

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

Email: esoperformance@ofgem.gov.uk

Date: 17 December 2020

Dear colleagues,

Decision to grant the Electricity System Operator a derogation under Article 6(14) from the requirements of Article 6(4) of the Regulation (EU) 2019/943 for Short Term Operating Reserve and the Balancing Mechanism

On 6 December 2019, we¹ received a request from the Electricity System Operator (ESO) for a derogation under Article 6(14) from the requirements of Article 6(4) of the Regulation (EU) 2019/943 (the Electricity Regulation)² for two products; Short Term Operating Reserve (STOR) and the Balancing Mechanism (BM).

The ESO have requested a derogation from the requirements of Article 6(4) to allow two specific products, STOR and the BM, to continue to have their balancing energy payments settled on a pay-as-bid basis³, rather than the pay-as-cleared basis required by the Electricity Regulation.

This letter sets out our decision to approve this derogation request in accordance with Article 6(14) of the Electricity Regulation and also outlines the necessary next steps that must be taken.

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 We note that the ESO has stated an intention to move STOR availability payments to pay-as-clear basis from 01 April 2021. Details of this update to STOR can be found at: <https://www.nationalgrideso.com/document/181766/download>

Background

STOR and the BM are existing products used by the ESO to balance supply and demand of electricity in the Great Britain (GB) electricity network. STOR is procured to protect the system against the largest loss (of generation or demand) and used to respond quickly to system faults. The BM is used in several ways; chiefly to correct imbalances between supply and demand, and, importantly, to manage system constraints.

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 paragraphs 2 and 4 for specific balancing products which are activated locally without exchanging them with other transmission system operators.

Given that the specific balancing products, STOR and BM, have been designed and are procured on a pay-as-bid basis, the ESO is requesting a derogation under Article 6(14) from the requirements of Article 6(4) of the Electricity Regulation. Article 6(4) of the Electricity Regulation relevantly provides:

“The settlement of balancing energy for standard balancing products and specific balancing products shall be based on marginal pricing (pay-as-cleared)...”.

A pay-as-cleared market would mean that all parties delivering the service within a set window get paid the same amount (the market clearing amount). This market arrangement incentivises parties to bid into the market at a lower price (at their short run marginal cost) to ensure they are dispatched, with profit being made when subsequent parties are dispatched.

For the BM, the ESO argues that the non-homogeneity of the product, mostly related to a locational value which can resolve system constraint issues, is difficult to price into the market. For STOR, the ESO argues that it has a large price stack, which means that the increase in amount paid for subsequently dispatched parties is increasingly high. We understand that these factors could lead to uneconomic procurement which would be amplified in a pay-as-cleared market over a pay-as-bid market.

In accordance with Article 6(14) of the Electricity Regulation, the proposal for a derogation must also 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 at this time the ESO does not intend to convert either STOR or the BM balancing energy bids into bids for standard products. The ESO has stated that STOR and the BM will only be activated locally, and therefore the third requirement ((c) above) of Article 6(14) is not applicable to this request.

Reasons for our decision

We have reviewed the request submitted to us in line with the requirements of the Electricity Regulation, the wider objectives of the EBGL regulation 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 request from the ESO for a derogation from moving STOR and the BM to pay-as-cleared markets, we considered the following aspects:

- a) The rationale for maintaining pay-as-bid markets for STOR and the BM over moving to pay-as-cleared markets*

Both STOR and the BM are currently paid for on a pay-as-bid basis. The ESO has stated that the costs of converting existing systems to allow pay-as-cleared are not insignificant, and could lead to consumer detriment.

Based on analysis provided to us by the ESO of the market histories, the reduction in marginal bid price from parties would need to be in the region of 76% for the BM and 66% for STOR before the economic savings could be realised from moving to pay-as-cleared for these products.

For the BM, we understand that this is mostly driven by the utilisation of this product for solving system imbalances occurring from, for example, network constraints. The locational feature of this usage means that products can often be dispatched 'out-of-merit', artificially raising the clearing price above the true marginal price.

For STOR, we understand that the main factor which affects its ability to meet an ideal pay-as-cleared market is the expensive tail of prices. There are large steps in price between subsequent bids (price stack), meaning that a small increase in energy dispatched could have a big influence on price. Furthermore, in windows where STOR is dispatched, we understand that 20% have only one provider activated and so in these instances, the product approximates a pay-as-cleared market anyway.

Therefore, we agree with the ESO's assessment that converting STOR and BM to pay-as-cleared from pay-as-bid is unlikely to present any consumer savings. Unless market parties have an incentive to reduce their bids, pay-as-cleared could lead to a more expensive payment mechanism, and even in that case, due to the non-homogenous nature of the BM product meaning that out-of-merit bids may need to be accepted, pricing as pay-as-cleared could still be more expensive in many instances. Additionally, given the initial cost of converting systems to allow the change, we deem that it is in the best interest of consumers to maintain these products as pay-as-bid.

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

The ESO has stated that it is committed to procuring RR primarily through the TERRE auction once it goes live. However, it has also stated that TERRE alone would not be able to ensure the operational security of the GB network, and thus STOR and the BM will still be necessary products. We understand that their procurement and utilisation should reduce once TERRE becomes available, but we note that there may still be occasions, as already described in this decision letter, where 'out-of-merit' bids in the BM may need to be dispatched for constraint management reasons.

We also understand that the ESO will still need to procure STOR capacity ahead of the TERRE auction and BM market closures to protect against large system losses and ensure operational security, but that STOR will only be dispatched if sufficient RR cannot be provided over the TERRE platform. Once activated, STOR would be used to correct system frequency and RR would be dispatched to replace those reserves. We understand that it would be undesirable to dispatch reserve services such as STOR for balancing purposes as this depletes the amount of reserve held which may be required for unforeseen losses.

As a result of the above considerations, we understand that that use of STOR and the BM will be minimised.

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 the BM and STOR are sufficiently different from existing products as to not create any significant inefficiencies and distortions in the balancing market inside the GB scheduling area. In addition, neither STOR nor the BM products are to be traded across scheduling areas, and we understand that the ESO will only activate them locally. As a result we also believe that there is no risk of distortions outside of the GB scheduling area.

Decision and next steps

We agree with the ESO that maintaining a pay-as-bid payment system for STOR and the BM will offer the most value to consumers. 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 supporting economic analysis we hereby:

- grant the ESO a derogation under Article 6(14) of the Electricity Regulation from the requirements of Article 6(4) of the Electricity Regulation for STOR and the BM.

Our decision to derogate the ESO from the requirements of Article 6(4) of the Electricity Regulation is effective immediately. This derogation from the requirements of Article 6(4) shall apply to both STOR and the BM balancing energy payments for the duration that the ESO deems that it is necessary to use them as specific products – noting that Article 26(2) of the EBGL Regulation states that each TSO using specific products shall review at least once every two years the necessity to use specific products.

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

Yours sincerely,

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