

EirGrid launches consultation on the Long Duration Energy Storage Procurement Mechanism

Ireland's energy sector is undergoing a crucial transformation, with EirGrid's October 2025 consultation on the Long Duration Energy Storage (LDES) Procurement Mechanism marking an important milestone for storage developers and investors in this space. EirGrid is aiming to launch the LDES procurement round in Q1 2027 and for LDES contracts to be awarded in Q4 2027.

The following article provides a legal and market perspective on the proposed LDES scheme, analysing its design, incentives, risks, and key considerations for potential LDES bidders.

Accelerating Ireland's Energy Transition

Ireland's journey to reach 80% renewables by 2030 is placing unprecedented demands on grid flexibility, reliability and decarbonisation. Energy storage is recognised as an essential enabler for tackling key challenges that include managing variability in wind and solar output, reducing dispatch down costs from renewable curtailment, supporting grid security, and enhancing market efficiency. These assets absorb surplus renewable power and deliver it during times of system stress or price spikes, minimising costly system imperfections and facilitating deeper decarbonisation.

Historically, the lack of viable long-term revenue certainty has prevented LDES developers from investing in large-scale LDES projects in Ireland. The LDES procurement mechanism proposed by EirGrid seeks to address this deficit, responding to widespread industry concern about missing market incentives and revenue risk.

Structure of the EirGrid LDES Procurement Scheme

EirGrid's proposed mechanism is technology-neutral, starting with a target procurement of 201 MW that could grow to 500 MW following further system reviews. Eligibility requirements are stringent: only established and commercially available storage assets capable of a minimum four hours' continuous import/export, with accepted transmission grid connection (minimum 110kV), full planning consent, and secure land rights can compete. LDES projects must also have a minimum capacity of 75 MW (and a minimum capacity of 20 MW for hybrid or storage assets co-located with renewables). The LDES bidder will also need to demonstrate that the project technology has a round trip efficiency of $\geq 75\%$. We also note that storage assets co-located with renewables may be able to avail of the parallel planning permissions and grid connection processes under ECP-GSS. Development readiness of projects is therefore a critical initial consideration for potential LDES bidders.

The procurement process will be structured with an initial qualification phase and then a tender phase. The initial qualification phase seeks to ensure that only development ready projects progress to the tender phase. In terms of the award criteria, bid evaluation weights cost/revenue floor (50%), grid connection method (30%), and location efficiency

(20%). LDES assets located in congested grid nodes or co-located with renewables will likely score higher, supporting optimal system integration and minimising additional grid investment needs.

We expect the LDES contract will contain comprehensive milestones that the LDES operator will need to achieve, including a target operational date. Risks associated with delay events will be an important feature to assess in the LDES contract in due course.



Proposed LDES Revenue Structure

At the heart of the proposed LDES scheme is the revenue floor. If a contracted asset's total revenue from wholesale trading, capacity markets and system services falls below the agreed floor (set via competitive tender (pay-as bid) and capped below the asset's levelised cost of storage), the TSO will top up payments to the floor level. The LDES scheme does not currently provide for any availability based payments to the LDES operator (which are a feature of other schemes such as ESBN's demand flexibility product).

The asset owner retains up to 70% of excess market revenue above the floor, with the TSO claiming the remaining 30%. This arrangement provides downside risk protection, a key requirement for attracting debt and equity investment, while incentivising efficient market operation. The open book accounting principles to assess all revenue streams will require transparent reporting of revenue and costs, raising important practical questions about determining which revenues and costs are eligible and appropriate dispute resolutions to manage any disagreements. The cost of network charges will also be a key consideration for LDES bidders in assessing their potential returns under the LDES scheme.

It is expected that successful LDES bidders will secure ten-year contracts with EirGrid to provide revenue certainty over a debt repayment period. Early project delivery before the target 2030 go-live may be rewarded with contract extensions.

Operational Envelope and Compliance

The primary purpose of the LDES procurement process is to procure a time-specific service that maximises the value of LDES while allowing contracted assets to access wholesale and other relevant markets. To maximise the availability of the time-specific capability of such assets, EirGrid is minded to implement an operational envelope model.

Under this proposed model, EirGrid will issue dynamic operational envelopes for each contracted LDES asset (i.e., import/export limits tailored to grid needs and provided ahead of day-ahead market gate closure). LDES operators must maintain compliance with the operating envelopes, facing scaled non-compliance charges if market actions breach their envelope. Ex-post true-up provisions offer relief from charges arising from TSO-directed balancing actions, provided LDES operators demonstrate efforts to meet all contractual and market obligations. This creates additional layers of contractual complexity and risk management for LDES operators.

Crucially, LDES assets retain broad market access, able to participate in wholesale, system services, and balancing markets as long as their trading remains within operational envelope limits. Ancillary services, such as voltage support or reserve provision, also remain available depending on technical parameters, provided compliance with operating envelope is maintained and subject to the LDES asset's state of charge.

In terms of trading the LDES asset, it will be important for LDES bidders to keep an eye on EirGrid's scheduling and dispatch update programme. Current scheduling and dispatch arrangements do not allow BESS units to participate fully in the wholesale market or balancing market. The scheduling and dispatch programme solution for battery units is due to go live on 11 November 2025. This will allow battery unit participants to submit positive and negative PNs as their intended output for each trading period. Given the changing regulatory landscape for LDES and BESS assets, appropriate change in law provisions in the LDES contract will be key.



Conclusion

The release of the LDES procurement mechanism consultation is a welcome development for the storage sector in Ireland. An appropriate LDES mechanism represents a key opportunity to establish and implement a bankable revenue model for LDES projects that has been missing until now.

EirGrid has invited stakeholders to submit their comments on the proposal before the 24 November 2025 deadline. All stakeholders are encouraged to actively engage in the consultation to ensure the final LDES product aligns with investment, decarbonisation and system stability objectives.

A copy of the public consultation can be found [here](#).

Please reach out to our Energy team below if you have any questions.

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