ELEXON

Amending Baselining Methodology Document for P415

BSC Panel

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Owner/author	**Iain Nicoll**	Purpose of paper	**Decision**
Classification	**Public**	Document version	**V1.0**

Summary **This paper invites the BSC Panel to approve the amendments to the Baselining Methodology Document for the method used to determine a Deviation Volume, using a baselining technique, for BSC Modification P415.**

1. Background

1.1 Balancing and Settlement Code (BSC) Modification P376 ('Utilising a Baselining Methodology to set Physical Notifications for Settlement of Applicable Balancing Services'), which was implemented on 23 February 2023, introduced the concept of baselining to the BSC.

1.2 P376 allows an optional alternative mechanism to determine the expected flows at Supplier Volume Allocation (SVA) Metering Systems (using a baselining technique calculated using an approved Baselining Methodology) for verifying that Additional BM Units and Secondary BM Units have delivered Bid Offer Acceptances. A BM Unit utilising this option is referred to as a Baselined BM Unit.

1.3 BSC Section S13 requires the BSC Panel to establish a Baselining Methodology Document (and subsequently have it in force at all times) containing the approved methodologies.

1.4 There is currently one approved methodology, BL01, the focus of which is on the Balancing Mechanism (BM) and describes the methodology for calculating volumes of electricity delivered by Suppliers and Virtual Lead Parties (VLPs) in the BM.

1.5 BSC Modification P415 ('Facilitating access to wholesale markets for flexibility dispatched by Virtual Lead Parties') was approved by the Authority on 6 October 2023 for implementation on 7 November 2024 as part of the November 2024 Standard BSC Release.

1.6 P415 relies on Deviation Volumes, which capture the difference between what a site would tend to consume or generate without any action from a VLP (calculated using a Baselining Methodology) and what was actually consumed/generated as a result of a VLP action taken at that site. Deviation Volumes represent an import/export MWh deviation to the Total System as a result of that action by a VLP.

1.7 The only approved Baselining Methodology technique, and the Baselining Methodology Document itself, was established by Modification P376 for use in the BM. Both the P376 and P415 Workgroups envisaged that additional Baselining Methodologies may be required over time, as the volumes of flexibility using baselining increase, and new flexibility technologies become available. However, the P376 solution has not yet been used to any material extent, and we therefore don't have the data required to assess how Methodology BL01 has performed to date. We therefore do not propose a full review of Baselining Methodologies at this stage. However, we have reviewed the BL01 Methodology to assess whether any features of it could be problematic in the context of P415. As a result we propose that the Panel should make changes to clarify the use of In Day Adjustments.

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1.8 P376 established the process for amending the Baselining Methodology Document (section 4). The process allows BSCCo to request the BSC Panel to review or change the Baselining Methodology. Elexon is requesting the BSC Panel to make changes to the Baselining Methodology Document as part of the implementation of P415.

1.9 The process requires that the BSC Panel will consult with Parties in a manner appropriate to the scale and complexity of the changes before agreeing them.

2. Proposed Clarification to Use of In Day Adjustments

2.1 Methodology BL01 uses historic data (for up to 10 Working Days, or 4 Non-Working Days) to calculate Unadjusted Baseline Values, but these do not fully account for variations in factors such as weather and temperature on the day. The In Day Adjustments are used to provide an up or down lift to ensure the values used in the calculations are a better representation of the conditions on the day. Elexon proposes to clarify how In Day Adjustments would work under P415.

2.2 BL01 handles In Day Adjustments as follows:

- Where the BM Unit has an Acceptance (in the BM), an In Day Adjustment is calculated (and added to the Unadjusted Baseline) as per section 3.4.3 (BL01 Step 3 – Calculate In Day Adjustment) of the Methodology. It is based on consumption in the "In Day Reference Window" i.e. the three-hour period up until Gate Closure for the first Settlement Period with an Acceptance.

- Where the BM Unit doesn't have an Acceptance, section 3.4.3.1 (In Day Adjustments for Settlement Days without Acceptances) states that multiple In Day Adjustments are calculated (for reporting purposes only), but don't impact Settlement (because, in the absence of Acceptances, baselines aren't used in Settlement).

2.3 P415 invalidates the explanation in section 3.4.3.1 of the Baselining Methodology Document as it is for the wholesale market and not the BM and using an Acceptance as the decision point for inclusion of In Day Adjustments is not appropriate.

2.4 At the BSC Panel meeting on 8 February (347/06) Elexon proposed to update the BL01 methodology and the document:

- amend BL01 to clarify that a Wholesale Market Notification does not trigger an In Day Adjustment i.e. the In Day Adjustment Window ends at Gate Closure for the first Settlement Period with an Acceptance (as currently), and in the absence of any Acceptance the In Day Adjustment is zero. Section 3.4.3.1 of the Baselining Methodology Document would be amended to clarify that, in the absence of Acceptances, any baseline used in Settlement won't have an In Day Adjustment applied. This clarification is required because (in the absence of Acceptances) the Baseline is currently not used in Settlement at all.
  - This option removes the risk of baselining manipulation, either through deliberate gaming or through legitimate reasons (i.e. demand shifting forward), but could potentially reduce accuracy by not accounting for variations in factors such as weather and temperature on the day.
  - This option is simpler for the Lead Party, mitigates the gaming risk and avoids the assurance issue of Lead Parties not picking the most accurate Baselining Methodology

- Elexon proposed general amendments to the wording in the Baselining Methodology Document to make it relevant to P415 and to add Virtual Trading to the Event Day list of circumstances in Appendix A to align with the P415 version of BSC Section S.

