

To: All interested stakeholders

Email: ESOPerformance@Ofgem.gov.uk

Date: 8 February 2023

Dear colleagues,

Decision to approve an amendment to the Terms and Conditions related to Balancing in relation to the proposed Balancing Reserve service

On 8 December 2023, we¹ received a proposal from the Electricity System Operator ("ESO") to amend the terms and conditions related to balancing ("T&C") required by Article 18 of Commission Regulation (EU) 2017/2195 establishing a guideline on electricity balancing,² as amended by the Electricity Network Codes and Guidelines (Markets and Trading) (Amendment) (EU Exit) Regulations 2019 ("EBGL").³ The proposal relates to an update to the T&C to incorporate service documentation for the new Balancing Reserve ("BR") service.

The ESO has proposed the BR service to achieve potential cost efficiencies in system balancing. These efficiencies are expected to arise from the introduction of an incentive to participants in the wholesale market to provide balancing capacity to the ESO. Introducing the BR-type service was one of the options explored in our Call for Input on options to address high balancing costs.⁴

The Authority has decided to approve the ESO's proposal to integrate the documentation for BR, including the Service Terms and Procurement Rules, into the T&C, as required by Article 18 of the EBGL.

Background

In accordance with Article 18 of the EBGL, the ESO was required to develop a proposal regarding the terms and conditions ("T&C") for balancing service providers ("BSPs") and

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 Commission Regulation (EU) 2017/2195 of 23 November 2017 establishing a guideline on electricity balancing (EBGL). EBGL came into force on 18 December 2018. Accessible at: <https://eurlex.europa.eu/eli/reg/2017/2195/oj>

³ The UK SI amendment of the EBGL:

https://assets.publishing.service.gov.uk/media/5c17d6b440f0b60c8d601a2c/ENC_Markets_and_Trading_SI.pdf

⁴ Our call for input and responses received can be accessed at: <https://www.ofgem.gov.uk/publications/callinput-options-address-high-balancing-costs>

balance responsible parties ("BRPs"). On 8 October 2019,⁵ we published our decision to confirm, upon satisfaction of certain conditions, that the T&C proposed by the ESO are the T&C required by Article 18 of the EBGL. On 25 June 2020, all the necessary conditions were met, and the proposed T&C came into force in Great Britain ("GB").

For efficient system balancing, the ESO depends on having adequate headroom and footroom⁶ from operating units. Currently, this requires the ESO to wait until gate-closure⁷ to assess whether the market has supplied enough headroom and / or footroom. If the market fails to provide sufficient upward and / or downward reserve, the ESO is compelled to adjust the market position. To do so, the ESO accept bids or offers through the Balancing Mechanism ("BM") as needed, which typically leads to increased costs for system balancing. Specifically, when bids are necessary to generate headroom on specific units, this often requires sourcing energy from alternative units, resulting in additional expense due to the acceptance of offers on these replacement units.

Rising costs in the BM have driven the ESO to innovate, with the BR service procuring balancing capacity a day ahead of dispatch. While keeping the energy dispatch process post-gate-closure, the ESO has stated that securing capacity at the day-ahead stage (and paying units for this availability through a pay-as-cleared auction) can offer units equivalent or higher rates of return than the wholesale market, but without placing the ESO at risk of incurring high balancing costs in the BM in real-time. Independent cost-benefit analysis ("CBA") by LCP Delta (August 2023) suggests significant financial savings through BR, potentially amounting to hundreds of millions of pounds between 2024 and 2027.⁸

The ESO previously submitted a proposal to introduce BR on 18 January 2023. We identified two substantial issues with the proposed service design in that submission: the minimum bid size requirement of 50MW was viewed as discriminatory as it was not sufficiently justified in the context of technical system limitations, and the cap of £250,000 for non-delivery reimbursements in BR contracts was deemed inadequate to disincentivise potential negative market behaviours in all cases. Given these issues, the Authority rejected the proposal on 7 March 2023.⁹

⁵ Our decision of 8 October 2019 is accessible here <https://www.ofgem.gov.uk/publications/decision-transmission-system-operators-proposal-terms-and-conditions-related-balancing>

⁶ Headroom and footroom refer to, respectively, capability of a unit to turn up generation (or turn down demand) and to turn down generation (or turn up demand), and therefore a unit must not be at its maximum (for headroom) or minimum (for footroom) operating point if it is to provide this balancing service.

