CMC_22_23

Indexation of Capacity Payment Price for Inflation

energia

21st September 2023

1. Area of Concern & Proposed Change

Area of Concern

- The modification is seeking to address a risk whereby capacity contracts are currently awarded and fixed in nominal prices and therefore associated inflation risk is placed with the capacity market participant.
- Both existing capacity providers and prudent developers of new capacity will then be required to build this inflation risk into their capacity bidding strategies - however, this may be restricted by the bid caps / USPC restrictions

Proposed Change

- SEM Committee Call for Evidence / Consultation (SEM-23-014) referred to introducing a similar approach to GB whereby participants entering a capacity auction know that capacity contract prices will be indexed over the lifetime of the contract – whether that is a 1 year contract or a 10 year contract.
- In order to avoid retrospective effect, the indexation of capacity contract prices would only take effect for **capacity auctions which have yet to take place** and would not apply to capacity auctions which have already been completed. This is important in order to maintain the integrity of previous auction results.
- The proposed modification uses the relevant CPI depending on the jurisdiction of the capacity as the index (i.e. CPI in Ireland for CMUs located in Ireland and CPI in UK for CMUs located in Northern Ireland).
- The modification does not allow for the Capacity Payment Price to be reduced from the price awarded in the auction.
- Where NetCONE / price caps have been inflated for certain capacity auctions (e.g. in the upcoming T-4 27/28 auction), the modification allows for this to be accounted for in the inflation modifier calculation.
- To allow for the relevant indices to be published and for the SEMO CMC team to process the calculation, the modification proposes using the indexation figure at the end of June, three months prior to the start of the relevant capacity year

2. Indexation Concept and Methodology

- The Inflation Modifier will be applied on an annual basis at the beginning of each Capacity Year to the Capacity Payment Price. The formula to be used is

  PCPΩn x $INFMODuy$

- The Inflation Modifier is: $INFMODuy$ = (max($CINFu$, 1))

  $CINFu$= $CPIx$ $CPIadjusted$ where:

a) $CINFu$ is the Calculated Indexation determined by the change in the published Consumer Price Index (CPI), beginning in the month in which the relevant Capacity Auction Approval Date occurs and ending in the month of June prior to the commencement of the relevant Capacity Year where $INFMODuy$ is calculated.

b) $CPIx$ means the CPI published for the month of June immediately prior to the beginning of the relevant Capacity Year

c) $CPIadjusted$ means the CPI for the month in which the relevant Capacity Auction Approval Date occurs adjusted for any inflation adjustments made to the Auction Price Cap and Existing Capacity Price Cap by the Regulatory Authorities up to the month of June prior to the commencement of the relevant Capacity Year.

3. Worked Example 1

- In an example of a theoretical T-4 auction for CY 22/23 using real CPI figures and theoretical auction prices the Inflation Modifier is calculated to be 1.03.

<u>Existing Capacity Single Year contract</u>

- T-4 2022/23 Capacity Auction Approval Date is September 2018.
- The Bid Caps were set by using Net CONE adjusted for 2% inflation per year to arrive at 22/23 values.
- The Capacity Payment Price for the example unit is is €50,000 for an existing capacity unit based in RoI.
- CPIadjusted takes the CPI at Sept 2018 and applies 2% inflation for the years to June 20222.
- CPIx takes actual CPI at June 2022.
- The CINF is greater than 1, so the CPP is multiplied by the CINF to get the CPP to be applied for CY 22/23 - €51,625

<u>New Capacity Multi-year contract:</u>

- The Date of Capacity Award and CPI at Date of Capacity Aware are Unchanged.
- CPI adjusted accounts for any adjustments made to the bid caps up to June 2023, which means the full four years of 2% adjustments used to arrive at the 22/23 values at the time of the auction. This leads to a marginally increased CPIadjusted figure.
- CPIx takes actual CPI at June 2023.
- CINF is greater than 1, so is applied to the original CPP to get €103,250 for CY 22/23.
- This calculation continues for the full 10 years of the contract - assuming there is 2% inflation from for the duration the CPP in the final year would be €122,784

3. Worked Example 2

Extract from T4 27/28 Parameters Decision

For the avoidance of any doubt, the SEM Committee will be utilising the newly published value for the Best New Entrant value of €107.03/MW[5]. Conscious of the study by CEPA/Ramboll on the Best New Entrant value, along with the underlying cost base which was as of 2022/23 it is important to note that there was a 2% applied to these cost base items to inflate into 2026/27 values.

The SEM Committee has decided to inflate the CoNE figure by a further 2% to account for the Capacity Year 2027/28. This increases the 2027/28 Net CoNE figure to €109,171/MWd/Yr. Given this information:

The two price caps to be used in the T-4 2027/28 Capacity Auction are:

1. Existing Capacity Price Cap (ECPC) of 0.5 x Net CoNE = €54,586/MWd/year
2. Auction Price Cap (APC) of 1.5 x Net CoNE = €163,757/MWd/year

- In the above extract, NetCoNE and associated Bid Caps have been adjusted by 2%. However, in a future auction if NetCoNE / Bid Caps are ***not adjusted*** by a further 2% as occurred in the above decision, the $CPIadjusted$ element of the methodology will capture this.

- T-4 2023/24 Capacity Auction Approval Date is September 2019.
- *The Bid Caps are unchanged by the RAs from the 22/23 auction, so therefore only reflect inflation up to the start of CY 22/23 i.e September 2022.*
- The Capacity Payment Price for the example unit is €50,000 for a unit based in RoI with a one-year contract.
- CPI adjusted takes the CPI at Sept 2018 and applies 2% inflation for the years to September 2022. Inflation is not taken into account after that as this inflation was not adjusted for in the bid caps.
- CPI X takes actual CPI at June 2023.
- The CINF is greater than 1, so the CPP is multiplied by the CINF to get the CPP to be applied for 23/24 - €55,104

4. Why this change is needed

- Investors in the CRM are afforded no protection from inflationary risk in contrast to other capacity market auctions e.g. GB. This issue was highlighted in the recent SEM Committee Call for Evidence / Consultation (SEM-23-014).
- This modification proposal seeks to address this risk by providing certainty for investors in both new and existing capacity units by indexing the Capacity Payment Price for inflation.
- This proposal is a proportionate and necessary change to the CRM that would help safeguard the delivery of new capacity and provide inflationary protection for holders of existing capacity.
- Ultimately consumers will be better served if the CRM contracts offer protection from high inflation, and therefore mitigate the risk of inefficient exit or failure of delivery for new capacity (and the need for emergency generation).
- Given that separate arrangements are being progressed for the T-3 2024/25 and the T-4 2025/26 auctions, and the need to ensure that the modifications do not have retrospective effect on auctions that have already concluded, the modification applies exclusively to auctions that have yet to occur i.e. auctions that take place after the approval of the modification.