

Single Electricity Market (SEM)

Capacity Market Code Modifications

Workshop 45

Consultation Paper

CMC_16_25: CRM De-Rating Factors for DSU

CMC_17_25: Drawdown of Performance Security

CMC_18_25: Introduction of Modular Generator Unit Types and De-Rating Methodology

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1. OVERVIEW

1.1 ABSTRACT

- 1.1.1 The purpose of this consultation paper is to invite industry participants to provide feedback and comments regarding the Modification Proposals to the Capacity Market Code (CMC) discussed at Workshop 45, held on 17 September 2025.
- 1.1.2 During this Workshop, three Modification Proposals were presented. This consultation paper relates to:

CMC_16_25: CRM De-Rating Factors for DSU

CMC_17_25: Drawdown of Performance Security

CMC_18_25: Introduction of Modular Generator Unit Types and De-Rating

Methodology

1.2 BACKGROUND

1.2.1 On 29 July 2025, the Demand Response Association of Ireland (DRAI) submitted one Modification Proposal (CMC_16_25) under the terms of B.12.4 of the CMC.

- 1.2.2 On 02 September 2025, the System Operators (SOs) submitted one Modification Proposal (CMC_17_25) under the terms of B.12.4 of the CMC.
- 1.2.3 On 03 September 2025, EPUKI submitted one Modification Proposal (CMC_18_25) under the terms of B.12.9 of the CMC and marked it as Urgent. The Regulatory Authorities (RAs) reviewed the proposal and in accordance with B.12.9.3, did not determine it to be Urgent.
- 1.2.4 The RAs also reviewed the Modification Proposals submitted to this workshop and determined that they were not spurious as per B.12.6.1 of the CMC.
- 1.2.5 On 29 September 2025, the RAs then determined the procedure to apply to the Modification Proposals. This is shown in Appendix A. An overview of the timetable is as follows:
 - i. The System Operators convened Workshop 45 where the Modification Proposals were considered on 17 September 2025.
 - ii. The System Operators, as set out in B.12.7.1 (j) of the CMC, prepared a report¹ of the discussion which took place at the workshops, provided the report to the RAs, and published it on the SEMO website promptly after the workshop.
 - iii. The RAs are now consulting on the Modification Proposals, from the date of publication of the consultation until the closing date of Friday 14 November 2025 for Workshop 45.

¹ Capacity Modifications Workshop 45 Report v1.0.pdf

iv. As contemplated by B.12.11.6, the RAs will make their decision as soon as reasonably practicable following conclusion of the consultation and will publish a report(s) in respect of their decision, at the earliest, by 02 February 2026.

1.3 PURPOSE OF THIS CONSULTATION PAPER

- 1.3.1 The purpose of this paper is to consult on the three proposed standard Modifications. Further detail is set out in the appended Modification Proposals in Appendix B.
- 1.3.2 The (RAs) hereby give notice to all Parties and the Market Operator of a consultation on the Modification Proposals.
- 1.3.3 Interested Parties and the Market Operator are invited to make written submissions concerning the proposed Modifications by no later than 17:00 on Friday 14 November 2025.
- 1.3.4 Please note that late submissions will not be accepted.
- 1.3.5 Upon closure of the consultation process, the (RAs) intend to assess all valid submissions received and form a decision to make a modification, not make a modification or undertake further consideration of the modification in respect of each Modification Proposal.

2. MODIFICATION PROPOSALS

2.1 CMC_16_25- CRM DE-RATING FACTORS FOR DSU

Proposer: DRAI

CMC 16 25: Proposal Overview

- 2.1.1 This Modification Proposal seeks to introduce a new means for calculating De-Rating Factors (DRFs) for Demand Side Units (DSUs) according to their projected availability. The Modification Proposal seeks to transition from Technology Class DSU DRFs, which use historical availability data for an average of all DSUs, and are a function of size and hours of demand reduction, to instead requiring the TSOs to publish a new DRF table, in which DRFs would be function of an 'availability metric' and hours of demand reduction (no longer being a function of size). DSU DRFs would not be based on historical availability, but on the DSU participant's projected availability.
- 2.1.2 DSUs would then select a DRF, taking on a commitment to deliver the promised level of availability, with a new Generator Performance Incentive (GPI) created with the intention of ensuring DSUs follow through on this commitment. The GPI would be calculated by multiplying the quantity of undelivered capacity by the capacity market clearing price by an incentive multiplier (which the proposer suggests setting at 1.1).

