

MODIFICATION PROPOSAL FORM			
Proposer <i>(Company)</i>	Date of receipt <i>(assigned by System Operator)</i>	Type of Proposal <i>(delete as appropriate)</i>	Modification Proposal ID <i>(assigned by System Operator)</i>
RA's	7 th September 2023	Standard	CMC_19_23
Contact Details for Modification Proposal Originator			
Name	Telephone number	Email address	
Elvis Sebastian		esebastian@cru.ie	
Modification Proposal Title			
Modification to Implement the SEMC Decision set out in SEM-23-038 and SEM-23-045 on Indexation of Capacity Payments			
Documents affected <i>(delete as appropriate)</i>	Section(s) Affected	Version number of CMC used in Drafting	
Capacity Market Code	Chapter M; Section F.9; Section E.8.6.1, Glossary	9.0	
Explanation of Proposed Change <i>(mandatory by originator)</i>			
<p>This modification will introduce a new section under Chapter M: Interim Arrangements to implement the SEM Committee decision (SEM-23-038)¹ of 11 May 2023 to apply indexation to multi-year New Capacity projects who won in the 2024/25 T-3 and 2025/26 T-4 Capacity Auctions. The indexation measure as laid out in the decision paper and explained further in the detailed response document (SEM-23-045)² will be subject to risk-sharing arrangements and the option to base indexation from the Capacity Auction Date up until Substantial Financial Completion (SFC) or from the Capacity Auction Date up until the last day of the capacity year prior to the year in which projects are due to deliver will be available to the affected projects.</p> <p>Under Chapter M, a total of 6 subsections are proposed to be implemented.</p> <ul style="list-style-type: none"> • M.[13].1 specifies to whom this indexation measure will apply, i.e., multi-year New Capacity projects awarded contracts in the 2024/25 T-3 and 2025/26 T-4 Capacity Auctions. • M.[13].2 specifies the start date of the period of which indexation shall begin. • M.[13].3 specifies the end of the period of which indexation will be applied. • M.[13].4 specifies the option to apply indexation only until SFC or within 30 days of the detailed decision publication date, rather than the end of the Capacity Year, as laid out in SEM-23-045. • M.[13].5 specifies how the Capacity Payment Price Indexation Factor is to be calculated, as a ratio of "unexpected inflation", being the change in the relevant wholesale construction price index for Ireland / Northern Ireland as appropriate, and "expected inflation", being a rate of 2% per annum. The specified wholesale construction indices are monthly, with the relevant months being the respective months in which the start and end dates fall. The expected inflation is calculated between: (a) the first day of the month 			

¹ [Indexation of Capacity Payments Decision Paper.pdf \(semcommittee.com\)](#)

² [Indexation Decision_0.pdf \(semcommittee.com\)](#)

following the month in which the start date falls, as is specified in the Decision Paper; and (b) the last day of the month in which the end date falls, giving a period in days that corresponds, on average, to the period over which the 'unexpected inflation' is calculated. The expected inflation is compounded daily, at a daily rate equivalent to an annual rate of 2%.

- M.[13].6 specifies that the calculated Capacity Payment Price will be, for the Capacity Market Units to which M.13 will apply, the Capacity Payment Price Indexation Factor multiplied by the Capacity Payment Price determined in accordance with the existing provisions F.9.1 of the CMC. The existing provision M.1.2.1 ensures that this new value of Capacity Payment Price will replace the value determined in F.9.1.

In addition to this legal drafting being proposed, the glossary will need to be updated to reflect the new terms used under M.[13].

Existing F.9.1.2 states that Capacity Payment Price shall not be subject to adjustment or indexation. This should be deleted to avoid conflict with the new Section M.13. While, alternatively, an exception could be added to F.9.1.2, the clause, in any case, appears not to have any effect, and hence should be deleted to avoid confusion.

