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Code Administrator Consultation Response Proforma

GC0183: Generator and Interconnector Availability During a Severe Space Weather Event

Industry parties are invited to respond to this consultation expressing their views and supplying the rationale for those views, particularly in respect of any specific questions detailed below.

Please send your responses to grid.code@neso.energy by **5pm** on **20 October 2025**. Please note that any responses received after the deadline or sent to a different email address may not receive due consideration.

If you have any queries on the content of this consultation, please contact grid.code@neso.energy

Respondent details	Please enter your details	
Respondent name:	Unjulie Sarna, Maitrayee Bhowmick-Jewkes, Vince Hammond	
Company name:	National Grid Ventures (IFA, IFA2, NSL, Viking, Nemo Link & BritNed)	
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Phone number:	-	
Which best describes your organisation?	<input type="checkbox"/> Consumer body <input type="checkbox"/> Demand <input type="checkbox"/> Distribution Network Operator <input type="checkbox"/> Generator <input type="checkbox"/> Industry body <input checked="" type="checkbox"/> Interconnector	<input type="checkbox"/> Storage <input type="checkbox"/> Supplier <input type="checkbox"/> System Operator <input type="checkbox"/> Transmission Owner <input type="checkbox"/> Virtual Lead Party <input type="checkbox"/> Other

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I wish my response to be:

(Please mark the relevant box)

☒ **Non-Confidential** (*this will be shared with industry and the Panel for further consideration*)

☐ **Confidential** (*this will be disclosed to the Authority in full but, unless specified, will not be shared with the Panel or the industry for further consideration*)

For reference the Applicable Grid Code Objectives are:

- i. *To permit the development, maintenance and operation of an efficient, coordinated and economical system for the transmission of electricity*
- ii. *Facilitating effective competition in the generation and supply of electricity (and without limiting the foregoing, to facilitate the national electricity transmission system being made available to persons authorised to supply or generate electricity on terms which neither prevent nor restrict competition in the supply or generation of electricity);*
- iii. *Subject to sub-paragraphs* (i) and (ii), to promote the security and efficiency of the electricity generation, transmission and distribution systems in the national electricity transmission system operator area taken as a whole;*
- iv. *To efficiently discharge the obligations imposed upon the licensee by this license* and to comply with the Electricity Regulation and any relevant legally binding decisions of the European Commission and/or the Agency; and*
- v. *To promote efficiency in the implementation and administration of the Grid Code arrangements*

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* See Electricity System Operator Licence

For reference, (for consultation questions 4 & 5) the Electricity Balancing Regulation (EBR) Article 3 Objectives and regulatory aspects are:

- a) *fostering effective competition, non-discrimination and transparency in balancing markets;*
- b) *enhancing efficiency of balancing as well as efficiency of national balancing markets;*
- c) *integrating balancing markets and promoting the possibilities for exchanges of balancing services while contributing to operational security;*
- d) *contributing to the efficient long-term operation and development of the electricity transmission system and electricity sector while facilitating the efficient and consistent functioning of day-ahead, intraday and balancing markets;*
- e) *ensuring that the procurement of balancing services is fair, objective, transparent and market-based, avoids undue barriers to entry for new entrants, fosters the liquidity of balancing markets while preventing undue market distortions;*
- f) *facilitating the participation of demand response including aggregation facilities and energy storage while ensuring they compete with other balancing services at a level playing field and, where necessary, act independently when serving a single demand facility;*
- g) *facilitating the participation of renewable energy sources and supporting the achievement of any target specified in an enactment for the share of energy from renewable sources.*

What is the EBR?

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The Electricity Balancing Regulation (EBR) is a European Network Code introduced by the Third Energy Package European legislation in late 2017. The EBR regulation lays down the rules for the integration of balancing markets in Europe, with the objectives of enhancing Europe's security of supply. The EBR aims to do this through harmonisation of electricity balancing rules and facilitating the exchange of balancing resources between European Transmission System Operators (TSOs). Article 18 of the EBR states that TSOs such as the NESO should have terms and conditions developed for balancing services, which are submitted and approved by Ofgem.

Please express your views in the right-hand side of the table below, including your rationale.

