Draft Modification Report

P397 'Assessing the costs and benefits of adjusting Parties' Imbalances following a demand disconnection'

This proposal seeks to require the BSC Panel to set rules that enable BSCCo to determine whether estimates of disconnected energy should be estimated and Imbalance Volumes adjusted following a demand disconnection Demand Control Event.

The BSC Panel initially recommends **approval** of P397

This Modification is expected to impact:

- The Balancing and Settlement Company (BSCCo);
- Central Data Collection Agent (CDCA);
- National Electricity Transmission System Operator (NETSO);
- Licensed Distribution System Operators (LDSOs);
- Half-Hourly Data Aggregators (HHDAs);
- Half-Hourly Data Collectors (HHDCs);
- Non Half-Hourly Data Aggregators (NHHDAs); and
- Non Half-Hourly Data Collectors (NHHDCs).

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Phase

Initial Written Assessment

Definition Procedure

Assessment Procedure

Report Phase

Implementation

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About This Document

This is the P397 Draft Modification Report, which ELEXON will present to the Panel at its meeting on 16 January 2020. It includes the responses received to the Report Phase Consultation on the Panel's initial recommendations. The Panel will consider all responses, and will agree a final recommendation to the Authority on whether the change should be made.

There are six parts to this document:

- This is the main document. It provides details of the solution, impacts, costs, benefits/drawbacks and proposed implementation approach.
- Attachments A and B contain the draft redlined changes to deliver the solution for P397 (BSC Sections and BSCPs respectively).
- Attachment C contains the proposed new Category 3 document outlining the Business Rules to support this Modification.
- Attachment D contains the Business Requirements for this Modification.
- Attachment E contains the full responses received to the Panel's Report Phase Consultation.

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1 Summary

Why Change?

Settlement Adjustment Processes (also known as the 'bottom-up' processes) introduced into the Balancing and Settlement Code (BSC) under P305 'Electricity Balancing Significant Code Review Developments' in November 2015 may not be efficient to run in all circumstances, for example, when considering a Demand Control Event (DCE) that has minimal material impact on Settlement. This possibility was highlighted following the DCE which occurred on 9 August 2019.

Solution

P397 would introduce a mechanism through which BSCCo determines whether LDSOs, NETSO, certain Party Agents and BSC Agents, and BSCCo should carry out the Settlement Adjustment Processes. BSCCo would determine the nature of the DCE and, where necessary, determine and then compare the costs and value of the DCE in order to determine whether the value of carrying out the Settlement Adjustment Processes outweigh the costs.

Impacts & Costs

This Modification Proposal creates new obligations for the BSC Panel and BSCCo. In particular, BSCCo will be required to perform an assessment of each future DCE to determine whether Settlement Adjustment Processes should be performed. ELEXON estimate that it will cost approximately £1,200 to operate the new processes, which will be required when a DCE is triggered.

ELEXON also anticipate that it will cost approximately £2,400 to run the review process as described in the Business Rules (approximately 10 Working Days effort).

There are smaller impacts for LDSOs, HH and NHH Data Collectors and Aggregators, the CDCA and NETSO, who will be required to wait to be notified whether to perform Settlement Adjustment Processes.

Trading Parties will not be required to do anything new or different by this proposal. However, this proposal will affect how Trading Parties Imbalance Volumes are calculated – i.e. only where the value of making adjustments exceeds the cost.

Implementation

This Modification is proposed to be implemented as a standalone release on the next Working Day (WD) after the Self-Governance Appeals window closes. If the proposed progression timetable is followed, this is anticipated to **be 6 February 2020**.

Recommendation

The Panel agreed to raise P397, at its meeting on 12 December 2019, as it believed P397 better facilitates BSC Applicable Objective (d) and so **should be approved** as a **Self-Governance** Modification. The majority of the Panel agreed to progress P397 straight to the Report Phase.

What are the Settlement Adjustment Processes?

Settlement Adjustment Processes are necessary to calculate Trading Parties' BM Unit Allocated Demand Disconnection Volume (BMUADDV) and Period BM Unit Demand Disconnection Volume (QDD). BMUADDV and QDD are included in the calculation of Trading Parties' Imbalance Volumes following a demand disconnection DCE to reflect the volumes of electricity that might have otherwise been Imported or Exported if there hadn't been a DCE.

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2 Why Change?

What is the issue?

The BSC Panel is concerned that the benefits of operating the processes introduced into the BSC under P305 in June 2015 may not always outweigh the costs. In particular, that certain demand disconnection DCEs may not always warrant the costs incurred by NETSO, BSC Parties, Party Agents and Central Agents to operate the Settlement Adjustment Processes necessary to make the adjustments.

1,025,000 Metering Systems were without power for between 15 and 45 minutes over Settlement Periods 34-36 on 9 August 2019 during a DCE. A comprehensive report of what happened during the event can be found here.

