



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

17 September 2021

Ms Anna Collyer
Chair
Australian Energy Market Commission
201 Elizabeth Street
Sydney NSW 2000
Lodged via the AEMC Website

Dear Ms Collyer,

RE: AEMC Draft rule determination, National Electricity Amendment (Integrating Energy Storage Systems into the NEM) Rule

Enel Green Power (EGP) welcomes the opportunity to provide a submission in response to the AEMC's draft rule determination.

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 27 countries across 5 continents with a managed capacity of over 50 GW of renewables and over 1,200 plants. EGP is the largest privately owned renewable energy company in the world, generating renewable electricity from hydro, solar, wind and geothermal resources across the globe.

We support many of recommendations in the draft determination: in particular the implementation of a new registration category for storage; greater flexibility and clarity for hybrid facilities; and the proposed changes governing the scheduling and dispatch of storage systems.

Further, while we argued for a different treatment of non-energy related costs and performance standards in our submission to the consultation paper, we accept the reasoning of the AEMC in arriving at its conclusions on these matters in the draft determination.

We do not agree however, with the reasoning and conclusions the AEMC has reached on network charging. The remainder of this submission sets out why we consider the AEMC has erred in its decision on this important matter.

Application of network charges to storage

Network charges should not apply to grid scale battery storage, as this is inconsistent with the principles underpinning the open access network. End users pay for the network because they benefit from the guaranteed delivery of secure and reliable electricity. Generators on the other hand are not required to fund the shared network because the network is open access and their ability to deliver their energy is not guaranteed, but rather is based on a combination of their offer price and the available transmission capability at the time they dispatch their electricity. This reasoning should apply in the same way to battery storage, which operates much more like a generator than it does as a load and indeed competes with gas fired peaking generation and other forms of storage (such as pumped hydro) in both energy and ancillary services markets. Applying network charges to battery storage but not the other technologies is anticompetitive.

Definitions matter in this regard. Network charges are currently levied on final consumption. Storage does not represent an end use of electricity but rather stores electricity for later consumption. It is not obvious to us that storage load and customer loads should be treated in the same way.

A large part of the reason why network charges are applied at the end use level is to minimise distortions to wholesale market signals, since generators would inevitably seek to pass through the largely fixed network charges through to customers through their variable pricing offers. The incentives for storage are the same.

The AEMC argues that exempting storage from network charges would be inconsistent with their recent decision to allow for export charging on the distribution network. We disagree with this position. Export charges are being applied at the end use level, to better reflect the costs end users impose on the network. By accepting such a charge, end users in return receive a firm level of export capability. As we have noted above, generators and storage do not receive firm export or import capability and are exposed to the strong combined locational signals of being constrained off the network and marginal loss factors, neither of which apply to end users.

Charging residential solar exports also has an additional important rationale. Where end users choose to install their own generation and storage for self-supply, they reduce their contribution to funding the network. This does not change their continued dependence on reliable supply however (that is, they are not completely disconnected from the grid). Further, the costs of providing that reliability to a customer is largely the same regardless of how often that customer draws on that network capacity to meet its energy needs. Therefore, it is appropriate they continue to pay their fair contribution to that capacity. It is appropriate therefore for distribution businesses to be given greater flexibility to recover their costs from end users through an export charge, as these funds are necessary for the distribution business to be able to maintain a reliable supply to end users.

Alternative Options

EGPs strong preference is for storage providers to be treated in the same manner as generators with respect to application of network charges. If the AEMC is minded not to do so, then a second-best option is for the AEMC to make changes to the rules that force network services providers to develop better tariffs for storage. Existing network tariffs at either the distribution or transmission level do not reflect the fact that storage facilities typically do not cause network costs and can often reduce them, by expanding the hosting capacity of the network in constrained areas. The AEMC appears to suggest this flexibility is already inherent within the rules with reference to the negotiated services framework. This framework is focused however on provision of connection services, or above standard shared network services by network services (e.g., an enhanced level of transfer capability) and have little relevance or bearing on potential network tariffs applicable to storage providers. It is the prescribed pricing framework that matters for storage providers, not the negotiated services framework.

While discussed at some length in the draft determination, we see little support for storage in the distribution pricing rules. Tariff Structure Statements (TSS) apply primarily across the broad residential and small business customer classes (with little scope for bespoke variations) and once set apply for 5 years, with very limited ability to change the tariffs during that period. Grid scale storage would typically fall under the large customer class, who are subject to Individually Calculated Tariffs (ICT). ICTs are developed primarily to allocate additional connection related costs to customers than can be directly attributable to them, to avoid cross-subsidisation from residential and small business customers. There appears to be little scope to negotiate lower network charges under this framework.

We further note that there appears to have been very little innovation in network tariffs since the inception of TSS arrangements. The best distribution providers have come up with as far as we are aware are demand charges, which have limited efficiency from the perspective of managing system peaks and provide little benefit to storage providers.

Prudent discount provisions

We consider they may be more promise for delivering better network tariffs for storage providers under the prudent discount provisions of the transmission rules. These provisions allow transmission providers to negotiate discounts to network charges for large customers if there is a threat of by-pass.

The limitations of the prudent discount provisions however are that prudent discounts are at the complete discretion of the network service provider and are only applicable in the event of bypass risk. We consider the scope of this provision could be expanded to apply in circumstances where customers either do not impose any costs on the network or deliver a benefit to the network (e.g., expanding network capability or helping to reduce network peak demand). In the former circumstance storage providers should be able to negotiate for the locational component of transmission uses of system charges to be zero, where they provide a benefit (reduce constraint costs), they should receive a rebate based on the costs of future investment they help avoid.

Transmission network services providers should also have stronger incentives to apply these sorts of discounts. This could be done, for example, by including an express requirement for services providers to negotiate such a discount where the benefits note above can be demonstrated. Network businesses must also be required to 'act reasonably' or use 'best endeavours' in negotiating prudent discounts.

Finally, we note that there are no prudent discount provisions in the distribution rules. Certainly, the concept of ICTs would not appear to be flexible enough to meet this need. We recommend that with the additional amendments we propose above, that the AEMC require the prudent discount provisions be incorporated into the distribution rules.

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,



Werther Esposito
Country Manager
Enel Green Power Australia