

**To:** Catia Gomes, Frameworks Officer  
National Grid Electricity System Operator  
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**Date:** 03/08/23

**Regarding:** GC0154 Workgroup Consultation

Dear Catia,

NeuConnect has been an active participant in the GC0154 work group which relates to the incorporation of interconnector ramping requirements in response to SOGL Article 119.

As you may be aware, NeuConnect is a new 1.4GW interconnector that will create the first direct link between the UK and German energy markets. The £2.4bn project reached Financial Close last summer, with the UK and German Governments highlighting it as a *“groundbreaking project that underpins our ever-increasing energy cooperation”*.

NeuConnect is also one of the very first interconnectors to be delivered through ‘project finance’ which has required significant engagement with Ofgem to help secure ‘variations’ to the ‘Cap and Floor’ model, setting an important precedent for how future interconnectors could be delivered – indeed, as Ofgem have recognised, *“enabling alternative sources of finance such as project finance is in the interests of GB consumers as it provides access to a broader pool of capital, as well as promotes competition in the interconnector market”*.

NeuConnect has therefore responded to each of the questions individually below, and in keeping with its placement within the wider Interconnector Community of which NeuConnect actively supports and is proactively involved. In accordance with the ESO’s request, we have completed the consultation document as enclosed, but would like to raise summary concerns in the following areas:

1. The CBA undertaken is not holistic, or considered to be conclusive at this stage, further work is required in order to confirm and determine the correctness of such a cost benefit to UK consumers, and the wider accompanying effects in Europe.
2. A risk to industry messaging and onward private investment in UK infrastructure needs to be borne in mind for any implementation of restrictions to industry providers, whom have collectively advised against such measures within the working group without a more robust understanding of implications.
3. The level of EU TSO and EU Stakeholder engagement is not considered sufficient at this stage, and would benefit from a more comprehensive and complete assessment.

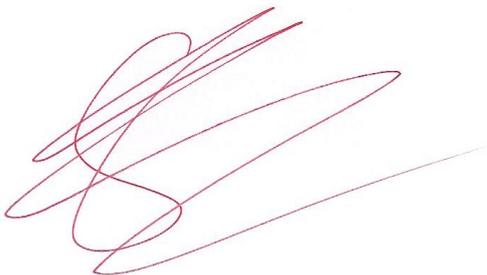
4. Any such implementation of the Original Proposal presents with yet unquantified risks in multiple areas as detailed in some of the examples provided in the below proforma responses, and is thus not recommended for progression at this stage; these risks span technical, commercial and political disciplines and are potentially far reaching in nature if not handled delicately.
5. We consider that further exploration of market-based solutions or alternatives would be highly beneficial and supportive of the ESO's operational concerns raised within the working party.
6. We suggest that it would also be prudent to consider longer term market, generation and technological trends that will impact system requirements, behaviours and operational demands.
7. The basis of the Original Proposal does not appear to fall within the terms of the original SOGL request, and is likewise not considered to be following applicable process.

NeuConnect recommends that further work is required in multiple areas in order to ensure that this topic area is sufficiently and competently investigated. This further work is necessary to demonstrably deliver and secure the most appropriate solution for the industry, for Europe, and for the UK consumer as a whole, all of which exist symbiotically in the context of an interconnected environment.

We underscore and reiterate that NeuConnect remains committed to assisting in this area and thus is happy to engage in any such further efforts, as required to arrive at a sensible conclusion, either within the existing code working group, or as part of a new working group that is specifically mandated to investigate, assess, and recommend measures that are compatible with all necessary elements in this complex topic area.

Should you have any further questions, please feel free to reach out.

