



**Single Electricity Market
(SEM)**

**Capacity Remuneration Mechanism
2025/26 T-4 Capacity Auction Parameters & Annual
Run Hour Limited Plants**

**Decision Paper
SEM-21-079**

01 October 2021

1. EXECUTIVE SUMMARY

On 3 August 2021, the SEM Committee consulted on the parameters for the 2025/26 T-4 Capacity Auction.

A total of six responses were received, one of which was marked as confidential. Having considered these responses, the SEM Committee has decided to retain many of the parameter values as published within the consultation paper. There are notable differences, these are summarised in the following table:

| Parameter | Proposed Value for 2025/26 T-4 capacity auction |
|---|--|
| De-Rating Curves, defining De-Rating Factors by unit Initial Capacity and by Technology Class (including for Interconnectors) | To be frozen at the same values used for the 2024/25 T-4. |
| Capacity Requirement | To be determined by System Operators prior to publication of Initial Auction Information Pack. |
| Indicative Demand Curve | <p>The Demand Curve shape chosen for this auction is as per Option 1 of the consultation paper. For the avoidance of doubt, the description of this curve is:</p> <ul style="list-style-type: none"> • Horizontal at the Auction Price Cap from 0MW to 92.5% of the adjusted Capacity Requirement. • Slopes down in a straight line to 115% of the adjusted Capacity Requirement. The line passes through the point at where the volume is equal 100% of the adjusted Capacity Requirement and the price equals Net CONE (€92,300 / de-rated MW / year). |

| Auction Price Cap | 1.5 times Net CONE i.e. €138,450 / de-rated MW / year | | | | | | | | | | |
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| Existing Capacity Price Cap | 0.5 x Net CONE i.e. €46,150 / de-rated MW /year. | | | | | | | | | | |
| New Capacity Investment Rate Threshold | €300,000 /de-rated MW / year. | | | | | | | | | | |
| Annual Stop Loss Limit Factor | 1.5 | | | | | | | | | | |
| Billing Period Stop Loss Factor | 0.5 | | | | | | | | | | |
| Indicative Annual Capacity Exchange Rate | To be determined by System Operators prior to publication of Initial Auction Information Pack. | | | | | | | | | | |
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| Full Administered Scarcity Price and Reserve Scarcity Price Curve | Short Term Reserve (MW) | Administered Scarcity Price (€/MWh) |
| | Demand Control | 25% of VOLL |
| | 0 | 25% of VOLL |
| | 500 | DSU Theoretical Price |
| Anticipated values to be applied in determining the Strike Price | Current formula and inputs remain as previously determined ¹ . | |

These parameters are included within the Initial Auction Information Pack for the auction, which is scheduled to take place in March 2022. A detailed timetable for the auction is also available².

¹ Please note that the appropriateness of the formula attributed to the ASP is currently under live consultation as per [SEM-21-042 Discussion Paper and Call for Evidence on Scarcity Pricing and Demand Response in the SEM | SEM Committee](#)

²[CAT2526T-4-2025-2026-T-4-Capacity-Auction-Timetable.pdf\(sem-o.com\)](#)

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3. SUMMARY OF PROPOSALS IN THE CONSULTATION PAPER

On 3 August 2021, the SEM Committee issued a consultation on parameters for the 2025/26 T-4 Capacity Auction (SEM-21-059³). Within the consultation, the SEM Committee proposed to predominantly retain most of the parameters from the 2024/25 T-4 capacity auction for the 2025/26 T-4 auction.

Some respondents included feedback in relation to the consultation (SEM-21-054) which focused on Annual Run Hour Limits, and their impact on de-ratings. The SEM Committee have included responses and decisions on this matter within this decision paper.

4. SUMMARY OF RESPONSES

Six responses were received in total from the following:

1. BGE
2. SSE
3. Energia
4. ESB GT
5. Powerhouse Generation

One of the responses was marked as confidential.

De-Rating Curves, De-Rating Factors

BGE support the notion of the introduction of a new ARHL de-rating factor, with inclusion to this T-4 2025/26 auction (more on this in a subsequent chapter). Given that the RAs have stated that the introduction of such a de-rating factor may mean the SEMC decides to employ a different value of Net CONE, BGE wish to stress their preference at choosing a different technology for the New Entrant.

³ [T-4 2526 Parameters Con paper - FINAL.pdf \(semcommittee.com\)](#)

Energia state that given the possibility that if an ARHL de-rating factor is introduced or Net CONE is changed as a result of ARHL, then the SEMC will decide on whether a change is needed to the multipliers acting on the Auction or Existing Price Caps (APC and ECPC, respectively). Energia argue that this approach raises "...significant governance and transparency concerns".

