SUBMISSION

AEMC NATIONAL ELECTRICITY AMENDMENT (RETAILER RELIABILITY OBLIGATION EXEMPTION FOR BI-DIRECTIONAL UNITS) RULE 2024 (ERC0389)

4 JULY 2024

INTRODUCTION

The Energy Users' Association of Australia (EUAA) is the peak body representing Australian commercial and industrial energy users. Our membership covers a broad cross section of the Australian economy including significant retail, manufacturing, building materials and food processing industries. Combined our members employ over 1 million Australians, pay billions in energy bills every year and in many cases are exposed to the fluctuations and challenges of international trade.

Thank you for the opportunity to make a submission under AEMC National Electricity Amendment (Retailer Reliability Obligation Exemption for Bi-Directional Units) Rule 2024.

The Retailer Reliability Obligation (RRO) is a mechanism designed to support reliability across the National Electricity Market (NEM) by preventing predicted future generation shortfall ('reliability gaps'). Fundamentally the RRO is designed to ensure liable entities have secured sufficient firm contracts to meet future potential reliability liability and in doing so underpin the investment case of firm generation assets.

The framework was proposed by the Energy Security Board and commenced on 1 July 2019. However, recent policies such as the NSW Roadmap Long Duration Storage Long Term Energy Service Agreements (LTESA) arrangements and the Federal Capacity Investment Scheme (CIS) will see significant "firm" technologies enter the market in coming years so it remains to be seen what additional benefit the RRO will deliver or if it requires further modification. For example, it may be the case where the focus of the RRO could turn to supporting long-duration assets.

Under current RRO obligations, retailers, large energy users and, notably, bi-directional units (BDU) with annual electricity consumption (from charging from the grid) above 10GWh per annum, are liable entities to the RRO.

However, BDU provide other services, including contingency and regulation Frequency Control Ancillary Services (FCAS) lower services (including the new 1 second very fast FCAS market, which only Battery Energy Storage Systems - BESS can provide), system integrity services, such as System Integrity Protection Schemes (SIPS) and Wide Area Protection Scheme (WAPS), inertia or system strength when BESS operate with grid-forming inverters and out-of-market contracts to provide system security services. It is also highly likely that BDU operators will largely operate in the arbitrage game, buying low and selling high. By purchasing energy when it is in abundance (i.e. at peak solar PV generation periods) it will assist with managing negative demand periods that are emerging as significant issues for grid stability. We should be encouraging this "load shifting" behaviour, which has the potential to eliminate reliability gaps.

We are concerned that including BDU as liable entities in the RRO creates a disincentive for BDU to operate as a load to provide FCAS for system security purposes during gap periods. For BDU to operate as a load imposes risks of RRO non-compliance, resulting in penalties and Procurer of Last Resort (PoLR) costs. A non-compliant BDU could pay up to an individual maximum of $100 million. We understand that if BDU providers withhold the provision of grid-supportive services to avoid consuming during a gap period, the system security risks would increase. In particular, the subset of BDU, BESS respond quicker than non-BESS BDU and would create gaps in the very fast FCAS. These disincentives will lead to increased costs to consumers.

In short, BDU face a trade-off between RRO compliance and the provision of system security services. In practice, BDU operators are incentivised to 'turn off' load for system security services to avoid 'Procurer of Last Resort' costs from breaching the RRO, which may be required during the RRO gap period.

We note that for much of the Consultation Paper, the Commission have focussed on the technology of the proponents that submitted the rule change request, that being battery energy storage systems (BESS). Occasionally the Commission also considers pumped hydro. However, aside from very fast FCAS, the impacts of the RRO extend to all BDU technologies. To future proof the decision, we encourage the Commission to consider the request in light of the future potential mix of BDU technologies (e.g. pumped hydro, BESS and compressed air are all currently operating or proposed in the NEM, and many more BDU technologies exist globally), and to consider the request in the context of not just what is needed now, but also post 2035 when much of the current system security providers (i.e. coal fired generation) will be closed.

RESPONSE TO SELECTED CONSULTATION QUESTIONS

POWER-SYSTEM SECURITY RISKS DURING RELIABILITY GAP EVENTS

Question 1: Does the RRO threaten the security of the power system by posing obligations on batteries?

- Do you agree with the proponents' assessment of other NEM-wide risks as a result of batteries being liable entities to the RRO?

We agree with the proponents' argument that there are opposing incentives between the RRO and the provision of grid-support services for RRO liable BDU. This is also true for large consumers who have RRO and grid-support service liabilities. Given the magnitude of the potential RRO penalties for non-compliance, RRO will take priority and the provision of grid-support services by BDU will take a backseat during reliability gap periods. We see this as a major concern for the reliability of the NEM and increased costs for consumers.

In particular, we see the impact of the RRO increasing further on the very fast FCAS market that is solely provided by one subset of BDU, BESS.

