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Judith Ross
OFGEM
9 Millbank
London
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Our Ref: EN01-005543

5 May 2017

Dear Judith,

Re: RES Response to the Ofgem Targeted Charging Review Consultation

RES is one of the world's leading independent renewable energy companies working across the globe to develop projects that contribute to our goal of a secure, low carbon and affordable energy future. We develop, construct, finance and operate onshore wind, solar PV, transmission network and energy storage assets. In over three decades of operation, we have developed 10% of the UK's onshore wind capacity and 12GW of wind globally, developed 1.3GW of solar PV globally, built over 1,600km of transmission network outside the UK and become a world leader in energy storage. We have used that storage experience in the UK to work closely with NGET to develop the new Enhanced Frequency Response service.

We welcome the opportunity to respond to the OFGEM "Targeted Charging Review: a consultation" document of 13 March 2017 and support the move to initiate Targeted Charging Review (TCR) of the residual component of transmission and distribution use of system charges. However, if it is to deliver the best outcome for consumers, the findings of the TCR must be placed in the context of a charging vision emerging from holistic review of total system charging. We think that delivery of this holistic review can be owned by the proposed Co-ordinated Charging Group (CCG) but its terms of reference and constitution must be clear on this aspect of its remit. We are supportive of the *Electricity Charging Arrangements* Report prepared by Energy UK and ask that it be given due consideration in deciding on the scope of any such charging review.

Detailed responses to your questions are set out below. If you wish to discuss any element of this response please don't hesitate to contact me.

Yours sincerely,

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Question 1: Do you agree that the potential for residual charges to fall increasingly on groups of consumers who are less able to take action than others who are connected to the system, is something we should address?

Yes.

Question 2: If so, why do you think, or do not think, action is needed?

There are a number of phenomena arising in the charging for use of licensed electricity networks that prompt the need for investigation and review. Issues such as triad “runaway” and likelihood of transmission generation residual going further negative in years to come indicate that transmission use of system charging may not incentivise behaviours that will arrive at the most efficient outcome. For this reason, we understand Ofgem’s desire to target residual charges. However, these are but two phenomena amongst a range of issues that give rise to potential market distortions. Other obvious issues include the depth of connection charging depending on whether a generator connects to a distribution system or to a transmission system and also the definition of electricity transmission itself in Scotland relative to England & Wales. There are clear interdependencies between residual charging, forward looking charges and other grid commercial matters such as access rights and connection charging. Applying modifications in one of these areas will be likely to create impact in other areas. Whilst we support the establishment of some base principles that will inform the structure and guide the development of residual charges going forward, we also consider that arriving at the optimum set of charging rules can only be arrived through the setting of a vision through holistic review of all aspects of total system network charging.

Question 3: We are proposing to look at residual charges in a Significant Code Review. Are there any elements of residual charges that you think should be addressed more urgently? Please say why.

No. As per response to question 2, we would encourage Ofgem to not draw conclusions on long term change to residual charges until a thorough and holistic review of total system charging is concluded. We accept that it may be prudent to put in place an interim measure until such a review is complete.

Question 4: Are there elements of the approaches in other countries that you think could be appropriate for GB residual charges?

We can see how there are elements of the approaches taken in other markets that could be usefully applied in GB but that it is too early in our review process to draw conclusions on which of these elements could be best applied.

Question 5: Are there other approaches that you know about from other jurisdictions, that you think offer relevant lessons for GB?

No. We would highlight that many other jurisdictions appear to have made changes to charging methodology in response to changes to the use of the relevant electricity system. We would encourage Ofgem to be proactive (rather than reactive) and consider changes to network charging that will best deliver a future vision for the GB total electricity system.

Question 6: Do you agree that our proposed principles for assessing options for residual charges are the right ones? Please suggest any specific changes, or new principles that you think should apply.

We agree that the proposed principles will help to shape residual charges in a way that better serves users of the GB total electricity system and agree that it will be necessary to establish some clarity around the definition of each. In particular, we highlight the significance of proportionality and practicality, taking into account factors such as simplicity, transparency and stability such that investors can understand the new rules and invest with confidence (and therefore at lower cost to consumers). We look forward to further supporting Ofgem in establishing accepted definitions of these principles.

*Question 7: In future, which of these parties should pay the transmission residual charges: generators (transmission- or distribution-connected), storage (transmission- or distribution-connected), and demand, and why? What proportion of these charges should be recovered from each type of user? **AND** Question 8: In future, which of these parties should pay the distribution residual charges: generators (transmission- or distribution-connected.), storage (transmission- or distribution-connected), and demand, and why? What proportion of these charges should be recovered from each type of user?*

We encourage Ofgem to set its vision for a charging methodology (or methodologies) which fits the future system and facilitate a holistic charging review to help deliver that vision before considering which charges should be recovered from different types of users.

Question 9: Do you support any of the five options we have set out for residual charges below, and why?

We think it is too early in the review process to determine which of the five options or combinations of the five options should be adopted. At this stage, we are sceptical that gross consumption would best support the proposed principles but we will reserve final judgement until there has been further progress of the TCR.

