Code Administrator 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 by **5pm** on **07 November 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@nationalgrideso.com or grid.code@nationalgrideso.com

Respondent details	Please enter your details	
Respondent name:	Vince Hammond	
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Which best describes your organisation?	☐Consumer body ☐Demand ☐Distribution Network Operator ☐Generator ☐Industry body ☒Interconnector	☐Storage ☐Supplier ☐System Operator ☐Transmission Owner ☐Virtual Lead Party ☐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 Code Administrator Consultation questions			
1	Please provide your assessment for the proposed solution(s) against the Applicable Objectives?	Mark the Objectives which you believe the proposed solution(s) better facilitates:	
		Original	☐A ☐B ☐C ☐D ☐E
		WAGCM1	☒A ☒B ☒C ☒D ☒E

		We believe that the Original Proposal fails to better achieve the Applicable Objectives, with the case not clearly made that there is an enhancement to the efficiency, economics or security of system operation, that competition has been facilitated, or that the proposal has been sufficiently coordinated with industry stakeholders including EU TSOs or ENTSOe. In contrast, the WAGCM1 does better achieve the applicable objectives, avoiding technical limitations that would be imposed at the expense of finding efficient economic solutions, but still allowing intervention if necessary to ensure system security can be maintained, and avoiding any divergence in cross-border arrangements that has not been fully coordinated with interconnected TSOs/ENTSOe.
2	Do you have a preferred proposed solution?	☐Original ☒WAGCM1
		1. NGV strongly advocates the WAGCM1. This will codify the current practice that Interconnectors Ramp at up to 100MW/min in order to achieve the market's nominated cross-border energy flows. This continuation of current practice was the implied expectation in Ofgem's decision on the implementation of the requirements of SOGL 118/119 and was stated as being the reason for Ofgem not having conducted an Impact Assessment. 2. In our opinion any review of interconnector ramp rates, in conjunction with other options to manage network operation, must be in coordination with external TSOs to ensure a fully coordinated interconnected operation. In relation to this ENTSOe is also part way through a review of cross-border ramping. Maintaining the current interconnector ramping arrangement (as captured by WAGCM1) would seem the right course of action unless/until there is a coordinated and clear case to change. 3. Furthermore, we are of the opinion that if action is needed on occasions to manage Interconnector ramping, other solutions such as (but not limited to) those referred to on p9 of the consultation could achieve enhanced efficiencies via the necessary coordination, however these are beyond the scope of just a Grid Code Working Group, and hence a wider forum would be appropriate to assess their viability and associated benefits. These wider options listed in Consultation p9 are re-stated here:

		i. Ensure ESO holds sufficient response and reserve to facilitate unrestricted Interconnector ramping. ii. Develop additional services with the Interconnector and EU Transmission System Operators (TSOs) to mitigate ramping e.g., slow or delay. iii. Changes to the GB wholesale market design to be more compatible with cross border capacity markets. iv. Change cross border capacity markets.
3	Do you support the proposed implementation approach?	☐Yes ☒No
		We do not support the Original Proposal for the reasons as indicated in section – 2 above, and additionally it must be noted that the Original Proposal poses significant implementation challenges including modification of IFA's converter stations control and despatch systems, both involving external suppliers. In terms of the Alternative (WAGCM1), NGV supports and will be able to adhere to the "*10 days after approval by the authority"* implementation plan. Note: -The wording of the 'implementation approach' in the consultation document is not correct, where it states that: "…*the ramping rate has never been limited before*." -Interconnectors have always had a limited ramp rate, which the Alternative proposal would maintain at 100MW/min.
4	Do you have any other comments?	1. Whilst a Grid Code modification is necessary to satisfy the codification requirement of Interconnector ramp rates, as per Ofgem's decision in 2019 on implementation of SOGL, in our opinion if there is an operational issue to address in relation to Interconnectors and their ramping this should have been the subject of a wider assessment than just via Grid Code. The original 'long-list' of solutions in the initial GC0154 Proposal, as referenced in this consultation document (p9), included market-based solutions however in reality these are out of scope to be achieved via a Grid Code modification. In our opinion, the Original Proposal has therefore been inappropriately narrowed to a Grid Code technical solution, which fails to address wider issues or propose other potential solutions. 2. Baringa's CBA was, in our opinion, a missed opportunity to explore the options more thoroughly, and the Workgroup