NETSO sent a single Demand Control Instruction (DC00201) to inform BSCCo of the DCE on 9 August. Of the three Settlement Periods affected by the DCE, the System Prices in Settlement Periods 35 and 36 were adjusted from £64.75/MWh to £65/MWh, just £0.25/MWh, and Settlement Period 34 was unaffected at £64.50/MWh. As a result, the calculated 'benefit' of adjusting BSC Party Imbalance Charges was £46,348[1] as per the R1 Settlement Run, whereas the indicative costs to operate the Settlement Adjustment processes for the 9 August DCE, excluding BSCCo costs, is expected to be approximately £52,644.

What was the impact on Settlement?

There was relatively low material impact on System Prices due to the nature of the event. The DCE was determined to be an Automatic Low Frequency Demand Disconnection (ALFDD) DCE meaning any Demand Control action included in the System Price calculation is System Operator (SO) flagged. Ordinarily a Demand Control action is priced equal to the Value of Lost Load (£6000/MWh), however, where any balancing action is SO-flagged it is initially unpriced and may be re-priced equal to the most expensive unflagged balancing action (i.e. the Replacement Price).

However, on this occasion the Demand Control action was also Net Imbalance Volume (NIV) tagged before being repriced, meaning the action was removed from the Imbalance Price calculation in all affected Settlement Periods. Consequently, any System Price change during the DCE was due to a shift in Imbalance Volume rather than a Demand Control being a price setting action.

To summarise, this event was highly unusual and the anticipated fluctuations in the System Price did not materialise as the System Price Calculation ultimately excluded the Demand Control action from the final price calculation. For more information on electricity imbalance pricing, please refer to our guidance note on the subject.

Background

What is a Demand Control Event?

If National Electricity Transmission System Operator (NETSO) is unable to call upon sufficient generation, or reduce demand, to meet the current demand on the system, it can call upon Demand Control under Grid Code Section OC6 'Demand Control' as a last resort emergency instruction to manage the situation. This enables it to instruct Licensed

[1] Calculated by multiplying the total MWh by the System Price over the three impacted Settlement Periods

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Distribution System Operators (LDSOs) to reduce demand in their areas, either through initiating Voltage Reduction and/or disconnecting consumers through Demand Disconnection. An LDSO typically may be required to reduce demand in blocks of approximately 5% of its total demand, and is required to respond to NGESO's instruction within five minutes of it being issued. It is usually left to the LDSO to determine how it achieves the instructed reduction, which will often be through a combination of Demand Disconnection and voltage reduction. A DCE is the term given to the period when Demand Control is in effect.

Types of DCE

The BSC requires that NETSO sends details of three types of DCE to BSCCo. These are DCEs that NETSO may instruct and which are provided for in Grid Code OC6:

- Demand disconnection;
- Voltage reduction; and
- Automatic Low Frequency Demand Disconnection (ALFDD).

Each form of Demand Control may be used by NETSO to reduce the consumption of electricity on the system by disconnecting parts of the distribution systems, either manually or by automatic relays (when the frequency on the system drops below 49Hz), or by reducing the voltage on the system.

DCEs typically occur in emergency situations where available "backup" power has already been deployed, e.g. through the Balancing Mechanism, or where an event requires immediate action.

What are the P305 processes?

Settlement Adjustment Processes were implemented as part of P305 'Electricity Balancing Significant Code Review Developments', a Modification that was raised to progress the outcomes of the Electricity Balancing Significant Code Review (EBSCR). One of the key outcomes was the requirement for the introduction of Demand Control actions into the Imbalance price, priced at the Value of Lost Load (VoLL), and an Imbalance volume correction process to amend Trading Parties' Imbalance Volumes to account for such actions.

In short, following a DCE that results in demand disconnection, the BSC requires that certain Parties, Party Agents and BSC Agents, and ELEXON work together to estimate the electricity that would have been Imported or Exported by disconnected customers (i.e. BM Unit Allocated Demand Disconnection Volume (BMUADDV) and Period BM Unit Demand Disconnection Volume (QDD)) and ensures these are included in Trading Parties' Imbalance Volumes to reflect the effect of any demand disconnection (as though the DCE was the provision of a Balancing Service by the Trading Party). These are known as the Settlement Adjustment Processes.

A DCE is often an urgent emergency action(s) taken by NETSO when there are no other market-based actions available. However, it may cause Parties' Imbalance volumes to be longer than they might otherwise have been through no fault of their own. A longer Imbalance position multiplied by an abnormally high System Price driven by the effect of a DCE (e.g. close or equal to the VoLL, £6,000/MWh) could result in a significant payment to Parties or a considerable reduction in their Imbalance Charge had there not been a DCE.

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The Settlement Adjustment processes were designed to ensure the accurate calculations of Parties' Imbalance volumes so Trading Parties do not benefit or suffer from the effects of a DCE that is outside of their control.

