks Australia (ENA) appreciates the opportunity to comment on the Green Hydrogen network charge exemptions – proposed approach for regulation and implementation, Consultation Paper.

ENA is the national industry body representing Australia's electricity transmission and distribution and gas distribution networks. Our members provide more than 16 million electricity and gas connections to almost every home and business across Australia.

The NSW green hydrogen strategy has established a 90% exemption on network use of system charges (TUOS and DUOS) to encourage investment in green hydrogen production in NSW. The principal elements of the scheme are:

- Electrolysers must be placed in areas of the electricity network where there is 'spare' capacity available during the next 2 years, the electrolyser complies with the exemption requirements and has received an exemption from NSW government, ie comes in under the 750MW cap.
- The electrolyser will be subject to network constraints – networks or AEMO will be able to curtail load if required in peak events.
- The electrolysers in the exemptions scheme will receive a 90% reduction in network use of system charges for a period of 12 years from the time they become operational, and they must be operational by 2030, after this the site reverts to paying the full charges.

In summary, ENA:

- Considers it is essential that regulations give effect to the policy position that the NSP's ability to recover its maximum allowed revenue under a regulatory determination should be unaffected. This means any scheme needs to be operate in a manner to keep the networks' revenue whole.
- Recommends that where an exempt hydrogen producer connects to the distribution network, there is no need to adjust the transmission charges levied by the TNSP. Instead, the DNSP should be able to recover the transmission component of the discounted charge through its other network tariffs.
- Is supportive of an exemptions scheme that is managed by NSW government, subject to a statewide cap of 750MW. This will require on-going management of the exemption status of each hydrogen

producer to ensure that the NSPs have accurate information regarding a party's eligibility for reduced network charges.

- Considers that the TAPR/DAPR and the network opportunity maps should suffice in providing an initial indication of locations where there is 'spare' network capacity.
- Considers that an obligation on further studies is not required and it should only be considered on a case by case basis.
- Suggest it is worth considering the interaction of this approach and networks planning obligations to ensure that load cannot drive network augmentation. There should be further consideration of the curtailment provisions versus the alternative of scheduling the load in the market.
- Supports the policy intent that green hydrogen electrolyser connections must have dedicated NMI and metering arrangements so that the exempt network charges can be accurately measured.
- Supports the proposed threshold of a minimum of 10MW or 40GWh per annum green hydrogen loads and the use of NER Chapter 5 negotiated connection arrangements.

ENA has provided more detailed comments in the Attachment.

ENA and its members welcome the opportunity to meet with NSW Government to discuss aspects of this submission to ensure that the implementation approach meets the policy intent in a practical and efficient manner.

Should you have any queries on this response, please contact Verity Watson at vwatson@energynetworks.com.au.

Yours sincerely

Andrew Dillon

CEO

Attachment

Ability to recover regulated revenue must be clearly maintained and clarified in regulations

ENA recognises that the NSW policy established the 90% exemptions where there is 'spare' capacity envisaged at a point in time only. The policy intent is that the reduction in network charges is not borne by the network service provider.

ENA considers it is essential that regulations give effect to the policy position that the NSP's ability to recover its maximum allowed revenue under a regulatory determination should be unaffected by the 90% exemption from network charges. This means any scheme needs to be operate in a manner to keep the networks' revenue whole.

For connections to the distribution network, the proposed policy may be given effect through site-specific tariffs, subject to AER approval. This approach means that the discounted network charge can be implemented by establishing a new tariff for each exempt hydrogen producer.

While transmission prices are also site-specific, the Rules regarding the setting of those prices are more prescriptive than distribution. In particular, the current Rules would not allow the transmission prices to be discounted by 90% of the standard rate, if the discounted amount is to be recovered from other customers. To give effect to the NSW Government's policy that the NSPs should be kept financially whole (which ENA supports), therefore, it will be important to introduce changes in the Rules that enable TNSPs to recover the shortfall in revenue that would arise from the proposed discount to exempt hydrogen producers.

ENA would welcome further discussions with the NSW Government on this issue to ensure that appropriate changes are made to give effect to the policy position.

TUOS for DNSP connected exemptions

Transmission charges for distribution connected customers are based on the bulk supply points. The transmission charges at these bulk supply points are allocated to distribution connected customers at the discretion of the specific DNSP when the tariffs are formulated. All TNSP charges to DNSPs are recoverable as a pass through amount.

Where a distribution connected hydrogen producer benefits from a 90% network exemption, the DNSP should be able to recover the transmission component of the discount through its other network tariffs. This approach contrasts with the position set out in the consultation paper, which suggests that the TNSP should adjust its charges to the DNSP. ENA does not support an adjustment to the transmission charge levied on the distributor, as this would involve a potentially complex recalculation of transmission charges without any material benefit.

NSW government management to the statewide cap

ENA understand that the scheme is capped at 750MW, NSW grant the exemptions which may lapse after 12 months from the date of granting if projects have not reached financial closure and may also be revoked if the conditions of exemption are not met. If the cap is reached ahead of 2029, the scheme should close early.

ENA is supportive of an exemptions scheme that is managed by NSW government, subject to a statewide cap of 750MW. This will require on-going management of the exemption status of each hydrogen producer to ensure that the NSPs have accurate information regarding a party's eligibility for reduced network charges.

ENA note the caps on some of the solar feed in schemes were materially exceeded with a consequence of greater costs to consumers than was intended. Given the size of the cap and length of the scheme ENA urges NSW government to proactively manage and transparently report on the uptake against the cap on a regular basis eg quarterly.

Spare capacity and exemption framework

The TAPR requires network asset rating and demand to be forecast 10 years out for various transmission network segments[1]. The TAPR and the network opportunity maps should suffice in providing an initial indication of locations where there is 'spare' network capacity. The NEM operates on open access, this does mean that spare capacity on any network element can change over time as new loads connect or disconnect. Similar arrangements apply in the DAPRs.

ENA consider that an obligation on further studies is not required and it should only be considered on a case by case basis.

Whilst augmentation may not be required immediately, this does not mean that it will not be needed over the 12 years the exemption applies. In particular, ENA note that networks are not constructed with the aim to provide 'spare' capacity, which means that 'spare capacity' is likely to dissipate over time. Whilst the concept of avoiding augmentation and additional costs to consumers is proposed, this is unlikely to be sustainable over the timeframes which may extend to 2042.

The policy papers states that exemptions would be subject to curtailing load at the direction of the network business or AEMO if required during a peak event. ENA suggest it is worth considering the interaction of this approach and network planning obligations to ensure that load cannot drive network augmentation. There should be further consideration of the curtailment provisions versus the alternative of scheduling the load in the market.

Identifiable exempt load is supported – with NMI, meter etc

ENA support the policy intent that green hydrogen connections must have a separate NMI and metering so that the exemption network charges can be accurately measured. Any other equipment on site in a hybrid facility must have a separate NMI, meter etc from the electrolyser.

The minimum load threshold is supported

ENA support the proposed threshold of a minimum of 10MW or 40GWh per annum green hydrogen loads.

[1] https://www.aer.gov.au/system/files/AER%20-%20TAPR%20guidelines%20and%20final%20decision%20-%2018%20December%202018.pdf, page 11

This means that all connection arrangements would be negotiated under NER chapter 5. The term standard connection would only apply to smaller connections under Chapter 5A, which is not the case here.