To: All interested stakeholders

Email: esoperformance@ofgem.gov.uk
Date: 4 November 2022

Dear colleagues,

Decision on the Demand Flexibility Service in relation to an update to the Terms and Conditions related to Balancing

On 14 October 2022, we\(^1\) received a proposal from the Electricity System Operator ("ESO") to make amendments to 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 ("EBGL"),\(^2\) as amended by the Electricity Network Codes and Guidelines (Markets and Trading) (Amendment) (EU Exit) Regulations 2019.\(^3\) The proposal relates to an update to the T&C to include service documentation for the Demand Flexibility Service ("DFS"), a new balancing energy product.

The ESO has developed the DFS to provide an additional system security tool for winter 2022/2023.\(^4\) The service intends to attract volumes of demand-side response ("DSR") (potentially aggregated through suppliers or aggregators) that is not currently engaged in other balancing services, but which could provide a turn-down service to reduce demand in tight system scenarios.

The ESO has suggested that this demand turn-down will help it to manage system margins when no upward flexibility is available (or at least, when none is perceived to be available in real time following ESO assessment at the day-ahead stage), as a last resort service. The ESO has published a DFS requirements paper\(^5\) explaining their expected use of the service based on the assumptions outlined in its Winter Outlook Report.

This letter sets out our decision to approve the proposed amendments to the provisions that form part of the T&C 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 T&C for balancing service providers ("BSPs") and balance responsible

\(^1\) 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.


\(^3\) The UK SI amendment of the EBGL: [https://assets.publishing.service.gov.uk/media/5c17d6b440f0b60c8d601a2c/ENC_Markets_and_Trading_SI.pdf](https://assets.publishing.service.gov.uk/media/5c17d6b440f0b60c8d601a2c/ENC_Markets_and_Trading_SI.pdf)

\(^4\) We understand that the ESO intends to use this product until 31 March 2023, with a potential short extension beyond that date, expected to be no later than 30 April 2023.

\(^5\) The ESO's Demand Flexibility Service Requirements paper can be accessed at: [https://www.nationalgrideso.com/document/268851/download](https://www.nationalgrideso.com/document/268851/download)
parties ("BRPs"). On 8 October 2019, 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").

The ESO first submitted its proposal to update the T&C to include DFS to us on 14 October 2022 following a period of consultation on these changes which concluded on 3 October 2022. This included proposed DFS Service Terms, which describe the requirements for the provision of the service, and DFS Procurement Rules, which describe the eligibility rules for participation in the service. To improve visibility of the T&C, the ESO has also provided an updated mapping document. The ESO provided updated documents to us on 27 October 2022 to correct some inconsistencies. We consider these updated documents to be the final version of the documents which are mapped onto the Article 18 T&C.

Given that the DFS has been designed to be procured and instructed at day-ahead timescales, the ESO requested a derogation under Article 6(14) from the requirements of Article 6(4) of the Electricity Regulation. The ESO requested a derogation from the specific requirement of Article 6(4) which requires that balancing energy is not procured ahead of balancing energy gate closure. We have approved this derogation request for the DFS alongside this decision, valid until no later than 30 April 2023.

**Rationale for our Decision**

We have reviewed the DFS service documents (consisting of the DFS Service Terms and DFS 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 objectives of the Electricity Regulation, and our statutory duties and obligations. In order to do this, we have engaged with the ESO to better understand its proposals in a number of areas.

In making our decision we have considered the responses to the consultation from industry stakeholders. Feedback was generally favourable towards the introduction of the DFS. However, several respondents sought clarification in a number of areas. The ESO responded to these questions and has made changes to the T&C to reflect stakeholder comments where appropriate.

Consultation feedback addressed the ESO’s position on the appropriate number of test events and setting of the Guaranteed Acceptance Price ("GAP"). Respondents also questioned the decision to exclude asset metering from participation in the service, suggesting that the ESO could make greater efforts to facilitate wider participation. Some respondents suggested that the ESO should consider using a ‘pay-as-clear’ utilisation price rather than the proposed ‘pay-as-bid’ pricing mechanism. Lastly, respondents sought clarity as to the frequency with which the service was likely to be called upon based on ESO analysis.

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6 Our 8 October 2019 decision is accessible at: [https://www.ofgem.gov.uk/publications/decision-transmission-system-operators-proposal-terms-and-conditions-related-balancing](https://www.ofgem.gov.uk/publications/decision-transmission-system-operators-proposal-terms-and-conditions-related-balancing)

7 This consultation ran from 1 September to 3 October 2022. Details are available at: [https://www.nationalgrideso.com/calendar/eb-gl-demand-flexibility-terms-and-conditions](https://www.nationalgrideso.com/calendar/eb-gl-demand-flexibility-terms-and-conditions)

We are confident that the ESO has appropriately addressed these areas of concern directly in its replies to consultation responses and / or in its engagement with us.

We acknowledge that the ESO has put the DFS product together within a very short space of time, and that that DSR itself is a relatively novel and untested service. We recognise that the ESO views the DFS as providing a last resort security of supply function. We have reviewed the analysis from the ESO and consider that the potential for material turn-down adds value to system security, and as a result, end consumers and the market as a whole. On balance, the service provides potential security in case of tight system margins over the coming winter, and that such a resource could contribute to overall consumer welfare. This view was generally supported by consultation responses.

We recognise that individual consumer welfare of those contributing to this service during this period is also critical. To that end, we expect the ESO to provide clear and transparent communication to participating suppliers and wider industry. This includes communications which provide clarity for consumers around the implications of their involvement in the service and any other information deemed appropriate.

