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Dear Mark,

STATUTORY CONSULTATION: CHANGES TO THE CAPACITY MARKET RULES

Thank you for the opportunity to respond to the above Consultation. We welcome this as part of Ofgem's annual review of possible Capacity Market (CM) Rule changes.

We summarise below some of our key thoughts on this year's review process focussed on ensuring that the CM is fit for purpose in terms of delivering effective competitive outcomes based on a level playing field, so as to deliver security of supply as cost-effectively as possible.

Wider market reform context: addressing CM distortions and ensuring the cost-effective delivery of security of supply

Clearly, there is already important work underway relating to the broader market context for the CM, including addressing wider market distortions that have been negatively impacting on competition in the CM auction. To ensure that the CM auction is properly competitive, based on a level playing field, and duly delivers the intended level of security of supply it is vital that:

- There is a timely decision on, and then effective implementation of, Ofgem's CMP 264/265 'minded-to-decision'.
- There is further clear signalling on the intent to address issues relating to both the non-delivery risk associated with 'behind-the-meter' generation and ensuring that it competes in the CM on a level playing field – this requires urgent attention and should be treated separately from the Targeted Charging Review.
- Given that a number of industry commentators are expecting a significant level of non-delivery from embedded generators that currently hold capacity agreements, we consider that extra volume should be procured as part of the next T-4 CM auction for delivery in 2021/22. (The T-1 auctions can be used to help cover the position for the intervening years leading up to this.)
- If the newly proposed approach to calculating Connection Capacity cannot be implemented in time for the next T-4 auction, then, as the current arrangements may result in an estimated 1-1.5 GW 'capacity gap', extra volume should be procured.

ScottishPower's Rule change proposals

CP 213, Listing Generating Technology Class of a CMU on the Capacity Market Register:

We welcome the fact that Ofgem has decided to take our proposal forward. The information on both Generating Technology Class and Primary Fuel Type will increase transparency, helping industry players to more effectively analyse the CM competitive landscape, and enable participants to react more quickly to market trends. This will help to deliver more effective competitive outcomes for the benefit of consumers. Moreover, such greater transparency will help market participants, Ofgem, and BEIS to bring forward proposals to address new issues that might emerge over time.

CP209 - CP212 & CP238, Extending the duration of testing and the separation of Storage Classes:

We welcome the fact that it now appears to be recognised that steps need to be taken to ensure that consumers are properly protected from the risk of CM resources being unable to deliver for the full duration of potential Stress Events. As is noted in the Ofgem consultation document, the System Operator is developing a new de-rating methodology and BEIS will consider amendments in this area following completion of the relevant analysis. Given the importance of this issue, it is vital that this work is progressed in a timely way so as to introduce changes before the next T-4 CM auction. Depending on the final design of the new de-rating approach, it may also need to be buttressed by appropriate changes to the testing regime and we would suggest that this merits further consideration as the de-rating changes become clearer.

CP239 & CP240, Unproven DSR, Addressing the non-delivery risk associated with behind the meter generation:

The concept of the 'Unproven DSR' category was developed to help bring forward the participation of new turn-down DSR technologies, whilst they moved beyond the early stages of development. To this extent, it can be seen as a step that complements the running of two early Transitional Arrangements (TA) auctions that recognised the nascent status of true turn-down DSR.¹

Accordingly, we do not believe that it could have been envisaged that the Unproven DSR category would in practice result in the bringing forward of mature 'behind-the-meter' generation engines at the large scale that has happened. Given this unintended outcome, we consider that steps need to be taken to ensure that the Unproven DSR category does indeed operate in a way that properly provides a route for the participation of true turn down DSR rather than an easy option for mature small generation engines sitting behind the meter. (In this context, we would note that similar regulatory changes were needed to ensure that the second TA auction functioned as intended.) We are also concerned that two or more Unproven DSR participants could be intending to use the same generating unit for the same delivery year without knowing that this is the case.²

¹ In this context, the results from this year's TA auction are striking with a relatively high clearing price of £45/kW/year

² Our high level analysis (see Annex 2) suggests that under the current rules a DSR provider may remain profitable in spite of failing to deliver 60% of their agreed volume.

It is vital that this issue is addressed in a timely way given the non-delivery risk associated with a significant number of such engines taking up a relatively high proportion of the volume to be procured in any given auction.

