



17<sup>th</sup> Floor · 88 Wood Street · London · EC2V 7DA  
T +44 20 3668 6683 [www.transmissioninvestment.com](http://www.transmissioninvestment.com)

By email only: [Cap.Floor@ofgem.gov.uk](mailto:Cap.Floor@ofgem.gov.uk)

FAO Andrew Bullimore  
Ofgem  
10 South Colonnade  
Canary Wharf  
London  
E14 4PU

28<sup>th</sup> July 2021

Dear Andrew

**Transmission Investment Response to the Consultation on the Interconnector Policy Review: Working Paper 3 – Wider Impacts**

Transmission Investment, as one of the UK's leading independent transmission companies manages one of the largest offshore electricity transmission portfolios. Our managed portfolio of Offshore Transmission Owner (OFTO) assets includes the connections to seven offshore wind farms, and we will take over management of a further three offshore wind connections in 2021 – in total a portfolio of approximately 3.2GW and over £2bn in capital employed. We are one of the largest managers of offshore wind transmission in GB, which is the largest offshore wind market in the world.

Transmission Investment is also a strong advocate of introducing competition into the delivery of onshore transmission and we continue to support the development of the required arrangements *inter alia* through industry groups, responding to consultations such as these and providing evidence to parliament.

Transmission Investment is leading, in partnership with the French national grid company RTE, the development of a proposed 1400MW HVDC interconnector between France and Britain via Alderney ("the FAB interconnector project"). This project was granted cap & floor regulatory treatment in 2015 and whilst it continues to experience Brexit related delays, it will commence construction as soon as the regulatory process allows. Transmission Investment is also in the early stages of developing a 700MW HVDC interconnector between Scotland and Northern Ireland ("the LirIC interconnector").

**Ofgem's Approach to Workstream 3**

We support Ofgem's approach to workstream 3. There are a number of publicly available studies which have assessed the wider benefits of interconnection. Identifying these studies and focussing on where these benefits can be directly attributed to support the needs case of further interconnection seems to be an appropriate and robust approach.

Further progress is merited however in establishing what methodology could be employed to assess the wider benefits attributable to a project as part of a need case assessment, be it quantifiably and/or qualitatively. The consultation points towards publicly available data but it is not clear how this may be applied and interpreted by Ofgem in a consistent manner

between projects and across timeframes. We would support Ofgem being explicit here in any decision to ensure developers understand how wider benefits may be considered for their projects.

### **Wider Impact Categories**

We agree with the potential wider impact categories which Ofgem has highlighted in the consultation document. Furthermore, we support and welcome that Ofgem has identified sub-categories within each of the wider impact categories.

However, Ofgem has not highlighted the potential benefits associated with the mandatory provision of Emergency Services to the connected TSO's. Whilst the availability of these services is not provided on commercial terms and usually only in Emergency Situations, they do provide benefits to the national networks by supporting security of supply as a last resort. In some cases, the provision of these services may be more effective or offset costs incurred by other asset classes thereby reducing the overall cost of providing Emergency Services to consumers. These services include Emergency Instructions, NTC Reduction, Mandatory Frequency response, non-commercial inter-trips etc. The benefit of these services could be assessed by National Grid ESO and included in a project's needs case assessment.

We broadly agree with Ofgem's initial views on each of the wider benefit areas. However, we would like to highlight the following observations:

*Boundary capability and constraint management:* Ofgem states that they recognise that "...in some instances interconnectors can have a negative impact on constraint management, where a large influx of power could lead to local constraints and costly curtailment". Any constraint cost impact should be identified as part of the Connections Infrastructure Options Note (CION) assessment. This assessment identifies the economically optimum point to connect taking account of capital costs, forecast operational constraint costs and the project developer costs. It seems unlikely that the constraints costs attributed solely to the interconnector at the point of a connection application will persist over the lifetime of the interconnector due to future changes in the onshore network. These changes will be driven by unforeseen new generation connections, decommissioning of older generation and changes in demand. Due to these inherent difficulties in predicting the future onshore (and offshore) network topology, it must be acknowledged there is a significant level of uncertainty in the level of attributable constraint cost to an interconnector. Any assessment of constraint cost should therefore be accompanied with a sensitivity assessment showing a range of probable outcomes and the timescales over which the identified constraint costs may (or may not) exist.

