| MODIFICATION PROPOSAL FORM | | | | | | | | |
|--|--|---------------------|---|--|--|--|--|--|
| Proposer (Company) | Date of receipt (assigned by System Operator) | | Type of Proposal (delete as appropriate) | | Modification Proposal ID (assigned by System Operator) | | | |
| SSE | 7 th March 2024 | | Stand | ard | CMC_03_24 | | | |
| | Contact Details for Modification Proposal Originator | | | | | | | |
| Name | Name | | Telephone number | | Email address | | | |
| Stacy Feldmann | | | | Feldmann.stacy@gmail.com | | | | |
| | Modification Proposal Title | | | | | | | |
| | Enduring Mechanism for Indexation based on GB model | | | | | | | |
| Documents affected (delete as appropriate) | | Section(s) Affected | | Version number of CMC used in Drafting | | | | |
| | | Section F Se | ction O | Version 10 | | | | |
| Explanation of Proposed Change | | | | | | | | |
| (mandatory by originator) | | | | | | | | |

Introduction

Indexation is a feature of other support schemes in Ireland (RESS and ORESS). It is also a feature of other Capacity Market schemes (i.e., in GB). An indexation mechanism allows that where there are unforeseeable and reasonable changes in inflation during the procurement and delivery of new capacity, it can be accounted for. It also prevents uneconomical exits from existing units due to inflation impact on their cost base. It is currently assumed that inflation is included in bids submitted at a capacity auction. However, the price signals in our CRM market are defined by our price caps which are fixed and unchanging, based on a Best New Entrant set only every 5 years.

Indexation was provided before for auctions 2024/25 and 2025/26 on an exceptional basis. We agree that this particular provision was by exception and did not set a precedent of how indexation should be treated in future. However, as above, other schemes in the SEM market are reasonably allowed to have inflation accounted for to help project delivery and project certainty. Where the CRM is acknowledged (in the EY review and the McCarthy review) as suffering in being unable to deliver capacity, there is a case to be made for inflation to be accounted for on a reasonable and enduring basis.

SSE notes that there is an existent modification proposing an enduring mechanism for indexation, we consider it misses out in supporting projects that are currently in their procurement phase prior to reaching the end of their Substantial Financial Completion Period. This means that projects that will be immediately addressing the identified capacity shortfall, outlined in the EirGrid Generation Capacity Statement from 2026, will not have the benefit of some form of inflation mechanism.

SSE are proposing an alternative approach to indexation that aligns with the GB approach fitted to the ISEM Capacity market timelines.

SSE's Indexation MOD proposal

We are proposing an alternative approach to indexation that aligns with the GB approach, with suitable adjustments to account for ISEM auction timelines. If the relevant auction was a T-4 auction, the Capacity Payment Price should be adjusted by inflation as detailed below in our worked examples.

We have sought in this proposal to:

- Propose an indexation mechanism in line with the SEMC's preference of a GB model if an enduring mechanism were to be considered for the CRM;
- Help ensure projects delivering capacity from the documented capacity shortfall of 2026 and future can have the assistance of indexation to help ensure delivery.
- Account for differences in Auction Parameters Publication dates in the ISEM from auction to auction (which is not needed in the GB CM)
- Address the fact that there is now a Market Readiness Certificate which could incentivise early delivery (CMC_25_23), which can be further incentivised if the CPIx average period in an enduring mechanism can account for a 6 months' earlier delivery of a project compared to the Capacity Year date (this can provide a useful enduring incentive for early delivery which is of benefit for security of supply)
- To consider the impact of deflation by adding a "max" term in the formula (similar to the current CMC 22_23 from Energia, ensuring that the Capacity Payment Price cannot be reduced from the price awarded in the auction);
- Act in accordance with the interpretation of retrospectivity as defined by the SEMC (SEM 23-045; SEM 24-015)

Application and Effective date of this mod

In our view, an enduring mechanism for indexation has been signalled by industry as a market feature that is necessary. As also mentioned at the recent T-3 stakeholder event, indexation was highlighted as still an issue for projects seeking to deliver projects in a challenging procurement market.

In order to ensure that this has effect in a timely and fair manner, we propose as per the legal drafting that indexation under this proposal has effect from the date of the RAs decision, and applies to projects that have yet to meet the end of their Substantial Financial Completion Period as defined under the CMC, see below.