CMC 16 25: Workshop Feedback

- 2.1.3 Capacity Market Code Modifications Workshop 45 took place on 17 September 2025, where the Modification Proposal was presented and discussed by the DRAI.
- 2.1.4 ESB GT asked about the status of operational metering and how this interacts with this Modification Proposal.
- 2.1.5 The DRAI responded to say it was not familiar with operational metering, and considered this to be unworkable.
- 2.1.6 Energia said it would be improper to change the DRF methodology for one specific technology type.
- 2.1.7 FERA stated it was not involved in the drafting of this Modification Proposal and that it does not support it. It further opined that it did not believe in implementing individual DSU De-ratings due to issues with sources of information, the inability to verify such data and the significant administrative burden on the TSO to process these accordingly while also adding costs to the end consumer.
- 2.1.8 FERA also opined that current DRFs are quite low, but this Modification Proposal would not solve this problem. It also said the proposal would be unacceptable to its members.
- 2.1.9 Grid Beyond highlighted the international comparison of DSUs, where it opined that DSUs provide resource adequacy in other markets through innovative new methods, which are not

being deployed in the SEM. It further outlined that data centres could provide load reduction in a similar manner, and the RAs need to give upside to industry and allow new entrants into the sector.

- 2.1.10 FERA responded to the previous comments regarding operational metering of Individual Demand Sites (IDS) and clarified that the operational metering comment refers to phase 2 of the DSU Energy Payments. FERA explained that it is very difficult for DSUs to predict the variability of their IDS and therefore believed that it would be difficult to accurately determine this accordingly.
- 2.1.11 The DRAI responded to these comments and noted that the current level of DRFs is currently untenable and that the "availability gap" is far greater than for any other technology.
- 2.1.12 It further opined that a responsible participant should carry the risk if they wish to participate in the Capacity Market and that a DSU does not need to be aggressive in choosing a De-Rating Factor and instead, should be conservative.
- 2.1.13 EPUKI asked if the RAs were considering using INCTOL and if this could be applied to all technologies and that it may be a potential solution already in the CMC.
- 2.1.14 The RAs responded by noting that all areas would be considered, but they could not confirm anything for future auctions.
- 2.1.15 BnM supported EPUKI's comment and stated that this could be a compromise to help all stakeholders.
- 2.1.16 SSE also supported EPUKI's comments.

- 2.1.17 The SEM Committee welcomes feedback and comments regarding this Modification Proposal.
- 2.1.18 The SEM Committee recognises the concerns of Market Participants surrounding the current DRF methodology and acknowledge that there are shortcomings associated with the use of technology class DRFs. As set out in the parameters decision paper for the T-4 2029/30 auction (SEM-25-040), the SEM Committee intends to consider possible changes to the DRF methodology, which could include unit-specific DRFs. However, and as set out in that decision paper, the SEM Committee recognises that such a change would require significant policy analysis and development, and the output may not necessarily lead to increased DRFs, given that availability is not the only factor impacting the results of marginal DRFs.
- 2.1.19 The SEM Committee notes declining DSU availability and that the DRAI considers that this decline is linked to falling DRFs. The SEM Committee is keen to see DSU availability improve but seeks further information from the proposer about the design of this Modification Proposal, whereby the DSU would nominate the availability metric it commits to meeting. The RAs also note that a DSU can reconfigure its make-up of individual sites and query how this would interact with the GPI.

- 2.1.20 The SEM Committee notes that the proposal relates only to DSU DRFs and not for other technology classes, and questions the rationale for this delineation.
- 2.1.21 In order to assist in the evaluation of this Modification Proposal and the wider question of unitspecific DRFs, the RAs have requested an impact assessment from the SOs.
- 2.1.22 This impact assessment should both consider this Modification Proposal as well as any wider introduction of unit-specific DRFs.

2.2 CMC_17_25- DRAWDOWN OF PERFORMANCE SECURITY

Proposer: EirGrid / SONI (TSOs) CMC 17 25: Proposal Overview

- 2.2.1 This Modification Proposal seeks to amend the CMC to provide an additional option for the TSOs to draw down Performance Security before an issued invoice payment period has elapsed, provided authorisation is granted from the defaulting participant.
- 2.2.2 The TSOs argue that this option is elective and if authorised by the defaulting participant, it would reduce the administrative burden on processing the Termination Changes due by allowing the TSOs to draw down on the posted Performance Security before the invoice timeframe lapses. This would result in a more expedient drawdown process on the designated cash reserve account in the SOs view.

CMC_17_25: Workshop Feedback

- 2.2.3 Capacity Market Code Modifications Workshop 45 took place on 17 September 2025, where the Modification Proposal was presented and discussed by the SOs.
- 2.2.4 FERA said it supported this Modification Proposal and welcomed SEMO accelerating the money recovery process in the event of a termination.
- 2.2.5 Energia questioned the timing of when authorisation for this drawdown will be given.
- 2.2.6 The SOs responded and said the detailed process is to be developed and will continue to work on this with their finance team. The SOs suggested a blanket approach could be used.
- 2.2.7 FERA noted that it was concerned with a blanket approach and would not approve of this aspect of the Modification if implemented in this manner.

CMC 17 25: RA Considerations

- 2.2.8 The SEM Committee welcomes feedback and comments regarding this Modification Proposal.
- 2.2.9 The RAs welcome the additional clarity to be provided by the SOs on the specific point in time where this authorisation will be granted.