ESB ask that any change to the DRF methodology must part of a consultation process to allow input from market participants, given that any change to the De-rating Factors will have a significant impact on both New and Existing Capacity.

Existing Capacity Price Cap (ECPC)

BGE cannot support the ECPC and APC as it currently stands as they are both dependent on the BNE price, which they say needs a full review to ensure it is compliant with emission limits.

Energia do not agree with the choice of 0.5 as a multiplier against Net CONE as any rational investor taking a view on future net going forward costs must take into consideration unforeseen economic shocks as "...[they] can and do happen, with severe negative consequences for generators".

Capacity Requirement

BGE make it clear that auctions should secure the adjusted Capacity Requirement at best possible value to meet the forecasted increasing levels of demand whilst maintaining the necessary capacity to ensure security of supply. They fully support the procurement of securing 100% of the adjusted Capacity Requirement.

SSE recommend a broader and holistic review of the security standard for this and future auctions, as they consider the 8-hour Loss of Load (LOLE) partly to blame when it comes to the success of the CRM in encouraging sufficient capacity. They suggest that the RAs give a careful consideration to the capacity requirement to ensure that past shortfall, future demand and high degree of demand side (versus capacity), is met by suitable volumes of generation.

Indicative Demand Curve

ESB are in favour of Option 2 in the consultation paper (Horizontal line for 100% of the Capacity Requirement, then a vertical drop at 100% Net Cone, sloping to 115% of Net CONE) as this choice will ensure that there will not be an under procurement of Capacity from a T-4 auction.

SSE expect that given the previous experience of low procurement via T-4, that greater attention would be paid to full procurement and appropriate entry signals via this longer-term auction. As such they believe that Option 2 is the best Demand Curve shape since the intended standard approach to the demand curve (Option 1) would rely on residual procurement in a forthcoming T-1.

BGE do not see the need to design in a level of under-procurement into the demand curve (Option 1) for this auction when the previous T-4 auction for the capacity year 2024/25 (using this other Demand Curve) under-procured due to a lack of qualified units, resulting in an additional capacity auction (T-3) being announced for capacity year 2024/25. BGE therefore also prefer Option 2.

New Capacity Investment Rate Threshold (NCIRT)

On NCIRT, Energia state their opinion that the level of threshold proposed discourages investment in refurbishment and plant upgrade unless Participants are allowed to benefit from a long-term contract. To address this issue, Energia wish for an introduction of an additional threshold for plant refurbishment at rate of €50/kW of de-rated capacity. Once this threshold is met bid limits could then be determined by the Auction Price Cap (APC).

BGE Agree with the threshold amount proposed.

Locational Capacity Constraint Areas (LCCAs)

SSE support retention of the LCCA Level 2 Rest of Ireland constraint.

Energia call for greater transparency and consultation in a number of areas including the level of reserves to be included and specific volumes proposed to be withheld for demand uncertainty included within each of the LCCAs.

Termination Charges and Performance Security Bonds

PHG believe that the proposed extra milestone will hinder future projects and in turn participant's ability to participate in the Capacity Auctions. PHG propose that the milestones are reverted to the current timeframes, such as those in the 2024/2025 T-4 Parameters decision.

SSE agree with the proposed changes, as the current setting means that the 'cheapest' time for a unit to terminate its contract would be 24 months before delivery, rather than 18. SSE encourage the SEMC to consider any design features that could assist to ensure delivery of projects either via additional support, or additional penalty for failure to deliver.

Energia note that whilst the proposed change places an additional financial burden and risk on new capacity projects, attempts to mitigate and limit non-delivery of Awarded New Capacity is welcomed.

5. SEM COMMITTEE RESPONSE

Existing Capacity Price Cap

The SEM Committee note the proposals to increase the ECPC, however the Committee do not consider that there is a compelling reason to do so for this T-4 auction, noting that the USPC process still allows existing units to apply for permission to bid prices above the ECPC.

Net CONE and VOLL

The RAs are engaging with ACER in relation to the implementation in the SEM of ACER's methodology for calculating VOLL and CONE. The process for calculating a new VOLL in accordance with the ACER methodology has commenced, but at this time this process is ongoing and hence no change is proposed for this auction. The RAs are also assessing the compliance of the current value of net CONE with the ACER methodology but as this process is also ongoing no changes are proposed for this auction.

De-Rating Curves and De-Rating Factors

The SEMC again acknowledges the comments made on the RAs intention to re-visit the methodology in the calculation of the De-rating Factors of time-limited units, and note the request to minimise volatility on these values. The RAs are continuing to liaise with EirGrid/SONI on this issue.