The Substantial Financial Completion Period is defined under CMC D2.1.3A:

D.2.1.3A The Substantial Financial Completion Period shall be set to 18 months for each Capacity Auction or such other period as is notified to the System Operators by the Regulatory Authorities with their instruction to conduct a Capacity Auction given under paragraph D.2.1.2.

This period is set from the date the final Auction Results have been published.

To be able to meet the Substantial Financial Completion, a project needs to be able to have all contracts signed, financing secured, and permissions obtained for construction and commissioning. It is taken as the point at which a project can signal under the Code that the project is viable and strongly likely to deliver.

Before that time, changes in supply chain prices and procurement challenges can still pose a significant impact on the project including unforecastable inflation during that period when the developer is at the highest degree of risk.

This is what our mod is seeking to address by mirroring the GB model of applying inflation, where this is understood. The GB model seeks to apply an average CPI across a period during which the bid and auction may take place, as well as towards the end of the build period for a project. A simple average across 7 months helps to avoid any spikes in CPI directly affecting the values for this formula.

It is our view that indexation cannot wait to be implemented given that inflation adjustments implemented in 2024 would help to deliver capacity that will be meeting capacity shortfalls from 2026 onwards. This is critical for mitigating security of supply.

We have provided worked examples below.

Legal Drafting Change

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

F.9.1.2 From xxx [effective date of modification approval], awarded New Capacity that has yet to reach the end of their Substantial Financial Completion Period as defined in D.2.1.3A of the CMC, the Capacity Payment Price will be indexed at the start of each Capacity Year in accordance with the following formula as per Section O.

From xxx [effective date of modification approval], Existing Capacity that are competing for their next single year contract at auction will have their Capacity Payment Price indexed in accordance with the following formula in Section O.

For those units in development prior to the effective date of CMC_xxx [modification reference for this mod]; except to the extent provided for in the Trading and Settlement Code, the Capacity Payment Price shall not be subject to adjustment or indexation.

Section O

$$PCP_{\Omega n} \times \max{(\frac{CPI_X}{CPI_{base}}, 1)}$$

Where:

PCP_{Qn} is the Capacity Payment Price

CPIx is the average monthly CPI figures for the winter before the Capacity Year, October to April inclusive, (April of the Capacity Year)

CPIbase is the average monthly CPI figures for the 7 months prior to the publication of the IAIP (Initial Auction Information Pack).

This value will be applied to the Capacity Payment Price and will apply to the Capacity Payments that become due in the Delivery Year of the project. This value will be recalculated, for each Delivery Year.

We expect to use the standard CPI indices values as published in ROI and NI (Central Statistics Office and Office for National Statistics).

Worked examples

GB Indexation Methodology:

In GB, the capacity cleared price for T-4 auctions are adjusted by inflation as detailed below:

- The Capacity Cleared Price is multiplied by $\frac{CPI_X}{CPI_{base}}$
 - CPIx is the average monthly CPI figures for the winter before the Deliver year (October to April inclusive)

- CPIbase is the average monthly CPI figures for the winter of the base year (October to April inclusive), with the base year defined in the Auction Parameters publication.
- The indexation base year (CPIbase) is published well ahead of the auction along with other Auction Parameters and refers to a period of known outturn CPI values (i.e. for the GB T-4 2027/2028, the auction parameters with the base indexation were published in July 2023, with the auction being held in Feb/2024. The base indexation period was Oct/2022 – Apr/2023, which are known values).
- For multi-year contracts, the CPIx is updated for each delivery year as per above calculation.

Example for ISEM T-4 2022/2023:

| ISEM T-4 22/23 Auction Timetable & Results | | | | |
|--|----------------------|--|--|--|
| IAIP date | 28/09/2018 | | | |
| Submission Commencement | 21/03/2019 | | | |
| Auction Run Start | 28/03/2019 | | | |
| Auction approval date | 25/04/2019 | | | |
| Auction results date | 29/04/2019 | | | |
| Auction clearing Price | 46,150 €/MW per year | | | |

Since the publication date for the IAIP was September 2018, the CPI base will be the average of CPI between February 2018 and August 2018, which is 101.26. For the Capacity Year 2022/2023, The CPIx will be the average of CPI between October 2021 and April 2022, which is 107.69.

