

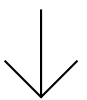
ELEXON

BSC ANNUAL REPORT
2021/22



CONTENTS

| | |
|------------------------------|----|
| Report from the Chair | 03 |
| Elexon's 2020/21 | 08 |
| BSC Rules Management | 13 |
| Working for Customers | 21 |
| Our Performance and Services | 27 |
| Committee Summaries | 31 |



REPORT FROM

THE CHAIR





Michael Gibbons CBE
Chair, Elexon Ltd and the BSC Panel

During the past year, Elexon has continued to offer professional support in a period of great challenge for the industry. A lot of this was unprecedented and resulted in an extremely difficult year not only for Suppliers, but also the wider market. In order to support industry in these circumstances, a far greater burden than normal was placed on Elexon and our people. We have managed this by optimising the resources we have and enabling our colleagues to work in a more flexible way.

Throughout the year, we aimed to deliver our services as efficiently and effectively as possible in order to continue to serve industry to our high standards. We adapted quickly to the additional workloads and demands placed on our colleagues resulting from the market volatility and the impact of Supplier failures. We also took on new responsibilities for the ways in which we serve the industry.

This report explains the key activities and milestones achieved by Elexon, and the BSC, over the past year. It is accompanied by Elexon's 2021/22 Financial Statements.

Supporting our customers as wholesale prices increased and Suppliers exited the market

The past year has been one of the most challenging that the energy sector has seen since the introduction of the competitive market.

Increasing global energy demand, including as part of the COVID recovery, lower than expected gas storage levels in Europe and the impact of the devastating conflict in Ukraine resulted in wholesale prices increasing to record levels.

The GB energy market has been under severe pressure, with 26 Suppliers having failed between April 2021 and the end of March 2022. The Panel met a remarkable 21 times, typically at very short notice, to discuss the individual circumstances of Supplier defaults. This was in addition to the 12 scheduled meetings that the Panel has each year. The Panel took a commercial approach combined with professional expertise to conduct these urgent meetings. The Suppliers concerned were invited to be represented each time, so that the process was completely fair, and resolved in a way which protected solvent BSC Parties and their customers.

We worked with Ofgem to manage the exit of the companies through the Supplier of Last Resort (SoLR) arrangements. Of the 26 companies that failed, 22 of them were duly dealt with under the SoLR process.

Elexon has made sure that around 2.4m customers were transferred to other Suppliers without delay. For the first time in many years, the Panel concluded on several occasions that it should request that Ofgem expel certain Parties from the BSC, in order to protect the remaining Parties, and their customers. In addition, the first ever Energy Supply Company Administration (ESCA) Order was designated for Bulb Energy Limited in November 2021, which placed the company in special administration. Since then, we have been providing support and guidance to the administrator on BSC compliance.

I thank Panel members for the effort, insights and expertise they have provided, which have helped to protect the interests of all companies that remain in the market.

Market-wide Half Hourly Settlement (MHHS)

One of the largest changes to the sector is the implementation of MHHS which we are facilitating. During April 2021, Ofgem confirmed that Elexon would manage implementation of MHHS as the Programme Manager. This is a role that involves co-ordinating the activity of around 180 organisations. The MHHS Programme role has been separated and ring-fenced from the rest of Elexon's BSC activities, and in November 2021, Ofgem approved Elexon's Business Separation Plan for the MHHS Programme.

The industry-wide transition to MHHS will make good use of the Government's roll out of Smart Meters. MHHS is critical to leveraging the benefits of smart meters and contributing to a more optimised and cost-effective electricity system which encourages more flexible use of energy. MHHS will be a cornerstone to achieving Net Zero, with total net benefits to society expected to be between £1.6bn and £4.5bn by 2045.

Over the last year we have worked hard to ensure that MHHS is delivered by 2025. In June 2021, the Architecture Working Group (AWG), to which Elexon provided technical leadership, recommended to Ofgem that 'event-driven' architecture is used to create the new data integration platform (DIP) that will help Suppliers to share MHHS data. In September 2021, we delivered the eight recommendations of the Code Change and Development Group (CCDG) to Ofgem, which will ensure that the transition to MHHS happens as smoothly and efficiently as possible.

Elexon Kinnect

We have been making significant investments in our systems. During 2021, we continued the roll out of [Kinnect](#), our new cloud platform.

This included delivering new functionality for the Customer Solution and starting the migration of data sets from our ageing Balancing Mechanism Reporting Service to our new Kinnect Insights Solution, which will provide a state-of-the-art service based on open data principles. We have also been preparing for the migration of the Settlement Administration Agent (SAA) to the Kinnect Settlement Solution. This will be a major step forward, as the SAA calculates the daily Settlement Runs. We expect to complete the migration in autumn 2022 following testing. More detailed information on the Kinnect milestones is in our [2022/23 business plan](#).

The Helix Programme

We need to overhaul BSC systems in order to deliver MHHS, and in summer 2021 we began the [Helix Programme](#), which will develop three new services and a new system to manage the vast increase in half hourly data that we will need to process once MHHS is live. The new Helix solutions will be built on Kinnect, taking advantage of its flexible and scalable cloud architecture. In January 2021 we began working with three technology providers to build the solutions ready for industry testing in April 2023. More information on Helix is available in our [latest business plan](#).

The Future System Operator and the Codes Review

In April 2022, the Government and Ofgem published next steps for the Future System Operator (FSO) role and the code arrangements. Both of these initiatives have consequences for Elexon. The Government and Ofgem have decided that the FSO will be a new public body which is independent of National Grid. Elexon is owned by National Grid ESO, therefore the FSO reforms will impact us.

The proposals for an FSO (published in July 2021) rightly recognised that Elexon's independence is of value to Government, Ofgem and the industry, and should be maintained, and that Elexon should remain accountable to the industry it serves. There will be a further consultation on Elexon's ownership arrangements explaining the options and we look forward to engaging in this.

The Government and Ofgem want code managers to be more empowered. They will be licensed by Ofgem and Code Panels will be removed and replaced by stakeholder engagement fora. As a result, the code managers will be responsible for playing an enhanced role in the change process, and delivering the strategic direction set by Ofgem.

Elexon has been a strong supporter of reforming the arrangements for central services. Along with many others in the sector, we welcome the direction that has been set. Having more empowered, end-to-end code managers will speed up the delivery of rule changes. We need an adaptive and agile change process to deliver change efficiently and effectively. This is important, as sweeping reforms to code rules will be needed to support Net Zero.

A fully independent FSO should also put an end to any concerns about potential for conflicts of interest between the electricity System Operator and National Grid. We look forward to supporting the implementation of these changes. We will continue to make the case for consolidating the codes themselves, so that the arrangements are easier to navigate for energy stakeholders and better able to facilitate coordination of strategic change.

Nuclear Regulated Asset Base approach

The dramatic rises in wholesale prices over the past year, and the war in Ukraine have increased the Government's focus on security of supply. A new energy security strategy was published by Government in April, which increases targets for the roll out of wind generation and sets an ambition for building up to eight new nuclear reactors. Elexon, through its subsidiary, EMR Settlement Ltd (EMRS) will have an important role to play in this. The Low Carbon Contracts Company (LCCC) is envisaged to be the settlement agent for the Nuclear Regulated Asset Base approach to financing. P435 'Enabling EMRS to undertake preparatory work for potential future settlement services to LCCC' was raised by LCCC and proposes to allow EMRS to support LCCC in development of the scheme.

2021 Customer Survey

The 2021 survey indicates that overall satisfaction with our service remains consistently high. 91% of respondents believe our service has improved over the last year, or stayed the same.

Overall satisfaction with our service remains consistently high, with 69% of respondents giving us a score of 8 to 10, out of 10.

Improvements to BSC processes

The credit arrangements and payment terms in the BSC are stringent so as to afford protection for BSC Parties against mutualisation of payment defaults when a Supplier fails.

Over the past year, the Credit Assessment Price (CAP), which is used to determine a Party's energy indebtedness, rose to record levels, as it tracks wholesale prices. It can place a financial burden on BSC Parties in making sure that they have adequate credit arrangements in place. In October 2021, following a proposal from Elexon, the Panel approved an alternative process which means that Elexon reviews and adjusts the CAP every two weeks (both upwards and downwards). This is so that the arrangements respond quickly to the 'fast changing market' conditions and thus protect BSC Parties as effectively as possible.

Improving the robustness of processes

During September and October 2021 we took steps to ensure that we have robust processes in place to forecast the impact of Supplier failures on Elexon Clear's cashflow, which is the service we use to manage all of the main Settlement transactions. This forecasting allows us to provide notice to Parties in advance, if the BSC Shortfall Amount mechanism needs to be triggered.

The Panel also consented to an increase in Elexon Clear's overdraft facility from £1m to £5m, to help us manage short-term BSC Party defaults. We undertook stress tests of our systems and processes based on different potential market scenarios. This enabled us to better support the industry through our management of BSC Party defaults.

