Making a positive difference
for energy consumers

To: All interested parties

Email: ESOperformance@ofgem.gov.uk

Date: 27 October 2023

Dear colleagues,

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

On 31 August 2023, 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 ("the 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 second iteration of the ESO's Demand Flexibility Service ("DFS").

On 4 November 2022, we approved[4] amendments to the T&C to include the first iteration of DFS. That iteration of DFS has since expired on 30 April 2023 and we no longer consider it to form part of the T&C. The ESO has developed the second iteration of DFS as a new service to replace the previous iteration and for the avoidance of doubt this decision letter considers the second iteration of DFS only and all references to DFS henceforth relate to this iteration unless stated otherwise.

[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://eur-lex.europa.eu/eli/reg/2017/2195/oj
[3] The UK Statutory Instrument amendment of the EBGL is accessible here: https://assets.publishing.service.gov.uk/media/5c17d6b440f0b60c8d601a2c/ENC_Markets_and_Trading_SI.pdf. All references to the EBGL are as amended by this Statutory Instrument.
[4] Our decision of 4 November 2022 is accessible here: https://www.ofgem.gov.uk/publications/decision-demand-flexibility-service-relation-update-terms-and-conditions-related-balancing

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 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").

The ESO has developed DFS to provide an additional system security tool for winter 2023/2024, following successful roll out of the service for the previous winter for the same purpose. The service intends to attract volumes of demand-side response ("DSR") (potentially aggregated through suppliers or aggregators) not currently engaged in other balancing services, but which could provide a turn-down service to reduce demand in tight system scenarios.[6] The ESO has suggested that this DSR can help manage system margins as a last resort service where traditional flexible electricity response is not sufficient.

The ESO submitted its proposal to update the T&C to include the second iteration of DFS to us on 31 August 2023. The submission followed a one-month consultation period on the DFS service documentation.[7] 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 T&C mapping document. We understand the ESO intends to have the service live from 1 November 2023.

DFS has been designed to be procured and instructed at timescales such that its balancing energy gate closure is earlier than allowed under Article 6(4) of the Electricity Regulation.[8] As such, the ESO also submitted a request to us for a derogation from this requirement for DFS. We have approved this request for DFS alongside this decision, with the derogation

[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] We note that this is not strictly a "demand turn down" service, but is technology agnostic, allowing "generation turn up" as well, subject to meeting the same requirements under the service terms.
[7] The ESO's consultation ran from 14 June 2023 to 17 July 2023 and can be accessed at: https://www.nationalgrideso.com/industry-information/balancing-services/demand-flexibility-service-dfs
[8] Commission Regulation (EU) 2019/943 of 5 June 2019 on the internal market for electricity ("Electricity Regulation") dictates that "Market participants shall be allowed to bid as close to real time as possible, and balancing energy gate closure times shall not be before the intraday cross-zonal gate closure time." Where the intraday cross-zonal gate closure time is currently T-1hour. The Electricity Regulation is accessible at: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32019R0943&from=EN,and has been adopted into UK law by UK SI 2020 No. 1006, available at: https://www.legislation.gov.uk/uksi/2020/1006/contents/made.

being valid until 30 April 2024. For clarity, without a derogation in place, the ESO cannot procure this service (under the existing design) regardless of its inclusion in the T&C.

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 DFS. However, several respondents sought clarification in a number of areas. The ESO responded to these questions and has considered changes to the T&C to reflect stakeholder comments where they deemed appropriate.

In our assessment of the ESO's submission we also considered the following aspects:

The need for DFS in winter 2023/2024

As a trusted expert and advisor on electricity system security of supply, the ESO considers that DFS will be an important tool in maintaining system security for winter 2023/2024. In its Winter Outlook[9] the ESO has outlined credible scenarios where DFS would be required to maintain healthy system margins in times of materially reduced electricity supply. We have further engaged with the ESO to better understand the range of scenarios where DFS might be required and accept that DFS volumes could be necessary for maintaining the system within the reliability standard. [10]

The precise volume of DFS required is subject to some uncertainty and a reasonable estimate must be made based on a range of scenarios. In their October 2023 DFS Market Information Report ("MIR"),[11] the ESO stated that it intends to secure 1.25GW[12] of DFS. We

[9] The ESO's Winter Outlook for 2023/2024 is accessible here: https://www.nationalgrideso.com/document/289136/download
[10] The reliability standard for GB is set accordingly to the methodology accessible at: https://assets.publishing.service.gov.uk/media/5a7c4a16ed915d338141dd0a/Annex_C_-_reliability_standard_methodology.pdf. In line with this the reliability standard is currently set at 3 hours of loss per year.
[11] The October 2023 Market Information Report for DFS is accessible here: https://www.nationalgrideso.com/document/289546/download
[12] The ESO's rationale for this figure is a desired 1GW of delivered volume, and derating of circa 80% between contracted and delivered volume is deemed suitable based on historic evidence from the Winter 2022/2023 service.

expect the ESO to provide sound rationale for the volume they determine as being necessary.