The existing E.8.6.1, which determines Maximum Capacity Duration, and on which M.13.1 relies, currently refers to "Exception Qualification". This term is undefined and is not used anywhere else in the Capacity Market Code. This would appear to be an error, and hence it is proposed that this refers, instead, to the defined term, "Exception Application".

Legal Drafting Change

*(Clearly show proposed code change using **tracked** changes, if proposer fails to identify changes, please indicate best estimate of potential changes)*

In Section M, add the following:

M.13 Capacity Payment Price Indexation

M.13.1 The provisions of this M.13 apply to Awarded New Capacity with a Maximum Capacity Duration of more than one Capacity Year, allocated pursuant to the T-3 Auction for the Capacity Year beginning 1 October 2024 and T-4 Auction for the Capacity Year beginning 1 October 2025, and included in the final Capacity Auction Results released by the System Operators on 4 March 2022 and 6 May 2022, respectively.

M.13.2 The Capacity Payment Price Indexation Start Date shall be 20 January 2022 or 24 March 2022, as the case may be, being the date on which the System Operators conducted the relevant T-3 Auction or T-4 Auction, referred to in M.13.1.

M.13.3 Unless the Participant notifies the System Operator otherwise in accordance with M.13.4, the Capacity Payment Price Indexation End Date shall be the day before first day of the first Capacity Year to which the Awarded New Capacity relates.

M.13.4 If, no later than Substantial Financial Completion or within 30 days of the Capacity Payment Price Indexation Detailed Decision Date, the Participant so notifies the

System Operators, the Capacity Payment Price Indexation End Date shall be the date of Substantial Financial Completion.

M.13.5 The Capacity Payment Price Indexation Factor (FPCP_{Qn}) shall be:

$$\text{FPCP}_{Qn} = (1 + 0.7 * (\text{FINFT}_{Qn} / \text{FINFX}_{Qn} - 1))$$

where FINFT_{Qn} is the Capacity Payment Price Total Inflation, being

(a) for Capacity Market Units connected in Ireland, the ratio of the CSO WPA15 Wholesale Price Index for Building and Construction Materials for the month in which the Capacity Payment Price Indexation End Date falls and the month in which the Capacity Payment Price Indexation Start Date falls; and

(b) for Capacity Market Units connected in Northern Ireland, the ratio of the ONS Construction Output Price Index for New Work (Infrastructure) for the month in which the Capacity Payment Price Indexation End Date falls and the month in which the Capacity Payment Price Indexation Start Date falls;

and FINFX_{Qn} is the Capacity Payment Price Expected Inflation, being 1, inflated at a rate equivalent to 2 per cent per year, compounded daily over the period between, and including, the first day of the month following the month in which the Capacity Payment Price Indexation Start Date falls and the last day of the month in which the Capacity Payment Price Indexation End Date falls.

M.13.6 The Capacity Payment Price shall be the Capacity Payment Price determined in accordance with F.9.1, multiplied by the Capacity Payment Price Indexation Factor.

In E.8.6.1, replace “Exception Qualification” with “Exception Application”.

E.8.6.1 Subject to paragraph E.8.6.2, the Maximum Capacity Duration in respect of:

- (a) New Capacity for which the Regulatory Authorities have approved a Maximum Capacity Duration as a result of an Exception ~~Application Qualification~~, shall be the approved Maximum Capacity Duration; and
- (b) otherwise, shall be one Capacity Year.

Delete F.9.1.2

~~F.9.1.2 — Except to the extent provided for in the Trading and Settlement Code, the Capacity Payment Price shall not be subject to adjustment or indexation.~~

In the Glossary, amend the definition of Capacity Payment Price, as follows:

Capacity Payment Price (PCP_{Qn}) in respect of Awarded Capacity, means the Capacity Payment Price determined in accordance with section F.9.1 and M.13.

And, add the following definitions:

Capacity Payment Price Total Inflation (FINFT_{Qn}) means, in respect of Awarded New Capacity to which M.13.1 applies, for Capacity Market Unit Q and price-quantity pair n, the total inflation

between the Capacity Payment Price Indexation Start Date and the Capacity Payment Price Indexation End Date, and has the value determined in accordance with M13.5.