Furthermore, with regards to costs of reinforcing the network, there is currently an inconsistent approach between the efficient connection of a generator and that of an interconnector. If a generator requests a connection, then the wider network is upgraded to accommodate the connection and it does not factor in the decision on whether the generator should proceed or not. We do not recognise any justification for why there should be an inconsistent approach here. It can not be expected that the network will stand-still and so there will be an ongoing cost to consumers (via TNUoS) to maintain and improve its capability regardless of whether it is a generator connecting or an interconnector connecting. We recognise the signals which TNUoS may create when locating a generator which for an

interconnector is driven via the CION and wider economics of the interconnector. To be consistent in approach any required network reinforcements should rightly be considered when locating the most economic point to connect (as part of the CION) but we do not recognise how it can be considered consistent to also factor these into whether the interconnector should proceed, or not.

*System operability:* We agree with Ofgem's view that interconnectors provide benefit through the provision of ancillary services to the ESO. Ofgem also highlight that interconnectors, in some situations, may cause increased costs due to them representing the largest loss on the network. However, this increased cost cannot be attributed to a single interconnector or all interconnectors above the largest loss of domestic generation. In the near future it is expected that domestic generation will exceed the capacity level of the largest interconnector and so this cost should be viewed as a cost of securing the network in general and not be an attributable cost applied to interconnection. In addition, we understand that as part of the OTNR work, the criteria regarding largest loss may be re-evaluated, potentially further reducing the impact in this area from the current scale of interconnector projects. Indeed, interconnectors can provide a Frequency Response service and with a capability above that of conventional generation<sup>1</sup>. Further interconnection should therefore be able to increase competition in the provision of this ancillary service, providing more options to the ESO and driving down the price of securing the network for the largest loss overall.

Further to the above, more could be done to support system operability through the provision of ancillary services from interconnectors. Currently interconnectors provide services by being active in competitive markets or through bilaterally negotiated services. More work could be completed to identify the technical capability of interconnectors and how the ESO could benefit from them. We feel more could be done to tailor products and develop transparent markets to take advantage of the enhanced capability which interconnectors could provide over traditional generation. Ancillary services cannot be considered in an interconnector's CBA due to the lack of transparency of currently operational services or a lack of reliability on these markets. We would therefore support Ofgem requesting the ESO to engage with TSO's in connecting markets to investigate and take advantage of the enhanced capability which interconnectors inherently have.

We recognise that Ofgem stated it will work with the ESO to establish how an analysis on system operability can better support any future regulatory regime for interconnectors. Alongside this we would welcome analysis on where the ESO could improve the use of interconnectors towards system operability and for this to be considered in any future analysis.

### **Future needs case assessments**

We support Ofgem's intention to draw more from public data and developer led assessments in future needs case assessments. However, we have concern on how Ofgem may ensure the public data is consistently employed between projects. Ofgem should seek to identify a public data source as the definitive and consistent source of information to inform the needs cases. This should be GB based to ensure Ofgem can consult and decide on its methodology ensuring

---

<sup>1</sup> Interconnector flows are controlled by power electronics and therefore are highly controllable, providing a very accurate and highly responsive Frequency Response service.

it is fit for purpose and consistent in its approach. As we have mentioned in previous consultation responses, this could be through an enhanced version of National Grid ESO's Network Options Assessment for Interconnectors (NOAIC). A lighter dependence weighting could then be used towards other available sources of data (such as ENTSO-E's TYNDP) to highlight any potential areas of uncertainty where forecasts differ.

### **Conclusions and initial proposals**

Taking our comments above into account, especially with respect to system operability, we agree with Ofgem's conclusion. We would urge Ofgem to identify and challenge why system costs may be attributable to future interconnectors and where they should be balanced against a system saving elsewhere. Furthermore, we encourage Ofgem to challenge whether a cost being borne by the ESO to manage the connection of an interconnector is due to an inefficiency in or ineffectiveness of the balancing market or wider network or where this is an unavoidable cost but justified by the overall net benefit of the project. Ofgem should ensure that economically beneficial projects should not be rejected or appear more costly (and therefore less beneficial) due to shorter term or legacy issues on the onshore network.

Finally, we would like to highlight that the initial proposals set out by Ofgem are not conclusive. They state that Ofgem will explore further the methodologies on how the aims of this workstream may be implemented. Ofgem state that these will be included in a decision as final proposals and therefore we can assume there will be no views sought from stakeholders on the proposals. We are of the view that this is an opportunity missed by Ofgem as this consultation would have benefited from a minded-to decision. Without a proposal being put forward by Ofgem, it is very difficult for responders to be specific in their views. We obviously support Ofgem investigating this further and remain an engaged stakeholder. However, we are limited in what we can contribute to the process in light of the above.

If you would like to discuss any of the comments above, please feel free to contact me.

Yours sincerely,



Richard Sidley  
Regulatory and Commercial Manager