4.7 Issue Form

Issue Form - BSCP40/04 Issue Number: 89 (mandatory by BSCCo)

Issue Title (Mandatory by originator)

Ensuring Demand Control Event (DCE) procedures remain fit for purpose

Issue Description (Mandatory by originator)

A Demand Control Event (DCE) occurred on 9 August 2019. This was the first DCE since <u>BSC Modification P305 'Electricity Balancing Significant Code Review Developments'</u> went live on 5 November 2015. P305 introduced Settlement Adjustment Processes (sometime referred to as 'bottom-up calculations) designed to ensure the accurate calculation of Parties' imbalance volumes in the event of a DCE.

Following the DCE on 9 August 2019, the BSC Panel considered, at its meeting on September 12 2019 whether the costs to operate the Settlement Adjustment Processes were proportionate compared to the benefit of any adjustment and therefore whether the Settlement Adjustment Processes for estimating disconnection volumes remain appropriate in all DCE circumstances (i.e. for demand disconnection, voltage reduction and for automatic low frequency demand disconnection; whether or not a Demand Control Event is SO-flagged).

In response to its initial consideration, the BSC Panel raised BSC Modification P397 'Assessing the costs and benefits of adjusting Parties' Imbalances following a demand disconnection' at its meeting on 12 December 2019. P397 proposes to introduce a mechanism through which the Balancing and Settlement Code Company (BSCCo) determines whether Settlement Adjustment Processes should be run or not in response to a DCE. On 3 March 2020, Ofgem wrote to the BSC Panel to explain why it had 'sent back' P397¹. Ofgem explained that it was unable to form an opinion on whether or not P397 should be approved based on the evidence submitted. Ofgem acknowledged that there was a limit to the amount of evidence that could be collected for P397 given the short time frame given to P397. Ofgem have asked the Panel to conduct further analysis and provide the additional evidence. This Issue is being raised, in part, to complete a more thorough assessment of the costs of running the Settlement Adjustment Process and the impact the DCE had on market participants to facilitate Ofgem's send back request.

Furthermore, the DCE on 9 August has identified operational issues with the processes implemented under P305. As it stands, these focus primarily on ambiguities in how the processes are described in the BSC and its subsidiary documents. The following section provides further details.

We believe an Issue Group should:

- i. determine whether the P305 processes for adjusting Parties' Imbalances Volumes remain appropriate in all instances of demand disconnection, and if not, determine how and in what circumstances Parties' imbalances should be adjusted;
- ii. produce analysis and evidence that satisfies Ofgem's send back letter and enables Ofgem to make a final decision on P397; and
- iii. notwithstanding the conclusion of (i), identify lessons learnt from the operation of the existing process and make recommendations for improving the existing process.

-

¹ Please see BSC Panel Papers 300/09 - 'P397 Draft Send Back Process' and 300/09A - 'P397 Authority decision letter' - https://www.elexon.co.uk/meeting/bsc-panel-300/

Justification for Examining Issue (Mandatory by originator)

The processes currently specified in the BSC and its subsidiary documents appear to result in a significant cost to serve in events that have a minor financial impact on Settlement.

As such it may not be efficient for industry and ultimately consumers for these processes to be used as they are or in all DCE circumstances. For example,

- Adjustments to Parties' imbalances are made in respect of all Demand Disconnection events (but not all Demand Control Events) irrespective of whether the DCE is SO-flagged
 - Where a DCE is SO-flagged it is likely to be re-priced in the System Price calculation, from the Value of Lost Load (currently £6000/MWh) to the most expensive non-SO-flagged Offer. Repricing a DCE System Action results in a much smaller impact on the subsequent System Price and calculation of Parties' Imbalance Charges irrespective of the size of any adjustment to Imbalance volumes.
 - The DCE on 9 August illustrates this effect. The DCE was SO-flagged and affected Settlement Periods 34-36. The System Price for SP34 was unchanged and for SP35 and 36 increased by 25 pence². The expected adjustment to Imbalance Charges is expected to be between £23k and £46k.
- The BSC processes for making adjustments to Parties' Imbalances require a large number of BSC Parties, Party Agents and BSC Agents to follow detailed processes and timescales for adjusting Parties' Imbalances irrespective of the scale of the Demand Disconnection on System Prices and Imbalance Volumes.
 - P397 estimated that the cost to Parties, Party Agents and BSC Agents of running the Settlement Adjustment Processes for the DCE on 9 August would be approximately £54,000. A full breakdown of these costs can be found in the P397 Final Modification Report.
 - o However, this was an estimate based on feedback from some, not all, affected Parties etc.
 - O As Ofgem pointed out in its send back letter, in order to properly illustrate the cost of the processes, a better cross-section of industry costs is required.
- The P305 processes seek to make targeted changes to individual Non Half Hourly Metering Systems' Annualised Advances and to estimate Disconnection Volumes by using Settlement Period-level Profile Coefficients. Given that NHH Metered Volumes include a proportion of estimations, due to the fact actual meter readings are not available on a half hourly basis, it may be appropriate to revisit the methodology used to estimate NHH disconnected volumes to ensure it is still appropriate.
 - Furthermore, ELEXON notes that the roll-out of Smart Meters and the expected adoption of Market-wide HH Settlement is likely to see a considerable reduction in the volumes settled on a NHH (or MHHS equivalent) basis.