Elexon's culture and values

Throughout the year, we have also been embedding our new values into the heart of the organisation, as part of our cultural change programme. Our values define who we are, what is important to us, and the qualities that all of our colleagues are expected to demonstrate when approaching their work. An essential part of our cultural work is to create the feeling that at Elexon, we are one team where people support, collaborate and are inclusive of one another.

A key facilitator of creating the culture we want has been Elexon's Diversity Forum, which has continued to promote equality, diversity and inclusion across the organisation. During the year, we created a statement of intent and strapline to outline our commitments as an organisation. We also signed up to the Disability Confident commitment, and hosted Elexon's first Diversity and Disability Awareness weeks. Both of these weeks had events focused on creating a supportive and inclusive culture among colleagues.

We have also continued to focus on the mental and physical wellbeing of our colleagues. Our team of Mental Health First Aiders have been working with colleagues to help deal with any pressures they may be facing in their work or personal lives. We have also held various events focused on wellbeing, including BUPA-led talks on both male and female health concerns, as well as the importance of sleep to wellbeing.

Looking forward

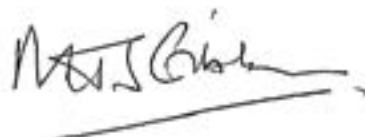
As we enter 2022/23, the period of change continues for Elexon. In 2021, our CEO for the last seven years, Mark Bygraves, decided to move on. I would like to thank Mark for his dedication to Elexon, and the achievements under his leadership. On behalf of the Board, the Panel, and everyone at Elexon, I wish Mark success in the next phase of his career.

I would also like to thank Sara Vaughan who stepped in as interim CEO from October 2021 to March 2022, and was, during her tenure, able to ensure that Elexon maintained the continuity, consistency and the high standards of performance for which it is known. As of April 2022, we have welcomed a new CEO, Simon McCalla, who is well equipped to lead Elexon into the future, and navigate the challenges that arise as the industry transitions to Net Zero.

During 2022, we will see further rotation of the Elexon Board. We will be saying goodbye to our Chair of the Audit and Risk Committee and non-exec Board director David Rigney, as he moves on after nine years at the end of June. David has brought an enormous amount to Elexon, with his financial services background, and strong accounting and governance experience. We look forward to welcoming his successor, Tim Fitzpatrick, who also has a strong financial services and CFO background, and is an experienced Chair of Audit Committees.

In the next year, we will also appoint or reappoint members to the BSC Panel as part of the BSC Panel rotation. Elexon facilitates these appointments via our election process. More information on this will be provided to BSC Parties in due course.

This is my last Annual Report as the Chair of the Elexon Board and the BSC Panel as I will be retiring from the position later this year, after having served for nine years. I have found the role an immense privilege, especially because of the wide range of achievements of the Panel and my colleagues in Elexon. The recruitment process has started for my replacement in both roles, and an appointment will be made later in the year. I would like to take this opportunity to thank my colleagues at Elexon, the Panel and the industry for allowing me this opportunity, and for their consistent support when needed. It has been one of the real highlights of my career, a great pleasure to perform and a role I shall undoubtedly miss. I take the opportunity to wish all connected with the BSC great success in your future endeavours.

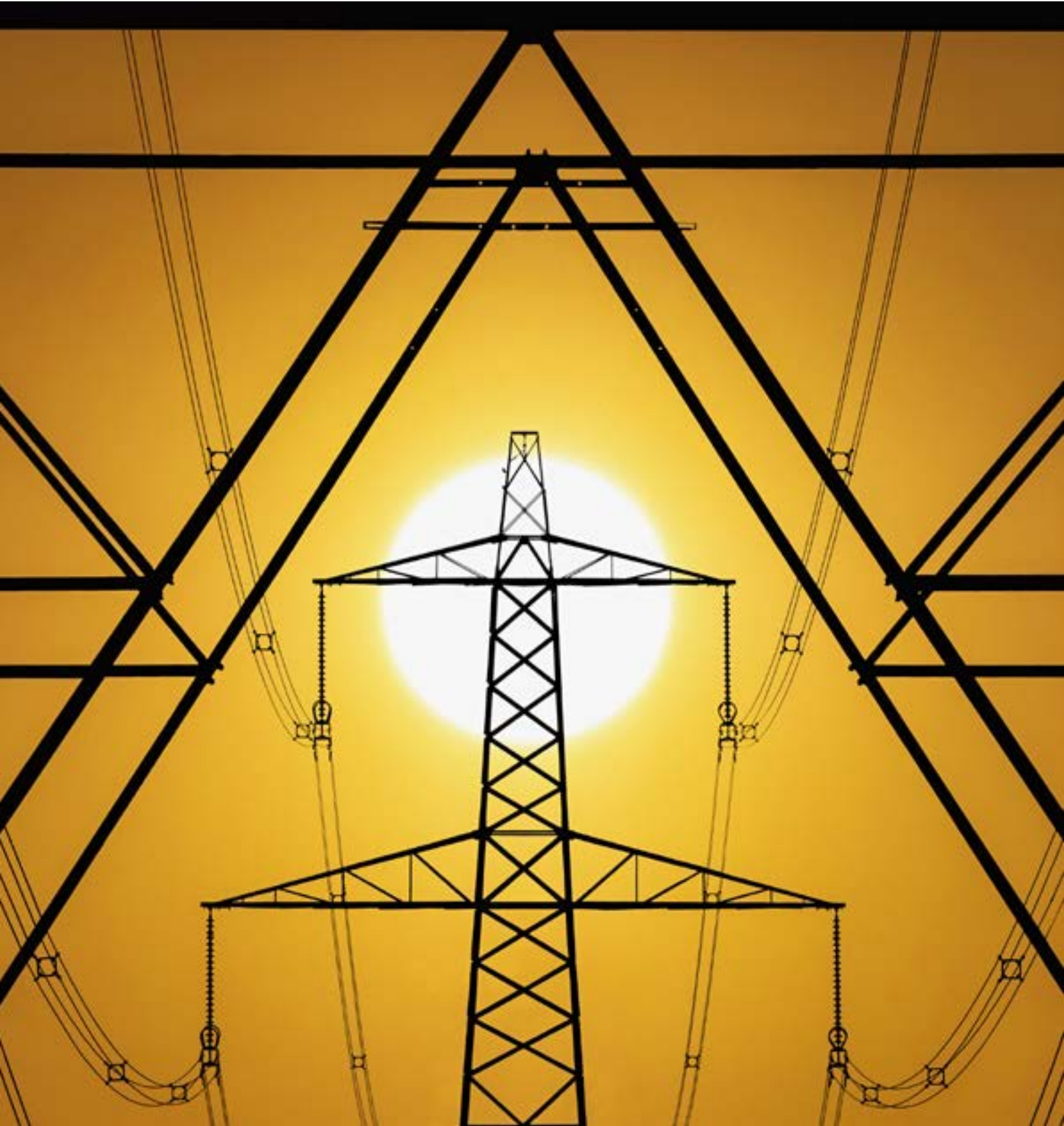


Michael Gibbons CBE

Chair, Elexon Ltd and the BSC Panel

ELEXON'S 2020/21

BSC HEADLINE STATISTICS



**2,325 Settlement
Runs carried out**

2,325

**20 Modification
Proposals raised**

20

**6 BSC Issues
raised**

6

**12 Modifications
implemented**

12

**3.12m Energy Contract
Value Notifications (ECVNs)
received**

3.12m

**52 Modification and Issue
Workgroup meetings
(including 28 Mod meetings)**

52

**12 Change
Proposals
implemented**

12

**22 Change
Proposals raised**

22

**Reviewed 53 consultations
and responded to 19**

53

**Approximately 2,100 new
followers on LinkedIn**

2,100

22 Supplier of Last Resort events managed supporting transfer of around 2.4 million customers to new Suppliers

278 Circulars published

2.4M

278

615 Credit Defaults managed

£1.41 billion of Credit Cover managed

615

£1.41Bn

45 parties acceded to the BSC

15 Parties registered for roles

29 Trading Disputes upheld totalling approximately £4.8m

45 15

£4.8M

1,014 people registered for our webinars

Our videos and recorded webinars were watched 9,000 times

1,014

9,000

Elexon Board remuneration

Section C4.4.5 of the BSC requires us to publish the remuneration and benefits payable to all of Elexon's directors in their capacity as directors of Elexon. In accordance with Section C4.4.2, Elexon's Chief Executive Officer does not receive any additional remuneration in his capacity as a director of the company.

Anne Heal

Non executive Director and
Remuneration Committee Chair
£33,600

Clare Duffy

Non executive Director
£29,600

David Rigney

Non executive Director, Senior
Independent Director and Chair
of the Audit and Risk Committee
£35,600

David Titterton

Non executive Director, Transformation
Committee Chair
£33,600

Sara Vaughan

Non executive Director
£29,600

BSC Panel remuneration

Section B2.11.5 of the BSC states that any remuneration or benefits awarded to the Panel Chair and Chair-appointed Independent Panel members should be disclosed in the Annual BSC Report.

