

**Consultation paper**

# National Electricity Amendment (Retailer reliability obligation exemption for scheduled bi-directional units) Rule 2024

**Proponents**

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**Reference: ERC0389**

## About the AEMC

The AEMC reports to the energy ministers. We have two functions. We make and amend the national electricity, gas and energy retail rules and conduct independent reviews for the energy ministers.

## Acknowledgement of Country

The AEMC acknowledges and shows respect for the traditional custodians of the many different lands across Australia on which we all live and work. We pay respect to all Elders past and present and the continuing connection of Aboriginal and Torres Strait Islander peoples to Country. The AEMC office is located on the land traditionally owned by the Gadigal people of the Eora nation.

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## Summary

- 1 In the national electricity market (NEM), batteries play a multifaceted role and provide a variety of services from energy to system security. Currently, batteries with annual electricity consumption above 10GWh per annum are also liable entities under the Retailer Reliability Obligation (RRO). On 8 April 2024, Iberdrola, Neoen and Tesla (the proponents) submitted a rule change to the Australian Energy Market Commission (AEMC or Commission) that seeks to exclude batteries from being liable entities.
- 2 The RRO is a mechanism designed to support reliability across the NEM by preventing predicted future generation shortfall ('reliability gaps'). When the RRO is triggered, liable entities must enter into sufficiently firm qualifying contracts to cover their share of the one-in-two year peak demand forecast for the region and reliability gap period.
- 3 The proponents have argued that including batteries as liable entities in the RRO acts as an incentive to not consume energy during a gap period in order to provide frequency control ancillary services (FCAS) and other services. This is because doing so imposes risks of RRO non-compliance, resulting in penalties and Procurer of Last Resort (PoLR) costs. A non-compliant battery could pay up to an individual maximum of \$100 million. If batteries withhold the provision of grid-supportive services to avoid consuming during a gap period, the proponents argue that system security risks could increase. They believe this would be due to the 'slower performance of non-battery providers' which could also increase costs to consumers.
- 4 Based on batteries' sizable market share as providers of system security services, the proponents argue that exempting batteries from the RRO will produce market and system benefits (especially for grid security) consistent with the National Electricity Objective (NEO). Furthermore, the proponents add that the exemption will not negatively affect the remaining liable entities.
- 5 The AEMC has commenced its consideration of the request for exemption, and this consultation paper is the first stage.
- 6 We are seeking your feedback on whether:
  - the NEM may become less stable and secure as a result of RRO liability applied to batteries
  - exempting batteries – and potentially pumped-hydro plants - from the RRO would contribute to a more secure power system without compromising reliability and adding costs to consumers.

### We are seeking your views on whether compliance with the RRO by batteries may compromise power-system security performance

- 7 We seek stakeholder input on whether the RRO poses operational and financial risks to battery operators that may have repercussions for the security and the reliability of the power system.
- 8 In other words, we want to understand whether the current design of the RRO poses obligations on batteries incompatible with the way these assets operate in the power system and may end up subtracting capacity that would otherwise be available to provide system-security services.

### We are also seeking your views on whether bi-directional units should be exempted from the RRO

- 9 The key question we are seeking feedback on is whether the NEM should exempt grid-scale batteries from being liable entities to the RRO. We seek your views on this proposed change and, more broadly, whether a rule change is the most appropriate solution to maintain power system

security in response to this problem.

- 10 We are also seeking views on whether pumped-hydro assets should also be considered for exemption as, like batteries, they have the capability to provide some ancillary services to the grid.
- 11 Finally, as an alternative to a rule change, we are interested in learning whether existing risk-management approaches could support battery-storage owners in managing RRO compliance without it conflicting with battery operations for essential system services.

## We consider that there are three assessment criteria that are most relevant to this rule change request

- 12 Considering the NEO<sup>1</sup> and the issues raised in the rule change request, the Commission proposes to assess the rule change request against three assessment criteria, for your feedback.
1. **Safety, security and reliability.** We will use this criterion to assess whether obligations from the RRO applied to batteries risk producing adverse outcomes for the security of the power system during reliability-gap periods.
  2. **Principles of market efficiency.** We will use this criterion to assess whether compliance with the RRO brings about financial risk that battery-storage owners are unable to hedge, thus discouraging future investment in storage assets.
  3. **Implementation considerations.** With the ‘Integrating Energy Storage Systems into the NEM’ rule change coming into effect in June 2024, we will consider transitional arrangements to account for a change in the registration of storage assets in the NEM from Market Loads to bi-directional units. This change has an effect on determining which storage assets are captured as legal entities liable to the RRO.