2.5 Elexon proposed to consult with industry for a period of three weeks on the updates to the Baseline Methodology Document and Panel agreed to this.

3. BSC Panels' initial discussions

3.1 A Panel Member questioned whether this demand shifting issue would be a problem in the Balancing Mechanism under P376. Elexon acknowledged it could be, but highlighted that under the Balancing Mechanism there is uncertainty about being dispatched by the ESO and it was felt that on the balance of probabilities that the risk didn't need mitigating for this scenario as we had no evidence to support it being a problem. Elexon also acknowledged that when use of the P376 solution becomes more prevalent we will have data to confirm whether this belief is accurate.

3.2 A Panel Member questioned whether an increased use of P415 could cause a problem with the baselining methodology where there are a high number of Event Days in the baseline reference period. Elexon

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acknowledged that this could potentially be a problem and agreed with the Panel Member to add a question in the consultation on that topic.

3.3 Elexon acknowledged that baselining is an evolving process and other schemes have encountered issues balancing the range of variables that can impact the accuracy. Elexon confirmed that baselining techniques require to be monitored as part of assurance activities and a data driven analysis would be the driver for any amendments to current, or new additions, to the baselining techniques available.

4. Consultation Responses

4.1 Elexon published the consultation on Tuesday 13 February 2024 and it closed on Monday 4 March 2024. We received one response. The full response can be seen in Attachment B.

4.2 The respondent is a company that specialises in operating and optimising onsite renewable energy systems. They are potentially going to become a Virtual Trading Party.

4.3 They did not comment on the proposed changes to the Baselining Methodology Document.

4.4 They commented on the issue of high numbers of Event Days and concluded that, other than running the site in a non-optimised manner every few days to ensure that enough data is present to allow for the calculation, the site optimiser could submit a calculated time series showcasing how the site operate would operate if no flexibility is present. They believe that the calculation should be feasible since the optimiser should already have all the data available but do acknowledge the policing of this methodology will be more difficult.

5. Further amendments

5.1 Elexon has amended the Baselining Methodology Document for some minor clarifications and corrections that are not material to the BL01 methodology. These are highlighted in yellow and with a comment in v1.2 of the document (Attachment A). These are also listed in Appendix 1.

6. Final Proposal

6.1 In the absence of any responses to the consultation on the removal of the In Day Adjustment for P415 Elexon reviewed the conclusion on the same issue from the responses to the National Grid Electricity System Operator (NGESO) consultation on the Demand Flexibility Service (DFS) 2023/24.

6.2 Feedback to NGESO indicated that in general, respondents favoured the consulted position of removing the within-day adjustment period. Analysis indicates that there is only a small difference in accuracy between the different options of the status-quo (3hr period), a longer-period (e.g., 10hrs) and removing the adjustment all together. It was acknowledged that on especially cold days it might be slightly harder for end consumers to reduce their demand below their baseline. However, most respondents view was that the trade-off is worthwhile, as removing the adjustment means that baselines can be calculated and communicated in advance, alongside dispatch instructions, simplifying and improving the end consumer experience.

6.3 NGESO concluded that they would retain the proposal to remove the within-day adjustment period.

6.4 Based on the lack of response to the Elexon consultation on In Day Adjustment and the number of responses to the NGESO DFS consultation on the same topic, and the conclusion reached by NGESO, Elexon believes that the In Day Adjustment should not be applied in relation to Deviation Volumes.

7. Recommendations

7.1 We invite the BSC Panel to

a) **APPROVE** version 1.2 of the BSC Configurable Item ‘Baselining Methodology Document’ to become effective as version 2.0 on 7 November 2024 as part of the November 2024 BSC Release.

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Appendices

Appendix 1 – Amendments to the Baselining Methodology Document

Elexon has updated v1.1 of the Baselining Methodology Document for some non-material additions for clarification, a summary of which follows:

Section 1.1.2

- First bullet point amended to confirm that the Wholesale Market Activity Notification is sent to the SVAA via the Energy Contract Volume Aggregation Agent (ECVAA);
- Second bullet point amended to clarify that the Lead Party 'may' choose Baseline as it is one of the options; and
- A new third bullet point added, and final bullet amended, to reference the Submitted Expected Volume option.

Section 1.2

- In the second group of bullet points, c) updated to reference Wholesale Market Activity Notification is sent to the SVAA via the ECVAA.

Section 2.1

- Reference to ECVAA added.

Section 3.2

- Reference to Wholesale Market Activity Notification being received added.

Section 3.4.3.1

- In the second bullet point reference to Acceptance added for clarification.

Section 4

- In first (non-lettered) bullet point add missing reference to VTP.

Attachments

Attachment A – Baselining Methodology Document v1.2

Attachment B – Amending Baselining Methodology Document for P415 - Industry Review Responses

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