Panel Chair

Michael Gibbons

Role: Elexon Board and BSC Panel Chair

Remuneration/benefits

- Annual fee for the combined roles: £161,851

Panel Members

Dr Phil Hare

Role: Independent Panel Member and Deputy Chair

Remuneration/benefits

- Annual fee of £25,000 (the annual fee covers 12 set Panel meetings per year as well as the preparation that goes into those meetings)
- £1,000 per additional meeting/day and £500 per half day
- £250 for each additional pre-Panel briefing

Professor Derek Bunn

Role: Independent Panel Member

Remuneration/benefits

- Annual fee of £25,000 (annual fee covers 12 set Panel meetings per year as well as the preparation that goes into those meetings)
- £1,000 per additional meeting/day and £500 per half day

Number of meetings attended by BSC Panel members

BSC Panel Members are appointed by:

- Election (in the case of Industry Members), or by appointment
- The Panel Chair (in the case of Independent Members)
- National Grid Electricity System Operator (National Grid ESO) in the case of the National Grid ESO Panel Member
- Distribution System Operators (in the case of the DSO Representative)
- Citizens Advice (in the case of Consumer Panel Members).

At scheduled meetings, Panel Members vote on whether or not to recommend Modifications for approval by Ofgem. Ad-hoc meetings are used for discussing urgent business, for example SoLR issues, Supplier Default and voting on urgent Modifications. A Consumer Panel Member attended all of the meetings. No elections for Panel members were held during 2021/22.

Panel Members' attendance is shown in the table below.

There were 12 scheduled BSC Panel meetings during 2021/22 and 21 urgent or ad-hoc ones. The unprecedented number of ad-hoc meetings, historically quite rare, was mainly due to the need to deal with Supplier failures, continuing the rise seen in 2020/21 when there were 10.

| Attendance | Scheduled meetings attended (12) | Urgent meetings attended (21) | Total meetings attended (33) |
|---|----------------------------------|-------------------------------|------------------------------|
| Michael Gibbons Panel Chair | 12 | 20 | 32 |
| Phil Hare Independent Panel Member | 11 | 19 | 30 |
| Derek Bunn Independent Panel Member | 12 | 18 | 30 |
| Diane Dowdell Chair-appointed Industry Panel Member | 8 | 19 | 27 |
| Lisa Waters Industry Panel Member | 11 | 14 | 25 |
| Mark Bellman Industry Panel Member | 10 | 14 | 24 |
| Tom Edwards Industry Panel Member | 12 | 20 | 32 |
| Andrew Colley Industry Panel Member | 12 | 21 | 33 |
| Rhys Kealley Industry Panel Member | 12 | 20 | 32 |
| Fungai Madzivadondo Distribution Network Operator Representative | 11 | 13 | 24 |
| Ed Rees Consumer Panel Member | 11 | 13 | 17 |
| Andy Manning Consumer Panel Member | 11 | 18 | 29 |
| Colin Down Ofgem Representative | 12 | 1 | 13 |
| Jon Wisdom National Grid ESO Panel Member | 11 | 16 | 27 |

BSC RULES MANAGEMENT



In this section of the Annual Report, we review our BSC change activity, including the number of changes implemented during 2021/22, compared with previous years. We discuss significant events that impacted the progress of changes, and this is followed by a summary of changes that have been implemented and progressed. For more detailed information, our [Change Register](#) contains a complete status list of all BSC changes that have been raised, past and present.

Modifications change the BSC itself, and are typically raised by the Panel and BSC Parties. Change Proposals amend the BSC subsidiary documents and over recent years they have largely been raised by Elexon. As always, we thank everyone who has devoted their time to developing change proposals, attending Working Groups, and responding to consultations.



Highest number of change proposals raised since 2016/17

During 2020/21 we implemented 12 Modifications and 12 Change Proposals compared with implementation of 17 Modifications and 10 Change Proposals in 2019/20. There were two Modifications that were rejected in 2021/22, [P332](#) 'Revisions to the Supplier Hub Principle' and [P416](#) 'Introducing a route of appeal for the Annual Budget in line with the proposals for the Retail Energy Code (REC)'

As well as those Modifications that we implemented during the year, there were also 20 Modifications and 22 Change Proposals raised in 2021/22, the highest number of changes raised since 2016/17. In comparison with 2020/21, 14 Modifications and 14 change proposals were raised during that year.

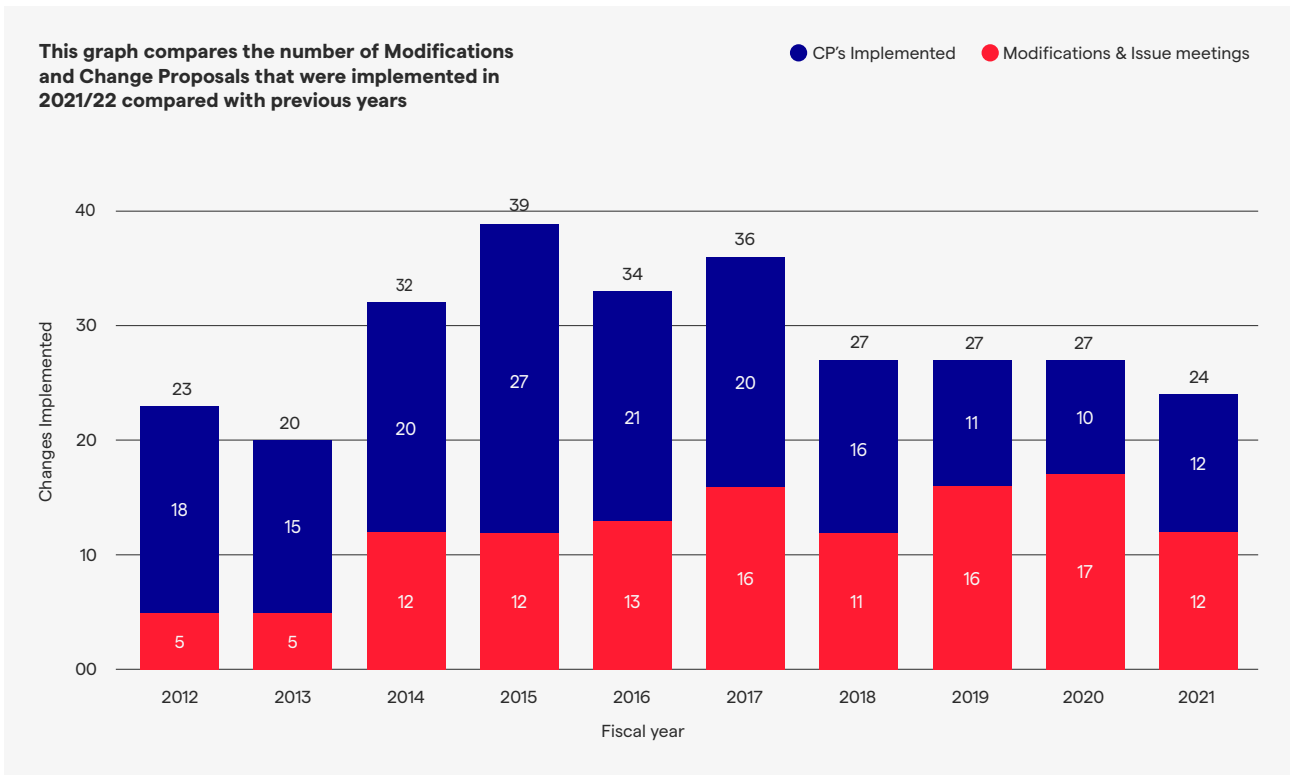
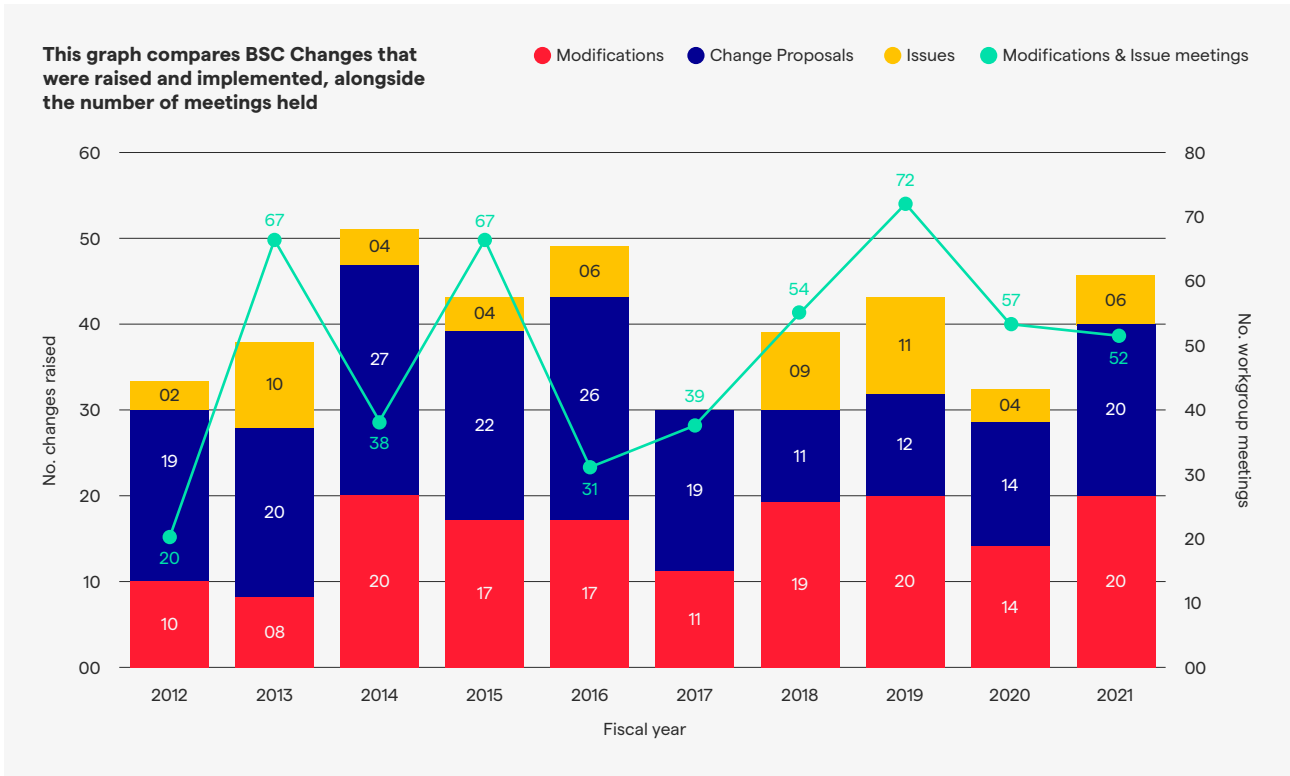
Of the Modifications that were raised in 2021/22, 90% were to solve issues with Governance, Assurance, and Settlement problems in the BSC. In addition to this, 25% of Modifications raised, and 5% of Change Proposals raised required system changes.