## Submissions are due by 4 July with other engagement opportunities to follow

- 13 There are multiple options to provide your feedback throughout the rule change process.
- 14 Written submissions responding to this consultation paper must be lodged with Commission **by 4 July** via the Commission’s website, [www.aemc.gov.au](http://www.aemc.gov.au).
- 15 There are other opportunities for you to engage with us, such as one-on-one discussions or industry briefing sessions. See the section of this paper about “How to engage with us” for further instructions and contact details for the project leader.

## Full list of 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?

<sup>1</sup> Section 7 of the NEL.

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

#### 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?

#### COSTS AND BENEFITS OF THE PROPOSED EXEMPTION

##### **Question 4: What are your views on the costs and benefits of the proposed exemption?**

- What do you consider the proposed exemption's benefits and costs? Please articulate how the costs/benefits for battery assets may flow through to market costs and system-management costs.
- If there are implementation costs for the exemption, will they be one-off or ongoing?
- Is there anything the Commission could do in designing the rule that would help to minimise the costs and maximise the benefits?

#### IMPLEMENTATION ISSUES AND CONSIDERATIONS

##### **Question 5: What are the key implementation issues and considerations?**

- Do you foresee barriers to implementing the exemption?
- What arrangements can we consider with the 'Integrating Energy Storage Systems into the NEM' rule change starting in June 2024?

#### 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?

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

#### 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?

## How to make a submission

### We encourage you to make a submission

Stakeholders can help shape the solutions by participating in the rule change process. Engaging with stakeholders helps us understand the potential impacts of our decisions and, in so doing, contributes to well-informed, high quality rule changes.

We have included questions in each chapter to guide feedback, and the full list of questions is above. However, you are welcome to provide feedback on any additional matters that may assist the Commission in making its decision.

### How to make a written submission

**Due date:** Written submissions responding to this consultation paper must be lodged with Commission by 4 July.

**How to make a submission:** Go to the Commission's website, [www.aemc.gov.au](http://www.aemc.gov.au), find the "lodge a submission" function under the "Contact Us" tab, and select the project reference code ERC0389.<sup>2</sup>

You may, but are not required to, use the stakeholder submission form published with this consultation paper.

Tips for making submissions are available on our website.<sup>3</sup>

**Publication:** The Commission publishes submissions on its website. However, we will not publish parts of a submission that we agree are confidential, or that we consider inappropriate (for example offensive or defamatory content, or content that is likely to infringe intellectual property rights).<sup>4</sup>

### Other opportunities for engagement

There are other opportunities for you to engage with us, such as one-on-one discussions or industry briefing sessions.

### For more information, you can contact us

Please contact the project leader with questions or feedback at any stage.

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<sup>2</sup> If you are not able to lodge a submission online, please contact us and we will provide instructions for alternative methods to lodge the submission.

<sup>3</sup> See: <https://www.aemc.gov.au/our-work/changing-energy-rules-unique-process/making-rule-change-request/submission-tips>

<sup>4</sup> Further information is available here: <https://www.aemc.gov.au/contact-us/lodge-submission>

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# 1 The context for this rule change request

This consultation paper seeks stakeholder feedback on the rule change request submitted by Iberdrola, Neoen and Tesla (the proponents) about exempting scheduled bi-directional units (BDUs) from being liable entities under the Retailer Reliability Obligation (RRO).

## 1.1 The proponents have proposed the rules be changed to exempt scheduled bi-directional units from the RRO

This section is divided into three parts.

- First, we outline the key features of the RRO mechanism
- Second, we illustrate the services that batteries provide in the NEM
- Last, we illustrate the issue with the RRO raised by the proponents and the argument for a change to the Rules.

### 1.1.1 The RRO seeks to support reliability by imposing obligations on liable entities, which include bi-directional units (batteries)

The RRO is a mechanism designed to support reliability across the National Electricity Market (NEM) by preventing predicted future generation shortfall ('reliability gaps'). The framework was proposed by the Energy Security Board<sup>5</sup> and commenced on 1 July 2019.

The framework is designed to provide incentives to market participants to invest in 'firm' generation or demand-response capacity in order to future-proof consumers against unreliable electricity supply.

