

Enel Green Power Australia Pty Ltd Level 23.07, One International Towers 100 Barangaroo Avenue Sydney NSW 2000

Meredith Mayes Australian Energy Market Commission 201 Elizabeth Street Sydney NSW 2000

17 January 2020

Dear Meredith,

## Re: Draft Rule Determination, National Electricity Amendment (Transmission Loss Factors) Rule 2020

Enel Green Power (EGP) welcomes the opportunity to respond to the Australian Energy Market Commission's (AEMC's) Draft Rule Determination on Transmission Loss Factors.

Founded in 2008, and part of Enel Group, EGP builds and operates large scale renewable generation capacity in energy markets around the world. EGP operates in 29 countries on 5 continents with a managed capacity of over 43 GW and over 1,200 plants. EGP is one of largest renewable energy companies in the world, generating approximately 82 TWh of renewable electricity from hydro, solar, wind and geothermal energy.

EGP broadly accepts the conclusions reached in the AEMC's draft determination. However, we consider there may be merit in the AEMC considering some form of interim 'time limited' solution for managing loss factor risk for participants, until such time more comprehensive changes to the loss factor framework are considered as part of the AEMC's coordination of generation and transmission investment (COGATI) review.

We also briefly consider the concept of Renewable Energy Zones (REZ), as proposed by the NSW Government, as a possible framework, among other things, for managing loss factor risk. It would appear to deliver some of the benefits of the COGATI reforms, while being able to be implemented more quickly.

These issues are described in more detail below.

## Balancing price signals against managing loss factor risks

Volatile MLFs, which are difficult to predict and manage for participants, are an important issue that needs to be addressed. However, we accept the AEMC's analysis that some of the solutions proposed by participants, while having their merits, could also create distortions in the National Electricity Market (NEM) with the overall net benefits difficult to assess.

The use of marginal loss factors (MLFs) in dispatch and settlement is an integral component of efficient dispatch and settlement in an energy only market. MLFs provide important signals for the efficient utilisation of the network, as well as the efficient entry and exit of generation. Such signals will become increasingly important to ensure customers do not overpay for transmission as some 15 gigawatts of coal fired generation capacity exits the market over the next decade or so, freeing up significant transmission capacity in the market to be fully utilised.

However, once an investment has been made, there is little the generator can do to influence losses on the network (other than by reducing its dispatch, which is hardly a satisfactory outcome). This is because the principal decision the generator can make to influence losses, its locational decision, has already been made. Consequently, exposing a generator to ongoing volatile MLFs after his plant has been built, increases its costs with little likely improvement in efficiency.

For these reasons EGP supports development of a hedging mechanism that would allow generators to manage their exposure to changing future loss factors, for a price, at the time of their investment decision. Developing such a mechanism will inevitably be complex and require substantial changes to market arrangements. We therefore understand the AEMC's preference for wanting to consider such a mechanism as part of its more holistic consideration of transmission and pricing reforms in the coordination of generation and transmission investment (COGATI) review. As we noted in our submission to the AEMC's COGATI discussion paper on its proposed transmission access model, EGP sees merit in well-designed financial transmission rights as a potential mechanism for managing both congestion and loss factor risk.

In its most recent update on the COGATI however, the AEMC has indicated that its current timeline for implementing COGATI reforms will now be deferred from 2022 to sometime post 2025. As a consequence of this shift in the time line, there may now be merit in the AEMC considering some form of interim loss factor solution to overcome the difficulties that a large number of renewable generators are currently experiencing in weaker parts of the grid. Such a solution would apply on a 'time limited' basis until a more comprehensive solution was developed.

## **Renewable Energy Zones**

EGP considers that the concept of Renewable Energy Zones (REZs), as proposed by the NSW government, could also provide a useful framework for allowing generators to better manage their loss factor risk. While similar to the model proposed for REZs by the AEMC<sup>1</sup> in its COGATI review, it appears this model could be implemented more quickly, and should be replicable across the NEM.

The NSW government recently announced the establishment of REZs in the Central West, South West and New England regions of NSW, supporting some 17,000 MW of renewable generation capacity currently in the investment pipeline in these areas.<sup>2</sup>

To support the development of REZs the NSW government proposes to establish a dedicated Renewable Energy Zone body, who would be made responsible for issuing long term transmission connection rights to generators in return for financial contributions from generators to fast track the transmission investment needed to connect REZs to the wider shared network. The REZ body would also be made responsible for land acquisition, community engagement and facilitating grid connections.

EGP understands the connection rights being considered by the NSW government would not provide the same type of financial access to the regional reference price as FTRs being considered under COGATI, but rather would provide a physical right to the privately funded transmission, so that others could be excluded from accessing this capacity.

This type of approach would allow generator locational investment decisions to be far more effectively coordinated with transmission investment than it has to date, ensuring sufficient transmission capacity is available for generators if they choose to locate in REZs and contribute to funding transmission investment to help unlock them. Loss factors could be expected to be significantly less volatile for connection rights holders because they would be able to exclude new generators without connection rights from using the transmission capacity they have underwritten. This would limit the impacts on loss factors caused by further new entry in the REZ. Each of the REZ identified would be connected into the

<sup>&</sup>lt;sup>1</sup> AEMC Discussion Paper, Renewable Energy Zones, 14 October 2019

<sup>&</sup>lt;sup>2</sup> NSW Electricity Strategy, p 20

500 kV network to minimise the potential for congestion in the shared network to reduce the access of the REZ to market.

While further detail needs to be worked through, and derogations from the existing rules would need to be sought to implement the framework, we consider NSW government's proposed REZ arrangements hold considerable promise for supporting investment in renewable generation and allowing future new entrant renewable generators to manage their loss factor risk. EGP understands the NSW government intends to seek expressions of interest from generators in the second half of 2020 and have the final rules in place so that construction of transmission can begin in 2022.

Please feel free to contact Con Van Kemenade, Head of Regulatory Affairs, on 0439399943 to discuss anything we have raised in this submission.

Yours faithfully,

Javier Blanco Country Manager Enel Green Power Australia