⁷ Gate-closure is one hour ahead of the start of a settlement period.

⁸ A report of this analysis can be accessed at: <https://www.nationalgrideso.com/document/298761/download>

⁹ This decision can be accessed at: <https://www.ofgem.gov.uk/publications/decision-reject-amendment-terms-and-conditions-related-balancing-relation-proposed-balancing-reserve-service>

The ESO submitted a revised proposal to amend the T&C to integrate BR on 8 December 2023.¹⁰ This proposal followed a consultation period that concluded on 26 October 2023.¹¹ The intention is to embed relevant sections of the BR Service Terms and Procurement Rules into the T&C. To enhance the clarity of the T&C, the ESO supplied an updated mapping document alongside the proposal. On 22 January 2024, the ESO submitted revised documents correcting minor drafting errors. These revised documents formed the basis of our decision-making process.

Rationale for our decision

We have reviewed the service documents (consisting of the Service Terms and Procurement Rules) proposed by the ESO to be recognised as part of the T&C and submitted to us in line with the requirements of the EBGL, the wider principles of the Electricity Regulation,^{12,13} and our statutory duties and obligations. In order to do this, we engaged with the ESO to better understand its proposals in a number of areas.

In reaching our decision, we considered the feedback from industry stakeholders in response to the consultation on the proposed changes. The overall response was positive, but there were requests for clarifications in several areas. The ESO addressed these inquiries and amended the T&C to incorporate relevant stakeholder feedback where appropriate.

Consideration of the need for the BR service

Based on LCP Delta's independent CBA, BR presents a potential net consumer benefit of £639m estimated from 2024 to 2027. The high-case and low-case scenario results from that analysis illustrate a potential positive impact in reducing balancing costs, with figures of £821m and £465m, respectively.

Therefore, despite the fact that the ESO can access regulating reserve¹⁴ in real time currently, we consider that there is potential efficiency in introducing a day-ahead capacity service which could lead to a reduction in overall costs.

¹⁰ The revised submission can be accessed under 'Ofgem submission December 2023' at:

<https://www.nationalgrideso.com/industry-information/balancing-services/reserve-services/balancing-reserve>

¹¹ This consultation ran from 26 September to 26 October 2023. Details are available at:

<https://www.nationalgrideso.com/industry-information/balancing-services/reserve-services/balancing-reserve?how-to-participate>

¹² 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>

¹³ 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>

¹⁴ Regulating reserve is a term used for the equivalent service as accessed through BM.

While there may be slight increases in wholesale electricity prices as a result of the day-ahead BR auction and subsequent change to market behaviour, LCP Delta's analysis suggests that this will only have a minimal impact. We expect the ESO to be mindful of overall market impacts when setting BR procurement requirements and monitor for any evidence contrary to the CBA.

Further, we note that aspects such as scarcity in the BM and electricity prices are contributors to the size of the benefits accessible through this kind of service. LCP Delta's August 2023 CBA was an update of an earlier analysis in January 2023. The movement in wider industry conditions meant a reduction in the amount of benefit provided by BR, but clearly remains positive. Again, we expect the ESO to consider wider market conditions when procuring BR and to monitor the continued need to procure the service ahead of real time.

Finally, we also note that one of the limitations mentioned in LCP Delta's analysis is that procurement decisions at the day-ahead stage are based on forecast information. Specifically, the CBA identifies that uncertainty in wind forecasts can reduce the potential net benefits of BR procurement. However, we believe that BR could still add positive consumer value. We encourage the ESO to mitigate the impact of procurement decisions as the service matures, ensuring that benefits are maximised.

Stakeholder views

Through the consultation, the BR service received significant stakeholder attention. General sentiment toward the service was supportive, particularly regarding the proposed service design enhancements. Several parties sought clarity on various aspects such as auction timings and the reimbursement methodology, which we believe the ESO responded to suitably.

Concerns were raised by a few respondents regarding the auction window duration, which the ESO is currently reviewing. We understand the ESO's reticence in providing exact auction timings until the service has been launched and real experience of the time for the auction algorithm to run exists. However, industry concerns about delayed publication of results are valid, and we expect the ESO to uphold its commitment to best-effort publication times. We also expect the ESO to be open about its review of the auction time period, including any future implications of co-optimisation or interaction with other ESO balancing service procurement.