Initially, if AEMO forecasts a reliability gap period in its Electricity Statement of Opportunities (ESOO), it advises the AER to issue a T-3 reliability instrument to trigger the RRO.<sup>6</sup> This in turn commences the necessary obligations on liable entities, (Market Customers).<sup>7</sup> If AEMO confirms reliability one year before the forecast gap 'T', the AER triggers the 'T-1' Reliability Instrument, through which liable entities must report their net contract position to the AER. In other words, contracts with generation capacity for the period T are locked in at T-1.

Retailers, large energy users and, notably, **batteries with annual electricity consumption (from charging from the grid) above 10GWh per annum, are liable entities to the RRO.**

Batteries will continue to be liable entities following the implementation of the Integrating Energy Storage Systems into the NEM rule change, when they will move to or register in the new Integrated Resource Provider (IRP) participant category, and be classified as BDUs. This change starts taking effect from June 2024 with all batteries required to transition to the new category by 3 December 2024.<sup>8</sup>

When the RRO is triggered, batteries that are liable entities must 'enter into sufficiently firm qualifying contracts to cover their share of the one-in-two year peak demand forecast for the region and reliability gap period.'<sup>9</sup> The share is based on the metered energy consumption at the liable entity's connection points in the reliability gap region'.<sup>10</sup>

<sup>5</sup> Energy Security Board. [Retailer Reliability Obligation - Final Rule Package](#), 3 May 2019.

<sup>6</sup> This would occur if a reliability gap exists three years and three months from the identified gap, and trigger a 'T-3' Reliability Instrument.

<sup>7</sup> The NER defines a Market Customer as 'A Customer who has classified any of its loads as a market load and who is also registered by AEMO as a Market Customer under Chapter 2.' See Chapter 10 Glossary.

<sup>8</sup> AEMC. [National Electricity Amendment \(Integrating Energy Storage Systems into the NEM\) Rule 2021](#), p. 17.

<sup>9</sup> The RRO is supported by a [suite of AER guidelines](#) which detail the operations of the RRO. More information is available on the AER website at the page [Retailer Reliability Obligation](#).

Non-compliance costs are determined by the AER after the reliability-gap period and are established on a causer-pays principle. The AER will determine where an entity was under-contracted in one or more trading intervals, and, if it was, allocates a portion of Procurer of Last Resort (PoLR) costs proportional to the shortfall.<sup>11 12</sup> A non-compliant liable entity can pay up to an individual maximum of \$100 million.<sup>13</sup> **Therefore, for batteries and any other liable entities, the ability to forecast load sufficiently ahead of time is key to avoiding non-compliance costs.**

### 1.1.2 Batteries operate as a load to provide a variety of grid-supporting services

Batteries play a multifaceted role in the NEM, as they have capabilities to provide a variety of services, from providing energy to a range of system security services.<sup>14</sup> An example of those services are listed in Box 1.

#### Box 1: Batteries can provide a variety of services to support the security of the power system

- Contingency and regulation FCAS lower services, including the new 1 second very fast FCAS market
- System-integrity services, such as System Integrity Protection Schemes (SIPS) and Wide Area Protection Scheme (WAPS)
- Inertia or system strength when batteries operate as grid-forming inverters
- Out-of-market contracts to provide system security services.

Source: Rule change request, page 3.

Note: More information on FCAS and very fast FCAS markets is available [here](#). More information on SIPS is available [here](#).

Crucially, the proponents highlighted the sizable market share of batteries as providers of system security services. The rule change request states that batteries currently provide around 40% of the market share of FCAS services in South Australia, and for the new 1-second very fast FCAS, the market share increases to 100%.<sup>15</sup> Furthermore, the rule change request includes a series of historical data on the provision of system security supporting the argument of batteries contributing to lowering FCAS prices.<sup>16</sup>

### 1.1.3 The proponents have raised that risks from RRO compliance deter batteries from providing grid-security services

The proponents argued that RRO compliance acts as an incentive for batteries not to provide FCAS and other services as a tool to manage risks of penalties and PoLR costs. This could increase system security risks due to 'slower performance of non-battery providers' and increase costs to consumers with NEM-wide FCAS prices rising, especially in the faster FCAS markets.<sup>17</sup>

10 AEMO. [Retail reliability obligation voluntary book builds](#).

11 Appendix A of this paper includes a flowchart illustrating the AER's RRO compliance assessment process for the RRO.

12 Clause 3.15.9A of the NER establishes AEMO's responsibilities in drafting procedures for the allocation of 'Procurer of last resort' costs.