The SEM Committee has decided to continue to implement the T-4 24/25 De-Rating factors in place of those submitted to the RAs. The De-rating Factors (DRFs) are calculated by the TSOs prior to each auction according to the Capacity Requirement and De-rating Factor methodology consulted on, and approved by the SEM Committee in SEM-18-030.

Many of the factors that are reducing the De-rating Factors themselves are set out further in the SEM Committee's Information note which aimed to express the Committee's reasons for rolling back to previous de-rating factors, in the T-1 2022/23 Capacity Auction process⁴.

⁴ For a more detailed explanation of the reasons for the De-rating factor roll back, see [SEM-21-025 Information Note on the T-1 2022/23 Capacity Auction Volumes and Initial Auction Information Pack](#)

Capacity Requirement

The Capacity Requirement for any Capacity Year is calculated by the System Operators (SO) using the methodology described in SEM-18-030a (Capacity Requirement and De-rating Factors Methodology June 2018). That methodology builds on the generation adequacy methodology that is employed by the System Operators to produce the annual Generation Capacity Statements. It is then the most recently available⁵ Total Energy Requirement (TER) from the GCS that feeds into the SOs modelling⁶,

The SEM Committee note the argument from respondents that the T-4 Capacity Requirement should feature the vertical component of the curve at the auction as had been proposed, to help ensure that sufficient capacity is procured.

While these views are noted, the Committee wish to stress that there is merit in continuing to approach the T-4 auction as per the high level design, ensuring that any procurement of Capacity needed can be purchased closer to the delivery year via a T-1 auction.

Indicative Demand Curve

The SEM Committee makes a decision prior to the publication of the Final Auction Information Pack for each auction to account for:

- a) existing Awarded Capacity in respect of the relevant Capacity Year;
- b) an allowance for changes in forecast capacity requirements;
- c) an allowance for capacity to be procured in later auctions for the Capacity Year;
- d) an allowance for the de-rated value of capacity that is forecast to be operational during the Capacity Year but which will not be participating in the Capacity Auction ;
and
- e) Reserves and other appropriate adjustments

⁵ The SEMC note that the Capacity Requirement for this auction was modelled using the GCS2020-29, available here [All-Island-Generation-Capacity-Statement-2020-2029.pdf \(eirgridgroup.com\)](https://www.eirgridgroup.com/all-island-generation-capacity-statement-2020-2029.pdf)

⁶ It is worth noting that at the time of writing, a new GCS was published for 2021-30. Adjustments in this regard will be considered as part of the Final Auction Information Pack.

The SEM Committee, for this T-4 Auction will employ Option 1 (sloping Demand curve), and any amounts not procured of the adjusted Capacity Requirement will be in a future T-1.

Termination Charges

Noting the views of respondents, the Committee have decided to include a new schedule of charges, as set out in the consultation paper.

The SEM Committee wish to make it known that prudent decisions on Termination Charges may be taken in future auctions, depending on the requirements of the local constrained MW required, and depending on the necessary New Capacity projects entering the Market.

LCCAs & Treatment of Constraints

The SEMC note ESB GT's views on the application of LCCAs in the CRM Auctions.

The SEM Committee notes the comments received on the treatment of constraints within the 2025/26 T-4 Capacity auction.

The SEM Committee will make a decision on allowing the Locational Capacity Constraints to be satisfied using multi-year New Capacity in advance of the publication of the Final Auction Information Pack, having considered the information from the System Operators on the Location Capacity Constraints.

6. ANNUAL RUN HOURS LIMITED PLANTS AND THE T-4 25/26 AUCTION

Participants will have been aware of the recent consultation on Annual Run Hours Limited (ARHL) Plants in which the RAs sought industry's opinion on the necessity of implementing a de-rating factor for ARHL plant.

The SEM Committee has decided against intervening for this T-4 25/26 Auction. A separate decision paper will be published in due course.

7. SEM COMMITTEE DECISION

The table below summarises the decisions taken by the SEM Committee in light of the responses above.

Auction Parameters

The following parameters will apply for the 2025/26 T-4 Capacity Auction:

| Parameter | Proposed Value for 2025/26 T-4 capacity auction |
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| De-Rating Curves, defining De-Rating Factors by unit Initial Capacity and by Technology Class (including for Interconnectors) | To be frozen at the same values used for the 2024/25 T-4. |
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| Annual Stop Loss Limit Factor | 1.5 | | | | | | | | | | | |
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| Anticipated values to be applied in determining the Strike Price | Current values to be re-applied. | | | | | | | | | |