More details of the Settlement Adjustment processes can be found in the P305 Final Modification Report.

Next Steps

Given this is the first use of the P305 Settlement Adjustment Processes, ELEXON plans to raise an Issue Group to thoroughly consider the overall experience of operating the processes for the first time (including more detailed understanding of actual costs and any operational challenges encountered) once the DCE on 9 August has been fully processed. A more thorough, evidence based review would enable industry to properly explore the issues and options, before making a recommendation to BSC Panel. The completion of the adjustment process is currently targeted at the final Settlement run (R3 of the impacted August 9 Settlement Periods i.e. March 2020.

The Panel is aware that BSCCo plans to raise an Issue to consider its concerns once it has received lessons from estimating BMUADDV and QDD following the DCE on 9 August 2019. However, the Panel believes that more urgent action is necessary in case there are further DCEs, in particular over the forthcoming winter and spring seasons, which may incur more costs than benefits for consumers.

At its meeting on 14 November 2019, the Panel challenged BSCCo to develop a Modification Proposal that it could adopt at its December 2019 Panel meeting. This is in the hope that a mechanism is in place as soon as practically possible in the event another low materiality DCE occurs, thus minimising unnecessary negative impacts on Parties, Party Agents and BSCCo.

Whilst ELEXON believes an Issue will enable a more thorough examination of the processes, ELEXON believe that this proposal will nevertheless positively impact Applicable BSC Objective (d). Therefore, ELEXON recommended that the Panel raise this Modification under Section F2.1.1(d)(i) at the Panel meeting on 12 December 2019. Whilst ELEXON have a preferred way forward and defining this proposal has been challenging (i.e. without a full understanding of the costs for performing the Settlement Adjustment Processes), it is a pragmatic approach which should reduce costs by avoiding the operation of Settlement processes in certain circumstances where the perceived benefits do not outweigh the costs.

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3 Solution

Proposed solution

The Proposed Solution seeks to introduce a mechanism wherein the Panel sets rules for BSCCo to use to determine whether relevant parties should operate the Settlement Adjustment Processes or not, based on whether the value of doing so exceeds the associated costs.

The solution comprises the following core elements:

- BSC Panel establishes and maintains business rules – 'Demand Disconnection Event Threshold Rules' – which will set out:
    - The circumstances in which BSCCo should asses the costs and benefits of a DCE;
    - A method for assessing the costs and benefits of a DCE – including any specific calculations or parameters that BSCCo should follow or use in its assessment – whereby Settlement Adjustment Processes should not be performed where the costs are equal to or greater than the value; and
    - Other criteria, timescales, parameters or calculations necessary to assess the DCE.
- New requirements on BSCCo to complete an assessment of each DCE in accordance with the BSC Panel's Rules and to notify BSC Parties, Party Agents and BSC Panel of its findings.

The specific process and calculations that BSCCo will follow are set out in detail in the Business Rules document and proposed redline changes to BSC Sections and BSCPs in Attachments B, C and D.

To summarise, the benefit of running the processes (i.e. 'DCE Value', £/MWh) is defined as the sum of the value of the disconnected volumes within each impacted Settlement Period (£) divided by the total amount of energy disconnected during the DCE being assessed (MWh). The DCE Value is derived for each DCE to be assessed. The DCE Value is then compared against a pre-determined estimated cost of running the process (i.e. 'DCE Cost', £/MWh) for all impacted parties. Following a DCE, BSCCo would follow the rules outlined in Attachment D to determine these values and therefore whether the costs are greater or equal to the value. In all cases, BSCCo must notify all BSC Parties, Party Agents and the BSC Panel of its conclusion.

DCE Value

The proposal proposes to calculate DCE Value using the following formula:

$$DCE_Value = \frac{\sum_j (SP_j \times DDE_Size_j)}{DDE_Size_{total}}$$

Where:

SP_j – is the System Price for a Settlement Period affected by demand disconnection or auto low frequency demand disconnection during the DCE

DDE_Size_j (MWh) – is the anticipated energy disconnected during a Settlement Period due to demand disconnection and derived from a DCI(s) sent by the NETSO to BSCCo for the DCE being assessed

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DDE_Size$_{total}$ (MWh) – is the total anticipated energy disconnected due to demand disconnection and derived from the DCI(s) sent by the NETSO to BSCCo for the DCE being assessed.

The calculation of DCE Value uses the actual System Price(s) from affected Settlement Period(s). This is because whether or not the DCE affects the calculation of the System Price, the DCE will affect Parties' Imbalance Volumes and those Parties may benefit or disbenefit by the amount of energy disconnected multiplied by the System Price irrespective of any DCE effect.

DC00201 affected three Settlement Periods. The corresponding System Prices and disconnected volumes are set out in Table 1 below. The total disconnected volume was 714MWh.

