



**Single Electricity Market
(SEM)**

**Capacity Market Code Urgent Working Group
Modification Consultation Paper**

CMC_11_22 – De-rating for Annual Run Hour Limits

SEM-22-055

18 August 2022

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Appendix A – Capacity Market Code Modification Timetable

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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 in regards to the proposed modification to the Capacity Market Code (CMC) discussed at the Urgent Working Group held on 17 August 2022.
- 1.1.2 During this Working Group, one modification was presented and was deemed as Urgent. This consultation paper relates to:
- **CMC_11_22: De-rating for Annual Run Hours Limits**
Following the decision by the SEM Committee on 15 August 2022, this modification introduces a downward adjustment to de-rated capacity for Candidate Units with a limit on their annual run hours.

1.2 BACKGROUND

- 1.2.1 The SEM CRM detailed design and auction process has been developed through a series of consultation and decision papers, these are all available on the SEM Committee's (SEMC) website. These decisions were translated into legal drafting of the market rules via an extensive consultative process leading to the publication of the Trading and Settlement Code (TSC) and the Capacity Market Code (CMC). An updated version of the CMC (6.0) was published on 18 February 2022 and the most recent version of the TSC was published on 17 May 2022.

Process for modification of the CMC

- 1.2.2 Section B.12 of the CMC outlines the process used to modify the CMC. In particular, it sets out processes for proposing modifications, as well as the consideration, consultation and implementation or rejection of modifications.
- 1.2.3 The purpose of the Modifications process is to allow for modifications to the CMC to be proposed, considered and, if appropriate, implemented with a view to better facilitating code objectives as set out in Section A.1.2 of the CMC. (B.12.1.2).
- 1.2.4 Modifications to the CMC can be proposed and submitted by any person (B.12.4.1), at any time. Unless the modification is urgent modifications are subsequently discussed at a Working Group held on a bi-monthly basis. Each Working Group represents an opportunity for a modification proposer to present their proposal(s) and for this to be discussed by the workshop attendees.
- 1.2.5 For discussion at a Working Group, Modification proposals must be submitted to the System Operators at least 10 working days before a Working Group meeting is due to take place.

If a proposal is received less than 10 working days before a Working Group and is not marked as urgent it is deferred for discussion to the next Working Group.

1.2.6 Following each Working Group, and as per section B.12.5.6 of the CMC, the RAs are required to publish a timetable for the consideration, consultation and decision relating to the Modification(s) proposed during a Working Group.

1.2.7 If a proposal is received and deemed to be contrary to the Capacity Market Code Objectives or does not further any of those objectives, the Regulatory Authorities (RAs) will reject the proposal on the grounds of being spurious, as set out in section B.12.6 of the CMC.

Urgent Modifications

1.2.8 This paper is concerned with an urgent modification proposal.

1.2.9 A proposer may choose to mark a Modification proposal as “Urgent” (B.12.9.1). In this case, the RAs, as per section B.12.9.3 of the CMC, will assess whether or not the proposal should be treated as urgent. If the RAs deem a proposal to be urgent they have the power to fast-track the proposal.

1.2.10 In this regard B.12.9.5 provides:

“If the Regulatory Authorities determine that a Modification Proposal is Urgent, then:

a) the Regulatory Authorities shall determine the procedure and timetable to be followed in assessing the Modification Proposal which may vary the normal processes provided for in this Code so as to fast-track the Modification Proposal; and

b) subject to sub-paragraph (a), the System Operators shall convene a Workshop.”

1.2.11 The RAs may request the SOs to convene a Working Group to discuss the proposed Modification.

Process for this Modification

1.2.12 On 11 August 2022 the Regulatory Authorities submitted a modification proposal (CMC_11_22) under the terms of B.12.4. The Modification Proposal was marked as Urgent.

1.2.13 The Regulatory Authorities determined that the Modification Proposal was Urgent. This was because the Modification Proposal was proposed to deal with a matter that could reasonably be anticipated would imminently and unduly interfere with, disrupt, or threaten the proper operation of the Capacity Market.