13 See section 14T of the NEL for information on cost recovery.

14 "A scheduled battery asset is not typical end-customer load (which may add to peak requirements), but is highly controllable, subject to AEMO dispatch control, with millisecond two-way response, providing a suite of network benefits from both energy and non-energy services". [Rule change request](#), p. 13.

15 [Rule change request](#), p. 5.

16 Data points to support the analysis were sourced from a variety of reports (AEMO Quarterly Dynamics, an Aurecon report) and illustrated in detail in the [rule change request](#), pp. 8-12.

17 [Rule change request](#), p. 6.

The problem for batteries and the broader power system is illustrated in more detail in Chapter Two.

Iberdrola, Neoen and Tesla support exempting batteries from the RRO so that these assets can continue providing grid-supporting services during reliability gaps. They have suggested amending clause 4A.D.2(b)(2) of the NER to include the term 'scheduled bi-directional units' to the list of exempted entities.

The rule change request ('Retailer reliability obligation exemption for scheduled bi-directional units') can be read on our website [here](#).

## 1.2 The Commission has previously noted this issue

The Commission has previously noted the issues raised by the proponent in its final report on the Review of the Retailer Reliability Obligation in response to a submission by Neoen and Tesla.<sup>18</sup> In its final report, the Commission recognised the concerns raised by Neoen and Tesla, in particular, the disincentives for BESS to operate as a load to provide FCAS for system security purposes during gap periods. While the Commission did not make a recommendation in relation to this issue as it has not been consulted on during this review, it noted it was working with stakeholders and market bodies to find an appropriate solution.<sup>19</sup>

## 1.3 We have started the rule change process

This paper is the first stage of our consultation process.

A standard rule change request includes the following formal stages:

- a proponent submits a rule change request - **8 April 2024**.
- the Commission commences the rule change process by publishing a consultation paper and seeking stakeholder feedback - **30 May 2024**.
- stakeholders lodge submissions on the consultation paper and engage through other channels to make their views known to the AEMC project team - **4 July 2024**.
- the Commission publishes a draft determination and draft rule (if made) - **21 August 2024**.
- stakeholders lodge submissions on the draft determination and engage through other channels to make their views known to the AEMC project team - **9 October 2024**.
- the Commission publishes a final determination and final rule - **14 November 2024**.

Information on how to provide your submission and other opportunities for engagement is set out at .

You can find more information on the rule change process on our website.<sup>20</sup>

To make a decision on this proposal, we seek stakeholder feedback on:

- whether the security of the power system may be compromised due to liability of batteries to the RRO
- the proposed exemption under the Rules, and
- the assessment criteria that the Commission will use in their determination.

18 AEMC. Final Report - [Review of the operations of the Retailer Reliability Obligation](#), p. 22. 29 February 2024.

19 AEMC. Final Report - [Review of the operation of the Retailer Reliability Obligation](#), p. 31. 29 February 2024.

20 See our website: <https://www.aemc.gov.au/our-work/changing-energy-rules>

## 2 The problem raised in the rule change request

The proponents have stated that RRO compliance for batteries poses financial and operational barriers to providing essential system services to the power grid, leading to adverse effects for the NEM. As shared in Chapter One, batteries face a trade-off between RRO compliance and the provision of system security services. In practice, battery operators are incentivised to ‘turn off’ load for system security services to avoid ‘Procurer of Last Resort’ costs from breaching the RRO.

The main NEM-wide risks that the proponents believe could unfold are:

1. **Decreased system security** - due to the sizable market share that batteries have as providers of system security services
2. **Reliability issues** - due to RRO compliance increasing risks in investing in batteries, which may then need to be counteracted by additional government incentives for storage investments, and
3. **Higher market prices and costs to consumers** - resulting from a combination of factors, including the two risk areas above.<sup>21</sup>

This chapter seeks feedback on the proponents’ argument. In particular, we are interested in learning about system-wide implications that RRO compliance may inadvertently cause by constraining battery operations and battery revenue. Beyond security and reliability, we are also interested in learning about other ramifications (e.g increased market prices) that could lead to negative consumer outcomes.

This section outlines:

- issues that batteries face as liable entities of the RRO
- the potential issue for NEM security
- our questions for stakeholders.

