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Andrew Self
Ofgem
9 Millbank
London
SW1P 3GE

Our Ref: EN01-005538

13 April 2017

Dear Andrew,

Re: RES Response to Ofgem Minded to Decision Consultation - CMP264 and 265

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 CMP 264 / 265 Minded to Decision and Draft Impact Assessment* consultation document of 1 March 2017 ("the Ofgem Minded to Consultation"). We also fully recognise that there are deficiencies in the current approach to electricity network charging across both transmission and distribution systems. These deficiencies send perverse charging signals that give rise to a potentially inefficient total electricity system; the current approach to treatment of the demand transmission residual is one such deficiency.

We agree that change is necessary. However, we disagree with Ofgem's minded to decision to approve "WACM4" and disagree with key elements of the rationale presented in support of it. Responses to the individual questions raised in the Ofgem minded to consultation are set out in the appendix to this response but key points that we would highlight are set out below. Noting that the valuation of benefit specified in "WACM4" is at the lower end of the spectrum of options, and therefore delivers practically the largest change from status quo:

- The proposed solution could interfere with the more holistic review which is about to be undertaken by Ofgem. The Targeted Charging Review (TCR) is expected to be able to provide an enduring equitable solution for all industry participants in respect to the Triad Demand Residual charge (TDR)
- Moving to a lowest-valuation outcome ahead of the holistic review as part of CMPs 264 and 265 would not be appropriate. **We would instead support WACM7**, as proposed by National Grid, which would enable the targeted charging review to take place, while also reducing the impact on customers that a spiralling triad charge could create if no action is taken.

To consider this issue fully and **provide the evidence** upon which we have based our position above, we have co-sponsored a piece of independent study work by *Cornwall Energy Associates* (Cornwall) on this proposal and the related impact. We encourage you to carefully consider this study work which has been submitted separately.

If you wish to discuss any aspect of this response, please do not hesitate to let me know.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'G.Pannell'.

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Appendix

Question 1: Do you agree with our problem definition and that the Transmission Network Use of System (TNUoS) Demand Residual (TDR) payments to sub-100MW Embedded Generation (“smaller EG”) are distorting dispatch, wholesale price, the capacity market (CM) and that they pose an increased cost to consumers?

We agree the current charging arrangements create potential distortions and action is required to prevent charges becoming excessive for consumers. Due to the wide ranging interactions within the electricity market the proposed solution could open up further potential distortions. The Targeted Charging Review (TCR) is the appropriate forum to develop these and therefore we do not support moving to WACM4, which we believe is a lowest-valuation solution which may subsequently need to be unwound as part of the TCR conclusions.

We believe that the scope of the CMP proposals were too narrow. The issue of rising TDR payments is significantly related to the triad methodology which is increasingly unreflective of present and near-future use of the electricity network. Excluding the triad methodology from the scope of possible change risks addressing only the symptoms rather than the cause of any resulting distortion of charging signals.

Question 2: Do you agree that rising TDR payments to smaller EG is a problem which needs to be addressed?

We agree that rising TDR payments are not cost reflective and action is required to address this. However we note WACM4 is not an appropriate method for this and we would be more supportive of WACM7 as a practical interim measure better aligned with the applicable CUSC objectives.

As per our answer to Question 1, interrelated areas of charging must also be addressed, including for example the triad methodology itself.

Question 3: Do you agree with our interpretation of the applicable CUSC objectives?

We have focused our answer on our disagreement with your assessment against the applicable objectives, please see answer to question 4.

Question 4: Do you agree with our assessment against the applicable CUSC objectives and statutory duties? Please provide evidence for any differing views.

Against **CUSC objective A** – No. The charging methodology should facilitate effective competition in the generation and supply of electricity.

