Modification proposal:	**Connection and Use of System Code (CUSC) CMP300: Cost reflective Response Energy Payment for Generators with low or negative marginal costs (CMP300)**		
Decision:	The Authority[1] directs that this modification be made[2]		
Target audience:	National Grid Electricity System Operator (NGESO), Parties to the CUSC, the CUSC Panel and other interested parties		
Date of publication:	24 June 2022	Implementation date:	08 July 2022

Background

Certain generators are required by the Grid Code to provide a Mandatory Frequency Response ("MFR") service to assist the Electricity System Operator ("ESO") with keeping the electricity system frequency within a designated target of 50Hz. Such generators make/receive payments for doing so, in accordance with provisions set out in the CUSC. These payments are split between a Holding Payment ("HP") for being available, and a Response Energy Payment ("REP") which is explained in more detail below.

Generators submit HP tenders for both High and Low Frequency Response on a monthly basis and the ESO ranks these tender submissions in economic order selecting providers with the lowest combined HPs to provide the service. Where generators are instructed to increase their output (Low Frequency Response), they receive a REP payment to compensate for the energy costs incurred. Where generators are instructed to reduce their output (High Frequency Response), they pay ESO for the energy costs saved from reducing output. Under the MFR service, the REP is determined by the Reference Price and the Market Index Price ("MIP")

[1] References to the "Authority", "Ofgem", "we" and "our" are used interchangeably in this document. The Authority refers to GEMA, the Gas and Electricity Markets Authority. The Office of Gas and Electricity Markets (Ofgem) supports GEMA in its day to day work. This decision is made by or on behalf of GEMA.
[2] This document is notice of the reasons for this decision as required by section 49A of the Electricity Act 1989.

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In addition, in accordance with Article 18 of the Commission Regulation (EU) 2017/2195 establishing a guideline on electricity balancing,[3] as amended by the Electricity Network Codes and Guidelines (Markets and Trading) (Amendment) (EU Exit) Regulations 2019 (the EBGL Regulation),[4] NGESO was required to develop a proposal regarding the terms and conditions (T&Cs) for balancing service providers (BSPs) and balance responsible parties (BRPs). On 8 October 2019,[5] we published our decision to confirm, upon satisfaction of certain conditions, that the T&Cs proposed by the ESO are the T&Cs required by Article 18 of the EBGL Regulation. On 25 June 2020, all the necessary conditions were met, and the proposed T&Cs came into force in Great Britain.

The modification proposal

The 'Original Proposal' was raised by Drax ('the Proposer') on 17 May 2018 with the aim of improving the cost reflectivity of the REP for fuelled Contract for Difference ("CfD") Balancing Mechanism Units ("BMUs").

The Proposer considers that the current construction of the REP does not reflect the cost or avoided cost of energy production for all generators on the basis that BMUs which have low or negative marginal costs as a consequence of having a CfD Feed in Tariff ("FiT") are not treated in the same way as non-fuel CfD BMUs that have equivalent low or negative marginal costs.

Under current arrangements, the REP is set at the Market Index Price ("MIP") for all fuelled BMUs (including those with a CfD FiT). By comparison, following our decision to approve CMP237 in 2016[6], the REP is set at zero for "non-fuel" BMUs which have low or negative marginal costs.

The proposal states that the Reference Price for fuelled CfD BMUs should also be set to zero. The Proposer considers this appropriate because fuelled CfD BMUs which are instructed to provide High Frequency Response (reduction in output) may sacrifice

[3] Commission Regulation (EU) 2017/2195 of 23 November 2017 establishing a guideline on electricity balancing, The EBGL Regulation, came into force on 18 December 2017. Accessible at the following address: https://eur-lex.europa.eu/legalcontent/EN/TXT/?uri=CELEX%3A32017R2195
4 The UK SI amendment of the EBGL Regulation is accessible at: https://assets.publishing.service.gov.uk/media/5c17d6b440f0b60c8d601a2c/ENC_Markets_and_Trading_SI.pdf
[5] Our 8 October 2019 decision is accessible at: https://www.ofgem.gov.uk/publications-and-updates/decisiontransmission-system-operators-proposal-terms-and-conditions-related-balancing

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renewable subsidies as a result and as such, it would not be cost reflective for them to also pay the ESO for an avoided cost.

With regards to Low Frequency Response (increase in output), fuelled CfD BMUs receive a CfD subsidy payment and are also reimbursed by the ESO through a REP payment for the marginal costs associated with an increase in output. Setting the Reference Price to zero would eliminate the need for the ESO to pay the REP to fuelled CfD BMUs, potentially lowering the ESOs REP pay-out.

The Proposer states that CMP300 would facilitate Objectives (a)[7], (b)[8] and (d)[9] of the Applicable CUSC Objectives (ACOs) [10]. The Proposer noted that the primary objective of CMP300 is to better facilitate objective ACO(b) as it will, in their view, improve competition for MFR by ensuring that the REP is cost reflective for all MFR providers. The Proposer also noted that the modification would ensure that all generators providing MFR with low or negative marginal costs are treated equally.