### 2.1 Batteries may face conflicting incentives between reliability obligations and security

This section focuses on the issues the proponents consider battery owners face as liable entities under the RRO.

As noted in Chapter One, the proponents consider that batteries face conflicting incentives between RRO compliance (i.e., the prospect of penalties for breaching the RRO) and the provision of system security services (including revenue from the provision of those services).

Crucially, the proponents have argued that batteries would not be able to successfully manage these conflicting incentives because the RRO design has requirements incompatible with the operational characteristics of batteries. Specifically, they argue that:

1. **Provision of security services is hard to forecast and reflect in qualifying contracts.** Demand for grid-supporting services is hard to forecast and incorporate into qualifying contracts before T-1.
  - a. The proponents have also argued that if battery owners sought to purchase caps as a form of a qualifying contract, it would be difficult for the market to price these hedges, given the uncertainty of RRO liabilities.<sup>22</sup>

<sup>21</sup> [Rule change request](#), pp. 8-9

<sup>22</sup> [Rule change request](#), p.8.

2. **Batteries can operate as a load for security services, but every MWh of load is liable to compliance during a gap period.** RRO compliance applies to every MWh of load from liable entities irrespective of the function fulfilled by the MWh. In other words, there is no way to discern a MWh of load added to the grid for energy from a MWh of load used to provide lower FCAS or being dispatched following AEMO's Directions.<sup>23</sup>

Additionally, the proponents have raised the point that managing the conflicting objectives of RRO compliance and system security creates costs for battery-storage assets. These are:

- **direct costs** from either foregone revenue from services, or alternatively, hedging contracts to cover market load used for system security.
- **indirect costs** from operational changes that battery operators may make to limit exposure to RRO penalties or costs for resolving the lack of provision of out-of-market services to networks.<sup>24</sup>

## 2.2 The NEM may become less stable and secure as a result of RRO liability applied to batteries

As key providers of system-security services in the NEM (see Chapter One), Iberdrola, Neoen and Tesla have argued that costs - and risks - borne by these batteries might flow onto the market, with repercussions for power system security and, ultimately, consumers. They added that the impact of these risks will increase with rising penetration of renewables over the coming years and the need to complement these generators with batteries and grid-forming inverters to support grid security.<sup>25</sup>

The NEM-wide risks outlined by the proponent cover three key areas: system security, reliability, and market distortion.

- **System security (and market price for those services, e.g. FCAS).** In a scenario where batteries would not provide system-security services (or provide them at a higher cost) as a result of RRO compliance, the proponents flagged the rise of a variety of risks, such as: the erosion of supply for particular services (only batteries can provide very fast FCAS), the risk of insufficient supply of FCAS when coal capacity retires, and higher market-wide costs as a result of batteries' higher bids for FCAS provision (as bids would incorporate the costs of caps bought as qualifying contracts).<sup>26</sup>
- **Reliability - impact on battery-storage investments.** The inability to hedge risks from RRO non-compliance will eventually stymie investments in battery storage, aggravating the problem of insufficient supply to system-security services. To solve this problem, more government support would be needed, for instance, by the Capacity Investment Scheme, in order to incentivise more storage in the NEM.<sup>27</sup>
- **Market distortion and higher market prices.** For batteries, costs to manage the RRO would need to be recovered through higher bid prices in generation services. This will provide an advantage to more expensive scheduled generators in the bid stack (which are by nature exempt from the RRO), ultimately leading to higher prices for consumers.<sup>28</sup>

<sup>23</sup> [Rule change request](#), p.2.

<sup>24</sup> [Rule change request](#), pp.6-8.

<sup>25</sup> [Rule change request](#), p.4.

<sup>26</sup> An illustrative example is in the [rule change request](#) on p. 8.

<sup>27</sup> [Rule change request](#), p.13.

<sup>28</sup> [Rule change request](#), p.14.

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?

## 3 The proposed solution and implementation

Iberdrola, Neoen and Tesla have proposed changing the Rules to exempt batteries from the RRO.

This chapter seeks feedback on:

- the proposed exemption
- potential to exempt pumped-hydro plants in addition to batteries
- alternative solutions, and
- other implementation matters the Commission may need to consider in making its determination.

### 3.1 Should the Retailer Reliability Obligation exempt batteries to enable better security of the NEM?

The Commission asks for stakeholder views on whether exempting batteries (scheduled bi-directional units) from the RRO will contribute to a more stable and secure NEM at the lowest cost to consumers.

