

Review of the Credit Assessment Price (CAP) calculation process

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Summary **Elxon carried out analysis following the Credit Committee’s suggestion that the Credit Assessment Price (CAP) calculation process should take higher weight of forward market peak prices into account. Elxon invites the Panel to note the analysis and the Credit Committee’s recommendation for the CAP calculation process to proceed as currently designed.**

1. Background

- 1.1 The Credit Assessment Price (CAP) is a parameter defined in [BSC Section M1.4](#) as ‘the price which it would be appropriate to use to determine the equivalent financial amount of Imbalance Parties’ Energy Indebtedness’.
- 1.2 The BSC Panel has delegated responsibility for reviewing and determining the CAP to the [Credit Committee \(CC\)](#). The process for reviewing the CAP is set out in the [CAP Review Guidance Document](#).
- 1.3 Currently, Elxon performs a weekly check comparing the CAP to a reference price, which is calculated based on forward market prices for the next two months, taken from the ICIS Heren report. If the reference price diverges from the CAP by a pre-determined value (referred to as the ‘trigger level’), a review of the CAP is initiated following this breach.
- 1.4 System Prices were high in 2021 particularly between 6 to 8 January. High prices between £1,000/MWh and £4,000/MWh increased the average of System Prices to around £73/MWh over period 1 January to 15 February. A CAP value of £62/MWh (+/- £6/MWh trigger levels) was notified to BSC Parties in early January; an increase of £6/MWh from the previous CAP value of £56/MWh.
- 1.5 The CC expressed their concern that the current way of calculating reference price and CAP might not fully reflect the System Prices. The CC suggested that the process could better incorporate peak forward market prices, as they seem to be reflecting the recent System Prices better. They discussed that such arrangements might provide more support to ensure Parties had sufficient collateral prior to going out of business to avoid mutualisation.
- 1.6 Elxon carried out analysis using historic data to help evaluate whether considering a higher weight for, or solely using, forward market peak prices would make a difference.
- 1.7 The CC met in February 2021 to discuss the analysis. They approved that no changes to the current defined process was needed. However, this paper is to escalate their concern to the BSC Panel over CAP calculation process not reflecting extreme System Prices.

2. Analysis

- 2.1 We looked at the difference between 30-day moving average of System Price and CAP as this is a measure of how effective the CAP value is, as CAP is intended to be a proxy for outturn System Buy Price (SBP). We carried out this analysis for current arrangements compared with two peak-focused scenarios. The “Peak_only” scenario takes only peak prices into account for calculating the reference price and the CAP. In “P2B1” scenario, the weight of peak prices is double that of baseload prices.