discussions reflect this concern. The projected savings under the Original Proposal need substantiating, particularly if this is one of the key bases on which the Original Proposal is to be assessed. Baringa's report indicated some scenarios considered, and assumptions made, however it is remarkable that the projected cost savings have been resolved to an absolute value. Sensitivity studies, scenario ranges and inherent uncertainty will surely lead to a range of possible outcomes.

3. Following the Workgroup Consultation, a subset of the Working Group members (including NGV) commissioned a further assessment by AFRY to consider the CBA findings. It is important to note AFRY's observations, as follows:
    a) Significant savings available based on alternative monetisation factor for balancing volumes.
    b) The Baringa CBA has no consideration for negative impacts on limiting IC ramping.
    c) High correlation of IC cumulative ramping and increased balancing volumes has not been replicated.
    d) The CBA assumes no changes in procurement method for reserve and response products.
    e) The value of implementing a static IC ramp rate of 50MW/min is likely to reduce in the second half of the 2020s.

With these remaining open questions there is therefore considerable uncertainty over the CBA that supported the Original Proposal.

4. Key Stakeholders engagements:
    Key stakeholders in all aspects of Interconnector operations are the externally-Interconnector System Operators. However, those TSOs are not licensed UK entities and hence cannot participate in a Grid Code modification process, and any review of interconnector ramp rates must be conducted in full coordination with those parties, along with ENTSOe who are also conducting a review of cross border ramping.

5. Impact on 15-minute MTU:
    The introduction of a 50MW/min ramp rate, as per the Original Proposal, could introduce significant impact when combined with the key European initiative of 15minute Market Time Unit (MTU) project and its associated shortening of ramping windows. Most significantly with a 15min MTU there would be

		an increased likelihood, exacerbated by a reduced interconnector ramping limit, that for each Interconnector each MTU's scheduled MW transfer cannot be reached before the need to start ramping to achieve the target MW for the next MTU. 6. Higher IC Imbalance & Cost: Associated with the above point, a likely consequence of a 50MW/min ramp rate, particularly alongside a future 15minute MTU is that Interconnectors would be forced into significantly higher imbalance. This would lead the ESO (and also the external interconnected TSOs) to have to take additional balancing actions to resolve the resultant energy shortfall/surplus, the costs of which would be pushed onto Interconnectors. The options for how to mitigate the effects of this imposed increased imbalance on Interconnectors, that would likely arise in the event of adoption of the Original proposal, would need to be assessed in conjunction with external TSOs to ensure there is a coordinated approach. 7. The long-established Interconnector business model is to operate within and contribute to the overall GB market. Whilst NGV recognises the importance of maintaining system security, there are various high-level factors that contribute to the national supply-demand balance, across demand profile (and its forecasting), generation output and Interconnector schedules, and this will be alongside the likely emergence of new and increasingly flexible energy source technologies in the coming years. It is evident of course that the aggregate contribution from Interconnectors has substantially increased over recent years, and is projected to continue an upward trend, however it appears arbitrary to simply place an enduring blanket reduction of their maximum ramp rates by 50%, without fully exploring all opportunities in fullest detail. A more normal approach would be to explore market-based arrangements to satisfy the majority of operational scenarios, perhaps with clear technical backstop measures available for ESO as necessary for more extreme situations should they arise.
5	Do you agree with the Workgroup's assessment that GC0154 does impact the Electricity	☐Yes ☒No

	Balancing Regulation (EBR) Article 18 terms and conditions held within the Grid Code?	None identified
6	Do you have any comments on the impact of GC0154 on the EBR Objectives?	☒Yes ☐No
		With the potential for increased market imbalance with reduced interconnector ramp rates there is a potential impact on EBR Objective (d) relating to the efficiency of operation of markets from Day Ahead through to Intraday and Balancing timescales.