



Energy Storage Europe's reply to the European Commission's Public Consultation on the Revision of Network Code on Requirements for Grid Connection of Generators

August, 2026

INTRODUCTION

On 8 July 2026, the European Commission published the Draft Delegated Regulation & Annexes revising the Network Code on the requirements for the grid connection of generators. The revision aims to update the existing grid connection rules for generators, so they reflect the needs of an increasingly decentralised electricity system, including the integration of storage technologies, electric vehicles and other inverter-based resources. It builds on the [ACER's 2023 Recommendation](#), which proposed revising the current rules to make them more future-proof, harmonised across the EU, and better suited to evolving power system needs.

The proposal for the revision of the Network Code on the requirements for the grid connection of generators has been released on 8 July for a public consultation, which will close on 25 August 2026.

Energy Storage Europe Position

While the revised Network Code marks a step towards a framework fit for a decentralised, storage-based system, Energy Storage Europe believes its practical application to bidirectional storage assets needs further clarification. Energy Storage Europe broadly supports the direction of the revision and welcomes storage's explicit integration, particularly the introduction of grid-forming capability. The main area for improvement concerns how generator requirements apply to Type C and D storage across charging, discharging and transitional states, and how existing storage projects are safeguarded under the new compliance mechanism.

A. Energy Storage Europe – General Feedback

The revised Network Code for Generators (RfG 2.0) represents a genuine advance to a framework suited to a decentralised, storage-driven system; even so, Energy Storage Europe considers that its implementation for bidirectional storage assets requires further clarification before it can offer the sector the technical certainty it needs. More specifically, the formal inclusion of Electricity Storage Modules within the connection code, the widening of frequency, voltage and grid-forming obligations to cover storage, and the advances towards a harmonised certification framework across the EU collectively reflect its growing role as a core component of the power system. Energy Storage Europe largely endorses the overall thrust of this revision and, in particular, welcomes the introduction of grid-forming capability as a truly future-oriented feature for system resilience.

Energy Storage Europe also welcomes the entry into force timeline, with RfG 2.0 applying from 24 months after entry into force, which gives industry a reasonable and predictable time to adapt internal processes, certification pathways and, where relevant, technical specifications. Moreover, Energy Storage Europe welcomes the clarity that the new requirements are intended to apply only to newly built assets rather than retroactively, and considers this to be an essential safeguard for a sector whose investment decisions rely on long-term regulatory certainty. Energy Storage Europe would nonetheless recommend that this scope be stated explicitly and unambiguously in the final text, so that developers, financiers and asset owners can rely on it with full confidence rather than inferring it from the structure of the Regulation.

At the same time, Energy Storage Europe considers that several aspects of the draft would benefit from further clarification before the text is finalised. The principal issue concerns how generator requirements, largely designed for unidirectional synchronous or power park generators, apply to a bidirectional resource that charges, discharges and transitions between the two. While the draft rightly establishes the principle that storage should meet the same requirements as generators in both operating states, this principle is not yet consistently reflected across the individual frequency and voltage provisions, and Energy Storage Europe believes a more consolidated approach is needed to avoid inconsistent interpretation and implementation across Member States.

Energy Storage Europe also considers the need for grid-forming and synthetic inertia specifications to properly reflect storage's inherent energy capabilities, including its limitations, for modernisation thresholds to be applied predictably and proportionately, and for the specific technical characteristics of pumped-hydro storage to continue to be recognised throughout the text, including in relation to fault-ride-through parameters and response-time obligations. Energy Storage Europe recommends the final text to explicitly recognise their role and degree of flexibility in addressing additional requirements, to reflect the particular characteristics of their own networks.

Energy Storage Europe encourages the European Commission to build on the strong direction already set by this revision by addressing these points in the final text, and to preserve proportionate treatment of storage's physical capabilities throughout.

B. Ranges, Categorisation, and Timeline Application

Articles: 2, 3, 4, 5, 61, 62

Energy Storage Europe observes that greater clarity is needed on the definition of components, especially the distinction between active and passive elements, as this distinction affects the application of the significant modernisation provisions. Moreover, modernisation threshold ranges of 5-20% for capacity and 10-20% for reactive power under Article 4(2) are wide and left to TSO discretion. Energy Storage Europe further notes that determining what constitutes a "significant modernisation" in the first place appears to be largely left to TSOs, which Energy Storage Europe considers potentially problematic. Conversely, Energy Storage Europe also notes that the possibility for TSOs to request derogations for classes of power generating modules connected or to be connected to their network has been removed (former article 63). This may result in unclear implementation of "significant modernisation" activities, especially for newly-built facilities. Energy Storage Europe recommends a clearer definition for components, as well as narrower, EU-level indicative ranges to improve predictability for developers.