Ofgem states in 4.5 of the Ofgem Minded to Consultation that “*Competition is best facilitated by non-discriminatory arrangements that do not inherently favour particular market participants.*” The assessment in the minded to decision assesses the degree to which the WACMs facilitate competition by removing distortions. It considers five criteria as follows:

- The level of TDR payment to smaller EG (the value of “x”)
- Whether the options expose smaller EG to the TNUoS Generation Residual

- Whether and how the options prevent disincentives on smaller EG to generate at peak triad periods
- Whether and how the options 'grandfather' existing TDR payments to smaller EG
- Whether and how the options use phased implementation

Without a holistic review it is not possible to determine if WACM4 is better than the baseline as it may impact competition through the creation of new market distortions. National Grid has highlighted several interactions between the TDR and other aspects of the market. Consequently, it is not possible to determine whether the WACMs are removing market distortions or creating new ones within the narrow scope of evidence presented for CMP 264 / 265.

In the light of the imminent commencement of a holistic review, the selection of WACM4, a lowest-valuation position for embedded generators, seems to be inappropriate and a middle ground position would be more suitable to prevent escalation whilst also preventing the creation of distortions elsewhere in network charging arrangements.

On **CUSC objective B** – the reflection of the costs incurred by transmission licensees in their transmission businesses and which are compatible with standard condition C26.

We are concerned here about the cost-reflectivity of the locational charges, the negative generation residual for transmission connected generation, the triad methodology, the different connections policy between distribution and transmission and the cap on charges to transmission connected generation. We believe that these issues have not been appropriately considered within the narrow scope of CMP 264 / 265 and thus there is insufficient evidence to conclude that WACM4 will deliver overall benefit to consumers.

In addition, we are concerned about the work done on the “value of X” in WACM4, we do not believe enough evidence has been presented to demonstrate that this is the appropriate level. The £1.62/kW was calculated in 2013/14 and no update has been done on whether this is the appropriate method or base for charges.

Further evidence for this position is provided in the independent study work performed by Cornwall (submitted separately).

Question 5: In our assessment against the objectives, do you believe there are any relevant assessments we have not taken into account?

See answer to question 4, and please consider the study work performed by Cornwall and submitted separately.

Question 6: Do you agree with our assessment that, in this instance, grandfathering as set out in the WACMs would be unlikely to best facilitate the CUSC objectives when compared to the other options available to us?

We agree that change to network charges, in line with good governance arrangements, is an understood feature of the risk profile of the electricity industry. However we would also assert that, in some cases, grandfathering may better facilitate CUSC objective A (competition) as changing regulatory landscape that is not reasonably foreseeable can affect business viability, increase uncertainty and introduce new market distortions.

The regulator commented in 4.23 of the Ofgem Minded to Consultation:

“Generators, including CM/CfD holders, would have estimated future revenues and costs and set their CM/CfD bids accordingly. We do not know, and cannot comment on, what proportion of smaller EG that have secured CM contracts and CfDs have in fact relied on the continuation of current TNUoS charging arrangements in this way.”

In the Capacity Market, many embedded generators were aware the Triad benefit could change, however this is unlikely to be the case for many of the bidders in the CfD. At that time, it was reasonable for generators to assume some level of enduring triad based on historical values. At that time, it would have been reasonable for participants to assume some level of triad benefit in line with historic TDRs, as this has been above £10/kW since 2005.

However, WACM4 reduces it to around £1.62, indeed zero in several areas due to the negative locational charge, hence significantly below the historic average. It is unlikely investor business models would have expected triad residuals to fall to such a low level so quickly (because such an expectation would not have been reasonably foreseeable) and it is therefore reasonable to compensate them accordingly through the provision of grandfathering arrangements, or a more gradually phased approach.

Question 7: Do you agree with our assessment that the value of the avoided GSP investment cost best facilitates the applicable CUSC objectives?

No, we do not agree this modification is better than the baseline in respect of CUSC objectives A (competition) and B (cost reflectivity). Avoided GSP investment cost is one of the costs avoided by embedded generation but, we are concerned, due to the accelerated timescale of this modification, that there was not enough analysis performed by the workgroup to set the correct value or determine if this (or the associated locational charge) is reasonably reflective of the benefit. For example, the TDR was considered in isolation, yet the working group should have considered the locational element in their calculations.