Settlement Period	System Price	DDE_Size$_j$
34	£64.50/MWh	93.1 MWh
35	£65/MWh	465.5 MWh
36	£65/MWh	155.166 MWh

Based on the System Prices and disconnection volumes, the DCE_Value for DC00201 is £64.91/MWh.

DCE Cost

$$DCE_Cost = \frac{HHA_Cost + LDSO_Cost + NHHA_Cost_{Cost} + NETSO_Cost + BSC_Agent_Cost + BSCCO_Cost}{DDE_Size'_{total}}$$

Where:

HHA_Cost (£) – the expected cost for HHDCs and HHDAs to carry out 'bottom-up' processes for a historical or indicative DCE.

LDSO_Cost (£) – the expected costs for LDSOs to carry out 'bottom-up' processes for a historical or indicative DCE.

NHHA_Cost (£) – the expected costs for NHHDCs and NHHDAs to carry out 'bottom-up' processes for a historical or indicative DCE.

NETSO_Cost (£) - the expected costs for NETSO to carry out 'bottom-up' processes for a historical or indicative DCE.

BSC_Agent_Cost (£) – the expected costs for BSC Agents to carry out 'bottom-up' processes for a historical or indicative DCE.

BSCCo_Cost (£) – the expected costs for BSCCo to carry out 'bottom-up' processes for a historical or indicative DCE.

DDE_Size'$_{total}$ (MWh) – the total volume of electricity anticipated to be disconnected as a consequence of demand disconnection or auto low frequency demand disconnection derived from a historical or indicative DCE.

Based on indicative costs shared by some LDSOs and Party Agents and described in the proposal, upon implementation of this Modification DCE_Cost will be set equal to £75.13/MWh.

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In the case of DC00201, the consequence of following the method described above would have resulted in the conclusion that the Settlement Adjustment processes should **not** be followed to estimate BMUADDV and QDD. This is because:

1. DC00201 comprised a single DCI for auto low frequency demand disconnection; and
2. The DCE_Cost, £75.13/MWh, is greater than the DCE_Value, £64.91/MWh.

Justification

The proposer believes its solution strikes a balance between being the straightforward to implement and operate, and reflecting the costs and values of different sized DCEs.

An option suggested during the BSC Panel's discussion at its November meeting was for an overall cost threshold (£) to be set, against which the value of individual DCEs could be compared. Such an approach would rely on the assumption that all DCEs are broadly similar and don't vary based on the size of the event (whether in terms of disconnected energy or affected Metering Systems). ELEXON do not believe this is the case.

Depending on the circumstance, NETSO may instruct some or all LDSOs to shed load. Each LDSO may have different means of achieving the different levels of Demand Control requested by NETSO, these methods may change over time and, depending on the nature of the event, NETSO may require the use of different combinations of Demand Control instruction. In practice, the numbers of Metering Systems affected and volume of energy disconnected by a DCE is likely to vary from one DCE to the next.

Our understanding is that the Settlement Adjustment Processes' underlying costs are driven by identifying affected Metering Systems and then producing estimates of the Imports and Exports that have been disconnected. In simple terms it is the number of Metering Systems, not the volume of electricity disconnected, that affects the cost of operation. Furthermore, whilst NHH DCs and DAs rely on a largely automated solution meaning their costs are likely to be fairly fixed no matter the size of the DCE, our understanding is that HHDCs must use a method to individually estimate Imports or Exports for each disconnected HH Metering System. In order to reflect the number of disconnected MSIDs, or even the variability in HH cost, when determining the cost of a DCE would require LDSOs to identify the numbers (and types) of disconnected Metering Systems – i.e. the first stage of the Settlement Adjustment Processes, which might otherwise be avoided if a simpler solution (i.e. the proposed solution) were used.

Without more detailed investigation of LDSOs agreed processes for carrying out demand control the proposed solution assumes that the balance of disconnected HH:NHH Metering Systems stays the same regardless of the size (MWh) of the DCE.

BSCCo believes the simplest means of reflecting that different DCEs may have different overall costs is to determine a weighted cost measurement using the estimate of what NETSO anticipates will be disconnected that it reports in Demand Control Instructions to Balancing Mechanism Reporting Agent (BMRA).

BSCCo does not believe an appeals process is necessary. That is, the proposed Business Rules are intended to produce an assessment of value and cost that does not allow for judgement or subjectivity by BSCCo. Parties may encourage the Panel to change its rules if Parties believe the rules are inappropriate or do not properly reflect the costs and value of performing the Settlement Adjustment Processes.

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It should also be highlighted that the Issue Group due to be raised once the end-to-end process for the 9 August DCE has been completed will review these rules, and any other lessons learned from the process. It is expected that this Issue Group, with the benefit of having a full set of relevant data, will determine a more thorough, enduring solution. However, ELEXON do believe that this Modification is pragmatic and delivers a timely interim mechanism to help minimise the costs associated with potentially inefficient processes.