More BSC Issues raised, some of which support Net Zero

BSC Issues are raised when changes may be needed to the BSC, but where it is less clear what the problem is, or how it could be solved. Issues do not suggest changes themselves, rather they make recommendations on what (if any) changes should be raised, having refined the problem and potential solution options.

During 2021/22, six Issues were raised compared to only four in 2020. The Issues that are currently being dealt with are significant, and the outcomes of some could support progress to Net Zero.

During 2021/22, almost half (46%) of all BSC Workgroup meetings were for Issues. This is the highest percentage since 2012, with the average over the previous three years being 29%. This was because almost half of Modifications raised did not need to go for Workgroup Assessment.



Which organisations are raising changes?

In 2021/22, the BSC Panel raised the majority of BSC Modifications at 35%. This remains the norm, as in 2020/21 the BSC Panel raised the majority, at 45%. Elexon continued to raise the majority of Change Proposals, raising 85% in 2021/22 compared to 79% in 2020/21.

During 2021/22, for the first time we saw Ofgem raise three Modifications directly. They did this via a new type of Modification to the BSC called an Authority (Ofgem) Led Significant Code Review (SCR) Modification Proposal. These special types of Modifications, raised by Ofgem to deliver the outcomes of its SCRs, do not follow the normal Modification Procedures. Instead, they follow the timetable and process set by Ofgem, allowing it to give effect to its SCRs by essentially directing the changes to the BSC and avoiding the use of Workgroups.

BSC Changes which support regulatory reforms

The Ofgem-led SCR Modification process was used for the first time with [P420](#) 'Retail Code Consolidation Significant Code Review' which was implemented on 6 September 2021. P420 made the necessary changes to reflect the close down of the Master Registration Agreement (MRA) and the transition of the Supplier Volume Allocation (SVA) Metering arrangements from the BSC to the REC. This was part of the Retail Code Consolidation SCR. It also inserted the required drafting to give effect to the new Cross-Code Steering Group (CCSG) and cross-code Modification arrangements.

“During 2021/22, for the first time we saw Ofgem raise three Modifications directly. They did this via a new type of Modification to the BSC called an Authority (Ofgem) Led Significant Code Review (SCR) Modification Proposal”

Two further Ofgem-Led SCR Modifications have been progressed this year:

- [Modification P423](#) 'MHHS Implementation and Governance Arrangements', was raised by Ofgem on 16 August 2021 and implemented on 8 October 2021. P423 introduced implementation and governance arrangements for Elexon to effectively manage and oversee the MHHS Programme and require Elexon to undertake that programme management in a transparent, consultative and unbiased way. It also requires MHHS Programme Participants to develop and deliver the changes to their systems and business processes to ensure timely and cost effective implementation, and to cooperate with the Programme governance and processes, including testing, qualification and migration. P423 effectively built on changes approved through [Modification P413](#) 'Enable Elexon to be the Programme Manager for the implementation of MHHS' implemented in April 2021. P413 enables Elexon to provide MHHS implementation management services under the BSC and sets out the cost recovery mechanism for MHHS Programme Management Services.
- [Modification P436](#) 'Consequential BSC changes for Switching SCR (REC 3.0)' was raised by Ofgem on 2 February 2022. It will introduce the new Central Switching Service (CSS) and version 3.0 of the REC (REC 3.0). The CSS and REC 3.0 are both set to go live on the same day (expected to be 18 July 2022). Specifically it sets out the new relationship between Supplier registrations in the CSS and the Supplier Meter Registration Service (SMRS), provided by Supplier Meter Registration Agents (SMRAs) under the BSC. It also includes ownership transfer of pre-existing SMRS provisions and data flows from the MRA to the BSC, bringing all SMRS obligations under BSC governance where previously they were split across the two codes.

Our work to support Ofgem's [Targeted Charging Review \(TCR\)](#) also completed during 2021/22.

[Modification P402](#) 'Enabling reform of residual network charging as directed by the TCR' was implemented in February 2022. P402 introduced new reporting requirements on Licensed Distribution System Operators (LDSOs) and Elexon to provide data to enable the NETSO to set Transmission Network Use of System (TNUoS) demand residual tariffs and enable accurate billing of subsequent charges.

Following the conclusion of its Targeted Charging Review SCR, Ofgem directed National Grid and certain LDSOs to make changes to how residual revenues are recovered through Distribution Use of System (DUoS) and TNUoS demand charges. P402 facilitated this Ofgem decision.

Modifications which support MHHS implementation

Npower Commercial Gas Limited raised [Modification P432](#) 'Half Hourly Settlement for CT Advanced Metering Systems' and [Modification P434](#) 'Mandate to Half Hourly Settle the Non-Half Hourly Unmetered Supplies Metering Systems' in December 2021 and February 2022 respectively.

As part of work to deliver Ofgem's Settlement reform SCR [the CCDG](#) was convened to develop the MHHS Target Operating Model (TOM) recommended by the [Design Working Group \(DWG\)](#). The CCDG recommended that a number of enabling changes were progressed before the full MHHS Design is baselined in 2022 and directed using Ofgem's SCR powers.

P432 and P434 were raised as a consequence of CCDG recommendations 3 and 8. P432 seeks to align with the Electricity Supply Standard Licence Conditions and to require Half Hourly (HH) Settlement for all CT Meters by October 2023. It will also require all new connections for CT Advanced Meters to settle HH from October 2022.

P434 requires a period of mandatory Change of Measurement Class (CoMC) activity for all Non-Half Hourly (NHH) Unmetered Supplies (UMS) Metering Systems running from October 2023 to October 2024. All new UMS connections will also have to be HH settled from October 2023.

If these Modifications are not implemented, there is a significant risk that there will be insufficient time for customers, Suppliers and Agents to address any issues that may arise with the transition to the TOM. P432 and P434 will therefore reduce the risks to deliver MHHS.

Modifications which support Net Zero

The Chair mentioned [P435](#) 'Enabling EMRS to undertake preparatory work for potential future settlement services to LCCC' earlier in the report. It was implemented in April 2022. While not directly contributing to Net Zero, P435 will extend Elexon vires through its wholly-owned



subsidiary company EMRS Limited.

The change would allow EMRS to complete the necessary preparatory work for schemes established by (or proposed to be established by) the Secretary of State (SoS) outside of the Capacity Market (CM) and Contracts for Difference (CfD), which will support Net Zero. If the LCCC wants EMRS to operate any new scheme, further changes would need to be made to the BSC, either via a Modification Proposal or via a direction from the SoS, using powers granted under legislation.

[Modification P398](#) 'Increasing access to BSC Data' introduced open data principles into the BSC in June 2021 based on the principles and processes identified by the Energy Data Taskforce. Increasing access to data is important to support Net Zero initiatives. Since its implementation, we have had 20 Open Data Requests. Of these, five have been published and the other requests are in various stages of assessment. Further information can be found on the [Open Data Requests webpage](#).