Question 8: Do you agree with our assessment of the impacts on security of supply? Please provide evidence for provided views.

No, we believe the potential for significant effects on security of supply could be caused by this modification. It is, in our view, likely that CM participants will withdraw because of this change, and the press has already reported that some are seeking to exit the market. Investors are seeking to withdraw because of the potential for lower returns, but also because of the greater uncertainty and future charging volatility which may be introduced, or simply the perceived risk of unforeseeable future step-changes in charging arrangements.

Question 9: Please provide evidence to show if there are other cost savings which small EG drive in comparison to larger (over 100MW) EG on the distribution system.

The industry has a poor understanding of the impact of embedded generation on system costs, irrespective of the voltage level of connection. There has been insufficient time to properly analyse the value of embedded generators in a full and holistic way. We note that the targeted review, which is estimated to take a minimum of 18 months will undertake a more thorough analysis and yet the CMP 264/ 5 working group was expected to bring forward evidence in a much shorter timescale. Please see the Cornwall report highlighted previously in our reply.

Question 10: Is there other evidence that payment above avoided GSP/generation residual would better facilitate the applicable objectives?

Yes. A higher TDR above the avoided GSP investment cost would better meet CUSC applicable objective A (competition).

WACM7 would better meet CUSC objective A as it would limit the impact of market distortions that are likely to arise in other areas because of this change. Until these distortions are identified, evaluated and assessed through the TCR, it is impossible to determine whether WACM4 is better than the baseline and therefore a prudent approach is preferable. Please see the Cornwall report highlighted previously.

Question 11: Do you believe you have a legitimate expectation or contractual right for the continuation of TDR payments? If so, please provide evidence.

While we do not believe we have a legitimate expectation or contractual right for the continuation of TDR payments we do not believe the CUSC process has enabled this issue to be considered in a full and proper manner. We are concerned the process has been too rushed, without proper consideration given to the interactions between TDR and the wider market. Ofgem would be pre-empting the outcome of the TCR by adopting WACM4.

Question 12: Do you agree with our assessment of the distributional issues?

In paragraph 5.2, the Ofgem Minded to Consultation states “*the reduced payments by suppliers to smaller EG will reduce consumer costs.*” We are not convinced that this is the case and request that Ofgem consider wider impact of WACM4, including impact on investor confidence and cost of capital, as part of the TCR before drawing conclusions on costs and benefits to consumers.

Question 13: Are there any sectors that we may have overlooked?

We believe the distributional impact covered all appropriate sectors.

Question 14: Do you agree with our modelling approach?

We agree with the modelling approach, but are concerned about several assumptions made in the report. We remain sceptical about the assumption that the market would immediately move to build large, transmission-connected plant or “at the right time”.

Question 15: Do you think that our background assumptions and using FES data is an appropriate approximation for status quo?

We accept that there is substantial uncertainty for the future direction of demand. However, we accept that the slow progression is a reasonable scenario on which to base the modelling.

We are unsure about the assumption in the modelling that reserve costs will decrease in a system where new-build CCGT displace embedded generators. We would note that smaller scale embedded batteries and reciprocating engines are already providing cheaper frequency response than existing mandatory providers.

Question 16: Where WACMs are not modelled directly, do you think our assessment is appropriate (see appendix 8 for detail)?

Given the large number of WACMs submitted, we accept that some approximation needed to be made and that the assessment is reasonable in this respect.

Question 17: Of the options available to us, do you agree that WACM4 best facilitates the applicable CUSC objectives?

No, WACM 4 is not better than the baseline as regard objective A (competition) and B(cost reflectivity). WACM 4 is a worst-case scenario and pre-empts the outcome of the targeted charging review. We believe WACM 7 better reflects the uncertainty around the market distortions and value of the TDR for embedded generators.

Question 18: Do you believe that an implementation date of April 2018 best facilitates the applicable CUSC objectives?

It has been noted the TCR will take a minimum of 18 months to complete, and, if WACM4 is the appropriate enduring solution, the implementation date should be pushed back until the holistic review is complete.