Capacity Payment Price Expected Inflation (FINFX_{Qn}) means, in respect of Awarded New Capacity to which M.13.1 applies, for Capacity Market Unit Ω and price-quantity pair n , the expected inflation between the Capacity Payment Price Indexation Start Date and the Capacity Payment Price Indexation End Date, assuming a deemed rate of 2 per cent per year, and has the value determined in accordance with M13.5.

Capacity Payment Price Indexation Start Date means, in respect of Awarded New Capacity to which M.13.1 applies, for Capacity Market Unit Ω and price-quantity pair n , the start date from which Capacity Payment Price Indexation Factor is calculated, and is determined in accordance with M.13.2.

Capacity Payment Price Indexation End Date means, in respect of Awarded New Capacity, to which M.13.1 applies, for Capacity Market Unit Ω and price-quantity pair n , the end date from which Capacity Payment Price Indexation Factor is calculated, and is determined in accordance with M.13.3 and M.13.4.

Capacity Payment Price Indexation Factor (FPCP_{Qn}) means, in respect of Awarded New Capacity to which M.13.1 applies, for Capacity Market Unit Ω and price-quantity pair n , the factor used to multiply the Capacity Payment Price determined in accordance with F.9.1, and has the value determined in accordance with M13.5.

Capacity Payment Price Indexation Detailed Decision Date means 11 May 2023, being the date of publication of SEM-23-045 by the Regulatory Authorities.

Modification Proposal Justification

(Clearly state the reason for the Modification)

This mod proposal is required to implement SEMC decision SEM-23-038 and SEM-23-045 to apply indexation to capacity market contracts won by multi-year New Capacity projects in the 2024/25 T-3 and 2025/26 T-4 Capacity Auctions.

The SEM Committee, following the proposal of Mod_07_22 to the Trading and Settlement Code and upon receiving correspondence directly from a number of market participants expressing support for the mod, issued a Call for Evidence (SEM-22-071)³ regarding the impact of inflation on delivery of New Capacity Market projects in October 2022. Quantitative evidence was sought on the level of inflation projects faced and how this threatened their financial viability. Numerous respondents provided examples of the levels of inflation they faced, but none provided comprehensive evidence of the impact of inflation on actual expected project returns or demonstrated that those returns have been reduced to the extent that project viability has been threatened.

The SEM Committee, therefore, in February 2023, issued a Second Call for Evidence related specifically to the impact of inflation on the financial viability of projects, while also setting out a

³ [WP-05: Institutional Arrangements \(semcommittee.com\)](#)

Consultation on a “strawman” proposal for how the indexation provisions would work if they were to be introduced (SEM-23-014)⁴. The proposals focused on multi-year New Capacity projects which were awarded capacity in the 2024/25 T-3 and 2025/26 T-4 auctions, which evidence suggested were most at risk. Based on the responses, the SEM Committee concluded that:

- Capex inflation was over and above that which could/should have been reasonably anticipated by a prudent operator,
- Unanticipated inflation threatens viability of a significant proportion of multi-year new capacity projects which won in the 2024/25 T-3 and 2025/26 T-4 auctions and could have a material impact on security of supply,
- Indexing contracts is the simplest and most effective way to address the financial jeopardy faced by relevant new capacity,
- Capex inflation faces was a rate in excess of that captured in the HICP in Ireland and the UK CPI,
- A number of investors would be faced by continuing inflation throughout the majority, if not all of the 'Build Period'.

The justification for this modification as laid out above, is to implement the SEM Committee’s decision on Indexation.