An Issue Group should explore the appropriateness of the existing rules and processes for making adjustments to Parties' Imbalances following a Demand Control Event.

In addition, based on what we have learnt so far from operating the P305 DCE processes, there appear to be a number of areas where the processes may benefit from corrections or improvements. Please note we expect that as the P305 process is carried out further issues will be identified.

- Some sites were disconnected for less than the 46 minutes that the DCE lasted. We understand that in
 one case a site was only disconnected for three minutes. However, the P305 process requires an
 estimate of disconnected volume is determined for all disconnected MSIDs for the full DCE
 duration. Conversely, it is likely that some sites may be disconnected by the DNO for longer than
 NETSO report a DCE having effect.
- A consistent definition of a valid disconnected MSID is required, as the current definition is ambiguous.
- The specification of and references to the P0238 in the Code Subsidiary Documents are ambiguous, leading to file formatting issues. For example, the inclusion of a Profile Class field in the SVA Data Catalogue but not the SVAA Technical Specifications. For example, the inclusion of a Profile Class field in the SVA Data Catalogue but not the SVAA Technical Specifications and in BSCP502 (p77) where P0238 data flows sent from different Market participants overwrite rather than append.

• Some Parties and Party Agents have identified concerns that systems have struggled to produce and load the P0238, which contains details of all disconnected MSIDs and so may contain thousands of records. ELEXON implemented a software patch in November 2019 to ensure the P0238 flows were loaded, however this Issue should also review the emerging lessons from operating the processes for the DCE on 9 August. Based on these lessons the Issue Group should recommend improvements to the existing process.

Potential Solution(s) (Optional by originator)

Regarding the appropriateness of the DCE processes, there are a range of potential solutions. These include but are not limited to:

- Only making adjustments to Parties' Imbalances where:
 - O A **de minimis threshold is exceeded** for a DCE thereby ensuring that only significant events trigger the processes to be followed. The definition of what a "significant event" will need to be agreed. The de minimis threshold is likely to need to consider the impact on System Prices, the Demand Disconnection volume and/or financial materiality (£), and the duration of the DCE (and how to deal with different MSIDs/Regions being affected for different lengths of time). P397 already proposes a solution of this nature.
 - A DCE is not SO-flagged. This would mean that auto-low Frequency Demand
 Disconnections (as for the 9 August DCE) never trigger the adjustment process as ALFDD
 DCEs are automatically SO-flagged.
- Simplifying the processes so they are less onerous and costly, e.g.
 - o By **not making changes for NHH Metering Systems** i.e. not adjusting NHH Annualised Advances and not estimating disconnection volumes for NHH Metering Systems
 - By using a simpler method for estimating disconnection volumes. For example, rather than estimating disconnected volumes based on individual Metering Systems' metered data, a 'top down' method might use NETSO's Demand Control Instructions to apportion the total requested disconnected energy between Parties based on each Parties' relative Credited Energy or Market Share.
 - Centralise the process for example, the roll-out of Smart Meters and the implementation of the MHHS Target Operating Model may mean individual Metering Systems' metered data is provided directly into central systems where estimates of disconnection volumes can be calculated thereby relieving Party Agents from their roles in the current process.

Regarding lessons learnt from operation of existing process, the following solutions may be necessary:

- Ensure that the BSC and its CSDs describe processes consistently and clearly.
- Ensure that Parties' and Party Agents' systems and Central Systems are able to handle the files and large volumes of data required to operate the processes.
- Require DNOs to specify how long individual Metering Systems were disconnected to ensure estimates of disconnection better reflect the actual duration of disconnection.
- Introduction of a clear Communications Strategy to ensure that all impacted parties are aware of their obligations following a DCE given their relative infrequency.

Proposer's Details
Name
David Thomas
Organisation
ELEXON Ltd

² For more details see ELEXON Circular EL03026 https://www.elexon.co.uk/documents/industry-news/elexon-circulars/el03026/

Email Address
David.thomas@elexon.co.uk
Telephone Number
0207 380 4181
Date
23 March 2020

4.8. Issue Form Guidelines

These guidelines are to be used to assist in the completion of the Issue Form, contained in Appendix 4.7. The guidelines state who should complete each item on the form and whether it is mandatory or optional. They also give a brief description of the information that should be given for each item. For further support on completing this Issue Form, please contact BSCCo. Once completed this form should be submitted to BSCCo.

- **Issue Number** –mandatory to be completed by BSCCo once the proposed issue has been received. This is a unique number.
- **Issue Title** mandatory and is completed by the proposer of the Issue at the time the issue is raised. This should be unique where possible.
- **Issue Description** mandatory and is completed by the proposer of the Issue. The description should include as much detail as possible of the issue being encountered.
- **Potential Solution(s) optional** by originator This is to be completed where the proposer of the Issue has potential solutions that they want to be discussed as part of a potential solution to the issue.
- **Justification for Examining Issue** mandatory by proposer of the Issue details of the business case for examining the issue. This section should also include a brief assessment of the risk associated with leaving the problem/issue unresolved, in terms of materiality and probability of occurrence.
- Proposer's Details mandatory completion by proposer of the Issue the name, organisation, email address and telephone number of the proposer. This should include details of any originators of the Issue, for example if BSCCo is raising an Issue on behalf of another participant.