Regards,



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**Workgroup Consultation Response Proforma**

# GC0154: Incorporation of interconnector ramping requirements into the Grid Code as per SOGL Article 119

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@nationalgrideso.com](mailto:grid.code@nationalgrideso.com) by **5pm on 03 August 2023**. 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 Catia Gomes [catia.gomes@nationalgrideso.com](mailto:catia.gomes@nationalgrideso.com) or [grid.code@nationalgrideso.com](mailto:grid.code@nationalgrideso.com)

Respondent details	Please enter your details	
<b>Respondent name:</b>	Scott Field	
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<b>Email address:</b>	Scott.Field@NeuConnect.eu	
<b>Phone number:</b>	07814255340	
<b>Which best describes your organisation?</b>	<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"/> Transmission Owner <input type="checkbox"/> Virtual Lead Party <input type="checkbox"/> Other

**I wish my response to be:**

(Please mark the relevant box)

 Non-Confidential Confidential

*Note: A confidential response will be disclosed to the Authority in full but, unless agreed otherwise, will not be shared with the Panel or the industry and may therefore not influence the debate to the same extent as a non-confidential response.*

**For reference the Applicable Grid Code Objectives are:**

- a) *To permit the development, maintenance and operation of an efficient, coordinated and economical system for the transmission of electricity*
- b) *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);*

- c) 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;*
- d) 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*
- e) To promote efficiency in the implementation and administration of the Grid Code arrangements*

**For reference, (for consultation questions 5 & 6) 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?**

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 ESO 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 Workgroup Consultation questions		
1	Do you believe that the Original Proposal and/or any potential alternatives better facilitate the Applicable Objectives?	Mark the Objectives which you believe each solution better facilitates:
		Original <input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D <input type="checkbox"/> E <input type="checkbox"/> F <input type="checkbox"/> G
		WA(G)CM1 <input checked="" type="checkbox"/> A <input checked="" type="checkbox"/> B <input type="checkbox"/> C <input checked="" type="checkbox"/> D <input checked="" type="checkbox"/> E <input type="checkbox"/> F <input type="checkbox"/> G
		WAGCM1 seeks to preserve the existing ramping arrangements and satisfies the original SOGL compliance requirement. Upon further review, it is likely that the intention of the OFGEM 2019 decision was to provide clarity on this existing regime, and support transparency within the Grid Code with the expectation of no major change such as the one now included in the Original Proposal.
2	Do you support the proposed implementation approach?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
		We consider that any implementation of the Original Proposal would present with potentially deteriorating consequences and risk materialisations in a number of areas as outlined within this consultation response.
3	Do you have any other comments?	Click or tap here to enter text.
4	Do you wish to raise a Workgroup Consultation Alternative Request for the Workgroup to consider?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
		Click or tap here to enter text.
5	Do you agree with the Workgroup's assessment that GC0154 does impact the Electricity Balancing Regulation (EBR) Article 18 terms and conditions held within the Grid Code?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
		Click or tap here to enter text.
6	Do you have any comments on the impact of GC0154 on the EBR Objectives?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
		See answers to questions 7 and 8

Specific Workgroup Consultation questions		
7	Does the Original proposal or the alternative impact EU TSOs?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No It is not considered that the impact of the Original Proposal to the EU TSO's has been suitably assessed by the proposer. The Original Proposal presents with multiple risks that are not clearly understood, documented or quantified at this stage. E.g. EU system frequency or EU security of supply impacts.  WAGCM1 would maintain all existing arrangements with EU TSO counterparties, and would thus not be a cause for concern, or require further forms of detailed impact assessment.
8	Has there been sufficient effort taken to seek and obtain European engagement? Other- if other what else could have been done?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No The Original Proposal has not been robustly socialised with counterparty EU TSO members, and is thus considered to warrant further work. In our view, this regime could not reasonably be implemented in its current state, without significant risk to existing operational, commercial and political relationships. Our recommendation is that further work is undertaken to map out and assess the impacts to our EU colleagues as indicated above.  We do not consider sufficient effort or demonstrable progress has been made within key forums and EU stakeholders. We note and welcome the inclusion of the ENTSO-E subgroup chair by the ESO in a single meeting, but as has been continually called for by the working group, significantly more engagement is required across various EU forums and with IC and EU TSO representatives jointly present. Workgroup concerns are detailed on pages 13 – 15 of the consultation document and should be referred to accordingly.  NeuConnect also has a wider socioeconomic concern that such isolated and unilateral movement by the UK ESO would encourage reciprocal behaviour from the EU member states, and their responsible TSO's. This could invertedly lead to a broader scale degenerative situation, and accompanying lack of cooperation in other areas, which is obviously not the direction the industry would want to move in.
9	Does the Original proposal / alternative allow for GB to reach its net zero targets?	<input type="checkbox"/> Yes <input type="checkbox"/> No

