Balancing Mechanism Assurance Report

June 2021



BM Assurance Report | June 2021

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Introduction

Section Q of the Balancing and Settlement Code ('BSC'): Balancing Mechanism Activities, to which National Grid Company plc ('National Grid') is signatory, requires National Grid in its role as National Electricity Transmission System Operator ("NETSO") to submit certain data to the Balancing Mechanism Reporting Agent ('BMRA') and Settlement Administration Agent ('SAA').

A link to Section Q of the BSC as published on Elexon's website is provided below. Section Q of the BSC is updated periodically and as such, depending on the date of clicking on the below link, the version of Section Q may differ to one of the versions relevant to the audit period 1 April 2020 to 31 March 2021. Should you wish to access any of the versions of section Q of the BSC relevant to this audit period, please contact Elexon.

https://www.elexon.co.uk/the-bsc/bsc-section-q-balancing-services-activities/

Section H para 5.1.6 of the BSC requires the NETSO to appoint a Balancing Mechanism Auditor ('BM Auditor') to review the compilation and submission of Balancing Mechanism data. The objective of the Balancing Mechanism Audit ('BM Audit') is to establish whether, in all material respects, the NETSO is compliant with the requirements of Section Q of the BSC in the areas defined as in-scope.

For the year-ended 30 March 2021, National Grid Electricity System Operator (NGESO) in its role as NETSO has appointed PricewaterhouseCoopers LLP ('PwC') as the BM Auditor.

Scope of the Review

The overall scope of the BM Audit is defined in Section H 5.1.6 of the BSC. This states:

"The following matters shall be audited by an independent auditor of internationally recognised standing appointed by the NETSO (the 'BM Auditor'):

- a) The compiling and submission of Final Physical Notification ('FPN') data by the NETSO pursuant to and in accordance with Section Q
- b) The compiling and submission of Bid-Offer data by the NETSO pursuant to and in accordance with Section Q
- c) The compiling and submission of Acceptance data by the NETSO pursuant to and in accordance with Section Q
- d) The submission of other data by the NETSO pursuant to and in accordance with Section Q6"

The scope of the BM Audit does not include the calculation of the submitted Balancing Mechanism data by NGESO. Specifically, it does not include the calculation of Balancing Settlement Adjustment data and Applicable Balancing Services Volumes, which are required in the calculation of the System Sell Price and System Buy Price. Furthermore, the scope of the BM Audit does not require the BM Auditor to assess the validity of the Balancing Mechanism data submitted on behalf of BM Units to NGESO, but is restricted to the BM Auditor reviewing the onward submission of this data to the BMRA or the SAA, as required.

Additionally, those aspects of the specified processes that involve engineering decisions that NGESO makes are expressly excluded from the scope of the BM Audit. It is also not the responsibility of the BM Auditor to:

- confirm that system security has always been maintained; and/or
- review the accuracy of forecast demand as prepared by NGESO compared to actual demand.

For the purposes of this report, and the BM Audit, those aspects of Section Q of the BSC covering the compilation and submission of Balancing Mechanism data and relevant to the activities stated in a) to d) (from hereon referred to as the 'specified processes') above, form the reporting criteria. The data included within these submissions are collectively referred to as the 'Balancing Mechanism data'.

Directors' Statement

The Directors of NGESO are and shall be responsible for complying with the rules as set out in Section Q of the BSC (the reporting criteria) in respect of the compilation and submission of Balancing Mechanism data during the year ended 31 March 2021.

We confirm to the best of our knowledge that we have:

- established and followed the specified processes in accordance with the requirements of the reporting criteria;
- designed, implemented and maintained internal controls and processes over information relevant to the specified processes;
- presented information, including the reporting criteria, in a manner that provides relevant, reliable, comparable and understandable information; and
- measured and reported on the specified processes and Balancing Mechanism data based on the reporting criteria.

We confirm our compliance for the year ended 31 March 2021 as set out in:

- Version 36.0, dated 1 April 2020, covering the period 1 April 2020 to 27 May 2020;
- Version 37.0, dated 28 May 2020, covering the period 28 May 2020 to 24 June 2020;
- Version 38.0, dated 25 June 2020, covering the period 25 June 2020 to 17 March 2021; and
- Version 39.0, dated 18 March 2021, covering the period 18 March 2021 to 31 March 2021.

In &

Fintan Slye For and on behalf of the Board of Directors of National Grid Electricity System Operator Limited 18 June 2021



Balancing Mechanism auditor's independent assurance report to the Directors of National Grid Electricity System Operator Limited for the year ended 31 March 2021

We have performed an independent reasonable assurance engagement in our role as the Balancing Mechanism Auditor ("BM Auditor"), over specific aspects of the responsibilities placed on National Grid Electricity System Operator Limited ("NGESO") in its role as the National Electricity Transmission System Operator ("NETSO") within the Balancing and Settlement Code ("BSC") for the year ended 31 March 2021.

Our independent assurance report is produced in accordance with the Framework Services Agreement dated 1 December 2017 and Call-Off Contract Number: ESO-20-07-01 dated 1 October 2020, agreed between ourselves and NGESO.