We summarise our conclusions on specific issues raised through the consultation, below.

Testing

Within the proposed DFS Procurement Rules, the ESO provides details on the number of tests providers can expect, following submission of their first Weekly Indicative Forecast.9 The ESO noted that an Octopus Energy trial10 showed that four events were needed to create confidence in supplier forecasts. Therefore, the ESO has expressed that testing is important for them to build confidence in the control room around service delivery.

Several respondents noted that tests would also offer an opportunity for the ESO and Service Providers to gather information which may help to improve participation in the service and create confidence in forecast data in case of a real event. The ESO has suggested that regular tests are needed throughout the winter to maintain confidence in forecasted volumes under a range of market conditions and as participation increases.

Further, it has been made clear that inclusion of a number of tests is also needed to encourage participation in the DFS by guaranteeing commercial viability to Service Providers (and by extension, ensuring sufficient volume available to provide the service meaningfully). Feedback from suppliers revealed concerns that as a 'last resort service', the DFS may not be used this winter, thus increasing supplier risk around certainty of cost recovery.

We understand that the ESO has determined the number of tests required during the service’s lifetime with a view to maximising participation in the service, and that they propose that having a GAP strikes the right balance between ensuring security of supply and value for money and is thus in the interest of consumers. In response to considerable feedback through the consultation, the ESO has indicated that it will offer a

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9 A weekly forecast of a provider’s anticipated maximum aggregate Demand Reduction Volumes from each DFS Unit, together with indicative Utilisation Prices for each DFS Unit, as referred to in the DFS Procurement Rules.
10 Details of Octopus Energy’s Trial can be found here: https://octopus.energy/blog/results-big-dirty-turn-down-trial-paid-off-peak-energy/
higher GAP than the original value suggested (which matched the Ofgem price cap value per unit of electricity). We agree that setting a price that incentivises consumer response and that accurately reflects the value of the service is important. We note that Service Providers are not obligated to stick to the GAP and that it only applies during test runs of the service. ESO should encourage price discovery in its setting of the GAP if possible.

In light of the above, we believe that it is prudent for the ESO to conduct tests to generate confidence in downstream processes and service delivery. We expect the ESO to carry out DFS tests in an economical and efficient manner over the course of the winter to maximise value for consumers and provide an accurate assessment of performance at times when the service is likely to be called upon. Outcomes from tests (and real uses) of the DFS over winter 2022/2023 should be captured and used in development of future DSR services or to enable DSR to access existing services more easily.

Access to DFS for Behind-the-Meter Assets

We acknowledge the concerns that several stakeholders have raised with regards to exclusion of asset metering from the service. This centred around the possibility that this decision will limit the number of aggregators and potential volume able to participate in the service, thus reducing its value as a security of supply tool.

The ESO has confirmed that units may only be entered into the DFS where they are metered at a boundary point. While this does not automatically prevent all asset metered assets from participating in the service, we acknowledge that this requirement disincentivises or even excludes some volume that could have participated in the DFS.

Consultation feedback drew out this issue, and we requested further information from the ESO to clarify its decision to exclude asset metering. The evidence submitted to us included further detail on risk and expectations of volume.

In its response, the ESO reiterated that it needs to have confidence in the reduction being delivered through the DFS and that the risks associated with allowing asset metering do not outweigh the potential benefit of additional volume at the level they expect as a result.

We are confident that the ESO has provided sufficient justification for its choice of metering solution under the circumstances, but encourage ESO and industry to continue to look for ways to access this ‘behind-the-meter’ volume directly for existing and future balancing services.

Pricing Mechanism

Several industry responses to the consultation related to the ESO’s pricing mechanism for this service, confirmed as ‘pay-as-bid,’ and instead suggested that the ‘pay-as-clear’ method would serve as a more efficient price discovery mechanism.

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11 Asset metering allows on-site assets sitting behind the ‘grid boundary’ (the point of connection between the site and the distribution network) to use secondary meters or ‘asset meters’ located at or near those assets to record the amount of electricity the assets are producing or consuming, for settlement purposes.
The ESO conducted assessment of this service following its pricing methodology as approved by the Authority, and the outcome of that assessment favoured a pay-as-bid design. We are therefore satisfied that the ESO has sufficiently evidenced its choice and provided a satisfactory response to the industry consultation.

In light of all of the above, the Authority hereby confirms that the proposed DFS service documentation forms part of the T&C required by Article 18 of the EBGL.

**Next Steps**

We expect the ESO to publish the DFS Service Terms and DFS 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 also note that there were a number of consultation responses that related to wider suggestions for improvement to the ESO’s designs for a DSR product for future use. It is broadly acknowledged that DSR has an important role to play in future system operability and assisting in achieving net zero carbon ambitions. We encourage the ESO to continue to engage with stakeholders to use the growing evidence base to develop future DSR services or to enable DSR to access existing services more easily where this is shown to be in consumer interests.

If you have any queries regarding the information contained in this letter, please contact James Hill (James.Hill@Ofgem.gov.uk).

Yours Sincerely,

**Eleanor Warburton**
Deputy Director – Institutions for Net Zero

For and on behalf of the Gas and Electricity Markets Authority

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13 The ESO explain the outcome of its pricing assessment with industry in its September 2022 webinar on DFS. Information from that webinar is accessible at: [https://www.nationalgrideso.com/industry-information/balancing-services/demand-flexibility](https://www.nationalgrideso.com/industry-information/balancing-services/demand-flexibility)