For details of other BSC rule changes which are supporting Net Zero, see [page 26](#) of our 2022/23

business plan.

Modifications which support greater market transparency

The following changes support greater transparency in the electricity system:

National Grid Electricity Transmission System Operator (NETSO) raised [Modification P419](#) 'Enhanced Reporting of Demand Data to the NETSO to facilitate BSUoS Reform' on 6 May 2021. Ofgem approved P419 on 25 April 2022, for implementation on 23 February 2023 as part of the February 2023 standard BSC Release.

P419 will build on existing Modification P383 'Enhanced reporting of demand data to the NETSO to facilitate CUSC Modifications CMP280 and CMP281' which enabled the aggregation of specific Metering Systems' metered data for network charging purposes. P419 will introduce the ability for Suppliers to submit declarations through the Elexon Kinnect Customer Solution.

[Modification P399](#) 'Making the identity of Balancing Service providers visible in the Balancing Services Adjustment Data' was implemented in November 2021. P399 included additional information in the Balancing Services Adjustment Data to identify the assets involved in bilateral trades. Previously, each Balancing Adjustment Action taken outside the Balancing Mechanism was reported with a unique sequential number. This did not identify the counterparty to the bilateral trade and created an information advantage to those counterparties, reducing transparency in the operation of the system creating a barrier to effective competition.

The BSC Panel raised [Modification P427](#) 'Publication of Performance Assurance Parties' impact on Settlement Risk' on 14 October 2021. The Performance Assurance Board (PAB) agreed with Elexon that this proposal be recommended to the Panel for them to raise, as part of the Performance Assurance Framework ([PAF Review](#)). P427 will allow the PAB to recommend that the Panel publish notices to industry in respect of Performance Assurance Parties' contribution to Settlement Risk along with relevant risk data. This will increase the effectiveness of all detective and investigative Performance Assurance Techniques (PATs) including Error and Failure Resolution (EFR) through greater incentives. The benefits of P427 include improved efficiency of the PAF, with swifter resolution rates to EFR plans and any other significant

issues that impact Settlement.

[Modification P383](#) 'Enhanced reporting of demand data to the NETSO to facilitate Connection and Use of System Code (CUSC) Modifications CMP280 and CMP281' was implemented on 1 April 2021. It aggregates specific Metering Systems' metered data for network charging purposes, i.e. to support the operation of CUSC Modification Proposals CMP280 and CMP281. It introduced processes explaining how Suppliers, Half Hourly Data Aggregators (HHDAs) and the Supplier Volume Allocation Agent (SVAA) participate in the aggregation and reporting of storage facilities' Metering Systems' metered data. It also enables the BSC Panel and Elexon to perform assurance activities for the aggregation of this data. These new registration and aggregation processes are being re-used for [P419](#) and [P395](#).

Other Modifications to support Parties

The Modifications below were raised to adapt the BSC so that it better supported BSC Parties based on needs that had arisen over the course of the year.

E.ON Energy Solutions raised [Modification P425](#) 'Amendment to the definition of Shared SVA Meter Arrangement' on 6 October 2021. This Modification aims to reduce the requirement from two or more Suppliers, to one or more Suppliers, to be involved in a Shared Supplier Volume Allocation (SVA) Metering Arrangement. This would allow multiple Suppliers to continue facilitating Shared SVA Metering Arrangements, while also allowing a single Supplier to make use of such an arrangement. This change will benefit customers and Suppliers that are interested in Shared SVA Metering Arrangements.

Drax Energy Solutions Limited raised [Modification P426](#) 'Combining related BSC Parties' Energy Indebtedness positions for the Credit Cover Percentage calculation' on 11 October 2021. This Modification proposes to remove 'inefficiencies' with the Credit Cover calculation by allowing related BSC Parties to combine their Energy Indebtedness prior to calculating the Credit Cover Percentage. It would reduce the amount of credit cover that we require Parties to lodge for a group of related companies. The Panel has asked the Workgroup to carefully consider the impact P426 would have on competition.

The Panel raised [Modification P429](#) in November 2021, on the recommendation of the PAB and Ofgem approved it for implementation in the February 2022 standard Release.

The cost of reporting and processing participant-reported Performance Assurance Reporting and Monitoring System (PARMS) serials is thought to be disproportionate to the benefits provided. P429 removes the majority of the PARMS data and since implementation Suppliers have benefitted from of a reduction in the reporting burden. Ultimately, we expect this change to reduce their costs for complying with the Assurance regime.

Ecotricity raised [Modification P430](#) in November 2021. It seeks to extend the solution to Approved Modification P375 'Settlement of Secondary BM Units using metering behind the site Boundary Point' to allow Suppliers to register Asset Meters and allocate Asset Metering System Identifier (AMSID) Pairs to Secondary Balancing Mechanism Units (SBMUs). Currently, only VLPs can register AMSID to SBMUs. It is the Proposer's view that the P375 solution is incomplete and should be extended to also apply to Suppliers. This would avoid a distortion in the market that gives one industry Party role an advantage over another, when both can provide Balancing Services from behind the Meter.

The Panel raised [Modification P437](#) 'Allowing non-BSC Parties to request Metering Dispensations' to introduce a provision in Section L 'Metering' to allow the relevant Meter Operator Agent to apply for Metering Dispensations on behalf of a non-BSC Party.

Through this Modification, a Metering Dispensation could be submitted at the design stage of a new site, which is earlier than the recommended 14-week timeline. This will allow for amendments proposed by the Imbalance Settlement Group (ISG) and/or Supplier Volume Allocation Group (SVG) to be properly considered and increase the likelihood that they can be actioned, resulting in improved Settlement accuracy for the relevant Metering Systems.

Key Issue groups:

The below Issues were raised in 2021/22 as problems or potential improvements to the current arrangements had been identified, but it was not known how best they should be resolved.

[Issue 97](#) 'Meter shortage risk driven by global materials availability and supply chain challenges' was raised in August 2021, as a result of the world-wide shortage of semi-conductors as well as other crucial components. This impacts on the ability of Meter manufacturers to produce various types of Meters including those used in the BSC. Our understanding is that this issue is also impacting the availability of Current Transformer (CT) Metering, which has the highest potential impact as CT Meters are usually installed at higher consumption/ higher voltage sites.



Following a Request for Information (RFIs) it was agreed that the Issue would be closed and Elexon will continue to monitor it. We are doing this by sending out quarterly RFIs to Meter manufacturers, and monthly RFIs to Metering Equipment Managers (MEMs), SVA Meter Operator Agents (MOAs) and Central Volume Allocation (CVA) MOAs. We will ask for feedback on Parties current Meter stocks and forecasts of Meter stocks over the coming months. This data will be published on our website so it can be viewed by anyone. Having this data will allow us to monitor the situation, and if it is getting worse we will be able to act accordingly.

[Issue 93](#) reviewed the BSC metering Codes of Practice (CoPs), as they had not been reviewed before. The review started in January 2021 and is due to conclude in June 2022. Meter Operators from the Association of Meter Operators (AMO), raised the issue as they believe they would benefit from improvement and/or clarification on a number of aspects to be identified and confirmed as a result of the review.

To optimise the activity of the Issue Group, a series of known aspects impacting the metering Codes of Practice (CoPs) are combined in this single Issue (e.g. the use of HH and non HH meters as the market arrangements transition to MHHS). A list of the identified issues and considerations can be found in the proposal form on the Issue 93 webpage.

Three Change Proposals have been raised so far as a result of the Issue: [CP1554](#), [CP1553](#), and [CP1550](#). In addition to this, we are aiming to consolidate the CoPs into one document. We are also now requesting information to understand the impact that 'end-dating' the CoPs 6 to 9 will have, as we believe they are now obsolete.

[Issue 95](#) 'Assessing the continued use of [TIBCO](#) service as a source of data for market participants' was raised in June 2021. This Issue Group seeks to establish the future of the TIBCO messaging service with the migration of BMRS as part of Elexon's transformation programme. Elexon is building a new [Insights Solution](#) to replace BMRS as part of Elexon Kinnect, our new scalable, modular platform. We need to understand views from BSC Parties to improve value with regards to data publications. We believe it is now important to re-examine the requirements of BSC Parties and BMRS users in relation to the longevity and current implementation of the BSC obligations with respect to TIBCO. The first workgroup was held in February 2022, and the work is still ongoing.

“We need to understand views from BSC Parties to improve value with regards to data publications. We believe it is now important to re-examine the requirements of BSC Parties and BMRS users in relation to the longevity and current implementation of the BSC obligations with respect to TIBCO”

WORKING FOR CUSTOMERS



Customer Operations

Our services are tailored to meet the needs of our customers and we offer our expertise and guidance on a range of issues. This includes sharing our analysis of trends and developments in the wholesale market through our [Insight](#) articles. We also offer a wide variety of training on the BSC topics, both in person, and [online](#).