For the purposes of our assurance engagement, the reporting criteria is those aspects of Section Q of the BSC covering the compilation and submission of Balancing Mechanism data and relevant to the specified processes. Section H Paragraph 5.1.6 of the BSC requires that the activities set out below should be subject to audit by the BM Auditor and accordingly they form the subject matter of the engagement. Together, these activities are referred to herein as the "specified processes":

- compiling and submission of Final Physical Notification data by the NETSO pursuant to and in accordance with Section Q;
- compiling and submission of Bid-Offer data by the NETSO pursuant to and in accordance with Section Q;
- compiling and submission of Acceptance data by the NETSO pursuant to and in accordance with Section Q; and
- submission of other data by the NETSO pursuant and in accordance with Section Q6.

The data included within these submissions are collectively referred to as the 'Balancing Mechanism data' for the purpose of our opinion. All other rules, principles, criteria, processes and controls described in or required by the BSC are excluded from the scope of our assurance report.

In addition, for the purposes of our assurance engagement we have considered the following versions of the BSC, Section Q:

- Version 36.0, dated 1 April 2020, covering 1 April 2020 to 27 May 2020;
- Version 37.0, dated 28 May 2020, covering 28 May 2020 to 24 June 2020;
- Version 38.0, dated 25 June 2020, covering 25 June 2020 to 17 March 2021; and
- Version 39.0, dated 18 March 2021, covering 18 March 2021 to 31 March 2021.

Unless the context otherwise requires, words and expressions defined in the BSC, Section Q versions 36.0, 37.0, 38.0, and 39.0, to which NGESO is a signatory, have the same meaning in this assurance report.

Respective responsibilities of NGESO and the Balancing Mechanism Auditor

NGESO's responsibilities in its capacity as NETSO, is responsible for the compilation and submission of Balancing Mechanism data to the Balancing Mechanism Reporting Agent ("BMRA") and the Settlement Administration Agent ("SAA") are set out in Section Q of the BSC. NGESO is responsible for complying with Section Q of the BSC in respect of the compilation and submission of Balancing Mechanism data. The BSC also requires NGESO to appoint a BM Auditor to review the compilation and submission of the Balancing Mechanism data referred to in paragraph 5, Section H of the BSC. NGESO's Board is also responsible for preparing the Directors' Statement.

It is our responsibility to plan and perform our work, including testing on a sample basis, over the activities performed by NGESO, with a view to expressing an independent opinion as to whether NGESO, has, in respect of its compilation and submission of Balancing Mechanism data, in all material respects, carried out the specified processes set forth in Section Q of the BSC for the year-ended 31 March 2021.



Independence and Quality Control

In carrying out our work, we complied with the Institute of Chartered Accountants in England and Wales (ICAEW) Code of Ethics, which includes independence and other requirements founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour, and is no less demanding than the applicable provisions of the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants (IESBA Code).

We also apply International Standard on Quality Control (UK) 1 and accordingly maintain a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Basis of review

We have performed our reasonable assurance engagement in line with the requirements of the International Standard on Assurance Engagement 3000 (Revised), 'Assurance engagements other than audits or reviews of historical financial information' issued by the International Auditing and Assurance Standards Board.

Scope of work

We have planned and performed our work in accordance with our Assurance Approach which is included as Appendix A of the 'BM Assurance Report, June 2021'. Our work included an examination, on a test basis, of the specified processes carried out by NGESO, in respect of its compilation and submission of Balancing Mechanism data as set forth in Section Q of the BSC.

In reaching our opinion, we assessed the risk of a material breach in respect of the compilation and submission of Balancing Mechanism data in relation to the specified processes, whether caused by fraud or other irregularity or error.

The scope of the BM Audit does not include the calculation of the submitted Balancing Mechanism data by NGESO. Specifically, it does not include the calculation of Balancing Settlement Adjustment data and Applicable Balancing Services Volumes, which are required in the calculation of the System Sell Price and System Buy Price. Furthermore, the scope of the BM Audit does not require the BM Auditor to assess the validity of the Balancing Mechanism data submitted on behalf of BM Units to NGESO, but is restricted to the BM Auditor reviewing the onward submission of this data to the BMRA or the SAA, as required. Additionally, those aspects of the specified processes that involved engineering decisions that NGESO made are excluded from the scope of our BM Audit. It is also not the responsibility of the BM Auditor to:

- confirm that system security has always been maintained; nor
- review the accuracy of forecast demand as prepared by NGESO compared to actual demand.

Materiality

The assessment of what is material and therefore what issues, if any, warrant inclusion in the independent assurance report, is a matter of professional judgement. The BSC Auditor has communicated [to us] that its materiality as part of the BSC audit is 1.2 TWh for the year-ended 31 March 2021, which we have taken into account where any issues have been identified for which a clear numerical impact in terms of TWh can be considered. In applying our judgement, we also took into account the following factors:

- a. the number of persons and entities affected by the specified processes;
- b. the effect of an adjustment which affects (in a past or the current audit period) whether NGESO has carried out the specified processes, or is likely to affect the future;
- c. whether a misstatement is the result of an intentional or unintentional act or omission;
- d. the extent to which the actual outcome would have been different had the specified processes in respect of the compilation and submission of Balancing Mechanism data as set forth in Section Q of the BSC been carried out; and
- e. the aggregate impact of any failure to comply with Section Q of the BSC.