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4 Impacts & Costs

This Modification's greatest impact is on the BSC Panel and BSCCo. This is because it proposes to introduce new requirements on each. On the one hand BSC Panel will be required to establish and maintain new business rules that govern how an assessment of the costs and benefits of a DCE should be completed. It will also require BSCCo to perform this assessment following a DCE in accordance with the Panel's business rules.

This Modification is expected to have a small impact on certain BSC Parties, Party Agents and BSC Agents because depending on BSCCo's assessment of costs and benefits, they may be instructed not to progress the P305 Settlement Adjustment Processes. In particular, we expect the following Parties, Party Agents and BSC Agents to be affected CDCA; LDSOs; NETSO; HHDAs; HHDCs; NHHDAs; and NHHDCs.

This Modification will not require Trading Parties to do anything differently. However, Trading Parties may experience a small impact by the implementation of the Modification. That is, whereas the BSC currently requires that Trading Parties' Imbalances Volumes are always adjusted by the estimation of BMUADDV and QDD, this Modification will mean that BMUADDV and QDD is only estimated in certain circumstances.

Estimated central implementation costs

ELEXON's costs to implement this Modification will be approximately £3,840. This is primarily driven by the need to develop new internal processes, update guidance documents and the BSC Website:

- 4 Working Days effort to implement new internal processes and documents: and
- 5.5 Working Days to implement document changes to the BSC and Code Subsidiary Documents.

It will cost approximately £1,200 for ELEXON to operate the new processes, which will be required when a DCE is triggered.

It will cost approximately £2,400 for ELEXON to run the review process as described in the Business Rules (approximately 10 Working Days effort).

Impact on BSC Parties and Party Agents	
Party/Party Agent	Potential Impact
LDSO	May be instructed not to operate Settlement Adjustment processes after a DCE, saving time and money.
HHDA	
NHHDC	
HHDC	
NHHDA	

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Impact on BSC Parties and Party Agents	
Party/Party Agent	Potential Impact
CDCA	May be instructed not to operate Settlement Adjustment processes after a DCE

Impact on NETSO
The NETSO may be instructed not to send details about Metering Systems providing balancing services during the disconnection event

Impact on BSCCo	
Area of ELEXON	Potential Impact
Market Operations	As the team responsible for running the Settlement Adjustment Processes, they will need to update their Local working Instruction (LWI), guidance documents, the BSC Website and may need to answer ad hoc queries about the process.

Impact on BSC Settlement Risks
A positive impact on the following Risks as the participants in question may well process less data, therefore lowering the Risk of error manifestation. Risk 008 'Processing of [SVA] Metered Data', Risk 009 'Data Aggregated Processes – Metered Data', Risk 021 'Retrieval and processing of [CVA] Metered data'

Impact on Code	
Code Section	Potential Impact
Section R	Include new requirements to ensure Settlement Adjustment Processes are only operated where the requirements described in the new Category 3 document are met.
Section S	

Impact on Code Subsidiary Documents	
CSD	Potential Impact
BSCP03 – Data Estimation and Substitution for Central Volume Allocation	Consequential changes to reflect the requirement to wait for instruction from BSCCo before operating the Settlement Adjustment Processes
BSCP502 – Half Hourly Data Collection for SVA Metering Systems Registered in SMRS	
BSCP503 – Half Hourly Data Aggregation for SVA Metering Systems Registered in SMRS	
BSCP504 – Non Half Hourly Data Collection for SVA Metering Systems Registered in SMRS	

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Impact on Code Subsidiary Documents	
CSD	Potential Impact
BSCP505 – Non Half Hourly Data Aggregation for SVA Metering Systems Registered in SMRS	
BSCP508 – Supplier Volume Allocation Agent	
BSCP515 – Licensed Distribution	
New Category 3 Document – Business Rules for Assessing Demand Control Event	Conception of the document will create new Business Rules within the BSC framework

Impact on a Significant Code Review (SCR) or other significant industry change projects
ELEXON requested SCR exemption for this proposal from any of Ofgem's open SCRs on 05 December 2019. Ofgem confirmed P397 is SCR exempt on 10 December 2019.

Impact on Consumers
No direct impact – If implemented this Modification proposal should ensure the operation of the 'bottom up' process is only in situations where the costs are greater than the benefits. This should ultimately reduce costs for Parties and therefore the costs to Consumers.

Impact on the Environment
No direct impact expected.

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5 Implementation

Recommended Implementation Date

The BSC Panel has initially agreed an Implementation Date for P397 of **1 WD after the Self-Governance Appeals window closes**. If the Panel approves P397 at its meeting on 16 January 2020, and Ofgem agrees that this is a Self-Governance Modification, P397 will be implemented on **6 February 2020**.