We produce the Trading Operations, and System Price Analysis Reports regularly to help you keep track of issues that affect Settlement. They are available under the 'Data' heading at the top of the [BSC website home page](#).

During 2022/23 we:

- Held 44 meetings with potential new entrants giving them the opportunity to understand the BSC and how it works, before they consider whether to accede to it
- Completed 15 Registrations where companies underwent the market entry process and are registered in a role
- Registered three new VLPs
 - Gridbeyond Limited
 - TESGL Ltd t/a SSE Enterprise Energy Solutions
 - BESS Holdco 2 Limited
- There are now 11 VLPs in total registered in the BSC
- Ensured that 13 Parties left the market smoothly, over and above the 26 companies that exited the market through the SoLR process.
- Managed 14 qualification applications and nine re-qualifications

While we only carried out a small number of face-to-face meetings with customers in 2021/22 we did carry out 1,140 teleconferences with them, compared with 1,088 in 2020/21. We hope to host more face-to-face meetings in 2022/23.

The teleconferences were led by our team of [Operational Support Managers \(OSMs\)](#) who offer comprehensive ongoing support to BSC Parties. We assign an OSM to each Supplier Volume Allocation BSC Party so that they receive a dedicated service.

"We provide high quality support to companies that are entering, operating in, or exiting the electricity market"



BSC Audit 2021/22

To protect the interests of all BSC Parties and consumers, an external audit of BSC processes is carried out annually.

The BSC Audit is split between two distinct areas of work:

- The Supplier Volume Allocation (SVA) Process Assessment covering Suppliers and SVA Agents
- The Central Volume Allocation (CVA) International Standard on Assurance Engagements (ISAE) (UK) 3000 Opinion, covering Central Systems and CVA Meter Operator Agents.

Significant Findings for the SVA Market

The [BSC Audit](#) this year has been conducted with a backdrop of significant market turmoil. Whilst there has been a decrease in the quantity of material findings impacting Settlement, this statistic needs to be considered within a broader context.

There were 144 material findings across the Performance Assurance Parties (PAPs) in scope for testing this year, compared to 168 last year. However, 43 material findings and 12 non-Settlement impacting (immaterial findings) were closed due to Suppliers exiting the market as a result of SoLR activity, and also due to a number of PAPs choosing to outsource some Agent roles.

Elexon own the scope of the SVA audit but we continue to work closely with the BSC Auditor to ensure that it remains risk-focused. The data and findings are also shared between the various Performance Assurance Techniques (PATs) to increase the audit effectiveness and bring the best value to the PAPs and the market. This report has therefore evolved to increase the focus on the impact to Settlement Risks of the BSC Audit findings, as set out in Elexon's Risk Evaluation Register (RER).

Concentration of Findings and 'Hit Rate'

In previous reports we have highlighted the concentration of findings at a small number of PAPs. This is still the case with the latest audit, as 40% of all material findings relate to just five PAPs, (although the concentration has reduced from 51% in 2020/21).

What the 40% statistic does not take into account is how many processes were audited at these PAPs. This year we have introduced the concept of a 'hit rate' - the number of findings raised compared to the number of workpapers tested. This provides an alternative lens on PAP performance and risk. It highlights three additional PAPs that have a higher than a 50% hit rate, where material findings are raised on more than half of the workpapers tested.

Concentration of Risk and the SoLR Impact

This year has seen unprecedented flux within the market with 265 Suppliers ceasing trading, impacting around 2.4m customers. This added additional strain to those PAPs that remain in the market, and it fundamentally changes the make-up of the market itself. This can be seen most dramatically within the Non-Half Hourly (NHH) Agent market. The Audit Report was presented to the Performance Assurance Board for their consideration.

95% of the NHH market is now serviced by just seven PAPs, with one of those PAPs responsible for nearly half the market. There is a clear increase in concentration of risk. However it also means that a number of PAPs share just five percent of the market between them. There is therefore an increased risk that one or more of these PAPs becomes commercially unviable (it should be noted that the commercial viability of PAPs is not assessed as part of the BSC Audit). As there is no SoLR equivalent for Agents, there may a risk of losing vital Settlement data.

Continued Change of Agent Findings

We continue to see problems with Change of Agent (CoA) activity, predominantly in response to the D0170 (Request for Metering System Related Details) flow. Testing this year has noted material findings at 15 PAPs (consistent with 2019/2020 findings) against Settlement Risk Six (Meter Technical Details transfer and processing).

Missing Meter Technical Details (MTDs) from previous Agents is regularly quoted as a reason for not being able to provide the required information. We continue to see problems with the transfer of D0313 (Auxiliary Meter Technical Details) data flows, causing Agents to have to replace working Meters to be able to obtain future meter readings. This potentially impacts Settlement, and adds a further unnecessary cost burden on the industry.

Technical Assurance of Metering

On behalf of Elexon, in its role as the Technical Assurance Agent (TAA), the energy services company C&C Group provide the Technical Assurance of Metering (TAM) Service.

This service involves visiting customer sites to ensure that Metering Equipment meets BSC requirements and provides accurate data for Settlement. This gives stakeholders assurance that Settlement operates efficiently and accurately.

Elexon and the TAA delivered service improvements and operational changes during 2021/22 to best support our customers in recovering from the COVID-19 lockdowns.

These included:

Technical Assurance Agent Management Tool (TAAMT) 2

- The overhaul of the TAAMT [online platform](#) during the 2020/2021 operational year culminated in the launch of the new TAAMT2 platform in July 2021
- The new platform maintains the same functionality as TAAMT1, with increased speed, combined with a modern look and feel
- Elexon and the TAA implemented an 'agile' programme for continuous improvement of the platform. A second release, incorporating changes to the interface in response to customer feedback, went live in March 2022.

Resumption of TAM Inspection Visits

- At its March 2020 meeting, the PAB approved recommendations for a suspension of all TAM activities in response to the first COVID-19 lockdown. This was to allow customers to focus on business critical activities during a period of upheaval
- The PAB approved the resumption of TAM activities at its May 2021 meeting, with a limited number of inspection visits resuming from August 2021.

Desktop Audits

- Elexon delivered [P391](#) 'Introducing Desktop Audits' in April 2020, allowing for greater flexibility in the method we use to assure accuracy of Metered data. Desktop Audits supplement site Inspection Visits through a review of Metering Equipment records and data
- On-site Inspection Visits are resource-intensive both for Parties and the TAA. Through desktop audits we provide a flexible, pragmatic and cost-effective addition to onsite Inspection Visits.
- The Optional Desktop Audit sample carried out during the 2020/2021 operational year allowed Elexon and the TAA, with support from the Technical Assurance of Metering Expert Group (TAMEG), to identify improvements
- At its May 2021 meeting, the PAB agreed for Desktop Audits to be made compulsory. The additional flexibility allowed for Elexon and the TAA to continue to audit a statistically significant sample of the metering population despite the suspension of inspection visits during the first third of the 2021/2022 operational year.



Performance Assurance Framework (PAF) focus

Elxon facilitates the [PAF](#) which is used to ensure that Parties are:

- Meeting their obligations on Settlement performance and BSC requirements
- Routinely checking that they are not at risk of non-compliance with their obligations
- Seeking to rectify non-compliances that are found.

Making sure the PAF is relevant to the market

To ensure that the PAF remains relevant and reflective of the marketplace, we apply a consistent approach to assess and regularly re-evaluate Settlement Risks. We also evaluate how and when Performance Assurance Techniques (PATs) need to be deployed to counter these risks.

Following the alignment of all our Risk owners (Elxon colleagues) into the single Assurance team last year, we were able to leverage their combined knowledge and understanding of industry issues to allow us to be more reactive to changes. An example of this in action was our approach to re-activating a number of Assurance Techniques through the latter half of 2021/22, as the impacts of COVID-19 on the marketplace reduced.

Phasing out derogations to support companies during the pandemic

We put in place derogations in 2020 to help Parties manage the impact of COVID-19. They included allowing Suppliers to use estimations of consumption where it was not possible or feasible to visit sites to obtain meter readings. We phased out the derogations from July 2021 giving industry notice and providing assistance and guidance as to when and how the PATs would again be applied.

We then judiciously re-applied the [EFR](#) technique, with significantly lower Settlement Performance criterion than were in place prior to March 2020. This recognised the difficulties many Parties faced in meeting the Settlement Performance Standards. A BSC standard requires that Suppliers settle 97% of their total Non Half-Hourly (NHH) metered energy on Annualised Advances by the Final Reconciliation Run. To help the companies manage the impact of the pandemic we agreed that they would not face application of EFR or other PATs if they underperformed against this target.

Subsequently, to reflect the improving market performance and further reductions in COVID-19 restrictions, we have reviewed and gradually reintroduced compliance towards the normal Settlement performance standards.