Opinion

Based on our procedures, in our opinion, in all material respects, NGESO has carried out the specified processes as set forth in Section Q of the BSC in respect of its compilation and submission of Balancing Mechanism data for the year ended 31 March 2021.

Use of this report

This report is intended solely for the benefit of the Directors of NGESO in connection with NGESO's reporting obligations under Section H paragraph 5.1.6 of the BSC and in accordance with the terms agreed between us.

To the fullest extent permitted by law we do not accept or assume any liability or responsibility for any other purpose or to any other party for our assurance work or our report save where terms are expressly agreed in writing.

Where the 'Balancing Mechanism Assurance Report, June 2021' (including our independent assurance report) is published on a website by NGESO, it shall be subject to the conditions of access specified in the agreement between us and NGESO. The maintenance and integrity of that website is the responsibility of NGESO; the work carried out by us does not involve consideration of these matters and, accordingly, we accept no responsibility for any changes that may have occurred to the 'Balancing Mechanism Assurance Report, June 2021' or our independent assurance report when presented on that website.

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PricewaterhouseCoopers LLP Chartered Accountants Watford 18 June 2021



Appendix A - Assurance Approach

We designed our audit approach and testing to provide reasonable assurance that the specified processes had been carried out as set forth in Section Q of the BSC respect of NGESO's compilation and submission of Balancing Mechanism data for the year ended 31 March 2021. This consisted of the following activities

- a) obtained an understanding of the computer systems and/or internal operating procedures that NGESO has established;
- b) tested on a sample basis, to the extent we considered necessary, the ongoing operation of the IT systems and/or internal operating procedures relevant to the specified processes for the period 1 April 2020 to 31 March 2021; and
- c) tested on a sample basis, to the extent that we considered necessary, the data processed by the relevant IT systems and/or internal operating procedures for the period 1 April 2020 to 31 March 2021.

In performing our assurance engagement, we assessed the risk of a material non-compliance with the specified processes, as set forth in Section Q of the BSC. In areas within the specified processes where we identified specific risks, or where weaknesses were identified in the operation of certain internal processes or controls, these compliance tests were supplemented by substantive tests of detail of the relevant underlying data.

We selected a number of half-hour periods within Settlement Days for testing across the reporting period. The selection of the Settlement Days (and subsequently half-hour periods within) reviewed was based solely on our assessment of risk and application of our sampling methodology. Our samples included a mixture of "normal" days and other days where we anticipated unusual factors which, in our view, represented a risk as to ensuring alignment with internal operating procedures.

Where it was more efficient for us to do so, we used technology enabled audit tools and ran tests for the entire selected sample day. These methods involved the use of data interrogation tools to perform automated tasks such as matching two or more types of records, identifying patterns and looking for anomalies.

Where we did not find sufficient samples of particular events/activities on the selected sample days we selected data from additional days to ensure that the sample sizes selected continued in line with our sampling methodology.

Throughout the period of execution of our work we monitored developments that had a potential impact on the compilation and submission of Balancing Mechanism data, and where we identified a potential risk within the scope of our assurance engagement, we assessed the risk and determined an appropriate response.

The work that we carried out can be summarised as follows:

1) The receipt and compilation of Final Physical Notification, Bid-Offer an Acceptance Data

- Compared the Settlement Data (Final Physical Notification, Bid-Offer and Acceptance data and Bid-Offer Acceptance Data) sent by the BMUs against the information processed by the NGESO systems, and notified to the Balancing Mechanism Reporting Agent (BMRA);
- Confirm the relevant application of default data where required, through sample testing; and
- Reviewed incidents where the electronic transfer had been interrupted and confirmed that appropriate actions were taken to ensure no data files have been lost/duplicated.



2) The submission of Final Physical Notification Bid-Offer, and Acceptance Data and other required data

- Compared the Settlement Data (Final Physical Notification, Bid-Offer and Acceptance data and Bid-Offer Acceptance Data) in the NGESO systems with the information notified to the BMRA;
- Confirmed the appropriate submission of Final Physical Notification, Bid-Offer and Acceptance Data and other required data within the required timescales, through sample testing; and
- Reviewed any incidents where electronic transfer had been interrupted and actions taken to ensure no data files have been lost/ duplicated.

3) General IT Controls Testing

Most transactions involving the input and output of data are sent and processed electronically. The integrity of these transactions may therefore be impacted by the robustness of the IT control environment. Consequently, we obtained an understanding of the IT general controls through testing which covered the following domains and the SPICE and SORT applications:

- Program development;
- Program changes;
- Computer Operations; and
- Access to programs and data.

This testing was not designed to provide us with sufficient appropriate evidence on which to form an assurance conclusion over the design and operation of controls and accordingly we do not express such a conclusion.