2.3 CMC_18_25- INTRODUCTION OF MODULAR GENERATOR UNIT TYPES AND DE-RATING METHODOLOGY

Proposer: EPUKI

CMC 18 25: Proposal Overview

- 2.3.1 This Modification Proposal seeks to introduce a new 'Modular Generator Unit' type to the Capacity Market Code and a new de-rating methodology associated with these units.
- 2.3.2 According to the proposer, this new unit type would be similar to an Aggregated Generator Unit (AGU), with the distinctions that the components contributing to the unit are not 'generators', and the removal of the 10MW maximum restriction. The proposer described the main example of this proposed new unit type to be a CCGT that is capable of operating and exporting to the grid both in open mode only and in combined mode.
- 2.3.3 The Modification would derate individual components of a modular unit separately and then be summed.

CMC 18 25: Workshop Feedback

- 2.3.4 Capacity Market Code Modifications Workshop 45 took place on 17 September 2025, where the Modification Proposal was presented by EPUKI.
- 2.3.5 FERA stated that it believed that this Modification Proposal would be difficult for SEMO and the SOs to implement. It further stated that this Modification Proposal understates how complicated power stations are and a single point of failure would shut down a unit composed in this manner and that the intended aim of this Modification Proposal is to seek a higher DRF.
- 2.3.6 EPUKI responded and said this was a technical consideration and that this Modification Proposal would not impact on typical unit reliability. EPUKI also asked if the name-plate capacity would remain the same.
- 2.3.7 FERA responded to this query from EPUKI and said this would be a matter for the SOs.
- 2.3.8 The SOs opined that by increasing the size of the unit, the DRF would be lower due to the introduction of a steam turbine as it often cannot operate independently.
- 2.3.9 iPower noted that increasing AGU capacity does not impact reliability of other units and therefore supported the Modification Proposal on this basis alone.
- 2.3.10 The SOs highlighted numerous areas of concern, namely regarding a single point of failure, cascading ramifications on other codes and markets such as the Grid Code, the Trading and Settlement Code and the Balancing Market, which had not been considered in their view. The SOs also noted outstanding questions around Annual Run Hour Limits and CO2 limits and, as such, that there are far greater implications of this Modification Proposal, which should be considered appropriately.

- 2.3.11 EPUKI responded to the SOs' concerns and said if these units can continue to operate, it did not see how this would impact on the Grid Code.
- 2.3.12 EPUKI stated that the purpose of this Modification Proposal is to impact on DRF calculations only and that no other impacts were considered and would be unchanged in other codes.
- 2.3.13 BnM stated it would like to understand the modular unit and incremental generation better and asked if this could this be assembled in one year.
- 2.3.14 EPUKI stated that it had not considered this question in detail and welcomed further engagement in terms of operationalising this question.
- 2.3.15 The DRAI stated that this is a good proposal from the customer's perspective.
- 2.3.16 The DRAI also asked what the purpose of this committee is and stated that the committee should be looking for solutions to improve this Modification Proposal.
- 2.3.17 The RAs responded and said the purpose of Capacity Market Code Modifications workshop was exclusively to hear CMC Modification Proposals.
- 2.3.18 The Secretariat clarified that the committee the DRAI referred to is the Balancing Market Committee.

CMC_18 _25: RA Considerations

- 2.3.19 The SEM Committee welcomes feedback and comments regarding this Modification Proposal.
- 2.3.20 Noting the technical nature of this proposal, the SEM Committee would welcome further information and analysis from the proposer in response to the concerns raised at the workshop by some participants, as well as from other participants on points raised at the workshop.

3. CONSULTATION QUESTIONS

- 3.1.1 The SEM Committee welcomes views and responses on the Modification Proposals raised within this consultation paper.
- 3.1.2 Respondents are invited to provide comments and feedback in respect of:
 - > the Modification Proposals and their consistency with the Code Objectives.
 - > any impacts not identified in the Modification Proposals Forms, e.g., to the Agreed Procedures, the Trading and Settlement Code, IT systems etc.; and
 - > the detailed CMC drafting proposed to deliver the Modifications.
- 3.1.3 A template has been provided in Appendix C for the provision of responses.

4. NEXT STEPS

- 4.1.1 The SEM Committee intends to decide, at the earliest, by 02 February 2026 on the implementation or otherwise of the Modifications outlined within this consultation paper as per B.12.11.6 of the CMC.
- 4.1.2 Responses to the consultation paper must be sent to <u>both</u> the UR and CRU CRM Submissions inboxes (<u>CRMsubmissions@uregni.gov.uk</u> and <u>CRMsubmissions@cru.ie</u>), by close of business 17:00 on Friday 14 November 2025. Please note that late submissions will not be accepted.
- 4.1.3 We intend to publish all responses unless marked confidential. While respondents may wish to identify some aspects of their responses as confidential, we request that non-confidential versions are also provided, or that the confidential information is provided in a separate annex. Please note that both Regulatory Authorities are subject to Freedom of Information legislation.