Your ref: ERC0389

4 July 2024

Ms Ilaria Barletta
Project Leader, AEMC
Submitted online at: www.aemc.gov.au

Dear Ms Barletta

Submission: Retailer reliability obligation exemption for scheduled bi-directional units

CS Energy welcomes the opportunity to provide a submission to the Australian Energy Market Commission's (**AEMC's**) *Consultation Paper – Retailer reliability obligation exemption for scheduled bi-directional units* (**Paper**).

About CS Energy

CS Energy is a proudly Queensland-owned and based energy company that provides power to some of our state's biggest industries and employers. We employ almost 600 people who live and work in the Queensland communities where we operate. CS Energy owns and operates the Kogan Creek and Callide B coal-fired power stations and has a 50% share in the Callide C station (which it also operates). CS Energy sells electricity into the National Electricity Market (**NEM**) from these power stations, as well as electricity generated by Gladstone Power Station for which CS Energy holds the trading rights.

CS Energy also provides retail electricity services to large commercial and industrial customers throughout Queensland and has a retail joint venture with Alinta Energy to support household and small business customers in South-East Queensland.

CS Energy is creating a more diverse portfolio of energy sources as we transition to a new energy future and is committed to supporting regional Queensland through the development of clean energy hubs at our existing power system sites as part of the Queensland Energy and Jobs Plan (**QEJP**).

Overall views

As the NEM transitions to a system with more variable renewable resources (**VRE**), energy storage will play an increasingly important and multifaceted role in providing both reliability and system security services. Reforms that enable the more efficient use of energy storage

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(including batteries, pumped-hydro and other emerging technologies) would be crucial in supporting this transition, while maintaining system reliability and security.

In this context, CS Energy supports exempting energy storage facilities (that draw electricity from the grid to provide services later) from being liable entities under the Retailer Reliability Obligation (**RRO**). Such an exemption would likely reduce the costs of providing system security services by energy storage and therefore lower costs for consumers in the long-run.

Detailed comments

Under the current RRO, retailers, large users and energy storage facilities that draw more than 10GWh/year from the grid are treated as liable entities. When the RRO is triggered, liable entities are required to source qualifying contracts to cover their share of the peak demand forecast. Such an arrangement is designed to support reliability by addressing the projected future generation shortfall (**reliability gap**).

However, the application of the RRO liability, which does not distinguish whether electricity imports are consumed by end-users or stored for export later, has led to unintended consequences. CS Energy agrees with proponents of the rule change that such an application acts as a disincentive for batteries to charge during reliability gap periods[1] and provide system security services later due to the costs/complexity in sourcing qualifying contracts and the risks of non-compliance.

Specifically, demand for system security services (and hence load required to provide such services) is challenging to forecast and incorporate into qualifying contracts. This in turn increases the risk of RRO non-compliance, which may prompt battery operators not to charge during reliability gap periods and thereby reduce the provision of security services later. In other words, this leads to a trade-off between the provision of system security services and RRO compliance.

CS Energy considers the current RRO liability imposes unintended costs, including:

- Direct costs on battery operators – forgone revenue from not providing system security services or costs incurred to source qualifying contracts to meet RRO liabilities to provide security services;

- Indirect costs on battery operators – due to the need for additional monitoring and operational changes to manage the risk exposure of RRO liabilities;

- System-/market-wide costs – increased costs for system security services due to the reduction in supply of such services being provided by batteries. This is especially the case for very fast frequency control ancillary services (**FCAS**) which, at this stage, can be provided only by batteries. In the longer-term, the costs/inability to manage RRO non-compliance risks can also stymie investments in battery storage, which would reduce the supply of firming and security services with the potential flow-effects of having a less reliable and secured power system.

As the NEM transitions to a system dominated by VRE, it will develop new energy and system security constraints, therefore it is essential that investment and operation of energy storage assets do not face unnecessary regulatory disincentives and costs. Instead, storage

[1] Under the RRO, reliability gap periods refer to the periods where future generation shortfall are projected.

assets must have maximum freedom to earn revenue from providing a wide range of essential services.

The above identified challenges and costs are faced not only by batteries but also likely by other forms of energy storage technologies including pumped-hydro. These undesirable impacts can be mitigated by exempting energy storage technologies that draw electricity from the grid for the purpose of providing services later from the RRO liabilities.

Based on the increasingly sizable market share of energy storage in supplying system security services, it is likely that exempting energy storage technologies from RRO liabilities will result in further grid security benefits. In Q1 2024, batteries supply 57% of the FCAS market with an average increase of 632 MW relative to Q1 2023.[2]

CS Energy also notes that exempting energy storage technologies from the RRO liabilities would unlikely increase the compliance costs for other participants but may instead reduce these costs. Under the RRO framework, retailers and large users are obliged to acquire qualifying contracts and compete for these contracts in the financial market. Exempting energy storage technologies from the RRO liabilities would likely reduce unnecessary competition for these qualifying contracts and put downward pressure on contract prices. Further, this exemption would unlikely impact reliability negatively as energy storage assets are dispatched for charging by the NEM dispatch engine only if it is least-cost to do so from a system perspective while incorporating bids from market participants.

If you would like to discuss this submission, please contact Wei Fang Lim, Market Regulatory Manager, at wlim@csenergy.com.au or on 0455 363 114.

Yours sincerely

Don Woodrow
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[2] Australian Energy Market Operator, Quarterly Energy Dynamics (QED) – Q1 2024.