Thursday, 4 July 2024

Australian Energy Market Commission
Level 15, 60 Castlereagh Street
Sydney, NSW, 2000

Submitted via aemc@aemc.gov.au

ERC0389 Retailer reliability obligation exemption for scheduled bi-directional units

Dear Ms Wild,

The Clean Energy Council (CEC) is the peak body for the clean energy industry in Australia, representing nearly 1,000 of the leading businesses operating in renewable energy, energy storage, and renewable hydrogen. The CEC is committed to accelerating the decarbonisation of Australia's energy system as rapidly as possible while maintaining a secure and reliable supply of electricity for customers.

We welcome the opportunity to comment on the consultation paper on the proposed rule change *Retailer reliability obligation (RRO) exemption for scheduled bi-directional units (BDUs)*.

The CEC supports the proposed rule change on the principle of encouraging optimal utilisation of batteries. The number of batteries and energy storage assets generally will continue to grow. This will provide significant additional benefits to the power system, helping to reduce the total cost of the transition for consumers. Storage can provide a wide range of services, such as fast and very fast FCAS, inertia and system strength, as well as system integrity protection schemes, all of which provide material benefits to consumers.

One of the objectives of the RRO was to ensure retailers and large electricity users obtain contracts to cover their share of a 1-in-2-year peak demand in a declared reliability gap period. This would result in increased contracting levels that would increase liquid contract markets and reduce the volatility of spot prices.

However, the RRO was designed at a time when energy storage was not yet a primary element of the power system. It is only now that the implications of the RRO for energy storage are becoming clear.

Energy storage assets should not be considered to be equivalent to traditional loads on the system. Storage assets are charged not as an end use, but rather so as to provide energy back

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to the system for the purposes of meeting consumer demand at other times, stabilising the grid or fulfilling other out-of-market services.

Considering these benefits, any additional regulatory burden that would impede the effective operation of energy storage assets is likely to reduce the efficiency of the system. We consider that RRO compliance has the effect of limiting batteries and other energy storage assets from providing energy and essential system services, thus reducing overall efficiency of the system.

The CEC also considers that grid stability is provided by other types of energy storage technologies. We therefore support expanding the exemption to all storage assets.

The high-level questions posed by AEMC are briefly detailed.

- Obligations on batteries

Under the current rules, batteries face penalties for charging during a RRO gap period, which significantly reduces the availability of critical system security services. The CEC agrees with the analysis put forward by the proponents, drawing from more accurate information since the RRO was implemented.

Batteries and other energy storage assets are scheduled loads and would charge during a reliability gap period only if dispatched. Although batteries can also charge at low prices for energy arbitrage purposes, there do not seem to be examples where this has been the case during an RRO gap period.

We also note that in the future, it is likely that more hybrid systems will be connected, allowing batteries to charge from excess solar behind the connection point. This further reduces the probability of needing to charge during a gap period.

The penalty imposed by the RRO is likely an unintended consequence of RRO policy design. The CEC encourages AEMC to revisit the rationale for including all types of loads as liable entities in light of more data on storage assets operation.

- Exemption of batteries

If batteries were not subject to RRO compliance they would be better able to respond to market signals due to their flexibility in operation and responsiveness. There could be an overlap between the times when storage assets are RRO liable (if charging during a reliability gap period) and those periods where they are directed by AEMO or out-of-market obligations to charge, to ensure enough energy is provided for reliability or system security. This may not be a frequent issue now, but with more batteries in the system, this conflict could drive inefficient operation.

In addition, investors are looking for certainty - such compliance obligations add to revenue uncertainty.

The AEMC should also investigate how distribution-connected batteries are affected by the RRO since there is currently a rule change underway to allow aggregated batteries to bid in the wholesale market. Batteries on the distribution network are deployed for grid stability functions and RRO could equally restrict their operation.

- Exemption for pumped hydro

The CEC considers that all forms of energy storage should be exempt from RRO obligations. While the current storage solutions include batteries and pumped hydro, other storage technologies such as flow batteries or compressed air are likely to form part of the system and their optimal operation is equally important.

The CEC therefore support inclusion of pumped hydro in the list of exempted entities, as well as all other forms of energy storage. This would be in line with how energy storage operates to support the grid irrespective of technology type.

Pumped hydro is also often a tenderer for the Reliability and Emergency Reserve Trader (RERT), which helps to address remaining reliability gaps. These types of contracts are useful for driving investment in pumped hydro and drawing out the interaction between an exclusion and these mechanisms can be further investigated. Exclusion of pumped hydro from the RRO is therefore likely to support reliability generally.

- Benefits, costs and implementation

RRO exemption will deliver additional market benefits by enabling more energy storage in the system, therefore increasing supply of additional grid support services, lowering prices and reducing the need to dispatch high-cost gas generation.
Overall, when storage assets operate effectively, the cost of providing both energy and FCAS should be lower, translating directly into lower costs for consumers.

If an exclusion were progressed, AEMO would have to update the ESOO since it uses liable entities in the forecast methodology. AER would also need to update the RRO guidelines. All these changes would be minor and could be delivered in time.

The proponents indicated a desired timeframe for the rule change of December 2024. The CEC encourages the AEMC to progress quickly with a desired determination. The matter under consideration is narrow and the expansion of the exemption to include other storage types that register as Integrated Resource Provider should be equally straightforward.

- Alternative solutions

The CEC considers that the way the RRO is prescribed in the NER, as either being a liable entity or not liable, would indicate that no nuance is currently possible, and the avenue of rule change is most adequate. In order to meet the timeframe suggested in the rule change request and the relative narrow scope of the submission, we encourage AEMC to focus on a change in the rules.

As always, the CEC welcomes further engagement from the Commission as this rule change progresses. Further queries can be directed to aspataru@cleanenergycouncil.org.au.

Kind regards

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