We note that DFS is an enhanced action and will not be used as an everyday[13] commercial balancing action, which aligns well with its design purpose being for maintenance of system security of supply under certain conditions. We expect DFS to be procured in a manner that is economic and efficient, recognising that the cost of the service will ultimately be borne by the consumer. We expect the ESO to avoid over-procurement of DFS, particularly having set a Guaranteed Acceptance Price ("GAP"), procuring the service only against actual forecast system requirements. We expect the ESO to regularly update its stated DFS requirement in line with up-to-date forecasts of need. We consider the testing of DFS under true competitive conditions to allow for price discovery to be an important part of developing the service for the future. In this regard, we expect to see price discovery testing done ahead of the 1.25GW threshold stated in the ESO's MIR if system security conditions allow.

Service design improvements

We note that the ESO has made some improvements to DFS for winter 2023/2024 compared to the first iteration of DFS.

The ESO has proposed removal of within-day adjustment for domestic participants.[14] The ESO has stated that the reason for removing within-day adjustment is to mitigate any perverse incentive for participants to artificially increase their baseline by increasing their consumption during the adjustment period, ultimately resulting in higher overall payments for service delivery. We recognise that respondents to the ESO's consultation generally supported this as a positive change. Whilst we believe that the volumes associated with this risk are likely to be small, we consider the ESO removing opportunities for participants to "game" the system and receive higher payments is a positive step for DFS. However, we expect the ESO to continue to review the baselining approach for DFS (and other services) to ensure that providers are paid for volumes actually delivered, including whether a revised approach to within-day adjustments between the two extremes of DFS iteration 1 and iteration 2 would be beneficial in this regard.

[13] Although without formal definition, the ESO uses the terms "everyday", "enhanced" and "emergency" actions to help industry understand the nature of different tools and in which sequence they are utilised. Enhanced actions are used where everyday actions are insufficient, and emergency actions when enhanced actions are insufficient.
[14] The within-day adjustment only applied for domestic participants, the baseline of industrial & commercial participants is already not subject to the within-day adjustment.

In line with provider feedback, we are also pleased to see that participants will be able to enter volume via asset meters[15] into this iteration of DFS. We agree with the ESO that this should increase the overall volume able to participate in DFS and should have positive impacts on the ability of the service to contribute to system security and provide learnings to help develop the service for the future.

Whilst we consider that the inclusion of asset metering in DFS is a positive step, we expect the ESO to continue to review the requirements for asset meters entering the service to ensure they are as efficient as possible. One key area for review is the current requirement for domestic asset meters to be associated with a boundary meter that is half-hourly settled (which is not the case for delivery at the boundary meter). We understand that in the timeframe available given the ESO's identification of a specific need for the DFS that the current arrangements are appropriate for the state of development of the service.

The ESO has also introduced a process to prevent meter point administration number ("MPAN") duplication. We are generally supportive of this introduction, as this should help avoid any duplication of payments – the cost of which would ultimately be borne by the consumer. Furthermore, the ESO notes that this should prevent any confusion in parties which are participating in the service as it will be unambiguous which provider is representing (at any one time) the meter for each consumer. The ESO has introduced additional automation options which should lead to an overall more efficient service. Again, we expect the ESO to review these changes and to make any necessary updates to the service to maximise the efficiency of DFS.

Finally, we are supportive of the ESO introducing capability for within-day dispatch of DFS. In the previous iteration of DFS, dispatch only occurred at the day-ahead stage and testing of intraday dispatch times should allow the service to develop and allow dispatch closer to real-time. Dispatching DFS close to real-time allows the ESO to have maximum certainty of its balancing energy requirement and therefore leads to a more economic and efficient procurement of the service. We agree with the ESO that within-day dispatch of DFS should have positive impacts on the use of DFS as a tool to help ensure electricity security of supply. We also recognise that market parties appear supportive of moving dispatch closer to real time given this provides the best picture of actual volume requirement and hence has the least impact on other markets.

Other service design aspects

[15] Asset meters are as defined by the Elexon Code of Practice 11, accessible here: elexon.co.uk/documents/bsc-codes/codes-of-practice/code-of-practice-11-the-metering-of-balancing-services-assets-for-settlement-purposes/

Within the proposed DFS Procurement Rules, the ESO provides details on the number of tests that providers can expect. The ESO has stated that providers can expect six tests before 1 January 2024. Those tests would operate with a GAP.[16] If a threshold of contractable volume (1.25GW according to the latest ESO MIR) is met, then we understand that the testing regime may continue but with removal of a GAP and tests becoming competitive, encouraging price discovery. Should this threshold not be met, we understand that the ESO plans to continue a testing regime with a GAP still in place.