1.2.14 On the 15 August 2022 the RAs determined the procedure to apply to the Modification Proposal. The procedure is shown in detail in Appendix A. An overview of the timetable is as follows:

- i. The System Operators convened an urgent Working Group where the Modification Proposal was considered on 17 August 2022.
- ii. The System Operators, as set out in B.12.7.1 (j) of the CMC, are to prepare a report of the discussions which took place at the workshop, provide the report to the RAs and publish it on the Modifications website promptly after the workshop.

- iii. The RAs will then consult on the Proposed Modification, with a response time of 5 Working Days (as per B.12.9.5 in the CMC), from the date of publication of the Consultation.
- iv. As contemplated by B.12.11 the RAs will make their decision as soon as reasonably practicable following conclusion of the consultation and will publish a report in respect of their decision.

1.3 PURPOSE OF THIS CONSULTATION PAPER

- 1.3.1 The purpose of this paper is to consult on the proposed urgent modification. More detail about the modification is set out in the appended modification proposal (Appendix B).
- 1.3.2 The Regulatory Authorities hereby give notice to all Parties and the Market Operator of a consultation on the proposed Modification.
- 1.3.3 Interested Parties and the Market Operator are invited to make written submissions concerning the proposed Modification by no later than 17:00 on Thursday, 25 August 2022. **Please note that late submissions will not be accepted.**
- 1.3.4 Upon closure of the consultation process, the Regulatory Authorities intend to assess all valid submissions received and form a decision to either implement or reject a modification or undertake further consideration as regards to matters raised through the consultation process in regards to the proposed modification.

2. MODIFICATION PROPOSAL

2.1 CMC_11_22 – DE-RATING FOR ANNUAL RUN HOUR LIMITS

Proposer: Regulatory Authorities

Proposal Overview

- 2.1.1 This proposal was submitted following the direction by the SEM Committee on 11 August 2022 and introduces a downward adjustment to de-rated capacity for Candidate Units with a limit on their annual run hours.
- 2.1.2 The proposed modification uses analogous drafting to that employed for daily run hour limits for storage and DSUs and, like current interconnector de-rating, it will compound an additional de-rating factor to the marginal outage-based de-rating factor to produce an effective de-rating factor.

- 2.1.3 The proposal sets out that the additional de-rating will only apply to combustion plant and will only be applicable to New Capacity. The RAs deem this to be important to provide New Capacity with appropriate economic incentives to deliver capacity for the whole Capacity Year.
- 2.1.4 However, the RAs are of the view that it is not appropriate to apply this additional de-rating to Existing Capacity at this time as it could lead to early exit of capacity at a time when generation margins are tight.
- However, in the longer term it is anticipated that the additional de-rating for annual run hours limits may apply to all combustion plant.
- 2.1.5 The current Capacity Market de-rating process does not distinguish between a project that can run continuously for the whole year and one that has restricted running: for example a unit limited to less than 1500 run hours per year. Not providing a categorization for ARHL de-rating factors, means there is no differentiation to incentivise unrestricted run hour unit configurations.
- 2.1.6 In order to comply with the SEM Committee decision of 11 August 2022, this proposal would need to be implemented for the forthcoming T-4 CY2026/27 Capacity Auction, and given the impacts on the calculation of de-rating curves, the Qualification process and the process to determine Substantial (or Minimum) Completion will be affected, would need to be implemented ahead of the publication of the Initial Auction Information Pack (IAIP).
- 2.1.7 Failure to implement this proposal could lead to either the market incurring capacity adequacy issues, as some units are not permitted to operate due to the emissions limits; or the market procures large volumes of run hour restricted units to deliver the required “effective” de-rated capacity, at a significant cost to consumers, which is an inefficient way for delivering security of supply.
- 2.1.8 Further detail on the Modification Proposal are set out in the appended Modification Proposal Appendix B, which includes the draft changes to the CMC.

Working Group Feedback

- 2.1.9 SSE referred to the Commissioned Annual Run Hour Limits in G.3.1.2.E and highlighted that in the drafting, this appears to be the final version being proposed. SSE asked how this would positively impact the Awarded Capacity contract value at the time of an Auction, given that this is prior to the time when the final commissioned ARHL will be arrived at.

The RAs advised that a Participant would qualify with the de-rated capacity for which they believe the unit will be able to achieve and at the point of commissioning the process would follow G.3.1. The RAs then elaborated that if a unit were to commission with less de-rated capacity than was awarded then the normal process would determine whether Substantial Completion or Minimum Completion had been achieved.