We agree that increasing credit cover requirements could be a good mitigation tool in this area. Indeed, we advocated an increase in the level of credit cover (so as to align Unproven DSR with the position for other CM participants) in our response last year to the BEIS consultation on CM reform³, and BEIS has indicated that it wishes to review this issue further in its recent consultation response. However, as is noted in the Ofgem Consultation document, this would require amendment of the Regulations and we recognise that there might be timing challenges around progressing this kind of change in the event that BEIS decides that it is appropriate.

In the meantime, we believe it is important to consider alternative options to address this issue through CM Rule changes (such as strengthening the reporting requirements in tandem with introducing new delivery milestones for behind-the-meter generation seeking to participate as Unproven DSR). Such changes could have the dual effect of improving transparency around participation well ahead of any given T-4 auction, as well as deterring speculative bidding of mature behind-the-meter plant.

Accordingly, we would strongly encourage Ofgem to engage further with BEIS on possible reforms in this area.

Connection Capacity

Whilst we are broadly supportive of the proposed new approach for calculating Connection Capacity for existing capacity (our understanding is that Ofgem are intending to maintain the current arrangements for New Build CMUs), we believe that the approach could be made more administratively straightforward.

Our suggestion is that, as an alternative to the approach suggested by Ofgem, CM participants should have the option of using historical output data (if available) to demonstrate the ability of capacity to deliver, along with a director's declaration that the chosen figure was based on the expected capacity in the delivery year. For many participants this approach would negate the need for the proposed testing in the 12-month window ahead of the prequalification window of the T-1 auction for the relevant delivery year. Given that for many participants the data that would be required is already provided during prequalification, we believe that giving participants the option to use this alternative approach would still incentivise accurate statements of capacity capability, whilst avoiding an unnecessary administrative burden (and associated costs) for CM participants and delivery partners.

In the interest of security of supply it is also important to effectively reduce instances of overstating capacity. We therefore support the introduction of significant penalties below a 97% threshold.

We appreciate that changes to the methodology for calculating Connection Capacity could have a significant impact on CM participants and consumers. However, Ofgem's likely approach has been known for some time and we believe our suggested amendment would address one of the main concerns that is likely to be raised. Once Ofgem has reflected on the responses to this Consultation, we believe it should consult on the drafting of the Rules without delay. Doing so may enable the introduction of the

³ BEIS, [Consultation on reforms to the Capacity Market](#), March 2016

changes to the Rules before the next prequalification round, which is expected to be in July 2017. We recognise, however, that there may be challenges in introducing the penalty system mentioned above ahead of the next prequalification round as this would require changes to the Regulations.

Accordingly, if the proposed new approach to calculating Connection Capacity cannot be implemented in time for the next T-4 auction, Ofgem should estimate the size of the resulting 'capacity gap' (which we understand may be in the region of 1-1.5 GW) and advise BEIS so that extra volume can be procured accordingly.

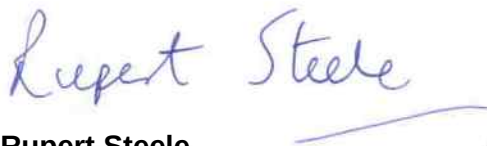
Process

We continue to believe that it might be helpful to hold a workshop (prior to publication of the Ofgem CM Rule change consultation) where the case for the various proposals being advanced by market participants could be debated. We would, therefore, suggest that in future this step is inserted between the nominating of CM Rule changes and the publication of Ofgem's Consultation.

Annex 1 sets out our responses to the specific questions in the Consultation document and Annex 2 provides our high level analysis of the extent to which Unproven DSR can fall short of delivering its committed capacity and still break even (referred to in footnote 2 above).

If you have any questions in relation to our response, please do not hesitate to contact me.

Yours sincerely,



Rupert Steele
Director of Regulation

STATUTORY CONSULTATION ON CHANGES TO THE CAPACITY MARKET RULES

SCOTTISHPOWER RESPONSE

Question 1

Do you agree with the introduction of a financial penalty under Rule 6.8.4 for failing to meet refurbishment milestones? (CP229)

We agree that the current arrangements may provide a free option for Refurbishing CMUs to reduce the length of their agreement and try to gain improved terms in the T-1 Auctions, which could result in higher costs for consumers.

We believe that CMUs should have the correct incentives to carry out their refurbishments, and support the introduction of a financial penalty under Rule 6.8.4 for failing to meet refurbishment milestones.