Working with Elxon's OSMs to support the return to routine Meter reading

The Assurance team worked with the PAB and Elxon's OSMs to balance the need to hold Parties to account on their BSC Obligations, with the workload they faced as they adapted their businesses following 18 months of significant disruption. Suppliers and Generators returned to routinely reading meters instead of using estimations. The OSMs were supporting the companies to ensure they could manage this transition.

Managing the Supplier of Last Resort process and supporting Issue 97

We have also focused efforts on supporting Parties that become Suppliers of Last Resort. Historically, we have seen the rapid transfer of customers causing issues for some of the 'gaining' Suppliers, due to missing historical data, customer information, or Supplier Agent appointments.

We updated guidance documents to provide advice for how these Suppliers can minimise the impact this has on their performance metrics. We worked closely with Suppliers to share learnings from across the industry which mitigate the impact on Settlement.

We continue to investigate any events which have the potential to disrupt (or improve) any Settlement related activity. For example the Assurance team worked with the BSC Change team to convene the Issue 97 Workgroup mentioned earlier in the Rules Management section of the report. The team has also evaluated the impacts of the Faster Switching programme, particularly how reduced switching timescales affect Parties' compliance with the BSC Obligations.

Transfer of some BSC responsibilities to the REC

As part of its Retail Code Consolidation and Switching Programme Significant Code Reviews, Ofgem has merged a number of existing industry codes into the REC including some aspects of the BSC. The assurance team has delivered a significant piece of work over the past year to transfer the governance of SVA MOAs to the REC, as MOAs will no longer fall under the jurisdiction of the BSC's Assurance framework.

Performance Assurance Framework (PAF) focus

(Continued)

The transfer required an extensive update to existing BSC documents.

Over 2021/22, the team has also been preparing to make changes to BSC in July 2022 which will facilitate introduction of REC 3.0 (as explained in the Rules Management section of the report). To manage the impact of these changes we will continue to work with the Retail Energy Code Company (RECCo), through the cross-code REC/Elexon Assurance meetings. This will ensure a seamless approach between the BSC and REC.

Trading Disputes

The Trading Disputes process allows BSC Parties to amend Settlement to take account of issues that have come to light, and which affect Trading Charges.

During 2021/22, 48 Trading Disputes were raised (compared with 63 in 2020/21). All Trading Disputes were resolved by Elexon or the Trading Disputes Committee without escalation to the BSC Panel.



Market-wide Half Hourly Settlement Programme

In April 2021, Ofgem appointed Elexon to manage the [industry-led programme](#) to deliver MHHS. We are pleased to facilitate this industry-led programme to deliver a major reform supporting Net Zero.

The Programme has quickly established the necessary arrangements to design and deliver the implementation plan. This included tendering for (and appointing) Expleo Technology UK Limited (with its subsidiary company Moorhouse Consulting Limited) as the Lead Delivery Partner (LDP). The LDP began working with the MHHS Programme in December 2021.

Governance arrangements have been agreed following consultation, so that the Programme can make decisions on behalf of the industry, to which it is accountable. The [Programme Steering Group \(PSG\)](#) has been established as part of this. The PSG is the Programme's overarching decision-making authority and members include representatives from industry, Elexon, Ofgem, and Citizens Advice.

The MHHS Programme is ring-fenced and separate from the rest of Elexon. This ensures that it has separate decision-making processes, reporting and resources from the rest of Elexon.

The [Architecture Working Group](#) to which Elexon provided technical leadership consulted on, and recommended to Ofgem in June 2021, that 'event-driven' architecture is used to create the new Data Integration Platform (DIP). The DIP will allow Suppliers to share half hourly data with Elexon. It will be developed by a technology provider to be chosen following a tender process. Ofgem confirmed in [April 2022](#) that Elexon will initially operate the DIP and it will be governed by the BSC, once development is complete.

In September 2021, Elexon delivered the eight recommendations of the CCDG to Ofgem which will ensure that the transition to MHHS happens as smoothly and efficiently as possible. Elexon also provided technical leadership to the CCDG. BSC change proposals have been raised as a result. For more detail see the Rules Management section of the annual report.

More detail on the MHHS Programme is available in our [2022/23 business plan](#).

OUR PERFORMANCE AND SERVICES



BSC Services in operation

Balancing Mechanism Reporting Service (BMRS)

The [BMRS](#) is the go-to source for operational information on system balancing, Settlement and the wholesale electricity market.

Daily requests to the BMRS Application Programming Interface (API) service have increased from 3.6 million in 2020/21 to 5.5 million in 2021/22. The number of individual users has risen from approximately 55,000 to 62,000.

BMRS operates 24/7 and was available 99.9% of the time in 2021/22 compared with 99.6% in 2020/21.

BSC Central Systems Availability Performance 2021/22

- Elxon delivered over 99% availability on its 24/7 core services
- Energy Contract Volume Allocation Agent — 99.96%
- BSC Service Desk — 100%
- Balancing Mechanism Reporting Agent — 99.88%

Electricity Market Reform Settlement Services

Electricity Market Reform Settlement Services

As well as managing the BSC, Elxon is the Settlement Services Provider to the LCCC and the Electricity Settlements Company (ESC). These activities are ring fenced from BSC activities and are conducted via a separate subsidiary of Elxon, EMRS.

EMRS delivers Settlement services for both the CM and the CfD schemes. The costs of running EMRS are borne by LCCC and ESC and not by BSC Parties. However, because EMRS occupies the same premises as Elxon, EMRS makes a fair contribution to these costs based on headcount. This resulted in LCCC making a contribution of £827k to the shared fixed costs in 2021/22, which would otherwise have been borne by BSC Parties.

Number of Settlement Runs (12 month Total)

2,325

Amount of credit cover managed to 31 March 2022

£1.41Bn

Number of Energy Contract Volume Notifications received

3.12M

Review against the annual budget

For each financial year we prepare a business plan, which comprises our strategy and budget for the year ahead. We request feedback from our customers and the BSC Panel on it. That feedback is shared with the Panel and an updated version of the plan is presented to our Board in March each year, so that it can be finalised and approved for the coming financial year.

BSC expenditure outturn for 2021/22 is £67.5m, resulting in a £16.2m underspend (19.4%) against an annual budget of £83.6m.

Savings from defrayment

The position against budget for the full year is summarised in the table below. Delivery of the EMR services and the MHHS Programme has enabled BSC overheads to be defrayed by £827k and £647k respectively.

Savings on office overheads and costs for Rules Management

This year, COVID-19 restrictions have continued to have an impact on Elexon's costs resulting in savings on office overheads of £600k. Savings were also made on costs for BSC Rules Management. For example, [P402](#) 'Enabling reform of residual network charging as directed by the Targeted Charging Review' was implemented in February 2022, however it did not require changes to BSC Systems.

The outcome of Brexit resulted in there being no premise for GB's participation in Project TERRE (Trans-European Replacement Reserve Exchange) or the Manually Activated Reserve Initiative (MARI). Savings were therefore made as Modification P407 'Project MARI' was withdrawn in February 2021. The savings totalled £400k.

We also experienced impacts such as a postponed implementation of [P376](#) 'Utilising the baseline methodology to set Physical Notifications for Settlement of Applicable Balancing Services', which has resulted in costs falling into the 2022/23 financial year.

Investment in Kinnect delivered as planned

We escalated our work on Kinnect and the Helix Programme as shown in the table.

Our Transformation investment in rolling out Kinnect was fully used, although we prioritised the mobilisation of Helix to ensure that this unbudgeted expenditure (£2.4m in the table) could be taken from money already provisioned by BSC Parties.

The spending required on Helix in 2021/22 was not budgeted in the 2021/22 business plan. This was because Ofgem's decision (in April 2021) to implement MHHS and require that Elexon facilitates the industry programme to deliver it was published after we had finalised our plan (in January 2021).

Since 2018/19, £24.8m has been spent on Kinnect initiatives of which £14.8m was in 21/22. The programme remains in line with its initial budget estimates. There are currently £32.2m worth of investments in progress, which include the delivery of our new Settlement Solution. The Insights Solution and the Customer Solution. For more detailed information on the Kinnect solutions, see our [webpage](#).

Helix Programme to upgrade BSC systems to support MHHS is on budget

The [Helix Programme](#) remains on budget. Development work on the solutions began with our external delivery partners in January 2022. £2.5m was spent on the discovery phase which concluded in April 2022. Development of the solutions is tracking to complete on time and within budget. More information on the Helix solutions is in our [2022/23 business plan](#).



Review against the annual budget

(Continued)

Underspend on the MHHS Programme

The [MHHS Programme](#) remains with an overall budget of £90m of which £4.9m has been spent in 2021/22 leaving an underspend of £9.5m. This was due to the fact that the [Complete Strategy](#) report (an independent assessment of arrangements needed to deliver MHHS, which was requested by Ofgem), recommended that the Programme appoint external support to help with delivery.

Time was spent on procuring and on-boarding the lead delivery partner, causing a change to the profile of costs. In November 2021, Expleo Technology UK Limited (with its subsidiary company, Moorhouse Consulting Limited) were appointed to work alongside the Programme.