		<p>The Original Proposal runs in diametrically opposed position to other NG ESO and EU initiatives to support transmission system flexibility by leveraging the benefits and capability of cross border interconnection.</p>
10	<p>Do you believe the Original proposal or alternative impacts the interconnector business model? (Please consider any commercial and operational impacts)</p>	<p><input checked="" type="checkbox"/> Yes  <input type="checkbox"/> No</p> <p>From a purely Commercial perspective the Original Proposal will impact and IC's ability to respond to market signals and thus reduce the revenue position from market arbitrage, and/or other services. Likewise, a reduced ramping position as provided for in the Original Proposal will also expose IC's to a greater potential degree of imbalance risk. The magnitude of these commercial impacts and thus the materiality to the overall business model of IC's is under review and manifests on a case-by-case basis within the Interconnector community.</p> <p>Given the magnitude and pace of change for the Interconnector industry at present, coupled with Trade and Cooperation Agreement (TCA) dynamics, the Original Proposal compounds the business risk position and it is suggested that the Original Proposal will further erode market confidence in the UK regulatory framework. This serves to directly contribute to undermining future investment in critical UK infrastructure, and most notably, the journey to Net Zero.</p>
11	<p>Does the Original proposal / alternative meet the requirements of Ofgem's August 2019 decision on the implementation of the SOGL? (Check if this is incorporated in grid code objectives)</p>	<p><input type="checkbox"/> Yes  <input type="checkbox"/> No</p> <p>The Original Proposal is seeking to utilise GC0154 to impose retractions that are beyond the basic requirement for SOGL compliance.</p> <p>WAGCM1 meets the requirements of Ofgem's 2019 decision, by codifying existing ramping arrangements and aligns with their intent on this topic.</p>
12	<p>Do you believe that the Original/alternative solves the operational challenges faced by the ESO as a result of fast simultaneous interconnector ramping?</p>	<p><input type="checkbox"/> Yes  <input type="checkbox"/> No</p> <p>It is felt that an insufficient evidence base has been presented by NGESO in regards the cause and effect of fast IC simultaneous ramping, beyond a very specific and limited number of examples. A fuller picture and data set is required in order to understand the scale and breadth of this operational challenge. Although acknowledged as being worthy or further consideration in the context of future UK security of supply, this element has yet to be quantified and substantiated in the views of the responder.</p> <p>It is also observed that a multitude of tools exist at present and further mechanisms can be developed to</p>

		support types of operational challenge, should this indeed be proven to be a novel feature of simultaneous, unified Interconnector operation. These existing and alternative future tools or market-based solutions have not in our view been sufficiently investigated or debated within the working group, and would benefit from further development, should an expanded timeframe be available.
13	Do you believe the Original proposal or alternative proposal/s impacts or is impacted by the EU 15 MTU change?	<input type="checkbox"/> Yes <input type="checkbox"/> No Unknown, EU position is still in development so further consideration is needed.
14	Do have any comments on the reliability of the CBA conducted by Baringa? If available, please provide any analysis supporting your response.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No The workgroup has continually raised concerns regarding the CBA, and comments have been provided within multiple forums and emails. Workgroup concerns are detailed on pages 13 – 15 of the consultation document and should be referred to accordingly.
15	Are there any considerations for implementation on the Original proposal /alternative proposals? (e.g., IT impacts or considerations)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No As stated above, the Original Proposals compatibility with elements such as a drive for grid forming behaviour in Europe has not been considered. Such behaviour in Europe is now mandated in more recent connections and requires the Interconnector asset to be more responsive. The ramping restrictions suggested within the Original Proposal runs counterintuitively to this behaviour which in turn presents with potential control system issues and compatibility challenges, and would need to be more comprehensively investigated by the HVDC system OEM's.