Importantly, the proponents note that exempting batteries from the RRO:

1. **Will not compromise the integrity of the RRO mechanism** and its intent to support reliability. The proponents have argued that exempting batteries from the RRO may reduce compliance costs for remaining liable entities (i.e. retailers and large users), because of lower competition to procure Qualifying Contracts and a lower price for these contracts.
2. **Will not affect NEM reliability**, as AEMO would dispatch battery charging (load) in the NEM Dispatch Engine only when that is a least-cost dispatch decision.

To implement this change, the proponents have suggested amending clause 4A.D.2(b)(2) of the NER as follows:

#### Liable Entities

(b) A person who is a Market Customer is not a liable entity for a region if:

- (1) it is not registered for a connection point in that region at the end of the contract position day; or
- (2) the aggregate consumption of electricity of all connection points in that region for which it is financially responsible at the end of the contract position day (excluding any market connection point for a market generating unit or small generating unit or scheduled bi-directional unit) is equal to or less than 10GWh per annum as determined in accordance with the Contracts and Firmness Guidelines.

**Note:** This extract shows the changes made to this clause as a result of the IESS rule change which takes effect on 3 June 2024.

The Commission notes that it previously included scheduled BDUs as liable entities under the RRO in the IESS rule change on the basis of technology neutrality. However, the rule change's proponents have raised various considerations against maintaining this principle. This includes

the potential negative implications, including market distortion of 'raise' FCAS prices and cross-subsidies to end-customer loads.<sup>29</sup>

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

### 3.2 Should we also consider exempting pumped-hydro plants from the RRO?

This rule change request proposes an exemption that targets grid-scale batteries (scheduled bi-directional units). However, the proponents invited the Commission to assess whether pumped-hydro storage should also be considered for an exemption from RRO liabilities. This is due to the fact that similar to batteries, pumped hydro-storage will also be registered as 'Integrated Resource Providers' under the IESS rule change. We note, though, that pumped-hydro storage assets are much less responsive than batteries to market signals due to the different technologies and do not provide the full spectrum of system-security services that batteries do.

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?

### 3.3 What are the costs and benefits of granting the RRO exemption to bi-directional units?

In the rule change request, the proponents have indicated that the exemption would incur minimal implementation costs and unlock an immediate market benefits, such as savings from added government incentives for storage capacity buildout (which could be needed as part of the Capacity Investment Scheme).<sup>30</sup>

The proponents have also argued that the proposed exemption would result in positive outcomes under the NEO. We seek stakeholder input to help us quantify or appreciate the costs and benefits of exempting batteries and potentially also pumped hydro plants from the RRO.

COSTS AND BENEFITS OF THE PROPOSED EXEMPTION

<sup>29</sup> [Rule change request](#), p. 13.

<sup>30</sup> [Rule change request](#), p. 13.



**Question 4: What are your views on the costs and benefits of the proposed exemption?**

- What do you consider the proposed exemption’s benefits and costs? Please articulate how the costs/benefits for battery assets may flow through to market costs and system-management costs.
- If there are implementation costs for the exemption, will they be one-off or ongoing?
- Is there anything the Commission could do in designing the rule that would help to minimise the costs and maximise the benefits?

### 3.4 What are the key implementation issues?

The proponents requested the new rule be made before December 2024, the ‘Relevant Contract Position Day’, in preparation for the next potential RRO Regulatory Period forecast in New South Wales from 1 Dec 2025 to 28 Feb 2026, 2pm-9pm. The Commission notes that under clause 4A.D.2 of the NER, batteries are liable entities if the aggregate of its load at its connection points in that region for which it is a Market Customer at the end of the contract position day is equal to or less than 10 GWh per annum, as determined in accordance with the Contracts and Firmness Guidelines. While the proponents propose to exclude bi-directional units from being liable entities, this new category will not come into effect until 3 June 2024, and existing batteries have until 3 December 2024 to transition to the new category. The Commission is seeking feedback on whether batteries may still reach the liable entity threshold as a Market Customer prior to it moving to the bi-directional category. If this is the case, do stakeholders have feedback on what transitional arrangements might be needed to address this.

IMPLEMENTATION ISSUES AND CONSIDERATIONS

**Question 5: What are the key implementation issues and considerations?**

- Do you foresee barriers to implementing the exemption?
- What arrangements can we consider with the ‘Integrating Energy Storage Systems into the NEM’ rule change starting in June 2024?

