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Australian Energy Market Commission
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Transmission loss factors Draft rule determination

Snowy Hydro Limited welcomes the opportunity to comment on matters raised in the Draft rule determination from the Australian Energy Market Commission (the Commission) on Transmission loss factors.

Snowy Hydro Limited is a producer, supplier, trader and retailer of energy in the National Electricity Market ('NEM') and a leading provider of risk management financial hedge contracts. We are an integrated energy company with more than 5,500 megawatts (MW) of generating capacity. We are one of Australia's largest renewable generators, the third largest generator by capacity and the fourth largest retailer in the NEM through our award-winning retail energy companies - Red Energy and Lumo Energy.

Snowy Hydro supports the decision by the Commission to keep the existing marginal loss factor (MLF) methodology for calculating electricity lost during transmission, rather than moving to an average loss factor methodology. Losses in the transmission network have been a natural aspect of the NEM over the past 20 years making generator investment decisions important and we therefore welcome the decision to maintain the clear signals for efficient dispatch and future investment in the market. We believe the current MLF methodology is appropriate as it gives participants certainty over their loss factor ahead of time, which is needed in assessing their risk and ability to offer hedge contracts.

Snowy Hydro understand the yearly challenges that certain participants are having with MLF's however *"these fundamental changes are resulting in greater physical losses of electricity, which is not a function of economic theory but rather a function of physics"* as noted by the Commission¹. It is for this reason we understand that the Commission did not agree with *"Adani Renewables that there are "high inaccuracies" resulting from the use of a marginal and forward-looking calculation methodology"*². Snowy Hydro however notes that AEMO has increased engagement with market participants on possible changes to MLF calculations intended to make them more transparent and reduce volatility for investors. AEMO in recent years have:

- recalculated the 2019-20 MLFs due to updated methodologies.
- increased transparency in the market, and committed to publishing quarterly indicative MLF values to provide likely trends compared to the current financial year.
- providing more frequent updates of MLF values, to better inform the market of likely trends. In November 2019 AEMO published a report on indicative MLFs for FY20-21
- Scheduled forums to discuss some of the key challenges from MLFs

¹ AEMC, Transmission loss factors, Draft rule determination, 14 November 2019, pp21

² AEMC, Transmission loss factors, Draft rule determination, 14 November 2019, pp22

The transparency of new projects rule change is also closely related to the issues raised by the rule change requests. With significant changes occurring in the NEM with the increasing penetration of renewable generation and the changing market dynamics the Commission is consulting on three rule changes that relate to improving the transparency of new projects in the NEM that include a requirement to allow new project developers to register as intending participants. This will increase information about the new projects connecting to the system a current issue raised by renewable investors.

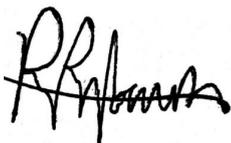
The Commission noted that dynamic loss factors, calculated every dispatch interval, as per inter-regional loss factors, is one way to reduce the inaccuracy. The Draft rule determination *“acknowledges that it is theoretically possible to compute dynamic loss factors, and that this could achieve market efficiencies”*³, however correctly notes *“the introduction of dynamic loss factors would be likely to also require significant, costly changes to AEMO's systems”*⁴. Incremental improvements in the NEM loss arrangements through the Coordination of generation and transmission investment (COGATI) reform is extremely ambitious as the reform has experienced numerous complexities.

Snowy Hydro has further concerns, in addition to the substantial changes that would be involved in moving to dynamic loss factors. The adoption of dynamic loss factors on their own would introduce additional uncertainty increasing risk, which will lead to additional cost. The complexity resulting from real time loss factors would make decision making for greater generator risk which would ultimately have negative implications on the financial contract market trading and a reduction in certainty for investment decisions.

The Commission needs to assess any change to dynamic loss factors holistically and through broader reforms being considered in the Energy Security Board (ESB)'s post 2025 market design. A change to dynamic loss factors may have little impact on the intermittent generation resources which tend to operate solely on input energy availability, however the change would negatively impact the ability of scheduled generators to offer firm hedging products to offset the intermittent output from these generators to market customers. Snowy Hydro believe dynamic loss factors will add another layer of risk, further affecting generators ability to offer forward contracts.

Snowy Hydro appreciates the opportunity to respond to the Draft rule determination and any questions about this submission should be addressed to me by email to panos.priftakis@snowyhydro.com.au.

Yours sincerely,



Panos Priftakis
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³ AEMC, Transmission loss factors, Draft rule determination, 14 November 2019

⁴ AEMC, Transmission loss factors, Draft rule determination, 14 November 2019