Return of the unused BSC budget to Parties

As Exlexon is not-for-profit, costs and interest charges are exactly matched by turnover for the year. During the year, based on our forecasting, we adjust our charges (rather than continuing to charge the equivalent of our budget) seeking to match our revenue to our costs.

However, as forecasting cannot be entirely accurate, there is, for the 2021/22 financial year, as in every year, a reconciliation of BSC costs charged to Trading Parties based on the final audited costs. Consequently a credit based on the final audited costs. Consequently a credit of £3.3m for the 2021/22 financial year will be returned to BSC Trading Parties in August 2022.

However, as forecasting cannot be entirely accurate, there is, for the 2021/22 financial year, as in every year, a reconciliation of BSC costs charged to Trading Parties based on the final audited costs. Consequently a credit of £3.3m for the 2021/22 financial year will be returned to BSC Trading Parties in August 2022.

Comparison of Exlexon budget for 2021/22 and full year out-turn

| | Full Year Budget | Full Year Actuals | Full Year Variance | % |
|---|------------------|-------------------|--------------------|--------------|
| Operational-people | 13.3 | 13.3 | 0.0 | 0.0 |
| Operational-other | 8 | 7.2 | 0.8 | 10.0% |
| Total operational | 21.3 | 20.5 | 0.8 | 3.8% |
| Demand led | 6.5 | 2.9 | 3.6 | 55.4% |
| Contracted | 20.8 | 18.8 | 2 | 9.6% |
| Investment in Systems & Business Transformation | 20 | 17.6 | 2.4 | 12.0% |
| Business development | 0.5 | 0.1 | 0.4 | 80.0% |
| Helix Programme | 0 | 2.5 | -2.5 | N/A |
| MHHS Programme | 14.6 | 5 | 9.5 | 65.1% |
| TOTAL | 83.6 | 67.5 | 16.2 | 19.4% |

COMMITTEE SUMMARIES



Credit Committee

The [Credit Committee](#) is responsible for all matters under the BSC that relate to the [CAP](#).

The CAP is defined in Section M 1.4 of the BSC. It is a parameter used to convert actual energy indebtedness and the credit cover lodged by a BSC Party into an equivalent megawatt hour (MWh) amount.

Prior to November 2021, a CAP review could only be initiated if a 'trigger event' occurred based on forward electricity market prices. The process for setting a new CAP took around one month. This method has proved to be unsuitable as due to high levels of volatility in forward prices, CAP changes could not be implemented quickly enough to keep pace with wholesale market trends.

To better manage this, Elexon proposed an alternative CAP review process, approved by the Panel in October 2021. Since November, the alternative process has allowed the CAP to be adjusted every two weeks. The Credit Committee can act in a more dynamic way when setting the CAP, by taking account of a wider range of analysis including wholesale gas as well as electricity forward price assessments, and System Prices. The CAP was altered 58 times between August 2007 to October 2021.

However, it has already changed seven times between November 2021 to March 2022. The alternative process demonstrates how CAP changes can be made more quickly, so that they remain representative of market conditions.

The impact of wholesale electricity price volatility on the CAP has been very clear. At the end of March 2021 the CAP was £54/MWh, and during autumn and winter 2021/22 it rose sharply to record levels, with the highest ever being £330/MWh in March 2022. Overall, the alternative process has protected the interests of Parties as CAP prices have been adjusted (both upwards and downwards) more frequently than before, ensuring that CAP levels mirror market developments.

More information about the alternative process is available on [our webpage](#). Our [Trading Operations Report](#) also provides more information on CAP price movements.



Performance Assurance Board (PAB)

The PAB conducts and administers activities to ensure the efficient, equitable and accurate allocation of energy between Suppliers. To achieve this the PAB uses the PAF which allows deployment of 16 techniques depending on the issue.

One of the PAF techniques is Qualification which provides assurance that all BSC Parties are suitably qualified, and that relevant standards of performance are maintained.

The PAB approved 14 Qualification applications (to become a BSC Party) in 2021/22. The same level of activity as in 2020/21.

However the number of Requalification approved applications increased from three in 2020/21 to nine in 2021/22. The nine re-qualifications comprised:

- Five Data Aggregator / Data Collector combinations
- Three Meter Operator Agents
- One Supplier Meter Registration Agent.

The challenges in the market with companies facing major cost increases also resulted in an increase in Surrender of Qualification submissions from two in 2020/21 to six in 2021/22.

They comprised:

- Three Meter Administrators
- Two CVA Meter Operator Agents
- One Half Hourly Data Collector.

On 30 September 2021 we saw the closure of [BSCP514](#) 'SVA Meter Operations for Metering Systems Registered in Supplier Meter Registration Service (SMRS) arrangements'.

Amongst other things, the arrangements defined processes that Meter Operator Agents (MOAs) used to carry out their work, including connections, disconnections and market data activities.

The types of Qualification are illustrated in the table below

| | 2021/22 | 2020/21 |
|----------------------------|---------|---------|
| Qualification | 14 | 14 |
| Re-Qualification | 9 | 3 |
| Removal of Qualification | - | 3 |
| Surrender of Qualification | 6 | 2 |
| Novation | 2 | 1 |
| Change of Ownership | 3 | 1 |
| Total Applications | 34 | 24 |

Supplier Volume Allocation Group (SVG)

The SVG oversees and helps to develop the SVA arrangements. To assist it, the group also has some advisory subgroups in specific areas:

- Metering Dispensation Review Group (MDRG, a joint subgroup with the Imbalance Settlement Group (ISG))
- Profiling Expert Group (PEG)
- Software Technical Advisory Group (STAG)
- Unmetered Supplies User Group (UMSUG).

Over the year, the SVG:

- Approved 14 Change Proposals and rejected four
- Oversaw more than 249 changes to [Market Domain Data](#) and rejected one
- Instructed Elexon to develop a more formal structured interim process for assessment of applications for exempt supply, and agreed that [Issue 96](#) 'Assessing the reporting to EMRS of chargeable volumes for SVA Metering Systems that record both exempt and licensed supply' should be raised to explore the process in more detail
- Approved new methodologies for the SVA [Line Loss Factors](#) (LLFs) annual audit and following that audit, the new LLF values
- Agreed an approach for dealing with exempt arrangements when a Change of Supplier event occurs.

Trading Disputes Committee (TDC)

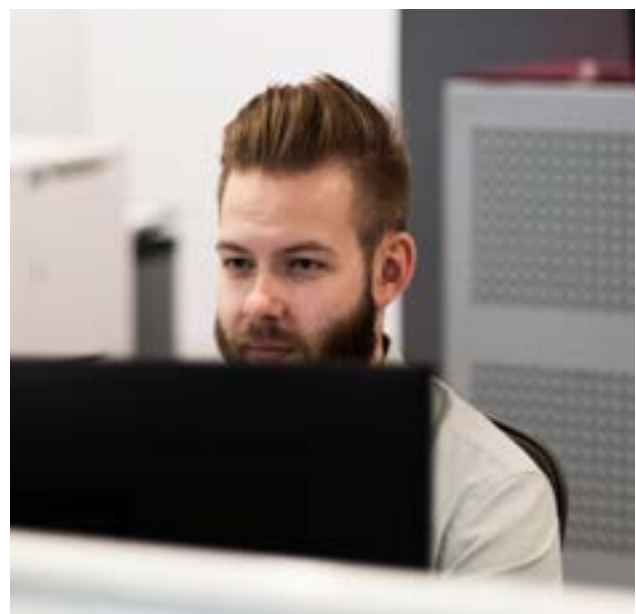
During 2020/21, the Trading Disputes Committee upheld 29 Trading Disputes. The total error corrected through the Trading Dispute process was approximately £4.8m.

All Trading Disputes were resolved by the Trading Disputes Committee. None were escalated to the BSC Panel.

Imbalance Settlement Group (ISG)

The Imbalance Settlement Group oversees and helps to develop the Central Volume Allocation (CVA) Arrangements. Over the year, the group has achieved the following key outputs:

- Approved 21 Metering Dispensations. Some of these enabled Parties to develop multi-use sites traded separately as part of Net Zero initiatives. They also addressed system stability inertia issues, and provided assistance with managing the impact that shortages of Metering Equipment may have on certain Parties. This is due to global supply chain issues for Meters
- Approved 11 BSC Change Proposals (CPs)
- Approved 11 [Credit Assessment Load Factor](#) (CALF) appeals to assist Parties where the relevant season in the previous BSC Year does not reflect demand or generation in the upcoming season
- Approved new methodologies for the CVA Line Loss Factors (LLFs) annual audit and following that audit, the new CVA LLF values
- Approved the Delivering and Offtaking Estimated Transmission Losses Adjustment (ETLMO), the associated methodology, actual Load Periods and Sample Settlement Periods to be used in the derivation of Transmission Loss Factors for use in the BSC Year 2022/23.



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