

To all with an interest in
offshore electricity transmission

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all gas and electricity customers*

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Dear Colleague

**Offshore Electricity Transmission: Open Letter on the Enduring Regime -
Clarification of transmission losses**

In our recent consultation document on the enduring offshore regime¹ we flagged that one of the factors that the Authority may consider in its assessment of enduring tender bids could be the transmission losses which would be incurred by the proposed transmission system. Additionally, in previous Offshore Transmission Policy documents² we have also set out that we did not consider it appropriate for an energy losses incentive to be put in place under the transitional regime. However, we recognise that it may be appropriate to consider such a mechanism under the enduring regime. As such, we thought it appropriate to clarify that we would still be open to considering such a mechanism and would welcome respondents' views as to the suitability of including a losses incentive under the enduring regime.

It is worth taking the time to understand energy losses and why they are important in the context of the enduring offshore regime. In any electricity transmission network the total metered energy which can be drawn from the Transmission System to meet demand will always be less than that delivered onto the Transmission System by generation, since some energy is used up in the process of transporting electricity. The energy 'lost' from the Transmission System is commonly referred to as 'transmission losses'.

Transmission losses can occur for various reasons such as losses in transformers (the losses arise from magnetising the iron core), cables (they include losses dependent on the voltage levels, length of line and climatic conditions) and the heat caused by current flowing through the transformers and lines. As such transmission losses can be influenced by network design and consumers pay for these energy losses through a combination of higher generation prices and network fees. It may be in consumers' interests for the network designs adopted by the bidders to have low energy loss rates (although cost of design will also be relevant). Therefore it may be reasonable for the Authority to account for this factor in the design of the enduring regulatory regime and tender process (as set out in paragraph 8.13 of the enduring regime consultation³).

In making our assessment of any bid we may therefore need to consider the benefit to consumers in various network designs. We may do this through a detailed technical analysis of each design. Such detailed technical analysis may be informed by NETSO and

¹ Offshore Electricity Transmission: Consultation on the Enduring Regime (Ref no. 157/09), 18 December 2009

² Offshore Electricity Transmission - A further Joint Ofgem/DECC Regulatory Policy Update (Ref no. 153/08), 20 November 2008

³ Offshore Electricity Transmission: Consultation on the Enduring Regime (Ref no. 157/09), 18 December 2009, pp55

the generators analysis of proposed designs or we may alternatively make our own detailed assessment of network design. However, we note that comparing the network designs of bidders could be highly subjective.

An alternative – or supplementary provision – to this approach may be to include an energy losses incentive. Such an incentive could be set generically ex ante across all enduring projects, with bidders altering their submissions on the basis of a minimum standard that would be incentivised. Alternatively, it could be defined on the basis of the level of losses specified by the winning OFTO in its bid (i.e. the incentive would aim to ensure that the level of availability specified in the winning bid is actually delivered by the appointed OFTO). In either case, if losses on the built network increased beyond the target loss factor due to network design, the OFTO would then receive a lower level of revenue to compensate users for the higher level of losses. We would welcome views as to the need for and design of any such incentive.

Next Steps

We note that the energy losses issue set out above creates some complex policy questions when considered in conjunction with our enduring regime consultation. We also recognise the need to provide, to the extent practicable, certainty to developers and investors about the form of an enduring regulatory regime for offshore transmission. We are committed to working with market participants, including potential OFTOs, financiers, generation developers, DECC and the Crown Estate to fully consider these issues.

Responses to our enduring consultation, including this additional open letter on the treatment of losses, should be submitted by 12 February 2010. Responses should be sent to:

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Should you wish to discuss the issues raised in this document, please contact Sam Cope on 020 7901 7239 or at sam.cope@ofgem.gov.uk.

Yours sincerely,

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