This ensures that this Modification is in place as quickly as possible, and the processes introduced can be utilised should a DCE occur before any changes are introduced following the Issue Group due to be raised in March 2020.

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6 Panel's Initial Discussions

The request to raise this Modification was presented to the BSC Panel at its meeting on 12 December 2019 (Panel 297/06). The Panel agreed to raise this modification in accordance with Section F2.1.1(d)(i). It unanimously agreed with the proposed Implementation Date and legal text and initially agreed by majority:

- That P397 **should** be treated as a Self-Governance Modification;
- That P397 better facilitates Applicable BSC Objectives (c) and (d); and
- That P397 should be **approved**.

Revised Estimate of Costs

At the Panel meeting ELEXON provided a revised estimate of the cost to industry of operating the adjustment process as being approximately £50k rather than the £300K figure discussed in the September Panel meeting and quoted in the letter sent by the Panel to Ofgem in its request to pause the processes.

An Ofgem representative questioned whether ELEXON's revised estimate was a definitive view and queried why this had changed in the first place. ELEXON replied that the original figure was based on estimates provided by certain Agents and ELEXON and was an early understanding of costs, and in itself was not definitive. Further, the revised figure follows ELEXON's efforts at untangling the expected running costs from those incurred from the teething problems associated with running the processes for the first time.

The new estimate is also not definitive and the figures set out in this proposal are ELEXON's current best understanding after some market participants shared indicative costs for the processes. The processes for the August 9 DCE have not yet been completed so no definitive values are available; the figure is likely to change once the DCE process is completed in early 2020. ELEXON commented that the view was never presented as the definitive view at the time of either the estimated costs or the consequential impacts highlighted by the Panel member. They explained that, on further instruction from the Panel to prepare a Modification Proposal, closer inspection had been undertaken which revealed an amount lower than the £300K initially considered by the Panel. They again noted that as the DCE process had not yet finished, this was subject to change.

A Member added that the identified costs only included the central aspects of running the processes (i.e. the costs to Party Agents, LDSOs etc.) and did not consider the consequential costs to wider industry (i.e. the costs of running internal administrative processes such as rebilling to account for adjustments in imbalance charges). Another Member noted that the proposal did not provide any analysis of the effects on different parties or types of party or how the proposal might operate in different scenarios. ELEXON was unable to seek these assessments as the timeline was incredibly tight to develop the P397 solution, collect evidence, and further, definitive answers to these questions require that adjustments for the August DCE are calculated.

The Chair noted that the Panel had discussed the £300k figure at its meeting in September 2019. In its original discussions, ELEXON highlighted that energy costs for the DCE were currently understood to be ~£30k and that the cost of estimating data could be much greater, though the effects are varied and full details of the event were not yet understood. One Member questioned when costs that are more reliable might become

What are the Applicable BSC Objectives?

(a) The efficient discharge by the Transmission Company of the obligations imposed upon it by the Transmission Licence

(b) The efficient, economic and co-ordinated operation of the National Electricity Transmission System

(c) Promoting effective competition in the generation and supply of electricity and (so far as consistent therewith) promoting such competition in the sale and purchase of electricity

(d) Promoting efficiency in the implementation of the balancing and settlement arrangements

(e) Compliance with the Electricity Regulation and any relevant legally binding decision of the European Commission and/or the Agency [for the Co-operation of Energy Regulators]

(f) Implementing and administrating the arrangements for the operation of contracts for difference and arrangements that facilitate the operation of a capacity market pursuant to EMR legislation

(g) Compliance with the Transmission Losses Principle

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available. ELEXON responded that this would be after the completion of the DCE Process, which is expected to be by the R3 Run scheduled in mid-March 2020.

Justification for Status

An Ofgem representative challenged the drive for justifying this Modification as straight to Report Phase, given that another DCE would be unlikely to occur. He stated that it may be beneficial to wait until the conclusion of the DCE process to learn lessons from it. A Panel Member commented that no one had predicted that August's DCE would have occurred when it did and clarified that the desire for quick action came about via a desire to protect customers who could be adversely affected should another one occur. The 9 August 2019 DCE was unusual as it was not a result of a failure of the market to balance energy – Parties had no influence over what occurred. Demand was reduced due to several unlikely events happening in rapid succession, causing the system frequency to drop to dangerous levels. Furthermore, because the event was SO-flagged, the financial materiality in prices and in imbalance charges was modest compared to indicative costs of performing the Settlement Adjustment Processes. The Member added that they felt the Panel has an obligation to Parties, and consequently to protect customers.

One Member stated that they agreed with the principle of working to avoid wasting Parties' money but that, in future, the Panel should consider more closely their role in raising Modifications of this type. The Member argued that this Modification would seek to overturn a solution introduced to deliver the requirements of the EBSCR. They were concerned that the P397 was being pushed through hastily without more thorough consideration of the original P305 and EBSCR decisions and the costs/impacts of the DCE process and the proposed change. However, another Member highlighted that this Modification would in fact improve upon the solution delivered under P305 by making it more efficient; the processes would remain and be operated where they would benefit the industry and consumers. Furthermore, the solution would be reviewed in a future BSC Issue.