Whilst we agree with the ESO that testing is necessary to gather learnings to develop the service and in order to grow volumes where appropriate in this nascent market, we have not been convinced that the testing regime in its current form is as economic and efficient as possible, especially considering the continued use of a GAP. The ESO has an obligation to maintain system security and costs; protecting against potential supply risks through development of their balancing services, including enhanced actions, ESO must do so with clear consideration of the costs ultimately borne by end consumers. We believe the ESO should look to commence the price discovery testing phase of DFS at the earliest opportunity (ie the lowest identified volume requirement) that forecasts of system conditions allow – we note that this should not represent a volume cap for DFS in general or restrict volume entering the service where it is price-competitive. This should allow maximum learnings from the tests and hence best development of the service.

We consider, as for all services unless by exception, that competitively driven procurement to identify true costs should deliver best value for the consumer. We therefore do not consider that use of a GAP as a way of providing revenue certainty for providers allows for prices to offer best value for consumers. Nevertheless, we are supportive of the need for testing DFS and are pleased to see that the ESO has removed onboarding testing in favour of testing which is more focussed on specific learning outcomes.

We note that the ESO has designed DFS in a way in which the service only attracts volume from participants not engaged in other balancing services. In general, we agree with this principle and that the ESO's choice to disallowing stacking of services should make best use of DFS as an enhanced action. This should mean that all volume participating in DFS should be additional volume that is not available to the ESO through everyday routes, maximising the overall amount of volume available to the ESO to balance the system in response to system security issues. Whilst we generally agree that this a good principle, we expect the ESO to further consider the effect of disallowing stacking in DFS both on the DFS market and other markets – especially other flexibility markets. We identified that a number of

[16] We understand from the latest MIR that the GAP is proposed to be set at £3,000/MWh, as per last year's service.

respondents to the ESO's consultation noted particular non-ESO services[17] where 'stackability' might be appropriate. We expect the ESO to continue to review the suitability of this blanket principle of exclusivity as the service improves.

Finally, the ESO has stated that it will not apply the Applicable Balancing Services Volume Data ("ABSVD") process to volume that is not half-hourly settled. Whilst we agree that this may be the best approach on an individual basis, this does potentially lead to different treatment of the otherwise similar volume depending on how it is entered into the service. We understand that the ESO has assessed this and has determined that volumes associated with this risk are likely to be negligible. We further consider that this issue is not strictly an issue with the DFS service and is associated with wider market conditions, so we are comfortable with the ESO's current proposal regarding this issue especially considering the need for DFS as a system security of supply tool at this time.

Our decision

Given the above, we hereby approve the ESO's proposed amendments to the provisions that form part of the T&C required by Article 18 of the EBGL. We expect any future amendments to these provisions to be undertaken in accordance with the relevant processes noted in 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, as soon as practicable following this decision.

We will continue monitoring the progression of the DFS market to ensure all processes are clear for market participants. We expect the ESO to remain mindful of its duties[18] to operate the system economically and efficiently.

We expect the ESO to provide further transparency around its forecast procurement requirements for DFS to us and to industry as early as possible, evidencing its decisions to procure at the projected volumes. Alongside this, the ESO should continue to review its exact requirement for DFS for winter 2023/2024 and to introduce the price discovery testing phase of DFS accordingly. Procurement of DFS, in both test and live events, must

[17] Such as Distribution Network Operator flexibility markets or the capacity market.
[18] Such as under Standard Condition C28 of the ESO's Transmission Licence, accessible here: https://epr.ofgem.gov.uk/Content/Documents/Electricity%20transmission%20full%20set%20of%20consolidated%20standard%20licence%20conditions%20-%20Current%20Version.pdf

be in line with the ESO's licence obligations to operate the system in an economic and efficient manner.

We also expect the ESO to keep in mind the transition to market-wide half-hourly settlement, and the role of DFS in helping to unlock flexibility within the electricity market as this becomes a business-as-usual market activity.

We also expect the ESO to continue to review the rules and restrictions in place, such as around asset meters and stacking, to ensure maximum participation and access while managing risks such as gaming.

We note that unlike the first iteration of DFS, this iteration of DFS has no proposed end date in the service terms and therefore is intended as an enduring addition to the T&C. Regardless, in order to use the service in its current form, the ESO requires a derogation from the requirements of Article 6(4) of the Electricity Regulation. Our approval of the ESO's derogation request expires on 30 April 2024, meaning that the ESO will not be able to use DFS after this date unless it is granted a further derogation. We only expect the ESO to re-request a derogation following significant improvements made to the service in line with some of the points raised in this letter. The ESO should start the process of identifying routes for improvement of DFS as soon as possible, including engaging with relevant industry parties. We will also continue to engage with the ESO on this matter to help ensure an improved future service.

If you have any queries regarding the content of this letter, please contact ESOperformance@ofgem.gov.uk.

Yours sincerely,

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For and on behalf of the Gas and Electricity Markets Authority