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**Energy**

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Your Ref 159/12
Our Ref 159/12
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Dear Ms Smith,

**Response to consultation on licence policy for future tenders**

**Preamble**

This response to the above consultation is on behalf of Siemens.

Siemens is the market leading design and build contractor for offshore grid connections and builds onshore transmission substations as an Alliance partner of National Grid. Siemens is also the leading supplier of offshore wind turbines and a co-investor in three UK offshore wind projects.

We are pleased to support this consultation. We recognise that the majority of the content is outside the normal scope of supply for Siemens. However, we would like to make specific comment on areas relating to transmission losses and availability that are described in Chapter 5 of the document.

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**Incentives for improving availability**

In the document you propose a capacity weighting mechanism that looks not only at the Megawatt hour (MWh) availability (as is the case under the current mechanism) but also at the duration of the outage and capacity availability during the outage. You describe a scenario where the OFTO would be proportionally increasingly penalised when the average loading of a windfarm was well below the maximum capacity. You propose that fewer penalties would be incurred for an outage that was a result of a small drop in capacity over a longer period of time than for the same MWh outage that was a result of a large drop in capacity for a short amount of time.

Based on our understanding of typical windfarm generating behaviour we believe this to be a sensible proposal. We expect that it would encourage the OFTO to maximise capacity during failure or maintenance in a way that recognises the practical operating parameters of a windfarm. We also believe that it would be technically possible to implement in the SCADA system.

In your consultation, you also questioned whether the target availability of 98%, as specified in the transitional regime, is appropriate for HVDC projects being delivered far offshore. We believe that this target could present a challenge for HVDC products available in the marketplace when delivered in the Round 3 environment, and would recommend further studies to determine a more suitable availability target.

**Transmission Losses**

You discuss appropriate controls for reducing losses through the design of transmission assets, and note that there is no way to incentivise the reduction of losses through the OFTO license, as the assets will already be in built and in operation when the licence is granted.

We are pleased that Ofgem is considering network losses and would strongly encourage further analysis in this area. We believe that the exclusion of losses from the developer's business case has the potential to skew investment in favour of technologies that might not offer the most efficient transmission solution, and hence may ultimately represent worse value for money for the consumer. At the moment there is no regulatory requirement or incentive for losses to be taken account of in designs as the cost of losses will not be borne by the developer. A lower loss system may have higher initial CAPEX costs but could offer a lower overall cost of usable energy that is delivered into the transmission network: at present, the regulatory regime does not differentiate in this regard.

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An appropriate incentive mechanism might be achieved by defining a reasonable target electrical loss figure (losses at maximum load or total MWh loss vs total MWh input) then declaring a £/MWh penalty or bonus that the developer would get when they sell the asset depending on their system performance under specified conditions.

We believe that this issue needs to be addressed immediately if Ofgem is to have an impact on the design of early Round 3 projects. System topologies are being defined for many of these projects at the moment and the period where meaningful intervention can be made will soon have lapsed. We believe a clear, immediate statement from Ofgem is needed that states loss calculations (valued at a rate including any subsidy paid) should be part of a cost benefit analysis and that future asset valuations will expect evidence to show this is the case.

This could be simply achieved in an open letter. Clarifying intent in this way would be sufficient to encourage developers to properly consider losses in the interest of customers as their designs are developed.

In the document, you also state that your technical advisers have quoted transmission loss levels of around 3-5%, with these being mainly dependent on the design of the system. Our recent studies have confirmed that this banding is broadly accurate, although it is perhaps shows a pessimistic view when compared to a recent study completed on a Round 2.5 project.

Yours sincerely,

**Ben Bowler**

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