





27 July 2021

Mr Warwick Anderson General Manager Australian Energy Regulator GPO Box 520 Melbourne, Victoria, 3001

By email: AEMO2021@aer.gov.au

Dear Warwick

Re: Transmission pricing methodology decision paper

CitiPower, Powercor and United Energy welcome the opportunity to respond to the Australian Energy Regulator's (AER) decision paper on the Australian Energy Market Operator's (AEMO) transmission pricing methodology.

Our submission addresses the following issues:

- the inequitable application of transmission use of system (TUOS) charges and network use of system (NUOS) charges for energy storage, resulting in inefficient connections to the transmission network
- an avoided TUOS calculation that does not reflect the changing drivers of transmission investment
- the proposed timing of the publication of TUOS charges should allow for the development, and approval, of our annual pricing proposals.

Application of TUOS and NUOS to energy storage

For the 2021–2026 regulatory period for Victorian distributors, the AER decided distribution-connected energy storage should incur NUOS, which includes TUOS. In contrast, AEMO has proposed that transmission-connected energy storage be exempt from TUOS charges, except where they are co-located with load. This is the current practice in Victoria.

Different rules with respect to the application of network charges for energy storage on transmission and distribution networks will result in the inefficient location of energy storage in the energy system. The Australian Renewable Energy Agency (ARENA) has verbally stated that the current arrangement is driving energy storage from the distribution network.

Energy storage is a critical complement to the inexorable roll out of renewable generation at both the distribution and transmission levels in the network. It may be in the best long-term interests of customers that energy storage is exempt from network charges so that energy storage can support the growth in renewable generation. The design of the energy storage connection agreements can serve to ensure they are not operated so as not to adversely impact the network. Further, network support payments can further incentivise the efficient use of energy storage on the network.

Avoided TUOS

The National Electricity Rules (rules) clauses 5.3AA(h) and 5.3AA(i) requires that a distributor must pay an eligible generator the avoided locational transmission costs that would have been payable by the distributor to the transmission network service provider (TNSP) had the generator not been connected to its distribution network.

To calculate the avoided locational transmission costs, a distributor needs to know both the locational price and the additional demand that would have occurred had the generator not been connected to its distribution

network. To ensure that retail customers do not pay too much or too little for the avoided transmission costs, we ask that AEMO be required to provide locational demand prices with, and without, embedded generators.

Further, the purpose of clauses 5.3AA(h) and 5.3AA(i) in the rules is to compensate generators for future augmentation costs of the transmission network that will be avoided because of their generation. This will however only be the case if the locational transmission price reflects the long run marginal cost of an additional unit of demand.

However, AEMO have proposed to allocate 50% of maximum allowed revenue (MAR) to locational charges which is unlikely to reflect the long run marginal cost. We consider this assumption leads to unreasonably high avoided TUOS payments. This is because AEMO has stated that demand growth is no longer the main driver of transmission investment. Rather, the driver of transmission investment is now the connection of renewable generation. We would therefore expect that the long run marginal cost of an additional unit of demand is well below 50% of MAR.

Timing of TUOS charges

AEMO has proposed TUOS charges for year 't' be based on energy and demand data in year t-2. Distributors use these charges for the purpose of setting network tariffs which are submitted to the AER for approval at the end of March—nine months after year t-2. This nine-month window provides an opportunity for AEMO to publish TUOS charges before distributors submit their annual pricing proposals. In the absence of published TUOS charges, distributors need to estimate TUOS charges. Experience shows that our estimates can be inaccurate, contributing to excessive volatility in network charges.

We therefore consider it more reasonable for AEMO to publish their TUOS charges for year t by the end of February in year t-1.

Should you have any queries about this submission please do not hesitate to contact Mark De Villiers on

Yours sincerely,

Renate Vogt

General Manager Regulation

CitiPower, Powercor and United Energy