



Catherine Williams
Head of Commercial Regulation – Electricity Transmission
Ofgem
107 West Regent Street
Glasgow
G2 2QZ

Email to: project.transmit@ofgem.gov.uk

27 May 2014

Dear Catherine

Project TransmiT: Further consultation on proposals to change the electricity transmission charging methodology

EDF Energy is one of the UK's largest energy companies with activities throughout the energy chain. Our interests include nuclear, coal and gas-fired electricity generation, renewables, and energy supply to end users. We have over five million electricity and gas customer accounts in the UK, including residential and business users.

We continue to believe that there should ideally be at least two years' notice of implementation of changes to the way TNUoS charges are calculated, and therefore would like to see implementation deferred until April 2017. There is a capacity auction planned for this autumn, and it will be useful for the final decision on CMP213 to be taken in good time ahead of that, to enable relevant parties to submit their bids with the best available knowledge of what their future TNUoS charges will be.

We continue to believe that the original version of CMP213 was flawed, and that diversity method 3, best reflects the way that generators share the network, with diversity method 2 doing so less well, and diversity method 1, which is inherent in the selected option, WACM2, doing so still less well. We do, however, agree that your chosen variant, WACM2, is better than the Original version of CMP213 (which features simple load-factor based dilution of the new year-round charge element, with no account taken of diversity).

We note that, based on the revised modelling you commissioned from Baringa, there are small adverse consumer bill impacts; we are inclined to agree with you that these are likely to be within the margin of error of models of this type, spanning so many years into the future (up to 2030).

EDF Energy
40 Grosvenor Place, Victoria
London SW1X 7EN
Tel +44 (0) 20 7752 2200

edfenergy.com
*EDF Energy plc.
Registered in England and Wales.
Registered No. 2366852.
Registered office: 40 Grosvenor Place,
Victoria, London SW1X 7EN*

We make some more comments about your various modelling assumptions and results, in our detailed responses to your questions; these responses are set out in the attachment to this letter. Should you wish to discuss any of the issues raised in our response or have any queries, please contact Mark Cox on 01452 658415, or me.

Yours sincerely,

A handwritten signature in black ink, appearing to read "Angela Pearce".

Angela Pearce
Corporate Policy and Regulation Director

Attachment

Project TransmiT: Further consultation on proposals to change the electricity transmission charging methodology

EDF Energy's response to the numbered questions in the consultation

Question 1: Do you agree with our interpretation of benefits to consumers of implementing WACM 2, including revised impact assessment modelling?

We note that the revised modelling undertaken by Redpoint (now a part of Baringa) for Ofgem, shows a small adverse consumer impact. We are always concerned about any adverse impact on consumers' bills. However, undertaking this sort of modelling via a suite of models, of the whole electricity system, including forecast build of generation and transmission and forecast payments to generators under EMR out to 2030, is certain to be, to some extent, inaccurate. Some details of EMR are still subject to possible change. We agree with Ofgem that the small adverse consumer impact cannot be regarded as reliable in the context of the margin of error that is inevitable in such modelling. We further agree that the increase in domestic consumers' electricity bills in the revised modelling, ranging from +£0.75p per home p.a. in Baringa's base case to +£0.05p per home p.a. in Baringa's alternative case, falls within the margin of error of the modelling as a whole.

Although, for the reasons set out in detail in our last two responses, we believe that diversity methods 2 and 3 take better account of the way generators behind a constraint share transmission capacity, than diversity method 1, we nonetheless agree that diversity method 1 (WACM2) takes better account of this sharing, than the Original version of CMP213. Moreover, we agree that WACM 2 better meets the CUSC applicable objectives overall than status quo (these objectives are based on the general principles that are agreed to apply to charge calculation). Therefore, although we do not believe it to be the best possible option, we would support the proposed implementation of WACM2.

We regret that the revised modelling was not carried out for a variant of CMP213 based on diversity methods 2 or 3, as this means that a comparison is not possible of the consumer impacts that would arise from these variants of CMP213. Publication of the distributional impact of the effects of the modelled tariffs could also have been beneficial, as a step towards analysing possible impacts on competition.