If a Participant were to commission more capacity than was awarded, which could happen with Initial capacity, Maximum on Time or with ARHL then the awarded capacity will be 100% of the awarded capacity from an auction and the additional capacity is then additional capacity that has not been previously qualified, nor taken part in an Auction. This additional capacity can participate in a subsequent auction.

- 2.1.10 SSE queried whether this would participate as New Capacity, to which the RAs advised that once it has been commissioned it would cease to be New Capacity and would therefore be deemed Existing at the next auction.

- 2.1.11 SSE queried whether there would be any need to update the definition of New Capacity within the CMC.

The RAs advised that they would look into this, however the current use of 'commissioned' is sensible and the application of ARHL will not change this.

- 2.1.12 Viotas took this opportunity to follow up on the definition of New Capacity with regards to DSUs. They advised that any existing site, currently part of a DSU, is deemed to be New Capacity when transferred from one DSU to another, despite technically being Existing and commissioned.

Viotas advised that this should be addressed within the definition of New Capacity. The RAs advised that this may not be addressed within the existing CMC, but understood the concern and would take this away to review.

- 2.1.13 TEL requested clarification that this proposal, if implemented, would not have an impact on previously awarded capacity that has not yet been commissioned.

The RAs advised that this proposal will not impact any previously awarded capacity secured within past Capacity Auctions. Further, the RAs stated that this proposal will follow the same principles of the CMC and that no retrospective action will be applied and any awarded capacity will continue to be measured against the De-rating factors that applied to the Auction in which capacity was secured.

- 2.1.14 Viotas requested clarification that this proposal, as it is currently drafted, will apply to combustion plant and initially only New Capacity.

The RAs confirmed that this is correct.

- 2.1.15 SSE referred to the T-4 CY20226/27 Parameters decision paper ([SEM-22-044](#)) where it states that the De-rating factors are being rolled back to those applied as part of the T-4 CY2024/25 Capacity Auction. However, this proposal then appears to apply an additional layer of de-rating. SSE highlighted that the terminology being used is confusing.

They queried whether the De-rating Factors being applied for different run hour limits are the existing factors from previous auctions or are there new values to be set. They referred to the executive summary of the Parameters paper stating a factor of 0.14 only.

The RAs advised that this would work similarly to the de-rating associated with Interconnectors whereby a marginal de-rating factor is applied taking account of outages and then subsequently interconnectors are subject to a further de-rating factor, known as an External Market De-rating Factor (EMDF), which takes account of coincident scarcity between the SEM and GB.

The RAs stated that in the instance of this proposal being implemented a pre-ARHL marginal De-Rating Factor would be computed through the usual De-rating Factor methodology. If a unit is then impacted by ARHL, e.g. can run more than 500 hours, but less than 1500 hours, then the initial De-rating factor would be multiplied by a factor of 0.43 which would then leave the effective De-rating Factor that would apply to the capacity.

If a unit can only run for less than 500 hours, then the factor of 0.14 would be applied.

The RAs confirmed that with this proposal, the process would still make use of the outage based marginal De-rating Factors, as have been used since 2017, and dependent on ARHL restrictions, a further factor of either 0.43 or 0.14 may also be applied to the relevant units.

2.1.16 The SOs advised that they welcomed the decision to apply the ARHL De-rating Factor and to provide clarity with regards to investment in new plant.

2.1.17 FERA provided commentary stating that DSUs currently don't get paid energy payments as a result of the SEM Committee, RAs and SOs believing that DSUs work on a 'turn off only' approach.

Further to this, FERA advised that there is work ongoing with regards to enduring payments, however at this point in time, they stated that DSUs do not have any Energy Run Hour Limit. Therefore, they were of the view that it would be inappropriate to apply this proposal to DSUs at this point in time and should not be applied until payments for DSUs is dealt with within the Code.

The RAs requested that FERA provide details on this area within their response.

2.1.18 Mutual Energy raised a point for clarification with regards to setting ARHL and how units would declare this.

They provided the example whereby when running at Min Gen a unit would have a higher emission rate than when running at full load: this may mean that the ARHL would depend on unit loading. The RAs suggested that under the relevant emissions legislation such a unit would only have a single ARHL value and presumed this would be at full load.