Summary of Decision:

- Indexation will only be applied based on the calculated change in the indices during the Build Period, i.e., the period starting on the relevant auction date and finishing on the last day of the Capacity Year prior to the year in which projects are due to deliver;
- Option to base indexation on a period ending at Substantial Financial Completion, rather than on the day prior to the start of the first Capacity Year will be available, i.e., option between:
 - An Indexation Factor based on “Unexpected Inflation” between the Auction Date and the SFC date of the project; or
 - An Indexation Factor based on “Unexpected Inflation” between the Auction Date and the end of the Build Period;
- Indexation will be applied on a currency zone basis;
 - Ireland: the Central Statistics Office’s Wholesale Price Index for Building and Construction (materials),
 - Northern Ireland: the UK Office for National Statistics’ Construction Output Price Index for New Work (Infrastructure);
- There will be an explicit risk-sharing percentage which will result in 70% of Unexpected Inflation being passed through the capacity price, with “Unexpected Inflation” meaning variances in the relevant indices from an assumed 2%⁵ annual growth during the Build

⁴ [SEM-23-014 Indexation Consultation and CfE.pdf \(semcommittee.com\)](#)

⁵ In SEM-21-110, the SEM Committee decided to inflate the Auction Price Cap for the 2024/25 T-3 and 2025/26 T-4 Capacity Auctions by 2% per annum, reflective of the “standard target level of inflation”.

Period;

- A one-off Indexation Factor will be calculated based on cumulative Unexpected Inflation during the Build Period, with the 70% risk-sharing proportion applied to it. The Indexation Factor will be applied to the capacity price awarded to each unit for all ten years of the contract;
- Different Indexation Factors will apply to:
 - Contracts denominated in Euros and contracts denominated in Sterling; and
 - Contracts awarded in the 2024/25 T-3 and 2025/26 T-4 auctions, which have different Build Periods.

Implementation of Indexation measure:

As per the SEMC decision SEM-23-038, the following method will be used to apply indexation to the calculation of capacity payments for multi-year New Capacity projects in the two relevant auctions:

- 2024/25 T-3 Capacity Auction
 - Auction date was 20 January 2022 and the last day prior to the year in which projects that won in this auction are due to deliver is 30 September 2024.
 - Expected Inflation is considered to be 2% in both jurisdictions.
 - Compound Expected Inflation: the SEMC will ignore the part month of January 2022 and calculate inflation over 2 years and 8 months. Therefore, expected inflation will be calculated as: $(1 + 2\%)^{2.667} = 5.42\%$.
 - Outturn inflation (Compound Total Inflation) will be calculated based on the published value of the chosen Ireland/UK indices for September 2024, or the date of SFC for the project, divided by the value of the index in January 2022.
 - The appropriate percentage to index to represent Unexpected Inflation would therefore be $= (1 + \text{Compound Total Inflation}) / (1 + \text{Compound Expected Inflation}) - 1$.
 - The final Indexation Factor would account for the application of 70% risk-sharing, meaning: $\text{Unexpected Inflation} \times 70\% = \text{Final Indexation Factor}$.
- 2025/26 T-4 Capacity Auction
 - Auction date was on 24 March 2022 and the last day prior to the year in which projects that won in this auction are due to deliver is 30 September 2025.
 - Expected Inflation is considered to be 2% in both jurisdictions.
 - Compound Expected Inflation: the SEMC will ignore the part month of March 2022 and calculate inflation over 3 years and 6 months. Therefore, expected inflation will be calculated as: $(1 + 2\%)^{3.5} = 7.18\%$.
 - Outturn inflation (Compound Total Inflation) will be calculated based on the published value of the chosen Ireland/UK indices for September 2025, or the date of SFC for the project, divided by the value of the index in March 2022.
 - The appropriate percentage to index to represent Unexpected Inflation would therefore be $= (1 + \text{Compound Total Inflation}) / (1 + \text{Compound Expected Inflation})$

– 1.

- The final Indexation Factor would account for the application of 70% risk-sharing, meaning: Unexpected Inflation x 70% = Final Indexation Factor.