| Month | Feb-18 | Mar-18 | Apr-18 | May-18 | Jun-18 | Jul-18 | Aug-18 | CPI base average |
|-------------------|--------|--------|--------|--------|--------|--------|--------|------------------|
| ROI CPI values | 100.60 | 100.90 | 100.70 | 101.30 | 101.40 | 101.80 | 102.1 | 101.26 |

| Month | Oct-21 | Nov-21 | Dec-21 | Jan-22 | Feb-22 | Mar-22 | Apr-22 | CPIx average |
|---------|--------|--------|--------|--------|--------|--------|--------|-----------------|
| ROI CPI | | | | | | | | |
| values | 105.9 | 106.5 | 107 | 106.6 | 107.6 | 109.6 | 110.6 | 107.69 |

The Capacity Payment Price adjusted for inflation would be: 46,150 x max(107.69/101.26, 1) = 49,080€/MW for the CY 2022/2023.

Modification Proposal Justification

(Clearly state the reason for the Modification)

It is reasonable and logical for indexation to be applied on an enduring basis since it is also built into other schemes like RESS and ORESS and in other jurisdictions, like in GB. The application of indexation in GB has been part of their capacity market design since its inception.

Progressing this modification in a timely manner would ensure that this modification could apply for projects in flight in 2024 with delivery from Capacity Year 2026. We consider that given the unexpected degree of auction attrition for the most recent T-4 2027/28, an enduring mechanism is urgent to avoid any further capacity shortfall that may occur and to help projects already expected, to be able to deliver. Industry has been clear as noted in SEM-24-011, that indexation is a concern.

Benefits of this proposal:

- Methodology taken from GB, which is well known and consolidated.
- Participants are protected from deflation (Lowest Capacity Payment Price possible is the Auction Cleared Price).
- Indexation base values will be known ahead of auction (at IAIP publication date), which
 allow participants to correctly assess in real terms opt-out decisions or requirements for
 specific price which are decisions made shortly after auction publications. New builds
 will also be able to build their business case with the correct assessment of project
 finance in real terms ahead of entering prequalification.
- Multi-year contracts consistent as GB market and indexed in line with the base year defined for the auction they contracted.
- No material changes to settlement systems as inflation adjustment value will be known months ahead of each capacity year and Market Operator can update auction payment price to inflation adjustments.
- Can provide a suitable additional incentive alongside Market Readiness Certification for early delivery.

Insofar as retrospectivity, our proposed change relates to already settled auctions and will not reopen these details. Rather, this change will appropriately apply to projects that are delivering capacity from 2026 onwards when under the Generation Capacity Statement from EirGrid, there will be a capacity shortfall. Given the security of supply situation, which has been further exacerbated by auction attrition in the most recent T-4 2027-28, it is imperative that existing projects yet to deliver, are provided with support against inflationary risk at the time when they face the highest cost uncertainty, i.e. during the tendering and procurement phase prior to the end of the Substantial Financial Completion Period.

Code Objectives Furthered

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

- A.1.2.1 (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:
- A.1.2.1 (e) to provide transparency in the operation of the SEM;
- A.1.2.1 (f) to ensure no undue discrimination between persons who are or may seek to become parties to the Capacity Market Code
- A.1.2.1 (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.

Implication of not implementing the Modification Proposal

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

It is likely that lack of an inflation mechanism is a contributing factor to the continued project terminations and capacity auction attrition experienced in the CRM. Ireland is a small market, and it is a challenging procurement climate overall as the types of technologies are being procured across the world in high volumes. In the current CRM design, the procurement phase of a project is only firmed up post-auction where quotes can be finalised and agreed. This means that there is potential for a degree of price changes in that period. This is something that the GB market understands and therefore, they have applied an inflation mechanism which averages CPI indices at different points in the auction and delivery periods for projects. We have sought to apply this approach in an appropriate manner, to the ISEM CRM design.

Impacts

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

Our Proposal would be ahead of the delivery year the TSO/SEMO would update system to reflect the updated inflation adjusted award price. Settlements of the

contract would flow through as normal (this change would require no changes to settlement)

SEMO we would envisage would be doing a once-a-year update of the new award prices in systems, which should create only limited impact.

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

Notes on completing Modification Proposal Form:

- 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.
- 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: Modification Proposal: Derivative Work: means the Capacity Market Code for the Single Electricity Market means the proposal to modify the Code as set out in the attached form 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.