Several Members emphasised the need for a pragmatic solution to be delivered in a timely manner. They emphasised that, with customers' money at risk, some mitigation must proceed.

The National Grid representative warned against the unintended effects of pushing such a Modification through without definitive values or thorough consideration, particularly in light of the volume of change currently facing the industry.

Another Member replied that they could not imagine what unintended consequences could occur, given that the Modification solution was low impact and enabled a more flexible process that would consider materiality before running an expensive process.

What are the Self-Governance criteria?

A proposal that, if implemented:

a) is unlikely to have a material effect on:
   i. existing or future electricity consumers; and
   ii. competition in the generation, distribution, or supply of electricity or any commercial activities connected with the generation, distribution, or supply of electricity; and
   iii. the operation of the national electricity transmission system; and
   iv. matters relating to sustainable development, safety or security of supply, or the management of market or network emergencies; and
   v. the Code's governance procedures or modification procedures, and
b) is unlikely to discriminate between different classes of Parties

Panel views against the Applicable BSC Objectives

The Panel unanimously agreed that the Implementation of P397 would positively impact Applicable BSC Objective (d) as this could potentially enable the industry to forego running a potentially inefficient process unnecessarily. The P305 adjustment process would not be performed in situations where the cost of running the process is expected to exceed the perceived benefits. This should reduce the overall cost to deliver the BSC by focusing only on those situations expected to deliver a net benefit.

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The majority of the Panel also agreed that P397 would better facilitate Applicable BSC Objective (c) as it would mean money is only spent running the adjustment processes when the cost of doing so is lower than the perceived benefits of running the adjustment processes.

Progression route

The Panel were split as to whether to proceed directly to the Report Phase. One half did want to proceed directly to the Report Phase, whilst the other half wanted to submit P397 into the Assessment Procedure. As per the BSC Section B 4.4.4, the Panel Chair made the casting vote, and decided to vote in favour of the recommendation. Therefore, the majority of the Panel decided to proceed directly to the Report Phase.

Those that wanted to go straight to the Report Phase wanted to do so on the basis that it was important to progress P397 quickly, to mitigate the risk of unnecessary cost, should another disconnection event occur. They believed that the P397 solution had been adequately developed and was flexible enough to choose whether to run the adjustment processes or not. Further, were P397 to be approved, the 'Demand Disconnection Event Threshold Rules' can be amended in the future, for example following the Issue that will be raise to review the DCE processes. Those that wanted to go to the Assessment Procedure wanted to do so because they believed more robust analysis should be given to the solution.

Panel views on Self-Governance

The Panel was equally split as to whether P397 should be progressed as a Self-Governance Modification Proposal. A Member argued that this is a significant change and should have at least one Workgroup meeting to consider it before submitting to Ofgem. The Panel heard that, whilst P397 may positively impact BSC Applicable Objective (c), the impact on competition would be immaterial by design.

The Chair cast their deciding vote in favour of the recommendation given to treat P397 as a Self-Governance Modification Proposal. ELEXON commented that Ofgem still has the power to request P397 be sent for Authority decision.

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7 Report Phase Consultation Responses

This section summarises the responses to the Panel's Report Phase Consultation on its initial recommendations. You can find the full responses in Attachment E.

Summary of P397 Report Phase Consultation Responses				
Question	Yes	No	Neutral/ No Comment	Other
Do you agree with the Panel's initial majority recommendation that P397 should be approved?	**9**	**0**	**0**	**0**
Do you agree with the Panel that the redlined changes to the BSC deliver the intent of P397?	**7**	**1**	**1**	**0**
Do you agree with the Panel that the redlined changes to the Code Subsidiary Documents deliver the intention of P397, including the new subsidiary document 'Demand Disconnection Event Threshold Rules'?	**7**	**1**	**1**	**0**
Will P397 impact your organisation?	**7**	**2**	**0**	**0**
Will your organisation incur any costs in implementing P397?	**2**	**7**	**0**	**0**
Do you agree with the Panel's recommended Implementation Date?	**9**	**0**	**0**	**0**
Do you agree with the Panel's initial view that P397 should be treated as a Self-Governance Modification?	**9**	**0**	**0**	**0**
Do you have any further comments on P397?	**0**	**9**	**-**	**-**

Nine responses were received to the Report Phase Consultation, with ELEXON responding to provide clarity, confirm views and answer queries on the future process where possible.

Respondents represented three Suppliers, three Distributors and five Supplier Agents.

Views on the Panel's recommendation to approve P397

All respondents agreed with the Panel's majority recommendation the P397 better facilitates BSC Objectives (c) and (d) and so should be approved. One respondent highlighted that all parties are more stretched than ever, and the requirement to take actions for a largely non-material event is not helpful.

