

Roadmap for Enhancements to Performance Monitoring of Balancing Services

Introduction

The balancing services that we procure are a crucial toolset for the Electricity National Control Centre in running the GB electricity system. The importance of these services and confidence in their delivery were brought to national attention, following the August 9th power cut in 2019. In Ofgem's summary investigation report that was published on the 3rd of January 2020, we were deemed to have acted in line with our role as System Operator. As part of that report, the ESO was asked to enhance our processes in actively monitoring and holding balancing providers to account for contractual delivery commitments.

As we work to enhance our performance monitoring capabilities, in parallel, we have committed to issuing a performance monitoring report every quarter. This roadmap shows what we are doing to meet this commitment and provides the industry with an update. Through the quarterly reports, we will provide regular updates on the performance of our balancing services. We plan to publish the first full report in October 2020.

We spend nearly £600m every year on balancing services and certainty of delivery is critical for our Electricity National Control Centre. We proactively monitor and manage performance but want to provide greater transparency over how we do this. We are enhancing our current processes and considering, from a design perspective, how performance monitoring forms an integral part of new product design. To that end, we have been working on developing a set of ambitions for our performance monitoring principles, which we aspire to apply to new services. We have also begun to build a set of targeted actions that will allow us to improve the way we performance monitor existing services, but also enable us to increase the profile of that work within the industry and help us continue to engage with relevant parties via appropriate channels. Our ambitions and targets are both under development and we are keen on receiving feedback on them to ensure they are clear, efficient and well-balanced. While this is not a consultation, should you have any questions, comments or suggestions around our proposed ambitions and/or targeted actions, please contact us at commercial.operation@nationalgrideso.com.

Below is a list of our guiding principles, of how we are operating and enhancing our performance monitoring activities:

- Inspire confidence in the market that the money we are spending on behalf of the end consumer is good value for money. Where performance does fall short of expectations, we have the appropriate support and mechanisms in place to work with providers to hold them to account and resolve issues collaboratively.
- We understand and value the importance of transparency around the performance of the contracts that we award. We need to share performance data, actions and trends in a timely manner and in an easily digestible format.
- Put in place further automated performance monitoring mechanisms that monitor and assess delivery across all balancing services and consider taking into account system conditions leading up to the monitored period.
- Ensure timely recovery of any penalties across all our services.
- Develop robust systems and processes for efficient and automated data transfers.

In order to meet our driving principles around our performance monitoring ambitions, we have drawn up a list of targeted actions that will allow us to improve the way we monitor existing services.

- Publish a dedicated quarterly performance report to enhance transparency around the delivery of our services. In the short to medium term, the focus will be on Short Term Operating Reserve (STOR), Fast

Reserve, Firm Frequency Response, Enhanced Frequency Response, Mandatory Frequency Response and Optional Downward Flexibility Management.

- Continue to review legislation changes and document their impact on performance monitoring.
- Actively engage with providers to address challenges and their root causes of less than optimal performance.
- Develop enhanced automation to increase the number of periods we performance monitor. We are reviewing how this can be applied to different services, as there might be a need for an update to Standard Contract Terms to allow us to do this for certain services.
- Continue to utilise the market forums, such as industry associations and consultations, to help share our performance monitoring approach for new products being developed under our Forward Plan commitments.

Service-specific performance monitoring insight

In this section, we will discuss specific actions we are taking to enhance our performance monitoring capabilities for existing services by improving our processes, systems and controls environment. We will also highlight our plans to publish performance reports for different services, with the aim of holding balancing providers to account for contractual delivery commitments.

Short Term Operating Reserve (STOR)

Short Term Operating Reserve (STOR) is one of our most established balancing services and is partially automated in terms of performance monitoring. Through our Platform for Ancillary Services (PAS), we receive close to real time metering submissions and as a result conduct efficient performance reviews across the service as a whole. Even though we are no longer procuring firm contracts, we are utilising existing long-term as well as optional contracts, and that is what our performance monitoring will focus on going forward. We have reviewed data available from our existing systems, which are used for the automated calculation of STOR payments, and are currently finalising our reporting that will identify under-performance and Events of Default (EOD) at service level. The data will be published in the next quarterly performance monitoring report, to cover Q1 and Q2 of financial year 2020-2021. We will then aim to publish STOR data with every subsequent quarterly performance monitoring report. We will highlight EODs applied, and the response time and delivery as a percentage.