Energy Storage Europe notes that a significant modernisation now triggers full compliance for the entire module rather than just the modernised part under Article 4(3), and views this very critically, especially in cases such as repowering, component replacement, or incremental expansion. Energy Storage Europe believes this risks discouraging upgrades and recommends the provision be reconsidered.

Energy Storage Europe observes that, regarding the "change of components" criterion, ACER's version excluded the replacement of spare parts from the definition of significant modernisation, which is no longer the case in the current consultation draft. This exclusion of the replacement of spare parts from the definition should be restored in the final version.

Energy Storage Europe welcomes the Type C and D categorisation in Article 5 and Table 1, which correctly captures the large storage assets' availability to deliver system services, and is consistent with the ESM definition in Article 2(62). Energy Storage Europe recommends that this categorisation be maintained in the final version.

Energy Storage Europe welcomes the entry into force timeline set out in Articles 61-62, which gives predictable lead time to adapt to the new requirements, and considers this timeline should be preserved in the final text. Energy Storage Europe nonetheless raises a major concern regarding Article 61: the new requirements are set to apply to installations that connect to the grid two years after the entry into force of the revised network code, whereas in RfG 1.0 and in the ACER proposal, the new requirements applied to installations which sign a final and binding contract for the power plant two years after the entry into force of the NC. Energy Storage Europe believes the new version of Article 61 could subject projects under development phase to the new requirements of RfG 2.0. Therefore, ESE calls for revert to Article 61 as stated in the RfG 1.0 and in the ACER proposal.

C. Grid-Forming Capability

Articles: 29, 30, 31, 32

Energy Storage Europe welcomes the framework that bounds grid-forming behaviour by current and energy limits under Article 29(3)-(6), though it notes that several aspects, including these current limits, energy storage capability, and the concept of a "dedicated feeder", remain insufficiently defined. Energy Storage Europe recommends that guidance confirm how the return from current-limited operation under Article 29(6) is expected to be in operation when the state of charge itself is the limiting factor.

Energy Storage Europe notes that synthetic inertia for Type C and D is set by the TSO under Articles 31(4)(a) and 32(2), without specifying how the assumed energy draw is calculated. Energy Storage Europe recommends that TSOs be required to publish their methodology, including its impact on available energy content. Moreover, Energy Storage Europe believes that overly restrictive or unclear definitions may limit flexibility, hybrid configurations, and the deployment of grid-forming technologies.

Energy Storage Europe observes that Article 31(4)(b) allows TSOs to require additional energy beyond the inherent energy storage capability, without qualification. Energy Storage Europe believes this should be bounded by proportionality and cost-recovery principles.

Energy Storage Europe notes that the national roadmap process for Types A and B under Article 29(1)-(2) has no minimum expected timeline. Energy Storage Europe recommends that an indicative deadline should be set.

D. General requirements for type C power-generating modules

Articles: 6, 22

Energy Storage Europe welcomes the general principle in Article 6(11) that storage must comply both when injecting and consuming. Energy Storage Europe notes, however, that this is not consistently operationalised across the LFSM-O, LFSM-U and FSM provisions, and recommends a consolidated approach to how these obligations map to charging, discharging and transition states.

Energy Storage Europe welcomes the fact that black start remains voluntary under Article 22(4). Energy Storage Europe considers, nonetheless, that national product specifications don't always reflect storage's energy capabilities, and recommends that TSOs be required to account for this in black start procurement.

Energy Storage Europe notes that the island operation and resynchronisation provisions in Article 22(4)(b)-(c) are drafted around first-mover technology. Energy Storage Europe recommends these be reviewed for their technical relevance to battery storage

E. General requirements for type D power-generating modules

Articles: 23, 32

Energy Storage Europe notes that Type D storage inherits synchronous-generator-oriented functions, such as the PSS-equivalent requirement under Article 27 via Article 23(1). Energy Storage Europe recommends the Commission confirm which Type D provisions genuinely apply to large-scale ESM.

Energy Storage Europe observes that some technical exemptions available to Type D under the previous framework do not appear to be carried forward in this draft. Energy Storage Europe recommends that,

where a requirement is not technically achievable for battery-based assets, a targeted exemption should be indicated rather than left to case-by-case derogation.

Energy Storage Europe considers that the fault-ride-through parameters for Type D under Table 12.1-12.2 are stricter than those for Type C, with no storage-specific indications. Energy Storage Europe recommends these be validated against real battery inverter capability.

Energy Storage Europe observes that the simulation model requirements under Article 22(5)(c) do not address state-of-charge-dependent capability. Energy Storage Europe recommends guidance cover how this should be represented in RMS/EMT models.

