

3 August 2023

National Grid ESO  
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**Response to National Grid ESO's Workgroup Consultation GC0154: Incorporation of interconnector ramping requirements into the Grid Code as per SOGL Article 119**

Dear Sirs,

MaresConnect Limited (**MCL**) welcomes the National Grid ESO's Workgroup Consultation GC0154: Incorporation of interconnector ramping requirements into the Grid Code as per SOGL Article 119, published on 11 July 2023 (the **Consultation**).

MaresConnect is a proposed 750MW interconnector between Ireland and Wales, aiming to commence operations in 2029. MaresConnect has a grid connection agreement with National Grid and was granted an interconnector licence from Ofgem in 2022. Ofgem is currently assessing MaresConnect's application for Cap and Floor regulation in Great Britain as part of its Third Cap and Floor window, with a decision expected end of 2023/early 2024. Further information can be found on our [website](#).

MaresConnect recognises the challenges National Grid ESO faces in operating the system in a safe, secure and efficient manner as we transition to net zero. As an HVDC interconnector, MaresConnect (and other HVDC interconnectors) are some of the most flexible assets available to the ESO. Interconnectors serve as a versatile instrument in the National Grid's toolkit, offering economic solutions to the challenges encountered by the ESO. Ensuring operational flexibility of these interconnectors should remain a priority when contemplating modifications to the grid code.

In that regard, we are of the view that the proposal in GC0154 would result in limiting the flexibility of interconnectors which will in return reduce the benefit of interconnection to consumers. If there is a reduction in flexibility services that interconnectors are able to provide, this could result in more costly methods of flexibility being required.

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We do not agree with the proposal for changing interconnector ramp rate, and we disagree with the outcome of the CBA that ESO commissioned to support the GC0154 proposal. We recommend that the alternative solution proposed by the Workgroup Members is implemented.

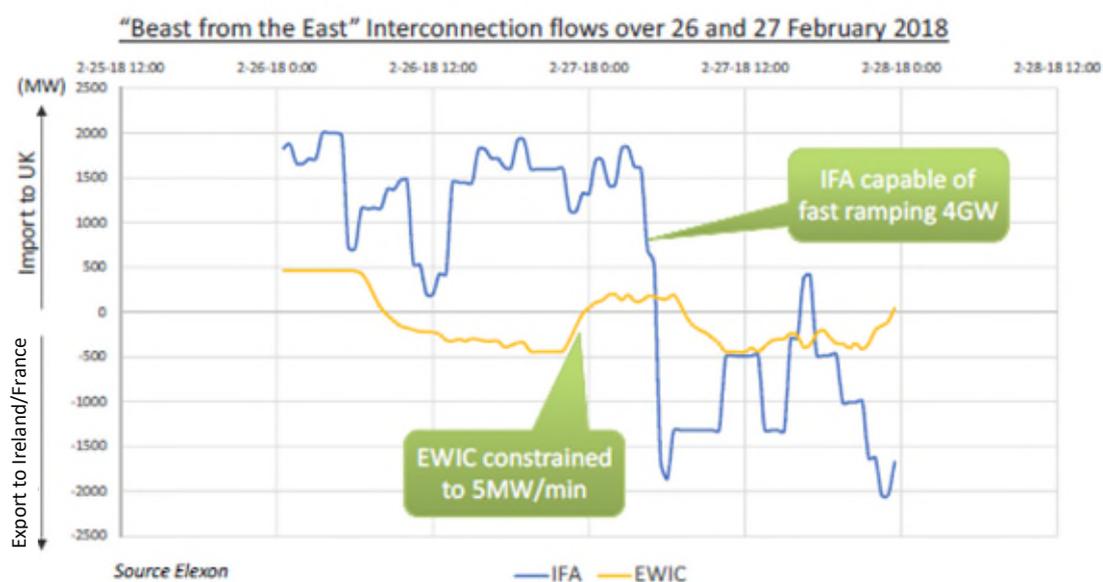
In support of our response:

- We urge ESO to work with interconnectors and other stakeholders to develop market-based solutions for interconnector operation that deliver benefits to consumers at both ends of the interconnector. This will allow ESO to develop a long term solution to the issues it is facing which will ultimately benefit consumers. In our view, the approach of seeking to address issues with simultaneous ramping through this proposed Grid Code change precluded the opportunity for market-based solutions to be developed, due to the technical nature of this code.
- Our interpretation of Ofgem's decision letter of August 2019 (Implementation of the requirements listed in Article 118 and 119 of the SOGL Regulation) which prompted this proposal is that Ofgem expected current arrangements to be codified within the Grid Code (and on that basis an Impact Assessment was not required). We do not believe that the Ofgem decision letter envisaged a change to interconnector ramp rates.
- We do not consider that sufficient evidence has been provided that simultaneous ramping of interconnectors causes operational problems. We note that ESO has not quantified the cost of balancing actions it took during 2022 as a result of simultaneous ramping.
- We note the concerns set out on pages 13-15 of the Working Group report, which do not appear to have been adequately addressed by ESO. The Working Group also expressed concern about a lack of transparency on the methodology employed and assumptions used, which is concerning.
- We recommend that engagement with EU TSOs and the ENTSO-E System Operation Committee is required before GB implements any changes to the ramp rates. The impact of the change has not been considered in the CBA or by an assessment of the impact on the frequency quality (and therefore security of supply).
- We note that EU TSOs are starting to develop and employ smarter operational processes with cross-border assets such as grid-forming capabilities. We are aware that the GB Interconnectors Forum has responded to this consultation confirming they its members would be happy to work with the ESO to learn lessons from the EU and to consider the application of such techniques to GB borders.

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- The shift towards a renewable generation base will lead to a corresponding increase in nonsynchronous power on our transmission networks and a higher degree of intermittency. HVDC interconnectors are well-suited to manage these fluctuations through the provision of ancillary services, particularly during unforeseen stress events or abrupt load losses. This was evident during the 'Beast from the East' weather event in 2018. The IFA interconnector played an instrumental role in sustaining stability and averting a potential brownout in France, as depicted in the accompanying chart.

### Slow ramping rates materially reduce economic impact of Irish interconnection



- Key to the effectiveness of these interconnectors is their capacity for swift power transmission adjustments (ramping up or down), which is indispensable for the efficient delivery of ancillary services. HVDC interconnectors, by virtue of their power electronics, can support rapid power flow changes to counterbalance the intermittency inherent in renewable generation. By limiting these technical capabilities, we risk jeopardising our energy supply's security. It is therefore crucial to optimise the use of these interconnectors, to ensure a consistent and secure energy supply as we progress towards a more renewable-centric energy landscape."
- Weather depressions crossing our wind farms typically last 4-6 hours and their passage can result in significant fluctuations in wholesale electricity prices. From a

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consumer's perspective, it is ideal to capture as much green power as possible and take advantage of potentially lower wholesale prices. However, constraining ramp rates can impede the realization of these benefits, causing consumers to miss out on both efficient green power utilization and cost savings.

We recommend that the requirements of retained EU law should be met by codifying the existing interconnector ramping parameters into the Grid Code as envisaged by the Working Group Alternative Proposal (and by Ofgem's original decision). Once this is done, a proper, holistic review of interconnector operation should be undertaken, including proper engagement with all affected stakeholders, to ensure that market-based solutions are developed that deliver benefits to consumers. We are willing to engage constructively in such as exercise.

We are available to discuss further any of the points made above.

Yours sincerely,



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CEO

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