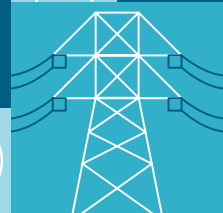


# Market Briefing Note

## Long duration storage infrastructure eligibility requirements



This market briefing note focuses on clarifying the eligibility criterion of 'registered capacity that can be dispatched for at least 8 hours' for long duration storage (LDS) Long-Term Energy Service Agreements (LTESAs). It has been developed for tender participants ahead of the NSW Consumer Trustee's first competitive tender in Q4 2022 (Oct to Dec).

### Briefing context



The *Energy Infrastructure Investment Act 2020* (EII Act) sets a target to construct 2GW of LDS capacity by the end of 2029.<sup>1</sup>



The Q4 2022 tender has an indicative tender size of 600MW for LDS LTESA. An expected construction schedule for LDS over a 20-year period is set out in the 2021 Infrastructure Investment Objectives Report.



The tender process will encourage competition with the aim of achieving optimal value for NSW electricity consumers.

### What you need to know

- ✓ Any storage technology is eligible to apply for an LDS LTESA providing the EII Act eligibility requirements for LDS infrastructure are met.
- ✓ Under the EII Act, eligible LDS infrastructure:
  - consists of storage units with a registered capacity that can be dispatched continuously for at least 8 hours, and
  - is scheduled by AEMO in the central dispatch process.
- ✓ The 'registered capacity'<sup>2</sup> is defined as being the amount (MW) shown as 'registered capacity' attributable to that generating unit in the 'NEM registration and exemption list' published by AEMO.

1. excluding the Snowy 2.0 project  
2. under section 43 of the EII Act



## Questions and answers

**The NSW Consumer Trustee has a duty to act in the long term financial interests of NSW electricity consumers, and it has discretion when recommending LTESAs. If it receives a sufficient number of quality proposals it may recommend LTESAs greater than the indicative tender size. If the bids in any tender round do not reflect value to consumers it may recommend LTESAs for generation or storage capacity below the indicative tender size.**

### Which storage technology types are eligible?

The NSW Consumer Trustee will maintain a technology neutral approach to LDS LTESA eligibility. Any storage technology is eligible to apply for an LDS LTESA providing the EII Act eligibility requirements are met.

### How is the 8 hour dispatch requirement defined?

The underlying project should be able to dispatch at the 'registered capacity' for 8 hours continuously. For example, the following projects would **not be eligible** under the EII Act:

- projects that are capable of discharging for two 4 hour cycles with charging in between
- projects able to dispatch for 8 hours continuously at a capacity lower than the 'registered capacity'.

Projects will need to maintain their eligibility throughout the term of the LTESA. An LDS project that meets the 8 hour duration initially cannot reduce the 8 hour duration through a modification of the original project at a later date or by changing its 'registered capacity' with AEMO.

### What does the Q4 2022 tender mean for pumped hydro projects?

The NSW Consumer Trustee encourages sufficiently progressed eligible pumped hydro technology to participate in the Q4 2022 tender, which has an indicative size of 600MW. In the event that there are no, or limited, successful LDS projects in the Q4 2022 tender the NSW Consumer Trustee has allowed for contingent LDS tenders in 2023 and 2024 to achieve the 600MW target.

The remaining 1,400MW of LDS is expected to be recommended from 2025 onwards, and it is expected that pumped hydro projects will participate in those tenders.

### How do short-duration batteries fit into an LDS tender?

Shorter duration storage technology (which is not able to dispatch at its registered capacity for 8 hours or more) is not eligible to participate in LDS tenders.

In the event that the NSW Consumer Trustee is directed to conduct a firming tender, it is expected that shorter-duration technology would be able to participate.

### Can an aggregation of multiple storage projects that individually dispatch for less than 8 hours qualify for LDS LTESAs?

- Storage units that can dispatch for less than 8 hours continuously are only eligible if they are aggregated with other storage units so together the aggregation would meet the dispatch duration criteria.
- The units must be aggregated for the purposes of the National Electricity Rules. This occurs if an application for aggregation of scheduled generating units is approved by AEMO.<sup>3</sup>

### Is there an opportunity to register part of a storage facility to meet LDS eligibility

Yes. For example, a storage facility containing multiple generating units could have them classified as separate scheduled generating units. If a project did this, LDS eligibility requirements could be satisfied by the generating units capable of at least 8 hours' discharge at their registered capacity.

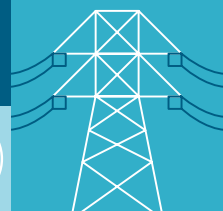
### What is the minimum size, in megawatts or megawatt hours, for a project to meet LDS eligibility?

The EII Act sets no minimum requirements for the size of an LDS project's registered capacity (MW).

The storage capacity (MWh) is dictated by the multiplication of 'the registered capacity' (providing it is scheduled capacity) and '8 hours duration requirement'.

There is no minimum storage capacity for a storage project to be eligible for an LDS LTESA, however the requirement to be scheduled with AEMO sets a minimum bound on project size for eligibility which is generally 5MW.

3. see clause 3.8.3 of the National Electricity Rules



- Projects under 5MW, if seeking to be eligible for an LDS LTESA, although eligible for a standing exemption from AEMO from the requirement to register, would need to be both registered with AEMO and classified as scheduled.
- Anyone that owns, operates or controls a storage system with nameplate rating of 5MW or above, (electrically connected to the National Electricity Market), needs to register with AEMO as a Scheduled Generator.

### Can a proponent alter an existing storage project to meet the LDS requirement?

For expansions of existing storage projects, storage units in the final project design that meet the requirements for LDS will be eligible. Project expansions, which are intended to be registered and classified with AEMO as a separate unit distinct from the existing units, can be considered for relevant eligibility criteria independently from the existing project.

### Can a proponent retrofit an existing generation project with an LDS project?

A storage project being retrofitted to an existing wind or solar project will be eligible where the storage element itself is new (i.e. the storage portion of the project did not exist at 14 November 2019) and meets the LDS eligibility requirements.<sup>4</sup>



## Market Briefing 2022

A series of engagements will be held to provide proponents with certainty and a thorough understanding of the tender process. Information will include:

- Progress against design milestones
- Timing of further decisions
- Additional detail necessary for proponents to successfully participate in the Q4 and future tenders

**To find out more please visit [aemoservices.com.au](https://aemoservices.com.au) or email us at [stakeholderengagement@aemoservices.com.au](mailto:stakeholderengagement@aemoservices.com.au).**

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<sup>4</sup> A generating unit that was committed prior to 14 November 2019 and has an LDS LTESA storage component retrofitted will still be considered as committed infrastructure and remain ineligible for a generation LTESA.