Code Objectives Furthered

(State the Code Objectives the Proposal furthers, see Sub-Section A.1.2 of the CMC Code Objectives)

The Capacity Market Code Objectives are:

- (a) to facilitate the efficient discharge by EirGrid and SONI of the obligations imposed by their respective Transmission System Operator Licences in relation to the Capacity Market;
- (b) to facilitate the efficient, economic and coordinated operation, administration and development of the Capacity Market and the provision of adequate future capacity in a financially secure manner;
- (c) to facilitate the participation of undertakings including electricity undertakings engaged or seeking to be engaged in the provision of electricity capacity in the Capacity Market;
- (d) to promote competition in the provision of electricity capacity to the SEM;
- (e) to provide transparency in the operation of the SEM;
- (f) to ensure no undue discrimination between persons who are or may seek to become parties to the Capacity Market Code; and
- (g) through the development of the Capacity Market, to promote the short-term and long-term interests of consumers of electricity with respect to price, quality, reliability, and security of supply of electricity across the Island of Ireland.

By addressing a risk that threatens the viability of a significant proportion of multi-year new capacity projects which won in the 2024/25 T-3 and 2025/26 T-4 auctions and could have a material impact on security of supply, the modification furthers Capacity Market Code Objectives (c) and (g).

Implication of not implementing the Modification Proposal

(State the possible outcomes should the Modification Proposal not be implemented)

The CMC would not reflect the decision set out in SEM-23-038 and SEM-23-045 if this is not implemented.

Impacts

(Indicate the impacts on systems, resources, processes and/or procedures)

Please return this form to the System Operators by email to CapacityModifications@sem-o.com

Notes on completing Modification Proposal Form:

1. If a person submits a Modification Proposal on behalf of another person, that person who proposes the material of the change should be identified on the Modification Proposal Form as the Modification Proposal Originator.
2. Any person raising a Modification Proposal shall ensure that their proposal is clear and substantiated with the appropriate detail including the way in which it furthers the Code Objectives to enable it to be fully considered by the Regulatory Authorities.
3. Each Modification Proposal will include a draft text of the proposed Modification to the Code unless, if raising a Provisional Modification Proposal whereby legal drafting text is not imperative.
4. For the purposes of this Modification Proposal Form, the following terms shall have the following meanings:

CMC / Code:	means the Capacity Market Code for the Single Electricity Market
Modification Proposal:	means the proposal to modify the Code as set out in the attached form
Derivative Work:	means any text or work which incorporates or contains all or part of the Modification Proposal or any adaptation, abridgement, expansion or other modification of the Modification Proposal

The terms "System Operators" and "Regulatory Authorities" shall have the meanings assigned to those terms in the Code.

In consideration for the right to submit, and have the Modification Proposal assessed in accordance with the terms of Section B.12 of the Code, which I have read and understand, I agree as follows:

1. I hereby grant a worldwide, perpetual, royalty-free, non-exclusive licence:
 - 1.1 to the System Operators and the Regulatory Authorities to publish and/or distribute the Modification Proposal for free and unrestricted access;
 - 1.2 to the Regulatory Authorities to amend, adapt, combine, abridge, expand or otherwise modify the Modification Proposal at their sole discretion for the purpose of developing the Modification Proposal in accordance with the Code;
 - 1.3 to the System Operators and the Regulatory Authorities to incorporate the Modification Proposal into the Code;
 - 1.4 to all Parties to the Code and the Regulatory Authorities to use, reproduce and distribute the Modification Proposal, whether as part of the Code or otherwise, for any purpose arising out of or in connection with the Code.
2. The licences set out in clause 1 shall equally apply to any Derivative Works.
3. I hereby waive in favour of the Parties to the Code and the Regulatory Authorities any and all moral rights I may have arising out of or in connection with the Modification Proposal or any Derivative Works.
4. I hereby warrant that, except where expressly indicated otherwise, I am the owner of the copyright and any other intellectual property and proprietary rights in the Modification Proposal and, where not the owner, I have the requisite permissions to grant the rights set out in this form.
5. I hereby acknowledge that the Modification Proposal may be rejected by the Regulatory Authorities and that there is no guarantee that my Modification Proposal will be incorporated into the Code.