Fast Reserve

Fast Reserve is also utilised through our Platform for Ancillary Services (PAS) and therefore, like STOR, also has a good level of automated data submission from the market. Please note, procurement of Firm Fast Reserve contracts has ceased, so our performance monitoring focus will be on Optional Fast Reserve going forward. The MBSS also publishes levels of availability and spend which provides some insight into the utilisation of the service. For Fast Reserve we are currently looking at data and reporting tools and will aim to mirror the process for STOR, once that has been trialled successfully. Fast Reserve performance monitoring processes require further development before we can publish data similar to that we will be publishing for STOR.

Optional Downward Flexibility Management (ODFM)

Optional Downward Flexibility Management (ODFM) is a time-limited service that we introduced in very challenging timescales to help manage the anticipated, extended low demand periods on the system that are linked to the COVID-19 pandemic. However, we were keen to ensure that we incorporated a performance monitoring element in the development of the service. The service went live in May and, until the end of July, we have dispatched the service five times. All units that have been called under the service so far have been successfully reviewed to ensure performance standards have been met. We will continue to monitor this service closely for the remainder of its lifespan. To date, the service has had a 98% delivery rate, with c. £187k recovered for non-delivery in May alone.

We are working on producing a snapshot report for ODFM that provides summary information at service level. The data will be published in the next quarterly performance monitoring report, to cover the first three months

the service was live (May – July). A second report will be published in the winter, to cover the three final months of the service (Aug – Oct). We will present how much we have spent during the period in question, how much we have recovered, and what unavailability levels we have observed.

Mandatory Frequency Response

Mandatory Frequency Response (MFR) is a service that is provided by Balancing Mechanism (BM) units that are obligated to do so based on the Grid Code, and any Mandatory Service Agreements that are in place. Payment terms are governed by the Connection and Use of System Code (CUSC), and currently there are no specific penalty clauses outlined associated with sub-optimal performance. We recognise that whilst we are putting more emphasis on our tendered markets and get closer to real time procurement, it is important we seek to address this area. Our aim is to investigate whether CUSC changes are required to enhance our performance monitoring capabilities.

Monthly/Weekly Firm Frequency Response

The monthly and weekly Firm Frequency Response (FFR) tendered services have a transparent and consistent set of performance formulas that all participants are subject to. We are working on moving towards monthly monitoring, rather than event-based monitoring, to ensure we consistently capture performance issues.

Our learnings from the challenges around monitoring performance of Primary, Secondary and High FFR are helping to shape our Dynamic Containment new service setup. All developments in this space will be communicated through our Dynamic Containment consultations and publications.

Our tendered frequency response services have seen large participant growth over the past few years, moving from tens of bid lines to over 200 in certain months. In the next quarterly performance monitoring report, we will publish data covering Q1 and Q2 of financial year 2020-2021, to offer insight into how the FFR tendered service is performing. We will provide information at service level and present how much we have spent during the period in question, how much we have recovered, and what unavailability levels we have observed. We will make use of custom-built tools created for performance monitoring the ODFM service, to simplify the FFR performance monitoring process.

Enhanced Frequency Response

Enhanced Frequency Response (EFR) was a one-off procurement event and therefore is a time-limited service. Performance monitoring was a key principle of the development of this service and we currently performance monitor each unit every month for all delivery periods. The results of the performance monitoring activity are shared with providers every month, and at times they also result in penalties. In Q1 of financial year 2020-2021, we have levied c. £179k of penalties from EFR providers. EFR, in comparison to our other services, has a very small number of contracts. We would like to review the options under the service terms to include high level performance details into subsequent versions of the FFR report mentioned above. We anticipate this forming part of the evolution of the FFR report as it progresses month to month.

Conclusion

We have robust processes in place to monitor performance and hold balancing providers to account against contractual delivery commitments, but we recognise that we can achieve more by enhancing our processes, systems and controls environments. Performance monitoring is a key focus for all our existing balancing services, and it is also a significant part of the foundation in the design of new products. We will continue to further enhance our performance monitoring capabilities, but we will also focus on developing our key targets to ensure they are fit for purpose, and work on refining our ambitions further and making them known to the market so that we can be transparent with our goals. In the next quarterly report, we will provide an update on progress made on refining and sharing our targets and ambitions, developing reporting tools and sharing performance monitoring data with the wider market, in an aim to improving performance monitoring processes for different services.

We welcome feedback on this initial roadmap. Should you have any questions or comments, please do not hesitate to contact us at commercial.operation@nationalgrideso.com.