### 3.5 Can battery owners manage RRO compliance and provide essential services competitively without any rule change?

Should there be reasons to keep the RRO technology neutral (i.e., keeping batteries liable under the RRO), we are interested in exploring alternative solutions and recommendations to ensure that batteries remain compliant with the RRO without compromising the power system’s security and battery economics.

We note that the proponents have contested the option of using caps contracts to hedge operational risks induced by the RRO due to the uncertain demand for grid-supporting services and the difficulty of factoring that demand into qualifying contracts before the start of a reliability gap period.

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

## 4 Making our decision

When considering a rule change proposal, the Commission considers a range of factors.

This chapter outlines:

- issues the Commission must take into account
- the proposed assessment framework
- decisions the Commission can make.

We would like your feedback on the proposed assessment framework.

### 4.1 The Commission must act in the long-term interests of consumers

The Commission is bound by the National Electricity Law (NEL) to only make a rule if it is satisfied that the rule will, or is likely to, contribute to the achievement of the national electricity objective.<sup>31</sup>

The NEO is:<sup>32</sup>

to promote efficient investment in, and efficient operation and use of, electricity services for the long term interests of consumers of electricity with respect to—

- (a) price, quality, safety, reliability and security of supply of electricity; and
- (b) the reliability, safety and security of the national electricity system; and
- (c) the achievement of targets set by a participating jurisdiction—
  - (i) for reducing Australia’s greenhouse gas emissions; or
  - (ii) that are likely to contribute to reducing Australia’s greenhouse gas emissions.

The targets statement, available on the AEMC website, lists the emissions reduction targets to be considered, as a minimum, in having regard to the NEO.<sup>33</sup>

### 4.2 We propose to assess the rule change using these three criteria

#### 4.2.1 Our regulatory impact analysis methodology

Considering the NEO and the issues raised in the rule change request, the Commission proposes to assess this rule change request against the set of criteria outlined below. These assessment criteria reflect the key potential impacts – costs and benefits – of the rule change request. We consider these impacts within the framework of the NEO.

The Commission’s regulatory impact analysis may use qualitative and/or quantitative methodologies. The depth of analysis will be commensurate with the potential impacts of the proposed rule change. We may refine the regulatory impact analysis methodology as this rule change progresses, including in response to stakeholder submissions.

Consistent with good regulatory practice, we also assess other viable policy options - including not making the proposed rule (a business-as-usual scenario) and making a more preferable rule - using the same set of assessment criteria and impact analysis methodology where feasible.

31 Section 88 of the NEL.

32 Section 7 of the NEL.

33 Section 32A(5) of the NEL.

#### 4.2.2 Assessment criteria and rationale

The proposed assessment criteria and rationale for each is as follows:

- **Safety, security and reliability.** This criterion will help the Commission determine whether risks of penalties for non-compliance with the RRO lead batteries not to provide system security services during reliability-gap periods, resulting in fewer providers of essential system services and potential risks for grid security.
- **Principles of market efficiency.** This criterion will help the Commission assess whether compliance with the RRO may discourage future investment in storage assets in the NEM with the RRO adding risks that batteries cannot effectively manage or hedge against.
- **Implementation considerations.** With the 'Integrating Energy Storage Systems into the NEM' rule change coming into effect in June 2024, we will consider transitional arrangements to account for a change in the registration of storage assets in the NEM from Market Customers to bi-directional units. This change has effect on determining which storage assets are captured as legal entity liable to the RRO.

#### 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?

### 4.3 We have three options when making our decision

After using the assessment framework to consider the rule change request, the Commission may decide:

- to make the rule as proposed by the proponents<sup>34</sup>
- to make a rule that is different to the proposed rule (a more preferable rule), as discussed below, or
- not to make a rule.

The Commission may make a more preferable rule (which may be materially different to the proposed rule) if it is satisfied that, having regard to the issue or issues raised in the rule change request, the more preferable rule is likely to better contribute to the achievement of the NEO.<sup>35</sup>