The RAs advised they would welcome comments and feedback on this area as part of the responses to the consultation.

2.1.19 The SOs advised that there may be merit in clearly linking the value of ARHL to the Initial Capacity that has been submitted.

2.1.20 SSE noted that the emissions and Capacity Years do not align. The RAs noted the potential for Capacity Year and the 'emissions year' over which ARHLs are defined to be mis-aligned.

The SOs suggested that to avoid confusion when submitting ARHL values that a time weighted average of the ARHL values for the two 'emission years' could be used.

- 2.1.21 SSE asked about the treatment of a unit on the borderline between potential ARHL values. In terms of being on the borderline between ARHL categories, the RAs recognised that there was significant risk for such capacity if its ARHL proved lower than expected as this could lead to it being unable to achieve Minimum Completion and all award capacity being terminated. They noted that this is due to the binary nature of the decisions in the key emission legislation.
- 2.1.22 SSE commented that there is the possibility during a unit's contract lifetime, whereby ARHL may vary. They queried whether this has been taken account of within the proposal.

The RAs advised that any variation of ARHL within the contract lifetime of a unit, wouldn't be picked up by the CMC as it would assume that the unit could continue to produce the same number of units stipulated at the time of Qualification and would therefore continue to pay the unit on that basis. The RAs reiterated that the proposal will have no retrospective action and any awarded capacity contracts are fixed at the time of being awarded.

Minded to Position

- 2.1.23 The SEM Committee welcome feedback and comments with regards to this proposed modification.
- 2.1.24 The decision by the SEM Committee to implement an annual run hour limit-based de-rating factor for new capacity requires modification to the CMC.
- 2.1.25 The RAs note that the proposed Modification uses processes and techniques that are already used in the determination of de-rating curves and factors which should help to minimise the impact of implementation. This will be important if the change is to be live in time to be used for the CY2026/27 T-4 Auction without pushing back the auction timetable so that it can no longer be considered a T-4 Auction.
- 2.1.26 Given the requirement in SEM-22-044 (paragraph 6.6) that the ARHL framework should apply to DSUs and AGUs, the proposed Modification has been substantially revised in C.3.8, E.8.2.9, E.8.8.2A, G.3.1.2E, G.3.1.4A and Appendices D and E. These changes reflect the issue, raised at the Working Group, that neither a DSU nor an AGU have an ARHL, rather ARHLs will apply to the component Demand Sites and Generators. De-rated capacities for DSUs and AGUs are built from the de-rated capacities of their components. This requires DSUs to provide component Demand Site data as part of the Qualification process.
- 2.1.27 As part of the changes related to DSUs, and following the raising of the issue at the Working Group, the Glossary definition of New Capacity has been extended to avoid catching Demand Sites moving between Participants as New Capacity.

- 2.1.28 Following feedback at the Working Group, G.3.1.2E has been altered to refer to the certification process for Major Milestones set out in J.4.3.2(c) as the test for ARHL to be used at commissioning, replacing the previous reference to Substantial Financial Completion.
- 2.1.29 To deal with the situation where two emission years span a single Capacity Year, C.3.8.10 has been added to use the time-weighted average of the two ARHL values as proposed by the SOs at the Working Group.
- 2.1.30 Given the above, the SEM Committee are minded to approve this revised proposal for implementation, subject to consideration of responses to this consultation.

3. CONSULTATION QUESTIONS

- 3.1.1 The SEM Committee welcomes views and responses on the proposed modification raised within this consultation paper.
- 3.1.2 Respondents are invited to provide comments and feedback for each of the proposed Modifications in respect of:
- the proposed modification and its consistency with the Code Objectives;
 - any impacts not identified in the Modification Proposal Form, e.g. to the Agreed Procedures, the Trading and Settlement Code, IT systems etc.; and
 - the detailed CMC drafting proposed to deliver the Modification.
- 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 make a decision in August 2022 on the implementation of the Modifications outlined within this consultation paper.
- 4.1.2 Responses to the consultation paper **must** be sent to Kevin Lenaghan (Kevin.Lenaghan@uregni.gov.uk) and Donna Maye (Donna.Maye@uregni.gov.uk) **by no later than 17:00 on Thursday, 25 August 2022. Please note that late submissions will not be accepted.**
- 4.1.3 Please note that 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.