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National Grid ESO response to Interconnector Policy Review: Workstream 3 and Workstream 4

Dear Andrew and Riccardo,

We welcome the opportunity to respond to the Interconnector Policy Review Working Paper for Workstream 3 – wider impacts of interconnection and Workstream 4 – multi-purpose interconnectors (MPI). We have responded separately to the Working Papers for both Workstream 1 - review of the cap and floor regime and Workstream 2 – socio-economic modelling on July 16th, 2021.

These consultations raise some specific issues relating to interconnector regulation, and we have responded to these within Appendices 1 and 2 of this letter, focusing on the areas of greatest relevance to ESO. However, there are also some broader points raised by Ofgem across the consultations concerning the role of the ESO, which are addressed in this covering letter

There is reference to a potentially expanded role for ESO in Workstream 3 in supporting future assessments of the impacts of interconnectors through enhanced and more proactive network planning processes. Workstream 4 notes that a shift towards a more system-wide and coordinated approach to identify new MPI projects may be preferable in the future and envisages a more prominent role for ESO to help identify the location, timing and capacity of new MPI projects.

An expanded role for ESO relating to cap and floor application windows and future regulatory regimes were also considered in Workstream 1 and 2. As noted in our response to Workstream 1, we agree that a more coordinated and system wide approach could be preferable in the future. This would be a change in the role and responsibilities of the ESO with respect to GB interconnection. Whilst there are potential benefits to this option, there are also some potential risks, uncertainties and challenges which would need to be explored further. In relation to Workstream 3, we also noted and supported discussions with Ofgem around the development of ways in which ESO analysis on system operability can be enhanced to support any potential future regulatory regime for interconnectors.

We note that the roles performed by the ESO are also currently being explored across multiple reviews by Ofgem and/or BEIS, including:

- the Offshore Transmission Network Review,
- Electricity Transmission Network Planning Review,
- Energy Future System Operator Review, and

- Early Competition Review.

We encourage Ofgem and BEIS to think holistically across these reviews to ensure consistent and strategic outcomes are delivered.

We hope that our response is of use to Ofgem and we would welcome further discussion. Should you require further information or clarity on any of the points outlined in this paper then please contact Tom Ireland in the first instance at thomas.ireland@nationalgrideso.com.

Yours sincerely,

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Matthew Wright

Head of Strategy and Regulation

Appendix 1. Interconnector policy review – Working Paper 3 – wider impacts of interconnection

Approach to Workstream 3

Question 1: Do you agree with the approach we have taken to workstream 3?

We agree with the broad approach Ofgem have taken to Workstream 3, whereby Ofgem have undertaken targeted stakeholder engagement alongside conducting a review of how wider impacts were considered in historic interconnector connections.

Workstream Analysis

Question 2: Do you agree with the potential wider impact categories we have focussed on? Are there any other areas we should consider?

We agree with the four wider impact categories identified and do not wish to raise any additional ones.

Question 3: Do you think the discussion presented in this document adequately represents the potential impact of interconnection within each category? If not, please explain and provide supporting evidence if possible.

We broadly agree that the discussion presented captures the impact of interconnection however we would like to raise several additional points to consider:

- **Decarbonisation -** Whilst we agree that greater interconnection will have positive decarbonisation benefits, it should be noted that the connection of a large non-synchronous interconnector may require greater use of carbon intensive generation for system control, displacing the dispatch of domestic low carbon generation.
- **System Operation -** We agree that interconnectors have a high technical capability to provide ancillary services however it should be noted that there are currently material regulatory and commercial barriers for widespread cross border ancillary service provision. Examples of such barriers includes ambiguity as to who would be responsible for the provision of the energy associated with a service and the fact that any cross border service must be agreed with all TSOs (e.g. all EU TSOs).

Question 4: Do you agree with our initial views with respect to each potential wider impact category? If not, please explain why.

We broadly agree with the initial views presented against each wider impact category and would like to raise a number of further points:

- **System Operation -** We agree that the impact of interconnectors on system operability can be both positive and negative, for example substantial trading activity has been required to manage the impact on largest loss. Moreover, cross border flow can have an impact on many other aspects of system operation such as thermal constraint management or consequences following the displacement of controllable, synchronous plant. In light of the magnitude and complexity of future interconnector's impact, we support further discussions with Ofgem on the development of how ESO analysis on system operability can be enhanced to support any potential future regulatory regime for interconnectors
- **Flexibility -** It should be noted that differences in the fundamental design of cross border capacity auctions and domestic wholesale energy markets may lead to a misalignment between supply and demand within a market period.

Assessing the wider impacts

Question 5: Do you agree with our view on how wider impacts have been captured in past needs case assessments?

We agree with the description of how wider impacts have been captured in the past.

Question 6: How do you think we should approach future needs case assessments within the framework presented in the working paper? Are there any other options we should consider?

