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for energy consumers

All interested parties,
stakeholders in GB and beyond,
and other regulatory bodies

Email: esoperformance@ofgem.gov.uk

Date: 31 January 2022

Dear colleagues,

Decision to grant the Electricity System Operator a derogation for Dynamic Moderation under Article 6(14) from the requirements of Article 6(2) of the Regulation (EU) 2019/943 as amended.

On 30 November 2021 we¹ received a request from the Electricity System Operator ("ESO") for a derogation under Article 6(14) from the requirements of Article 6(2) of the Regulation (EU) 2019/943 ("the Electricity Regulation"),² as amended by The Electricity and Gas (Internal Markets and Network Codes) (Amendment etc.) (EU Exit) Regulations 2020³ for the new specific Frequency Containment Reserve ("FCR") product, Dynamic Moderation ("DM").

The ESO have requested the derogation from the requirements of Article 6(2) to allow this specific product to be launched with the price of balancing energy pre-determined in the balancing capacity contract.

This letter sets out our decision to approve the derogation request for DM and outlines the necessary next steps.

¹ The terms "we", "us", "our", "Ofgem" and "the Authority" are used interchangeably in this document and refer to the Gas and Electricity Markets Authority. Ofgem is the office of the Authority.

² Regulation (EU) 2019/943 of the European Parliament and of the Council of 5 June 2019 on the internal market for electricity, available here: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32019R0943>

³ The UK SI amendment of the Electricity Regulation is UK SI 2020 No. 1006 which can be found at: <https://www.legislation.gov.uk/ukSI/2020/1006/introduction/made>

Background

FCR is defined in Commission Regulation (EU) 2017/1485 establishing a guideline for system operation ("the SOGL Regulation"),⁴ as amended by The Electricity Network Codes and Guidelines (System Operation and Connection) (Amendment etc.) (EU Exit) Regulations 2019⁵ as "the active power reserves available to contain system frequency after the occurrence of an imbalance". DM is a new specific FCR balancing product which the ESO has developed to meet the need to contain system frequency within operational limits ($\pm 0.2\text{Hz}$). It will deliver a fast, dynamic response mainly when frequency deviates by more than $\pm 0.1\text{Hz}$ from the nominal frequency (50Hz). Unlike static frequency response products, delivery of DM is dynamic and delivers energy proportional to the change in frequency, with an activation time of 1 second.

Article 6 of the Electricity Regulation as amended, which became applicable on 1 January 2020, contains a series of new obligations on the organisation of the balancing markets which apply to FCR products. Among others, this includes Article 6(2) which requires that the price of balancing energy shall not be pre-determined in contracts for balancing capacity.

The ESO has proposed that the DM product should have the price of balancing energy effectively pre-determined at £0/MWh in the balancing capacity (availability) contract. They noted that designing DM with a pre-determined price for balancing energy is justified given that:

- the volume of balancing energy utilised is expected to be very small, and therefore the payment for this volume of energy would also be very small. This is because the product only activates when relatively large pre-fault deviations from nominal frequency occur. The ESO have outlined that they believe this is expected to be infrequent in any given EFA block;⁶
- paying for the volume of energy delivered from the DM service does not provide any significant economic signal to market players, but would add additional costs and complexity to support the submission of non-zero prices close to real-time; and
- there is price volatility in the balancing market which could leave the ESO exposed to high balancing energy (utilisation) costs.

⁴ COMMISSION REGULATION (EU) 2017/1485 establishing a guideline on electricity transmission system operation, available here: <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32017R1485>

⁵ The UK SI amendment of the SOGL Regulation is UK SI 2019 No. 533 which can be found at: <https://www.legislation.gov.uk/ukSI/2019/533/made>

⁶ We understand that DM will be procured and contracted for, at least initially, on a daily basis in EFA block periods, where an EFA block is an Electricity Forward Agreement block, equal to 4 hours. There are thus six EFA blocks in a day (starting from midnight CET).

Article 6(14) of the Electricity Regulation allows the ESO, where standard balancing products are not sufficient to ensure operational security, to propose, and Ofgem may approve, derogations from Article 6(2) and (4) for specific balancing products which are activated locally without exchange with other transmission system operators.

Given that the specific balancing product DM has been designed with a pre-determined price for balancing energy, the ESO is requesting a derogation under Article 6(14) from the requirements of Article 6(2) of the Electricity Regulation.

In accordance with Article 6(14), the proposal for a derogation must contain the following information:

- a) a description of measures proposed to minimise the use of specific products, subject to economic efficiency;
- b) a demonstration that the specific products do not create significant inefficiencies and distortions in the balancing market either inside or outside the scheduling area; and
- c) where applicable, the rules and information for the process for converting the balancing energy bids from specific products into balancing energy bids from standard balancing products.

The ESO's derogation request was submitted in accordance with Article 6(14) and contained all necessary information. However, we note that the ESO does not intend to convert DM balancing energy bids into balancing energy bids for standard products. The ESO has stated that these products will only be activated locally. Therefore, requirement c) does not apply to this product.

