

Mr Ian Marlee
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Our Ref	146/12
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Dear Mr. Marlee,

Response to Request for Further Views and Evidence Integrated Transmission Planning and Regulation Project (ITPR)

Introduction

This response to the Ofgem consultation Ref: 146/12 is on behalf of Siemens Energy.

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 therefore have a detailed understanding of what it takes to deliver an integrated, efficient on and offshore transmission network.

We thank Ofgem for carrying out a consultation on network planning and delivery arrangements for electricity transmission. We support the consultation and believe that it is an important step in providing a cost effective model for delivering the transmission network Britain requires as part of the changing generation mix including both onshore and offshore generation and interconnection. We believe that long term network coordination is especially critical if offshore wind is to meet the cost reduction targets described in DECC's Renewables Roadmap. It is also essential in supporting the development of a sustainable, cost effective supply chain.

While the consultation deals primarily with the mechanics of regulation, we feel it is important to respond from the perspective of an equipment supplier and design and build contractor. We look forward to providing continued support to this consultation.

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Issue 1: The obligations and incentives on the multiple parties involved in transmission network planning and delivery may not align to ensure that individual networks or assets develop in line with the overall needs of the system.

The existing obligations present themselves to a designer or equipment supplier in a range of ways. Most evident is a lack of standardisation. The different regulatory treatment of interconnectors, boot-straps and offshore transmission has a direct impact on the specification of the assets by our customers. For example the differing treatment of losses or impact of non availability can make a significant difference to network topology and the design of major components like transformers.

In the case of UK offshore wind, a combination of factors including, but not limited to, the OFTO process, user commitment and charging regimes drives each generator to develop a (typically radial) project that is very specific to the needs of an individual wind farm. As well as preventing a move to the 'OFTO build' model, this has the following impact:

1. It is difficult to plan manufacturing volumes or drive innovation in manufacturing without clear technical direction. A manufacturer needs clear asset policy to drive R&D;
2. The maintainability of assets is restricted: it is difficult to adopt a whole system approach to asset management with a system of limited conformity;
3. There are limited opportunities to drive costs down through consistent design and bulk tendering. Further, the costs involved in tendering are significant and drive up the overall cost of reaching financial close;
4. Further to point (3), the existing arrangements do not necessarily reflect the significant risk posed by the development process, in particular relating to the procurement cycle for long-lead time items. Greater flexibility may be required to allow proportional risk to be taken on by parties involved in the development process.
5. The need for a future OFTO asset valuation drives customers towards a simplistic competitive bidding process but the complexity of the many driving factors requires significant effort to consider a wide range of possible options. A lower outturn cost and more optimized solution require an extended iterative and collaborative design period.

In addition to the above, there is a need for clarity on the regulatory framework that allows transmission assets to be used both to transmit the output from wind farms while acting as a bootstrap or reinforcement for the onshore network. At present it is unclear how a developer will recover the costs of including additional capacity or capability in an offshore asset. This presents itself to us in the tendering process: a lack of clarity may prevent us from working with the developer to optimise system configuration or reduce overall costs of an offshore scheme.

Issue 2: The framework for GB transmission entities to engage in European transmission activities may not provide an effective means for all relevant parties to contribute, giving rise to a risk that the GB system insufficiently represented at the European level.

Cross border working is not a barrier for Siemens. Furthermore, we engage with ENTSO-E via our German parent company. We are also aware that National Grid is a prominent ENTSO-E member.

Stronger UK engagement would perhaps allow stronger UK influence in European transmission activities and therefore be of long term benefit to the development of the UK transmission network.

Issue 3: There is a potential for conflicts of interest for parties undertaking transmission planning and delivery.

Business separation issues are not a great concern for Siemens and we think that existing safeguards are strong enough. Whilst an independent TSO might appear attractive in theory we recognise the benefit of the greater understanding and cost focus where the TSO also owns and manages some assets. We see a mixture of ownership, as is the case in the UK, does deliver benefits.

There are a number of successful examples where Siemens has provided equity or debt contribution to offshore transmission projects alongside developers, utilities or generators while simultaneously playing a majority role in the delivery of assets for those projects.

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Misalignment of regimes is more of a concern as we move towards a more integrated European transmission network. This relates to both regulatory and technical misalignment.

Issue 4: The regime interfaces for transmission related multiple purpose projects are potentially unclear, giving rise to a lack of clarity around regulatory treatment for these assets.

Fixed or standard rates of return do not reflect varying degrees of risk or complexity across the spectrum of offshore projects. Rather, flexibility in treatment should be allowed that reflects risk apportionment, contracting strategies etc. We would like to see the allowance of appropriate rates of return for the risks taken at different stages or parts of a project.

A lack of standardisation in relation to block size or configuration limits the ability to integrate across different suppliers. This affects competition and will adversely affect a reduction in costs to deliver assets. It will become more pronounced as we move towards the scenario where the onshore network is reinforced using offshore assets. We therefore support the ongoing development of industry standards that ensure offshore assets are suitable for the environment in which they operate, as well as those that move us closer to multi-terminal HVDC systems.

We believe short term gains could be made for customers through adoption by offshore developers of more standard block sizes for wind farms.

For HVDC transmission existing suppliers each have different solutions. An attempt to standardize now would result in an inefficient lowest common denominator standard. However there would be significant longer term benefit in setting standards for of the next generation for all to work towards.

We agree that the use of offshore connections as potential onshore network reinforcement is an area that is worth considering further.

Yours sincerely,

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