Finally, some stakeholders requested further explanation of the asset dispatch strategy for BR contracted units, prompting the ESO to reiterate their focus on following the economic merit order and meeting system security needs. Questions about the expected frequency

and volume of service utilisation were also raised. Further, there were a few objections regarding the minimum dispatch period (1 minute) and minimum dispatchable volume (1MW). The ESO set out that the energy dispatch of BR is essentially unchanged from the service as it is accessed today through BM bid/offer acceptances. For this reason, we are comfortable with the service design aspect and note that the focus of the procurement strategy change is on accessing balancing capacity ahead of real-time, not the dispatch of balancing energy.

We consider that the ESO has adequately addressed provider concerns through consultation.

Changes to address Ofgem concerns with original service design

The Authority acknowledges revisions to the service design, contrasting them with the original service design submitted on 18 January 2023.

Reducing the minimum bid size from 50 MW to 1 MW¹⁵ is a notable adjustment that will likely enhance market participation and competition. This addressed our concerns around compliance with various obligations on the ESO balancing services to reduce barriers to entry and not to unduly discriminate against market parties once accounting for price.

Moreover, replacing a fixed cap for non-delivery reimbursement with an indexed cap linked to the ESO's trade actions for energy or the maximum accepted BM offer/bid price for energy reflects a balanced and market-responsive disincentive for providers, which could lead to a more efficient balancing service. The ESO's analysis of historical data shows year-on-year rising prices for BM actions and variable costs from trades aimed at maintaining system margin. The move towards an indexed cap, supported by the ESO's modelling, appears to be a sensible approach to mitigate the financial risks of non-delivery. Post-launch, we expect the ESO to monitor whether energy actions set the correct incentive.¹⁶

Other service design considerations

The decision to procure the BR service without an additional frequency response capability requirement should widen participation. This approach is anticipated to foster competition and allow for a broader spectrum of reserve service participants. Nevertheless, it is important to acknowledge that this alteration may introduce an increased risk in securing the net volume of balancing services. The ESO has stated that it is confident in being able

¹⁵ 1 MW is an appropriate minimum requirement as it accords with the current Balancing Mechanism rules.

¹⁶ The ESO's rationale for using the price of energy actions is that this is mostly likely to reflect the replacement action they take in the case of a defaulting unit. If the ESO sees regular need for differently priced actions in this case, eg system flagged actions, then it should consider amending this to ensure the best incentives in this market. For clarity, we do not expect market participants to default on ESO balancing service contracts and so this should apply only *in extremis* in any case.

to access sufficient frequency response without needing to make this a feature of the BR service design. We will assess the effectiveness of this decision through our performance incentives framework.

One aspect of the service design that attracted views from the industry is the maximum time for full delivery of 10 minutes. The ESO explained that this value represents a balanced BR design which facilitates a sufficiently liquid market while providing the ESO with a reliable tool for managing system frequency. We consider that the ESO has reached an appropriate position for this value. However, we advise the ESO to keep this time period under review post-launch and consider adjustments to enhance service efficiency.

Decision

In light of the above, the Authority hereby:

- approves that the BR Service Terms and BR Procurement Rules as mapped form part of the T&C required by Article 18 of the EBGL.

Next Steps

We expect the ESO to publish the BR Service Terms and BR Procurement Rules alongside an updated Article 18 mapping document.

We will continue monitoring the progression of these actions to ensure all processes are clear for market participants. We expect the ESO to remain mindful of its duties to operate the system economically and efficiently. We further understand that the ESO is currently consulting on changes to include BR in the relevant balancing documentation in line with requirements under its C16 licence condition and the relevant balancing services guidelines. The ESO should ensure that consultation on these matters is completed in a timely manner.

We note that the ESO plans to launch the service towards the end of February 2024, with first service delivery expected in mid-March 2024. We expect the ESO to clearly inform the industry about exact dates and timings as soon as practical.

We expect the ESO to maintain a collaborative dialogue with stakeholders in assessing and refining the BR service, ensuring any modifications align with consumer interests.

If you have any queries regarding the information contained in this letter, please contact Shubh Mehta (shubh.mehta@ofgem.gov.uk).

Yours sincerely,

James Hill

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For and on behalf of the Gas and Electricity Markets Authority