*Question 10: Are there other options for residual charges that you think we should consider, and why? **AND** Question 11: Are there any options that you think we should rule out now? Please say why.*

As per Q.9, we think these questions should be covered within the scope of the TCR.

Question 12: Do you think we should do further work to analyse the potential effects of the charging arrangements for smaller EG (called 'embedded benefits')?

Yes. This further work should consider the 'bigger picture' of the net impact upon smaller EG, which would include the aspects of charging included in our answer to Q.15, below.

Question 13: Do you think changes are needed to the current charging arrangements for smaller EG, and when should any such changes be implemented?

Yes, and that this should be considered within the scope of the TCR taking into account aspects of network charging listed in our answer to Q.15 below. Ahead of TCR completion, we accept that it may be prudent to put in place an interim measure for the specific issue of

triad “runaway” element of embedded benefit – please see our related consultation response to your *mind-to* position on CMP 264/265.

Question 14: Of the embedded benefits listed in our table, do you think that any should be a higher or lower priority?

No.

Question 15: Do you think there are other aspects of transmission or distribution network charging which put smaller EG, or any other forms of generation or demand, at a material disadvantage?

We note the following aspects of network charging and charging-related policy which place “EG” at a material disadvantage:

- i. Connection Charging, and particularly the connection / infrastructure charging boundary, which requires significantly higher up-front capital expenditure (per unit connected) for distribution connected generators.
- ii. The definition of transmission system in Scotland.
- iii. SO User Commitment (CUSC section 15 and related implementation policies) has yet to be adequately updated to best reflect a large queue of small and frequently-changing list of EG. User Commitment policy presently focusses on the risk of an individual party terminating a connect offer, as opposed to the aggregated risk of capacity delivered in a specific area, hence placing an unreasonably higher per-unit liability burden onto distribution generator connectees.
- iv. Greater clarity on commercial network access rights for distribution connectees (in comparison with TEC for transmission connectees) and the subsequent relationship with network charging. Presently, distribution connection agreements give DNOs blanket and broadly unqualified powers of unmeasured and uncompensated constraint over DG, apparently without quantified assessment of the most overall efficient network solution.

Question 16: Do you agree with our view that storage should not pay the current demand residual charge, at either transmission or distribution level?

We would support this as a practical and proportional interim change ahead of the completion of a more holistic review. The charging methodology should align with the fact that final consumption is only applicable to storage on a net-basis.

Question 17: Do you agree with our view that storage should not pay BSUoS on both demand and generation?

We would support this as a practical and proportional interim change ahead of the completion of a more holistic review.

Question 18: Which of the BSUoS approaches described is more likely to achieve a level playing field for storage?

Once again, we believe that a clear vision established through holistic review of charging is a necessary step before this question can be properly answered. It must be acknowledged that a significant volume, if not the great majority, of electricity storage facilities will be connected to distribution networks. and so the full impact of all charging change – considering all embedded ‘benefits’, and any changes to residual UoS (D and T), as well as any changes to any of the aspects listed in our answer to Q.15, needs to be adequately assessed before this question can be quantifiably addressed.

Question 19: Do you think the changes in this chapter should be made ahead of any wider changes to residual charging that may happen in future? Do you agree with our view that these changes should be implemented by industry through the standard code change process?

We agree that there is overall benefit in making such changes (Questions 16, 17) with urgency, even on an interim basis whilst a future system vision of network charging is developed in parallel, in order to remove a barrier to growth in storage development. We agree that standard code change process is the route most likely to deliver the pace of change required.

However, we are also mindful that the standard code change process tends to favour larger companies, often more likely to be involved with transmission connecting assets, and, as a result, may not best reflect the needs of a future smart flexible energy system.

Question 20: We would welcome your thoughts on the potential make-up of a CCG. Please refer to the potential role, structure, prioritisation criteria and assessment criteria.

We are mindful that standard code change processes tend to favour larger companies, often more likely to be involved with transmission connecting assets, which, as a result, may not best reflect the needs of a future smart flexible energy system. We would encourage all efforts to make sure any such coordination group is reflective, insofar as practically possible, of stakeholders most likely to be enablers of a near-future smart flexible energy system.

Question 21: Do you agree with our proposed delivery model, including its scope?

We believe the scope of work as proposed is too narrow. We would refer to Energy UK’s 2016 *Electricity Charging Arrangements* Report and note that connection charge boundaries, exporting GSPs, behind-the-meter generation should all be included. Please also refer to our answer to Q.15, where we set out a list of relevant aspects of charging which must be considered in parallel with the central issue of residual charges.

Question 22: Do you agree that our proposed SCR process is most appropriate for taking forward the residual charging and other arrangements for smaller EG discussed in this document?

We agree that the charging changes under consideration are materially significant, and as set out in our cover letter and in our answer to Q.7 we believe that the fundamental vision for network charging needs to be established and then communicated. For this to occur, we believe that a SCR is required.