PROPOSED RULE CHANGE: RRO EXEMPTION FOR BATTERIES

Question 2: Will excluding batteries from RRO contribute to a secure power system during reliability-gap periods?

- *Apart from RRO compliance, do you see any other barriers to batteries providing system-security services?*

We have previously made comment on the CIS that proposes capacity in BDU be reserved for LOR3 (Lack of Reserve) events, which we believe will cause an LOR1/2 event to rapidly become an LOR3 event. Reserving part of the capacity of a BDU for LOR3 events will also impact the BDU provider's ability to provide grid-support services.

Aside from the CIS and RRO, we see no other barriers to BDU providing grid-support services.

- Are there compelling reasons to keep batteries liable to the RRO? In other words, do you see merits in keeping the RRO technology-neutral?

We understand the Commission's decision making during the Integrating Energy Storage Systems (IESS) rule change to keep the RRO technology-neutral, to increase competition across all technologies that provide electricity to the NEM. However, with the logic of the original IESS decision and the new information at hand, we can see compelling reasons for both keeping the technology neutrality in the implementation of the RRO to improve competition, and to exempt BDU from the RRO to maintain grid-support services and allow load shifting.

At this point in time, we see the provision of grid-support services during an RRO reliability gap and the load shifting opportunities to help manage negative demand to be more important than meeting the RRO liabilities and therefore support the proponents' concept.

RRO EXEMPTION FOR PUMPED-HYDRO ASSETS

Question 3: Should we also consider exempting pumped-hydro assets from the Retailer Reliability Obligation?

- *Do you believe that pumped-hydro plants should also be exempted from the RRO?*

As discussed in the introduction of this submission, we consider that ALL BDU technologies will experience similar impacts from the conflicting incentives between the RRO and the provision of grid-support services. We encourage the Commission to make a decision on this rule change that is technology neutral (i.e. applies to all BDU technologies that provide grid-support services) and does not require further rule changes to adjust for new technologies as they are implemented (e.g. compressed air storage) and, for all intentions, will remain fit-for-purpose for BDU once the current fleet of coal-fired generation are retired.

ALTERNATIVE SOLUTION TO A RULE CHANGE

Question 6: Are there alternative solutions to an exemption of the RRO that would be preferable?

- *Do you believe that battery operators can manage risks from RRO compliance with solutions • available today? If so, what are these solutions?*

We agree with the proponents that the current rules do not allow BDU operators to make their own decision as to whether they abide to RRO requirements or provide grid-support services. We believe that this needs to be resolved, and the proposed addition of the "Scheduled BDU" to the list of exempt entities is one way to achieve that.

- *Would an alternative solution be more aligned with the intent of the RRO and the long-term interests of consumers?*

Similar issues have arisen in most nation/state/prefecture legal systems when two laws have conflicting requirements. There have been many solutions to these issues, including exemptions (that is proposed in the current rule change). Others include:

- Setting one rule as precedent over the other rule, e.g. adding to the RRO that BDU must preference the provision of grid-support services over its obligations under the RRO.
- Providing clear descriptors of when a rule can be breached without penalty, e.g. adding to the RRO that BDU may breach its RRO obligations without penalty if it is delivering grid-support services.
- Providing authority in the RRO for AEMO to give written authorisation to a BDU to breach its RRO obligations to provide grid-support services.

We believe these three options align better with the intent of both the RRO and the IESS than a straight exemption, however are likely to be higher cost due to the BDU still needing to acquire RRO contracts by the T1 date.

We expect the Commission to decide which of the options (including those presented in other submissions) is best for consumers based on the ability of the Commission's preferred rule change to meet the NEO, that is to deliver the highest reliability and lowest cost to consumers while simultaneously meeting the reliability gap.

ASSESSMENT FRAMEWORK

Question 7: Assessment framework

- *Do you agree with the proposed assessment criteria?*
- *Are there additional criteria that the Commission should consider or criteria included here that are not relevant?*

We agree with the Commissions proposed assessment criteria, however we recommend that the Commission consider the rule change on the basis that it will need to be implemented now, in the "messy-middle of the transition", but should also remain relevant with changing technology and in the 2030's when most of the existing coal fired generation fleet will be retired.

CONCLUDING REMARKS

While we support the proponents' proposal to have BDU exempt from the RRO, we are disappointed that the Commission has not provided any alternative narrative in its Consultation Report, including the impact of the RRO on all BDU technologies and the long-term impact of the proposed rule change.

As such, we encourage the Commission to consider the request in light of the future potential mix of BDU technologies (e.g. pumped hydro, BESS and compressed air are all currently operating or proposed in the NEM, and many more BDU technologies exist globally), how BDU commercially operate (e.g. time shifting arbitrage) and to consider the request in the context of not just what is needed now, but also post 2035 when much of the current system security providers (i.e. coal fired generation) will be closed.

Do not hesitate to be in contact should you have any questions.

Andrew Richards
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