

CMP300 – Addressing the Ofgem Send-Back

Why did Ofgem send-back CMP300

On 9 July 2021, Ofgem sent back CMP300 asking the following:

- Provide more evidence that demonstrates objective (b) would be better facilitated for CfD BMUs as a class of users;
- Seek further feedback from industry and affected parties to improve the robustness of the assessment of the proposals; and
- Make best endeavours to secure further supporting evidence to demonstrate the economic impact of the Proposal against the class of users that would be affected.

What approach was agreed at CUSC Panel to address this

CUSC Panel on 30 July 2021 agreed next steps following send-back on 9 July 2021:

- They noted that Ofgem are asking the Final Modification Report to be revised and resubmitted
- They agreed that this needs to be assessed by a Workgroup (*there is no Workgroup Consultation, or Workgroup Report and no further Workgroup Alternatives can be raised*)
- They agreed the Workgroup's Terms of Reference
- They agreed (following the assessment by the Workgroup) that a Code Administrator Consultation is needed to be run before it is re-presented to Panel for Recommendation Vote

Agreed Terms of Reference to address Send-Back

- Provide more evidence that demonstrates CUSC Objective (b) would be better facilitated for CfD Balancing Mechanism Units (BMUs) as a class of users.
 - Confirm that there is only 1 CfD BMU currently impacted; and
 - Assess whether or not any future CfD BMUs are likely to come online in the future and assess how it can be ensured that they are not negatively impacted.
- Seek further feedback from industry and affected parties to improve the robustness of the assessment of the proposals.
- Secure further supporting evidence to demonstrate the economic impact of the Proposal against the class of users that would be affected or clearly articulate why this has not been possible.

The Workgroup met on 8 and 25 November 2021 to address these Terms of Reference and these discussions and conclusions are set out below:

Provide more evidence that demonstrates CUSC Objective (b) would be better facilitated for CfD Balancing Mechanism Units (BMUs) as a class of users.

- **Confirm that there is only 1 CfD BMU currently impacted; and**
- **Assess whether or not any future CfD BMUs are likely to come online in the future and assess how it can be ensured that they are not negatively impacted.**

There is only one CfD BMU currently impacted. The key question that the Workgroup sought to explore is the extent that new technologies may require a CfD or equivalent support mechanism in the future. The Workgroup agreed that the Future Energy Scenarios (FES) data was the most appropriate data source to quickly help the Workgroup provide a view of “whether or not any future CfD BMUs are likely to come on-line in the future”. It was confirmed by the ESO representative that the baseline FES data will only consider the CfD auctions that have occurred and therefore does not provide a direct forward view of what technology may or may not receive a CFD or similar incentive in the future. This meant that the quantitative analysis was limited to a view of potential technology types (and the associated predicted capacity) that may come on-line.

Source Data

The analysis used the Future Energy Scenarios 2021 Data Workbook ([FES Workbook](#)), which details all of the graphs, charts and supporting data published in FES from the ESO modelling - as the baseline. The focus of the analysis is the ‘ES1’ worksheet as this provides a yearly view (out to 2050) of MW Capacity predicted to be connected to the system (both at Distribution & Transmission) broken down by technology type/sub technology by each of the FES of ‘Steady Progression’, ‘System Transformation’, ‘Consumer Transformation’ and ‘Leading the Way’.

Methodology and Rationale

The analysis created a separate ES1 worksheet for each of the 4 FES to provide a range in terms of a view of the technologies and capacities coming on-line and then removed the following technologies:

- Those that are not ordinarily connected at Transmission this provides a view of those technologies (similar to the Transmission connected CfD BMU mentioned in the CMP300 proposal) that may potentially connect
- Removed the ‘Storage’ technologies such as ‘Compressed Air’ (primarily because in the example of compressed air the stored air previously pumped underground is used to run a turbine so it is assumed there is no fuel/or cost associated with that air which runs the turbines).
- Removed ‘Interconnectors’ and then ‘Thermal’ technologies (e.g. coal, oil)

This then leaves the remaining categories of ‘Low Carbon’ and ‘Renewable’ technologies which aligns with the Contracts for Difference (CfD) scheme being the government’s main mechanism for supporting low-carbon electricity generation by incentivising investment in renewable energy.

- Following this, the technologies considered as ‘non-fuel cost Power Stations’ in Section 4 of the CUSC (which have a zero reference price) have been removed (these include Onshore wind, Offshore wind, Solar, Tidal, Wave). Marine has then been removed given it uses the natural movement of water.
- Hydrogen (showing in both the System Transformation and Consumer Transformation scenarios) was removed given that it appears from the FES that those Hydrogen projects are focused on decarbonising heat and transport with several mentions of Hydrogen (produced via electrolysis) primarily being used for residential heating as well as transportation.
- Finally, ‘Waste’ & ‘Waste CHP’ has also been removed – from studying the business models for Energy from Waste it appears that although they have a fuel (that being the waste product) they don’t have a fuel cost as the business model tends runs off two

revenue streams, a “gate fee” (tipping fee) which they charge to take the waste and then revenue from generating the energy from the waste.

Conclusions

This then essentially leaves the following results:

FES Scenarios	Technologies that would potentially require a CfD or equivalent subsidy
Steady Progression	Nuclear*, Biomass, Biomass CHP, & CCS Gas
System Transformation	Nuclear*, CCS Biomass, CCS Gas, Biomass, & Biomass CHP
Consumer Transformation	Nuclear*, Biomass, Biomass CHP, & CCS Biomass
Leading the Way	Nuclear*, Biomass, Biomass CHP, & CCS Biomass

*Assumption made following discussion by the Workgroup that Nuclear would not be used for Response.

The results are similar in terms of the technology types identified with ‘Consumer Transformation’ the same as the ‘Leading the Way’ scenario.

In some scenarios however, the mix of those technology types differs as does the timing of when capacity is due to connect as well as the capacity values themselves, e.g. the ‘System Transformation’ scenario adopts both ‘Biomass and Gas CCS’ technologies.

However, there are some instances where those particular technology types (detailed in the table above) don’t have any new capacity connecting and are either static or show capacity coming offline over the period i.e. Biomass CHP in the Steady Progression scenario has some capacity coming online in 2021 then nothing further, whereas Biomass under the Consumer Transformation scenario only sees the capacity coming offline steadily from 2034 onwards.

From a qualitative perspective the Workgroup discussed the likelihood that different forms of generation will have a CfD or similar support mechanism in the future as we transition to net zero. The majority of the Workgroup concluded that the potential for the applicability of CMP300 to multiple BMU’s in the future was probable, though given the limitations of the FES, the Workgroup were unable to determine how many this would be.

Seek further feedback from industry and affected parties to improve the robustness of the assessment of the proposals.

There will be a Code Administrator Consultation run before the Draft Final Modification Report is presented to Panel - the aim would be to target the potential new technology types identified by the FES (that may be seeking connection to the transmission system) coming forward.

Secure further supporting evidence to demonstrate the economic impact of the Proposal against the class of users that would be affected or clearly articulate why this has not been possible.

The Workgroup noted that there is only 1 User in this class currently.

There will be a Code Administrator Consultation run before the Draft Final Modification Report is presented to Panel - the aim would be to target the potential new technology types identified by the FES (that may be seeking connection to the transmission system) coming forward.