Decision

We have reviewed the request submitted to us in line with the requirements of the Electricity Regulation, the wider objectives of Regulation (EU) 2017/2195^{7,8} and our statutory duties. We have also engaged with the ESO to clarify our understanding of the rationale for the request for derogation. When assessing the ESO's proposal for DM, we considered the following aspects:

⁷ COMMISSION REGULATION (EU) 2017/2195 establishing a guideline on electricity balancing ("the EBGL Regulation"), available here: <https://www.legislation.gov.uk/eur/2017/2195>

⁸ The EBGL Regulation is amended in UK law by UK SI 2019 No. 532 which can be found at: <https://www.legislation.gov.uk/ukSI/2019/532/contents/made>

a) the need to design a specific FCR product with a pre-determined price of balancing energy in the balancing capacity contract

Given that there is no equivalent standard product, and that other balancing products are not sufficient for ensuring operational security, we agree that there was a need for the ESO to develop the new specific FCR product, DM. While the ESO can currently access frequency response through other products such as Firm Frequency Response ("FFR") and Mandatory Frequency Response ("MFR"), the ESO have shown that DM is sufficiently different from these products. DM is required as it will better meet the needs of the current and future electricity system and improve efficiency of system balancing.

We understand the ESO is proposing that providers of DM will offer a volume of balancing capacity with an associated price, but that providers will not be able to assign a price to the activation of the balancing energy (effectively pre-determining the price of balancing energy at £0/MWh).

Based on the data submitted to us, we agreed with the ESO's assessment that the utilisation of the balancing energy provided through DM is unlikely to be material enough to justify pre-determining the price of balancing energy in the contract for balancing capacity. In addition, we believe that any payment for this volume of balancing energy would be too small to provide any significant economic signals to balancing service providers. However, we do not agree with the proposed justification that the ESO should be relieved of paying for balancing energy to avoid volatile or unpredictable prices in the balancing market. Nevertheless, we consider that the proposed design of the DM product, in which the balancing energy has a pre-determined price, is appropriate.

b) a description of measures proposed to minimise the use of specific products, subject to economic efficiency

We understand that there is no FCR standard product that can be used in preference to FCR specific products. We also understand that balancing capacity provided by DM will be required in the majority of contract periods (procured against varying volume requirements, dependent on system need) in order to maintain system frequency within operation limits during system imbalances. We further understand that the ESO will use volumes of DM to displace volumes in other frequency response products such as FFR, and that DM is also a more effective product than existing products. We therefore expect that this will reduce the overall volume procured for frequency response purposes compared to the current baseline.

The ESO continues to be required to procure and use all FCR products, including DM, in line with its licence obligations to procure balancing services in an economic, efficient and co-ordinated manner. As a result, we believe that this ensures that the ESO will procure only the minimum required amount of DM to manage system frequency safely and effectively, ensuring system security. We understand that the ESO will continue to monitor and develop DM, as well as its other new FCR products, and will look to optimise the procured volumes across the products.

c) a demonstration that the specific products do not create significant inefficiencies and distortions in the balancing market either inside or outside the scheduling area

We believe the ESO has demonstrated that the technical parameters of DM are sufficiently specific and different from existing frequency response products as to not create any significant inefficiencies and distortions in the balancing market inside the GB scheduling area. We understand that the ESO intends to use DM to replace some of the volume currently procured through FFR, and this will necessarily impact that market. The ESO has explained to us that the electricity system has different needs, with increasing penetration of renewable energy sources, and that the replacement of some existing products is necessary to ensure that system security can continue to be met.

In addition, there is no standard FCR product traded across scheduling areas, and we understand that the ESO will only activate DM locally. As a result, we believe that there is no risk of distortions outside of the GB scheduling area.

We agree with the ESO that DM is critical to ensuring future operational security. Based on our analysis of the information submitted to us by the ESO as required by Article 6(14) of the Electricity Regulation, and the current need for fast acting frequency response services to ensure security of supply, we hereby:

- Grant the Electricity System Operator a derogation under Article 6(14) of the Electricity Regulation from the requirements of Article 6(2) of the Electricity Regulation for Dynamic Moderation.

Our decision to derogate the ESO from the requirements of Article 6(2) of the Electricity Regulation for DM is effective immediately. This derogation from the requirements of Article 6(2) shall apply to DM for the duration that the ESO deems it necessary to use that specific product. However, we expect the ESO to continue to monitor the actual utilisation of DM

balancing energy for the continued relevance of this derogation. Particularly, the ESO should review whether this derogation continues to be necessary should frequency response services become stackable in future.⁹

If you have any questions about the contents of this letter, please contact James Hill (James.Hill@ofgem.gov.uk).

Yours sincerely,

Grendon Thompson

Head of ESO Regulation

⁹ We understand that currently the ESO's dynamic response products are 'stackable' with the balancing mechanism (ie, the same asset can provide both services in the same contracted window), but not with each other. We further understand that it is the ESO's intention to review this, with the potential for the products to become stackable.