The Workgroup raised an alternate pricing approach identified as Workgroup Alternative Code Modification 1 ("WACM1"). WACM1 would give fuelled CfD BMUs a one-off choice to either set the REP they face at zero or, alternatively, set the REP at the prevailing MIP. Workgroup members selected WACM1 to be the best option by majority.

2021 Send Back

In our previous decision[11] published 09 July 2021, we decided to send back the CMP300 Final Modification Report ("FMR"). We directed the CUSC Panel to revise and resubmit the FMR as we could not properly form an opinion on the proposal based on the previously submitted FMR and associated documentation. We required more information as to how the proposal facilitates ACO (b) and how this would impact the wider class of fuelled CfD BMUs. The Workgroup confirmed that currently only one fuelled CfD BMU would be impacted by the implementation of CMP300 and so, the Workgroup's approach was to

[7] The efficient discharge by the Licensee of the obligations imposed on it by the Act and the Transmission Licence;

[8] Facilitating effective competition in the generation and supply of electricity, and (so far as consistent therewith) facilitating such competition in the sale, distribution and purchase of electricity;

[9] Promoting efficiency in the implementation and administration of the CUSC arrangements.

[10] As set out in Standard Condition C10(1) of the Electricity Transmission Licence, see: https://epr.ofgem.gov.uk//Content/Documents/Electricity%20transmission%20full%20set%20of%20consolidated%20standard%20licence%20conditions%20-%20Current%20Version.pdf

[11] Decision to send back CUSC modification proposal CMP300 | Ofgem

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use Future Energy Scenario (FES) to analyse the potential for future subsidy receiving BMUs to come online. The result of the analysis is below:

FES Scenarios	Technologies that would potentially require a CfD or equivalent subsidy
Steady Progression	Nuclear*, Biomass, Biomass CHP, & CCS Gas
System Transformation	Nuclear*, CCS Biomass, CCS Gas, Biomass, & Biomass CHP
Consumer Transformation	Nuclear*, Biomass, Biomass CHP, & CCS Biomass
Leading the Way	Nuclear*, Biomass, Biomass CHP, & CCS Biomass

**Assumption made following discussion by the Workgroup that Nuclear would not be used for Response*

The limitations of the FES prevented the Workgroup from determining how many fuelled CfD BMUs will come online. We consider the additional information provided by the FMR demonstrated that there is potential for future fuelled CfD or subsidy receiving BMUs to come online and satisfied our concerns from the send back that the fuelled CfD BMUs can be considered a class of users in the proposal.

CUSC Panel[12] recommendation

At the CUSC Panel meeting on 25 February 2022, six of the nine Panel members in attendance considered that CMP300 would better facilitate the ACOs than the Baseline and therefore recommended its approval. Such Panel members unanimously agreed that ACO (b) was better facilitated, with one also citing ACOs (a) and (d). Out of the six, four Panel members considered WACM1 to be the best option, with the other two preferring the Original Proposal.

The three remaining Panel members did not consider the Original Proposal or WACM1 to better facilitate achievement of the ACOs. Of the three, two considered the proposals to be negative against ACO (b) and neutral against the other ACOs, whilst the other considered the proposals to be neutral across all ACOs. Multiple reasons were given for these views. Two Panel members noted that the impact of the proposed modification would depend on the actual fuel costs incurred by the CfD provider, noting that CMP300

[12] The CUSC Panel is established and constituted from time to time pursuant to and in accordance with section 8 of the CUSC.

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could improve competition in instances where the Marginal Cost of a fuelled CfD generator is closer to zero than to the MIP but noting that it was unclear whether this would be the case for all future fuelled CfD generation assets. One stated that a more unit specific approach may therefore be appropriate over a general approach. The third considered that there was not sufficient evidence to justify the proposed change and specifically noted that there was no clear consumer benefit. Two of these Panel members also noted that the elective element of WACM1 may result in fuelled CfD BMUs selecting an option that is the most commercially beneficial to them rather than the most cost reflective.

Our decision

We have considered the issues raised by the modification proposal and the FMR dated 09 March 2022 (the "updated FMR"). We note that the proposed legal text changes for CUSC modification CMP300 include changes which affect the T&Cs[13]. We have considered and taken into account the responses to the industry consultations on the modification proposal which are attached to the FMR[14]. We have concluded that:

- implementation of WACM1 will better facilitate the achievement of the ACOs; and
- directing that WACM1 be made is consistent with our principal objective and statutory duties.[15]

Reasons for our decision

We consider WACM1 will better facilitate ACO(b) and has a neutral impact on the other applicable objectives.

(b) facilitating effective competition in the generation and supply of electricity, and (so far as consistent therewith) facilitating such competition in the sale, distribution and purchase of electricity

[13] Mapping of EBGL Regulation Article 18 National Terms and Conditions requirements to the existing GB Electricity Market frameworks can be found at: https://www.nationalgrideso.com/document/146936/download
[14] CUSC modification proposals, modification reports and representations can be viewed on NGESO's website at: https://www.nationalgrideso.com/industry-information/codes/connection-and-use-system-code-cusc/modifications
[15] The Authority's statutory duties are wider than matters which the Panel must take into consideration and are detailed mainly in the Electricity Act 1989 as amended.