Standard Code Administrator Consultation questions						
1	Please provide your assessment for the proposed solution against the Applicable Objectives versus the current baseline?	<p>Mark the Objectives which you believe the proposed solution better facilitates than the current baseline:</p> <table> <tr> <td>Original</td><td> <input checked="" type="checkbox"/>i <input type="checkbox"/>ii <input checked="" type="checkbox"/>iii <input checked="" type="checkbox"/>iv <input type="checkbox"/>v <input type="checkbox"/>None </td></tr> <tr> <td colspan="2">-</td></tr> </table>	Original	<input checked="" type="checkbox"/> i <input type="checkbox"/> ii <input checked="" type="checkbox"/> iii <input checked="" type="checkbox"/> iv <input type="checkbox"/> v <input type="checkbox"/> None	-	
Original	<input checked="" type="checkbox"/> i <input type="checkbox"/> ii <input checked="" type="checkbox"/> iii <input checked="" type="checkbox"/> iv <input type="checkbox"/> v <input type="checkbox"/> None					
-						
2	Do you support the proposed	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				

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	implementation approach?	<p>Clarity on Process, Systems, and Formats for Declarations</p> <p>We request clarity on when the Space Weather Industry Protocol will be shared with us to prepare our processes and provide a format for submitting Space Weather Output Usable Declarations, especially for Interconnectors. The process flows are helpful, but additional guidance on handling edge cases (e.g., simultaneous events, communication failures, or cross-border impacts) would be valuable.</p> <p>It seems premature for the Grid Code modification to become effective before the underlying SW industry Protocol has been completed and published.</p> <p>We suggest that NESO include worked examples or FAQs in the final guidance.</p> <p>The above clarity will assist Interconnector Owners to develop the necessary processes to rapidly assess and declare asset availability during space weather events.</p>
3	Do you have any other comments?	<p>Declaration Timing</p> <p>The requirement to submit a Space Weather Outage Declaration within three hours of a Prepare Notification may be challenging for Interconnectors operating across jurisdictions (where operational decisions depend on EU TSOs</p>

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		<p>also). We would appreciate if NESO could clarify whether flexibility will be considered for cross-border coordination.</p> <p>If Interconnector Owners are unable to respond within the required timescales (especially for notifications issued with short notice), there may be compliance risks or operational conflicts.</p> <p>REMIT and Market Communications</p> <p>NESO will need to provide guidance on REMIT and market communications. We request further engagement on the alignment of these requirements with European codes and cross-border operational practices. Given the cross-border nature of Interconnectors, NESO should coordinate with EU TSOs to ensure consistent responses and avoid market fragmentation.</p> <p>Under the current drafting of this modification, NGV will have very little information to assess the impact on our flow schedule if we are informed of an imminent space weather event. At the time of issuing, the Output Usable Declaration would not be Precise (pending a subsequent 'imminent' Notification). This information could become precise and hence Inside Information from the point of (or very soon after) the 'imminent' Notification being issued.</p>
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		<p>will be our best estimate expected at the time, and so we might want to amend the Space Weather Output Usable Declaration (based on analysis) and be able to offer a higher flow level to the market during/after the event. The Grid Code text needs to be clear about requirements, and flexibility to deal with potential scenarios.</p> <p>Potential Conflict with Force Majeure and Asset Protection</p> <p>We seek confirmation that the requirements do not conflict with force majeure or asset protection protocols.</p> <p>Asset Vulnerability Guidance/Parameters</p> <p>If possible, NESO should provide technical criteria (e.g. the level of DC current expected to be flowing in the transformer neutral) or parameters to help Interconnectors assess and study asset vulnerability to space weather. A standardised approach would support consistency and reduce uncertainty.</p> <p>If the information is available, NESO should offer access to data or detail impacts on previous Space Weather events (based on severity of event and asset characteristics).</p> <p>Request for Impact Study and Cost Recovery Considerations</p>
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		unintended consequences, e.g. parties under-estimating or over-estimating the effects and hence Output Usable forecasts. This would undermine the objectives regarding efficiency and coordination and ultimately security of supply.
4	Do you agree with the Workgroup's assessment that the modification does impact the Electricity Balancing Regulation (EBR) Article 18 terms and conditions held within the Code?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
		No identified material impact.
5	Do you have any comments on the impact of GC0183 on the EBR Objectives?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
		<p>EBR objective c)</p> <p>While we understand this mod aims to improve certainty and security, in practice we don't see how this will be achieved when, in the absence of sufficient information to base a decision upon, most Interconnectors are likely to leave expected availability unchanged when notified of a space weather event. NESO would not necessarily have</p>

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		<p>a complete forward-looking view of the actual change in availability when justified deviations are possible and more likely to be used than notifying a change in availability in advance. This is especially true if we do not have standardised parameters on which to base a study into potential impacts.</p>
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