We agree that historical needs case assessments have typically been Ofgem led, developer supported with an independent socio-economic market assessment and with NGESO proving an assessment on system operator impacts. In terms of future needs case assessments we note that, as identified in this consultation, there are wide ranging impacts, both negative and positive, from additional interconnection. We agree that a more detailed assessment of these wider impacts should be a part of future assessments and that the role of the various stakeholders may change. Our initial view is that a move towards the use of the public data led assessment has advantages such as transparency, consistency of data/ approach and avoidance of the need for a developer to perform complex and broad modelling.

Conclusions and initial proposals

Question 7: Do you agree with our initial conclusions? If not, please concisely explain why and provide supporting information if possible.

We agree that interconnectors, including multiple-purpose interconnectors have far-reaching impacts on the energy system, such as decarbonisation, flexibility, security of supply and system operability. We also agree that interconnectors can have both benefits and disbenefits on the energy system. We agree that a more detailed assessment of these wider impacts should be integrated into future needs case assessments and that we are well placed to analyse these impacts and support potential future needs case assessments.

Modelling of these wider impacts is likely to be technically complex and challenging area for modelling. For example, the quantification of ancillary services provided over the lifetime of an interconnector is difficult, due to the considerable uncertainty of a range of factors, including but not limited to ensuring all relevant costs are factored into the assessment.

We agree that a more coordinated approach to identifying new interconnector projects may be beneficial, but to achieve this will require a significant increase in robust and comprehensive socio-economic modelling that covers all relevant potential costs and benefits.

Question 8: Do you agree with our initial proposals? If not, please concisely explain why and provide supporting information if available.

We support Ofgem in further developing their initial proposals.

Other

Question 9: Do you have any further feedback on our analysis, conclusions or proposals presented in this consultation document?

We have no further feedback, at this time.

Appendix 2. Interconnector policy review: Working paper for Workstream 4 – multiple purpose interconnectors

Workstream 4 Analysis

Question 1: Do you agree with the approach we have taken to workstream 4?

We agree with the approach taken for Workstream 4.

Question 2: Do you think that we have missed any important benefits that MPIs could deliver?

We agree with your assessment of the benefits of MPI projects and see them as playing an important role in reaching the offshore wind target of 40GW by 2030 and net-zero emissions by 2050.

Question 3: Do you agree with our view on the conclusions of the ITPR?

We welcome your statements on regulatory clarity and certainty being prerequisites for getting new assets such as MPI projects off the ground. We also agree that the specific conclusions of the ITPR do need to be developed further to provide sufficient regulatory clarity and certainty. We are working closely with stakeholders, including developers as part of the Offshore Transmission Network Review, and are exploring how the regulatory framework could change in the short term and longer term to facilitate getting MPI projects off the ground.

Question 4: Do you agree with our proposal to further explore the applicability of the cap and floor regime for the MPI projects currently under consideration? Please provide supporting information if available.

We agree that it is important to further explore how the cap and floor regime could work for MPI projects that are currently under consideration, including MPI projects that may have an OFTO element, and to what extent a more flexible approach can be taken for these projects.

Question 5: Do you agree with our proposal to also consider alternative regulatory models for MPI projects in the long term? What models should we consider? Please provide supporting information if available.

We agree that it is important to consider a broad spectrum of regulatory models for MPI projects in the long term. This should be considered in parallel to the work being undertaken in respect of the enduring regime development under the Offshore Transmission Network Review as the enduring regime (including the offshore delivery models) in respect of offshore wind, interconnection and MPIs could interact with the regulatory model for an MPI project.

Question 6: What other wider policy issues or aspects related to MPIs should we be aware of?

We believe that Ofgem have identified the relevant policy issues and aspects for MPI projects.

Conclusions and initial proposals

Question 7: Do you agree with our initial conclusions? If not, please concisely explain why and provide supporting information if available.

We agree that a shift towards a more system-wide and coordinated approach to identify new MPI projects may be preferable in the future, with NGESO having a more prominent role in the identification of the location, capacity and timing of new MPI projects. Whilst there are potential benefits to this option, there are also some potential risks, uncertainties and challenges which would need to be explored further. For example, modelling of the benefits and disbenefits of MPIs is at a very early stage, and would need to be robust, transparent and provide industry confidence when used to support any decision making process.

Question 8: Do you agree with our initial proposals? If not, please concisely explain why and provide supporting information if available.

We support Ofgem in further developing their initial proposals.

Other

Question 9: Do you have any further feedback on our analysis, conclusions or proposals presented in this consultation document?

Workstream 4 notes that a shift towards a more system-wide and coordinated approach to identify new MPI projects may be preferable in the future. We note that the roles performed by the ESO are also currently being explored across multiple reviews by Ofgem and / or BEIS including the Offshore Transmission Network Review, Electricity Transmission Network Planning Review, Energy Future System Operator Review and Early Competition Review. We encourage Ofgem and BEIS to think holistically across these reviews to ensure consistent and strategic outcomes are delivered.