Having considered the updated FMR, we consider that the Workgroup have demonstrated that fuelled CfD BMUs with low or negative marginal costs may experience a similar risk to non-fuelled CfD BMUs prior to the implementation of CMP237. Therefore the current arrangements potentially pose a financial risk for fuelled CfD BMUs on the basis that they are subject to both loss of CfD subsidy and the REP payment when turning down. Whilst we acknowledge that the level of risk is uncertain as not all fuelled CfD BMUs have low or negative marginals costs, we still consider it a risk and note that varying fuel costs combined with CfD payments creates a possibility that marginal costs will be low or negative.

To offset the financial risk associated with the current arrangements, we consider it possible that affected units may submit a high HP for High Frequency Response, which could hamper competition by pricing such participants out of a contract. It could also cause avoidable overspend by the ESO in securing frequency response.

We consider both the Original Proposal and WACM1 to mitigate this risk as it would allow fuelled CfD BMUs to be subject only to loss of subsidy payment and not liable for the REP payment when turning down. This could enable fuelled CfD BMUs to set a more competitive HP for High Frequency Response, increasing competition in the MFR Market and thereby facilitating ACO (b).

Recognising that there is a variance in marginal costs between technology types as highlighted by some Panel members, we have selected WACM1 over of the Original Proposal, so that units can best select the most cost reflective Reference Price. We consider that the most cost-reflective selection for BMUs with marginal costs closer to the MIP than zero is to set their REP to the prevailing MIP, while units with low or negative marginal costs can set their MIP to zero.[16] We consider that this approach will be better for competition because it avoids the creation of a competitive advantage for BMUs with higher marginal costs.

We have considered the risk highlighted by some Panel members that BMUs with high marginal costs may be commercially motivated to set their REP to zero instead of the prevailing MIP, which in turn could be detrimental to competition. We have also considered the suggestion that a more unit specific approach may mitigate against this risk. Our view is that BMUs would be unlikely to be motivated to make a selection solely

[16] For completeness, we note that CMP237 did not consider this alternate as the marginal costs of non-fuelled BMUs is always zero given the lack of fuel costs (no fuel costs).

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based on their own interest given there is only a one-off choice (whereas allowing continued re-declarations could be used to game this choice based on a BMU's assessment of fuel costs over time). Additionally, we note that whilst BMUs which elected to set their REP to zero would benefit from not paying the REP payment, they would also disbenefit from not receiving the REP payment and so, our view is that it makes it unlikely that they would try to game.

Notwithstanding this, we agree that a unit specific approach may be appropriate, and industry may wish to keep this under review. We note that this was not an option that was brought forward by the Workgroup at this stage and so was not available to us for consideration. Nevertheless, given that there is only one known unit impacted by these provisions at present, we think that a broader approach remains appropriate at this time.

We consider that giving fuelled CfD BMUs the opportunity to offer a more competitive HP for High Frequency Response will benefit consumers by promoting competition between providers of frequency. Increased competition should drive down submitted HPs, decreasing the pay-out from the ESO, in turn saving money for the consumer.

Other issues

We note that the updated FMR highlights a potential compliance risk with regards NGESO relying on information from the Low Carbon Contracts Company to ascertain whether a BMU holds a CfD. We note that the legal text, and in particular 4.1.3.9A(a)(ii) provides that an election (to set the REP to zero or MIP) '*can only be made once by reference to that CfD agreement*'. We interpret this to mean that BMUs are required to provide some evidence of a CfD arrangement when an election is made. This would reduce the compliance risk as it would reduce the possibility of human error when cross checking by the ESO. We also note that as there is only one affected unit that is currently on the system and therefore consider the total risk to be low. Nonetheless, it is the responsibility of the ESO to develop an appropriate framework to mitigate this risk.

We also note that there is a further potential compliance risk in scenarios where a fuelled CfD BMU lost their CFD as there is no mechanism in place to bring this to the attention of the ESO. As above, given the low number of affected CfD BMUs at present, we consider the associated risk to be low, albeit further protection could be introduced to the legal text in due course if industry considered it appropriate. In practice, we consider that it is unlikely that this scenario would occur regularly, and, in any event, our view is that it would be in the best interest of the BMU to report the loss of their CfD contract to the

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ESO. This is because these units would not receive either a subsidy or REP payment when turning up and will want to be reimbursed for fuel costs.

Decision notice

In accordance with Standard Condition C10 of the Transmission Licence, the Authority, hereby directs that Workgroup Alternative Code Modification 1 of proposal 'CMP300: *Cost reflective Response Energy Payment for Generators with low or negative marginal costs*' be made.

Robin Dunne
Senior Policy Manager, Domestic Market Arrangements
Signed on behalf of the Authority and authorised for that purpose

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