Views on redlined changes to the BSC

The majority of respondents agreed that the proposed redlined changes deliver the intent of P397. However, one respondent noted that there was an inconsistency in respect of the

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response times for the LDSO to send the P0238 data flow to BSCCo, with some BSCPs saying 5WDs and others saying 4WDs.

ELEXON amended the redlining accordingly, though it is worth noting that the original BSCPs referred to 4WDs. This was a mistake from the implementation of P305 and so it would have been inappropriate to maintain an erroneous and inconsistent requirement.

Views on redlined changes to the Code Subsidiary Documents

As above, the majority of respondents agreed that the redlining delivered the intent of P397, with one respondent recommending the inclusion of a reference to the response times in the Business Rules.

We are in discussions with the Party on this, and an update will be given at the Panel meeting on 16 January.

Views on impacts to respondent's organisations

A majority of respondents said that their organisations would be impacted by P397. Two respondents noted that this impact would be positive, where they expect to save costs in the long-term in the form of avoiding performing nugatory processes. Others highlighted that there would be minor impacts where their organisations would have to modify processes.

Views on costs incurred by respondent's organisations

A majority of respondents noted that their organisations would not incur any costs in implementing P397. The two respondents that said costs would be incurred both stated these would be due to changes in their processes.

One respondent highlighted that, rather than a cost, there would be a potential saving in the event that the processes are not required to be operated.

Views on the Panel's recommended Implementation Date

All respondents unanimously agreed with the Panel's recommended implementation date. One respondent highlighted that P397 introduces a process which stands to reduce costs to industry parties and, ultimately, customers, therefore they support the Panel's recommendation of implementation as soon as practicable.

Views on Self-Governance

All the respondents agreed with the Panel's initial view that P397 should be treated as Self-Governance as they felt it meets the Self-Governance criteria.

Further comments

No respondents had any further comments beyond those made in earlier responses. However, NETSO provided an informal response in which it confirmed P397 would have

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minimal direct impact on its operations as it would still be required to carry out the necessary processes. It did note that it would seem sensible for BSCCo not to run the Settlement Adjustment processes if it determined a future event had a minimal material impact on Settlement.

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8 Recommendations

We invite the Panel to:

- **AGREE** that P397:
    - **DOES** better facilitate Applicable BSC Objective (c); and
    - **DOES** better facilitate Applicable BSC Objective (d)
- **DETERMINE** (in the absence of any Authority direction) that P397 is a Self-Governance Modification Proposal;
- **APPROVE** P397;
- **APPROVE** an Implementation Date of:
    - 1 WD after the Self-Governance Appeals window closes (06 February 2020)
- **APPROVE** the draft legal text for P397; and
- **APPROVE** the P397 Modification Report.

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Appendix 1: Glossary & References

Acronyms

Acronyms used in this document are listed in the table below.

Acronym	
Acronym	Definition
ALFDD	Automatic Low Frequency Demand Disconnection
BMRA	Balancing Mechanism Reporting Agent
BMUADDV	BM Unit Allocated Demand Disconnection Volume
BSC	Balancing and Settlement Code
BSCCo	Balancing and Settlement Code Company
BSCP	Balancing and Settlement Code Procedure
CDCA	Central Data Collection Agency
DCE	Demand Control Event
EBSCR	Electricity Balancing Significant Code Review
HHDA	Half Hourly Data Aggregator
HHDC	Half Hourly Data Collector
IWA	Initial Written Assessment
NETSO	National Electricity Transmission System Operator
NHHDA	Non Half Hourly Data Aggregator
NHHDC	Non Half Hourly Data Collector
NIV	Net Imbalance Volume
LDSO	Licensed Distribution System Operator
QDD	Period BM Unit Demand Disconnection Volume
RF	Final Settlement Run
SO	System Operator
VoLL	Value of Lost Load
WD	Working Day

External links

A summary of all hyperlinks used in this document are listed in the table below.

All external documents and URL links listed are correct as of the date of this document.

External Links		
Page(s)	Description	URL
3	P305	https://www.elexon.co.uk/mod-proposal/p305/

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External Links		
Page(s)	Description	URL
3	Technical Report on the events of 9 August 2019	https://www.nationalgrideso.com/document/152346/download
4	Imbalance Pricing Guidance Note	https://www.elexon.co.uk/documents/training-guidance/bsc-guidance-notes/imbalance-pricing/
4	Grid Code OC6	https://www.nationalgrideso.com/document/33866/download
5	Electricity Balancing Significant Code Review	https://www.ofgem.gov.uk/electricity/wholesale-market/market-efficiency-review-and-reform/electricity-balancing-significant-code-review
15	BSC Panel meeting 297	https://www.elexon.co.uk/meeting/bsc-panel-297/

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