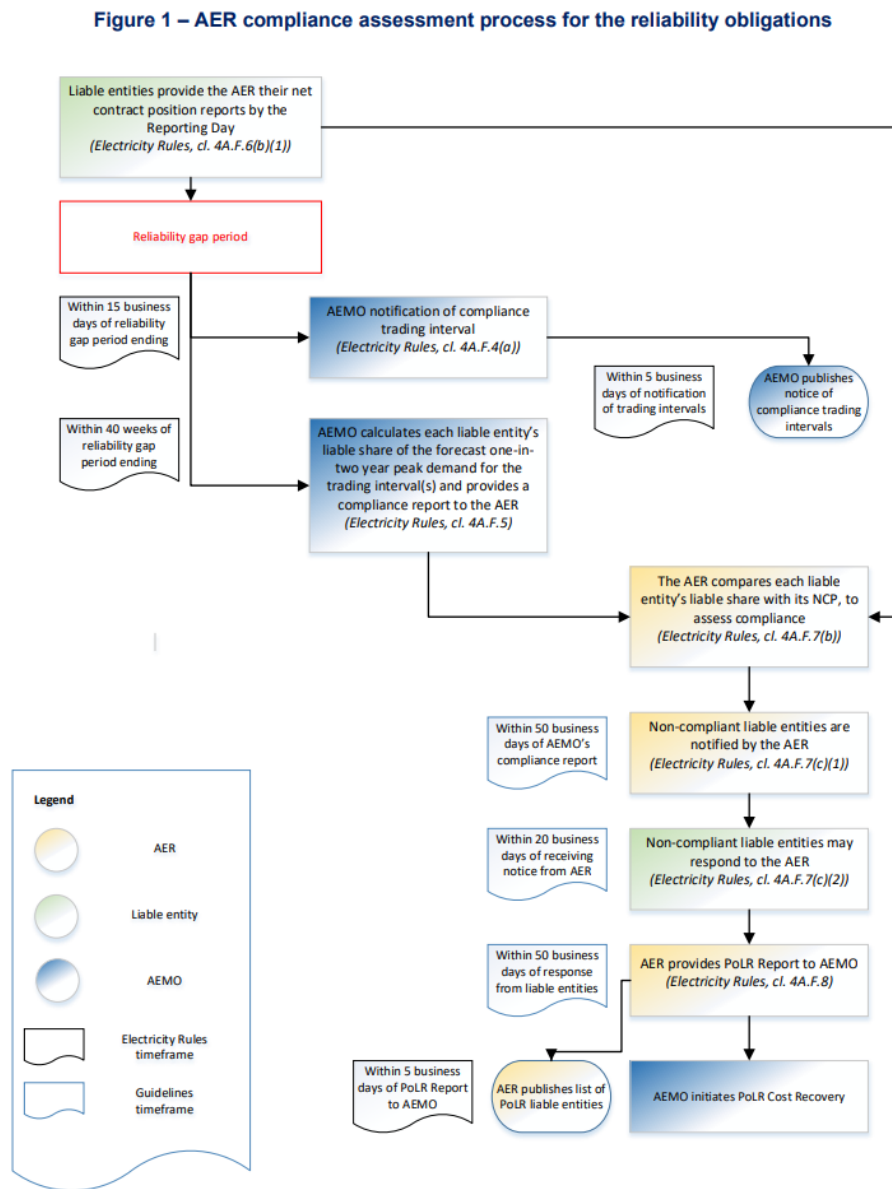
<sup>34</sup> The proponents describe their proposed rule at page 7 of their [rule change request](#).

<sup>35</sup> Section 91A of the NEL.

# A Appendix - AER Compliance Assessment Process for the Retailer Reliability Obligation

The following diagram is included in AER’s ‘Final Decision – Reliability Compliance Procedures and Guidelines’ effective from June 2023 and illustrates the process of compliance assessment for the RRO. The diagram is available on page 7 of the [guideline document](#). We note that the AEMC carried out a review of the operation of the RRO in February 2024.<sup>36</sup> Therefore, stakeholders should consult the AER website to ascertain whether the RRO compliance assessment procedures could have changed as a result of implementing the Commission’s recommendations.

**Figure A.1: AER Compliance assessment process for the reliability obligations (June 2023)**



Source: AER

36 AEMC. [Review of the operations of the Retailer Reliability Obligation](#) - Final Report. 29 February 2024.

## Abbreviations and defined terms

AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
BDU	Bi-directional unit
Commission	See AEMC
IESS	Integrating energy storage systems into the NEM (rule change)
NEL	National Electricity Law
NEM	National Electricity Market
NEO	National Electricity Objective
NER	National Electricity Rules
PoLR	Procurer of Last Resort
Proponents	The proponents of the rule change request
RIS	Regulation Impact Statement
RRO	Retailer Reliability Obligation