Question 2

Should the SO be required to update the information included in a CMN and if so what should such updates include? Please clarify why participants need this information in a CMN and cannot access it readily elsewhere.

We agree that Capacity Market Notices (CMNs) are settlement tools rather than dispatch tools and we therefore support Ofgem's proposed decision not to update the information included in a CMN. Once a CMN has been issued, participants may monitor any changing trends from the de-rated margins data and any system warnings issued by National Grid's control room via the Balancing Mechanism Reporting Service (BMRS).

Question 3

Do you think there are amendments that could be made to Schedule 4 which reduce the likelihood of future Rules changes being required if balancing service products are altered, which do not undermine the wider functioning of the Rules?

No, we consider that the uncertainty around the evolution of balancing services products means that it is difficult to amend Schedule 4 effectively. Relying on a generic approach may lead to unintended consequences due to incompatible products. To ensure that the rules remain compatible and fit for purpose, we believe a better approach would be to review the Rules when any changes to balancing services products occur.

Question 4

Do you agree that this is an appropriate solution to the issue identified with the storage output formula under Rule 8.6.2?

We agree that the current formula allows a Storage Facility, under certain circumstances, to receive an over-delivery payment despite having:

1. Only delivered capacity equal to its obligation during the relevant stress event; and
2. Continued to consume energy to charge between the issuing of the Capacity Market Warning and the start of the relevant stress event.

We, therefore, support the proposal to base “B”⁴ on six-weeks of historical consumption data (for the relevant period). This would remove the opportunities for baseline manipulation, more accurately reflect the usual consuming behaviour of the facility, and align the methodology with DSR.

Question 5

Do you agree this approach allows DSR providers of frequency response the ability to participate effectively during the testing regime?

Others may be better placed to highlight concerns around specific technologies. The approach, however, appears to allow providers of frequency response the ability to participate effectively during the testing regime.

Question 6

Do you agree that no change is required to the calculation of output during Satisfactory Performance Days and Stress Event periods once all frequency response services are included under Schedule 4?

Yes, we agree that no changes are required.

⁴ the mean average metered Consumption in MWh of each such Generating Unit in the two Settlement Periods prior to the Settlement Period in which the Capacity Market Warning with respect to the Stress Event was published, provided that if any such Generating Unit was generating electricity during any such Settlement Period it is deemed to be zero

Question 7

Do you agree that the current metering arrangements are suitable for DSR providers of frequency response services?

Yes, we agree. We do not believe that there is a need to amend the Rules relating to the metering test or the general metering arrangements to enable participation of frequency response providers.

Question 8

Do you agree with our conclusions with regard to our preferred testing format? (Of15)

A more straightforward approach to demonstrating the ability to deliver would be to use historical output data (if available) at the time of prequalification along with a director's declaration that the chosen figure is based on the expected capacity in the delivery year. For many participants this would replace the need for the proposed testing in the 12 month window, ahead of the prequalification window of the T-1 auction for the relevant delivery year. Given that for many participants the required data is already provided during prequalification, we believe participants should be given the option to use this alternative approach instead of the approach proposed by Ofgem. This would continue to incentivise accurate statements of capacity capability for the relevant delivery year(s) while avoiding an unnecessary administrative burden, and costs to CM participants and delivery partners.

Question 9

Do you think our proposed approach to setting incentives (threshold and penalty) will effectively reduce instances of overstating capacity? (Of15)

In the interest of security of supply it is important to effectively reduce instances of overstating capacity. We therefore support the introduction of significant penalties below a 97% threshold.

Annex 2

DSR FAILURE TO DELIVER - BREAKEVEN EXAMPLE

1. Introduction

ScottishPower submitted two CM rule change proposals to Ofgem in February 2017 (CP239 and CP240) seeking to place restrictions on the ability of generating units to participate in auctions as Unproven DSR. Part of the rationale for these changes was the high risk of non-delivery, which in turn is caused by the relatively weak financial incentives to deliver.

This note provides an illustrative example of the financial incentives on a party bidding in the CM auction as Unproven DSR and planning to deliver that capacity using existing generating units. Based on a representative set of assumptions, it shows that the party will still be profitable for delivery rates above 40%, ie the breakeven failure rate is 60%.

2. Applicable CM Rules

Credit Cover: The applicable credit cover for Unproven DSR Capacity is £5/kW/year (currently under review).