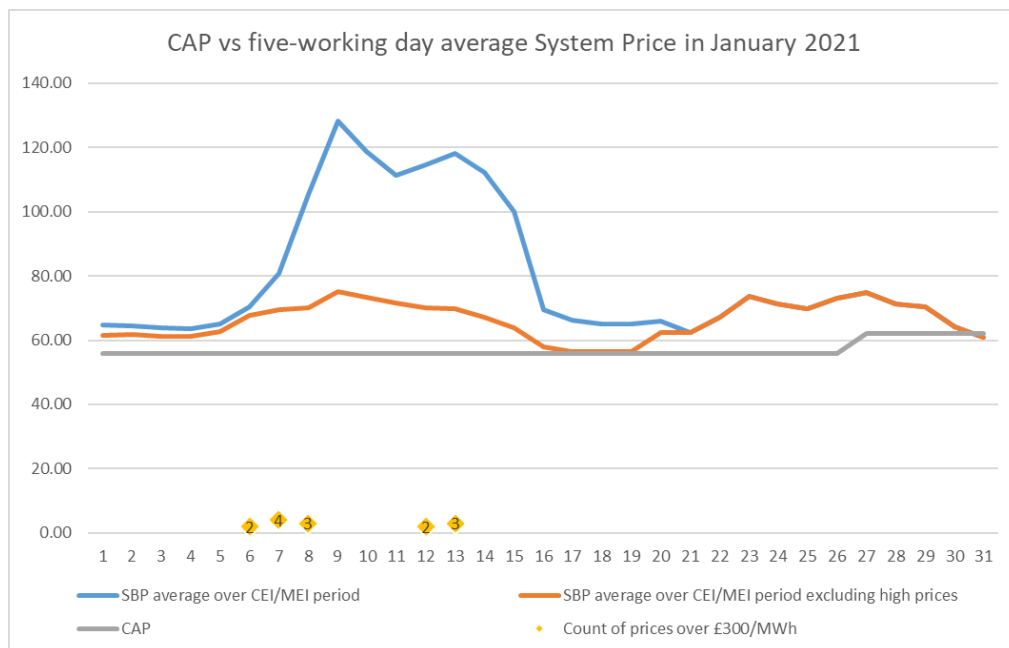
- 2.2 The analysis shows the current arrangements have performed quite well since October 2018 as the CAP was lower than the 30-day moving average System Price in only 60 days (out of 869 days). No major difference would have been made using neither the Peak_only scenario nor P2B1 scenario i.e. the number would have decreased by only five days under the Peak_only scenario and remained unchanged in P2B1 scenario.
- 2.3 System Prices were equal to or above £1,000/MWh in seven Settlement Periods in January 2021. Ignoring these would decrease the System Price average in January 2021 by nearly £10/MWh from around £72.50/MWh.
- 2.4 We have also looked at what percentage of Imbalance Volumes occur during peak hours. This has not exceeded 43% per year since 2016. This suggests that as the majority of Energy Imbalance Volumes do not occur during the peak price periods, any fair weighting should not be in favour of peak prices.

3. CC Members views

- 3.1 Elexon presented the analysis to the CC in February 2021 to obtain their views and comments on the process.
- 3.2 The CC Members expressed their approval with the recommendation that no changes to the current defined process was needed. Having said this, they also expressed their concern about the CAP not reflecting the high System Prices over events of System stress.

4. System Price average over CEI/MEI period

- 4.1 In addition to the above analysis presented to the CC, we also looked at the System Price average in comparison with CAP over the five working day period where the indebtedness calculation uses the CAP in Credit Assessment Energy Indebtedness (CEI) and Metered Energy Indebtedness (MEI). The CEI/MEI period covers the five working days before II Settlement Run data is available for a Settlement Date and is when the CAP impacts the Indebtedness calculation. The graph below shows the System Price average over CEI/MEI period and CAP, and also the count of prices over £300/MWh per day.



- 4.2 There were 14 Settlement Periods with System Prices over £300/MWh in January 2021. These occur on five days in the month, the first one on 6 January and the last one on 13 January, and remain in the CEI/MEI period until 21 January. The System Price average over the CEI/MEI period deviates from the CAP by more than £43/MWh for eight days between 8 January and 15 January and the deviation averaged at £57.61/MWh.
- 4.3 If the System Prices greater than £300/MWh are excluded from the average of System Prices during the CEI/MEI period, then the deviation is always less than £20/MWh; the deviation averaged at £14.15/MWh between 8 and 15 January.
- 4.4 The average System Price was £91.56/MWh for 1 to 15 January and £77.48/MWh for January. Excluding System prices greater than £300/MWh (14 out of 1488 Settlement Periods in January) would decrease this to £65.74/MWh for the first half of January and to £64.98/MWh for January. This demonstrates that where there

are extreme prices for a limited number of Settlement Periods, it has little impact on the effectiveness of the CAP process. Hence we do not believe this is an issue unless there is a longer running event.

5. Recommendations

5.1 We invite you to:

- a) **NOTE** the analysis presented in this paper;
- b) **NOTE** the Credit Committee's concern over the CAP calculation process not reflecting the System Prices over events of System stress; and
- c) **NOTE** the decision of the Credit Committee for the CAP calculation process to proceed as currently designed.

Attachments

Attachment A – CC43/01 – CAP Calculation Process Review

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