We note that the earlier RWE-commissioned modelling/evidence by NERA seemed to show that tariffs under WACM2 were less close to the LRMC (long-run marginal costs) of new transmission than the status quo for intermittent generators in cases where the marginal transmission investment is HVDC (generally, this may tend to be the case for new wind generation in Scotland, but will not be so for any other new generation). On the other

hand, where the marginal transmission investment is not HVDC, NERA's modelling for RWE found that the new WACM2 TNUoS tariffs approximate better to LRMC, than status quo TNUoS tariffs. We agree with Ofgem's response to this modelling, that there will be a range of new generation technologies and locations, and accordingly, a range of transmission investment types – which will not always entail the relatively expensive HVDC technology.

We do feel that the suggestion in section 2.48 of Ofgem's consultation that WACM2 might encourage the development of more tidal and wave power, with consequent consumer benefits, may be a little speculative. Both of these technologies are currently reliant on power sales prices of around £300/MWh; as to wave power, it tends to co-vary markedly with wind power in its region, and may lack diversity benefit when considered alongside the output of wind power. If tidal power does become cheap enough to be developed at scale as a reliable, affordable zero carbon technology around 2030, that is unlikely to be due to WACM2.

Question 2: Do you agree that the revised impact assessment modelling captures concerns raised during August 2013 consultation about the NGET modelling?

Yes. We note that it is assumed in the updated model prepared by Baringa, that all non-CFD plant that doesn't secure a capacity contract in the 2014 capacity mechanism auction, will close in or before 2018. This seems reasonable – a few such plant might "limp on" with a STOR or similar special balancing-services-support-related contract from National Grid, but that is effectively outside the market, and doesn't invalidate Ofgem's general assumption.

We note that one cause of variance in the results lies in the assumption made for imports from interconnectors to GB at time of peak British demand. Interconnectors are assumed to contribute 0% to useful peak generation capacity (in the capacity auctions as modelled, which target a 10% generation margin) at these times in Baringa's main modelling case, so that (particularly given the very limited assumptions that we are told were made as to the contribution from demand side response) more capacity support payments are needed, increasing the impact on consumer bills. In Baringa's alternative case, imports from interconnectors at time of peak demand are viewed as more reliable, flowing at 75% of their total capacity. In truth, there is evidence that anticyclonic weather systems in the Northern hemisphere can span a large area – up to 3,000 km in diameter. This means that at time of peak demand, during cloudless, windless, very cold conditions in GB, there may be a power deficit at the same time across many the EU member states that have a significant wind fleet. Some interconnectors may have an emergency assistance clause where, in an emergency, the relevant system operator of the Member State at either end may request that commercial flow be over-ridden to ensure maximum import takes place to the Member State of which the system is under stress. This is known to have been useful to GB on one occasion in the past. However, at least one interconnector into GB has a cancellation clause whereby if the system operators at both ends invoke the emergency assistance clause, the effect cancels out and no extra flow to GB will take

place. Therefore, the 0% assumption for interconnector imports at time of peak demand (Baringa's base case) may be more prudent than the 75% assumption (Baringa's alternative case) – although the true position is likely to lie somewhere in-between Baringa's two scenarios.

We take comfort from the independent review of the revised Baringa modelling that has been undertaken by Lane Clark and Peacock (LCP), to ensure that data transposition errors did not occur between the various model elements. We appreciate that LCP validated that the assumptions and modelling approach, including those around EMR and renewables build volumes, are sound, ensuring that the modelled outcomes under WACM2 and status quo are comparable, as total renewables build does not differ between the two – thus addressing a criticism RWE had made of the original, 2013 Redpoint modelling.

Question 3: Do you agree with our minded-to position in light of new evidence discussed below and the responses to the consultation set out in Appendix 2?

We continue to believe that a variant based on diversity method 3 or, absent that, diversity method 2, would have been better than this variant, which is based on diversity method 1; however, we believe that overall, WACM2 is better than status quo. We continue to agree with the element of WACM2 that relates to the treatment of HVDC convertor costs (full inclusion).

Question 4: Do you agree with our minded-to position to implement in April 2016?

We strongly believe that two full charging years' notice is required of any change to the TNUoS charge calculation method. Given that the completion late in 2016 of the HVDC bootstrap from Hunterston to Deesside would not, in any event, be taken account of in the tariff calculation until 2017/18, we urge Ofgem to defer implementation of WACM2 until April 2017; we also urge that the decision on CMP213 be taken as soon as possible, and in any event, well ahead of this autumn's capacity auctions, to maximise available notice.

**EDF Energy
May 2014**