ELEXON

Continuous Acceptance Duration Limit (CADL) Review 2022

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Summary **Elexon has reviewed the Continuous Acceptance Duration Limit (CADL) pricing parameter for the period 1 August 2020 to 31 July 2022, using analysis provided by National Grid Electricity System Operator (NGESO). Elexon suggests that the current 10-minute CADL remains suitable. At its meeting on 1 November 2022, the Imbalance Settlement Group (ISG) recommended that no change should be made to the CADL.**

1. Background

1.1 The Continuous Acceptance Duration Limit (CADL) is a pricing parameter that flags Bid-Offer Acceptances (BOAs) with a duration of 10 minutes or less, as these actions tend to be associated with system balancing actions. The Replacement Price may then reprice these CADL flagged actions during the Energy Imbalance Price calculation. When CADL was introduced in 2001, it was set at 15 minutes duration. It was changed to 10 minutes duration follow a parameter review in 2018, becoming effective 1 April 2019.

1.2 NGESO have modelled various levels of CADL to show the count and volume of actions flagged under the hypothetical levels.

1.3 The analysis covered the review period from 1 August 2020 to 31 July 2022.

2. Analysis

2.1 NGESO provided analysis on the volume flagged by CADL in the Energy Imbalance Price calculation, defining if it was considered as either Fast BOA volume or Non-Fast BOA volumes. Their analysis is included in Attachment B and Attachment C to this paper.

2.2 NGESO methodology defines plants that offer Fast Reserve actions as those that match, individually or as a group, the following minimum criteria:

a) Initial ramp rate is greater than or equal to 25 MW/min; and

b) BOA size is greater than or equal to 25MW; and

c) Start point is greater than or equal to the unit's Stable Export Limit (SEL), unless it is a hydro or open cycle gas turbine (OCGT) station.

2.3 The analysis includes modelling the flagging of actions at various durations of CADL. The aim is to find the most appropriate level of CADL, where the largest numbers of Fast Reserve BOAs are flagged, whilst leaving other actions unflagged. NGESO's analysis is included as Attachment B (2020-21) and Attachment C (2021-2022).

2.4 NGESO analysis shows that at the current 10-minute CADL, 43.1% of CADL flagged actions are Fast Reserve, with 56.9% classed as Non-Fast Reserve. The previous 15-minute CADL, if used in the Energy Imbalance Price calculation over the same time period, would have resulted in 40.6% of Fast Reserve and 59.4% of Non-

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Fast Reserve being flagged. With the current CADL of 10 minutes, 47% number of Fast BOAs are correctly flagged, and 19% of Non-Fast BOAs are incorrectly flagged.

2.5 Elexon have also carried out further analysis and our findings are included in Attachment A.

2.6 Considering the volume of Fast Reserve correctly flagged, the volume of Non-Fast Reserve incorrectly flagged by the current 10-minute CADL and comparing these to what would have otherwise been the case, it is our view that the analysis suggests that the current 10-minute CADL remains suitable.

3. ISG Recommendations

3.1 Based on the analysis provided, the ISG agreed that the current value of CADL remains suitable and recommended that no change should be made. The ISG also agreed that the next CADL review should take place in two years' time (2024).

4. Recommendations

4.1 We invite you to:

a) **NOTE** the analysis presented in this paper;

b) **AGREE** that no change is made to the CADL; and

c) **AGREE** that Elexon conduct the next scheduled review to cover August 2022 to July 2024, with a Panel update around November 2024.

Attachments

Attachment A – ISG259/04 – Continuous Acceptance Duration Limit (CADL) Review

Attachment B – National Grid Electricity System Operator – 2020/21 CADL Review

Attachment C – National Grid Electricity System Operator – 2021/22 CADL Review

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