F. Application of certain requirements to already connected power-generating modules

Article: 45

Energy Storage Europe expresses concern about possible application of Article 45, allowing new requirements to be applied to existing modules after a cost-benefit analysis conducted by TSOs in coordination with DSOs (as indicated in Article 46) and upon decision of the NRA. Besides this, implementing an Iberian blackout recommendation, we strongly support a non-retroactive application of the Delegated Regulation, as this could create legislative and market uncertainty among developers & asset owners.

This is because Energy Storage Europe observes that, without the 2016 Regulation's clear separation between existing and new facilities, Article 45 could in principle open the door to a very broad retroactive application of requirements to existing assets, outside genuinely exceptional circumstances, with this application also potentially varying at national level. Energy Storage Europe recommends an explicit "exceptional circumstances" threshold be indicated to keep the mechanism targeted.

G. Compliance Schemes

Articles: 49, 52, 53

Energy Storage Europe welcomes ENTSO-E, in coordination with the EU DSO Entity, being assigned the task of developing a common compliance framework structure under Article 49(1), which TSOs then use to build national schemes under Article 49(2). Energy Storage Europe recommends that storage stakeholders be formally involved during the definition of the common structure.

Energy Storage Europe welcomes the encouraged harmonisation on equipment certification, whether possible, under article 52(1). Nevertheless, ESE notes that fragmented national certification processes remain a source of additional cost and complexity for cross-border markets. Energy Storage Europe recommends the European Commission to develop an EU-wide certification framework, to better support standardisation for cross-border storage projects.

Energy Storage Europe notes that ENTSO-E, in coordination with the EU DSO Entity, will also issue non-binding implementation guidance under Article 53. Energy Storage Europe recommends that this guidance explicitly address storage-compliance questions, particularly mode transitions and grid-forming verification.

Energy Storage Europe notes that derogations remain possible on a case-by-case basis under Title V, though the possibility for class-wide derogation requests appears to have been narrowed compared to earlier practice. Energy Storage Europe recommends the derogation procedure remain proportionate, and reserves comment on any class-based option once the official text is published.

H. Pumped-Hydro Storage

Articles: 6, 15

Energy Storage Europe welcomes the distinction in Article 6(1) between fixed-speed pumped-storage machines, treated as synchronous, and variable-speed machines, treated as power park modules, which reflects the technology's distinct operating characteristics. Nevertheless, Energy Storage Europe notes that Article 6(6) cross-references both the synchronous fault-ride-through parameters (Tables 7.1-7.2) and the power-park modules parameters (Tables 8.1-8.2) for variable-speed units without clearly defining a distinction. Energy Storage Europe recommends clarifying this point for legal certainty.

Energy Storage Europe considers that the safety constraints of pumped-storage, such as slow-operating shut-off valves to prevent overpressure, limit how fast active power setpoints can change, including under the LFSM-O response time in Article 15(5)(b)(i). Moreover, ESE stresses that requiring implementation of Article 15 LFSM-O response requirements for major hydropower plants upgrades, such as capacity extensions, could result in these projects being technically or economically unviable, despite their aim of improving efficiency and increasing renewable energy generation. Energy Storage Europe recommends that response-time obligations for pumped-storage remain framed as "as fast as technically feasible" rather than fixed numerical thresholds.

I. Annex

Energy Storage Europe has no specific comments on the Annex to the Draft Delegated Regulation on the revision of the Network Code on the requirements for the grid connection of generators, as it concerns the compliance and certification framework for V2G electric vehicles and V2G electric vehicle supply equipment. Energy Storage Europe notes, however, that should the Commission develop future technical annexes or standards specifically addressing grid-forming capability or ESM compliance testing, these should explicitly incorporate storage's energy capabilities and mode-switching behaviour, in compliance to the comments raised under Sections D and E above.

About Energy Storage Europe

Energy Storage Europe (previously EASE) is the voice of the energy storage community, actively promoting the use of energy storage in Europe and worldwide. It supports the deployment of energy storage as an indispensable instrument within the framework of the European energy and climate policy to deliver services to, and improve the flexibility of, the European energy system. Energy Storage Europe seeks to build a European platform for sharing and disseminating energy storage-related information and supports the transition towards a sustainable, flexible and stable energy system in Europe.

For more information, please visit www.energystorageeurope.eu

Disclaimer

This response was elaborated by Energy Storage Europe and reflects a consolidated view of its members from an energy storage point of view. Individual Energy Storage Europe members may adopt different positions on certain topics from their corporate standpoint.

Contact: Secretariat | info@energystorageeurope.eu