Metering Tests: CMUs that clear in the auction must complete a Metering Assessment and, if required, a Metering Test. Failure to do so results in a termination and a penalty of £10k/MW. (For the purpose of our example we assume this test is passed).

DSR Test: Following the Metering Assessment and Test, the DSR Test confirms the obligation level and availability payment under the CM agreement. Performance is assessed against the original volume sold at auction as follows:

1. Demonstration of satisfactory delivery of between 90% and 100% leads to a pro rata reduction in the commitment to deliver and a pro rata loss of credit cover.
2. Demonstration of satisfactory delivery below 90% but greater than 2MW results in the total loss of credit cover and a pro rata reduction in commitment. (In the example below we assume a capacity of 30 MW. Therefore, an absolute failure of greater than 3MW leads to a loss of all credit cover (£150k/year)
3. If the DSR Test performance is <2MW, this results in a termination event, loss of contract and total loss of credit cover.

3. Assumptions and results

We assume the party bids 30 MW of Unproven DSR capacity into the auction and achieves a clearing price of £22.50/kW, the 2016 auction clearing price.

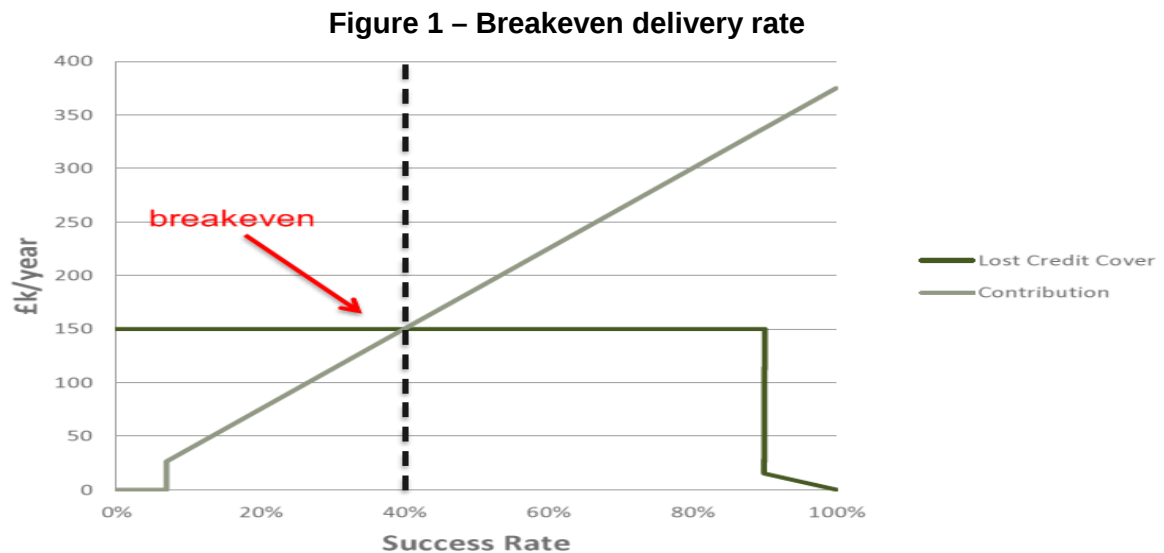
We calculate the breakeven delivery rate as the point at which the annual contribution (CM capacity payments less fixed O&M costs) is equal to penalties for non-delivery (in this case loss of credit cover).

We ignore capex and depreciation since we assume that the generating units already exist (ie the costs are sunk) and we ignore variable costs as we assume that all running during system stress events is in merit.

The fixed O & M cost is assumed to be £10/kW/year. This is the mid-point of an external view of the fixed O & M cost for different existing peaking plant technologies. While there are many different business models which may include third parties, we consider this to be a

prudent cost of delivery. (It is considerably less if the peaking plant is already running to serve other purposes.)

Figure 1 below shows that a DSR provider need only deliver 40% of the originally auctioned volume to break even, ie a break-even failure rate of 60%. For any delivery rate above 40% the contribution (CM capacity payments less fixed O&M costs) exceeds the lost credit cover.



Calculation of breakeven at 40%:

Contribution:	$\pounds(22.5-10.0)/\text{kW}/\text{year} \times (30\text{MW} \times 40\%)$	= £150k/year
Lost credit cover:	$\pounds5/\text{kW}/\text{year} \times 30\text{MW}$	= £150k/year

ScottishPower
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