Single Electricity Market

(SEM)

Capacity Remuneration Mechanism

T-4 CY2030/31 Capacity auction Parameters

Consultation Paper

SEM-26-28

11 June 2026

1. EXECUTIVE SUMMARY

Under the revised SEM arrangements, implemented in October 2018, capacity revenues are allocated through Capacity auctions for a relevant Capacity Year. Prior to each Capacity auction, a number of Capacity auction parameters must be set. The list of parameters to be determined by the Regulatory Authorities (RAs, the Utility Regulator in Northern Ireland (UR) and the Commission for Regulation of Utilities (CRU) in Ireland) is described in paragraph D.3.1.3 of the Capacity Market Code (CMC).

This consultation paper describes the SEM Committee's proposals for the relevant parameters to apply in the T-4 CY2030/31 Capacity auction, scheduled to take place on 25 March 2027.

The proposed parameters for consultation are:

	Parameter	Proposed Value for T-4 CY2030/31 Capacity auction
a	De-Rating Curves, defining De-Rating Factors by unit Initial Capacity and by Technology Class (including Interconnectors)	To be determined by System Operators (SOs) prior to publication of Initial Auction Information Pack (IAIP).
b	Capacity Requirement	To be determined by SOs prior to publication of IAIP.
c	Indicative Demand Curve	The Demand Curve for the T-4 CY2030/31 capacity auction will be set as follows: • Horizontal at the Auction Price Cap from 0 MW to XX% (depending on the APC) of the initial Capacity Requirement. • Slopes down in a straight-line to a zero crossing point at 100% of the Net Auction Requirement (after deduction of Previously Awarded Capacity) plus 15% of the initial Capacity Requirement.

<table>
<tr><th></th><th>Parameter</th><th colspan="3">Proposed Value for T-4 CY2030/31 Capacity auction</th></tr>
<tr><td>d</td><td>Auction Price Cap (APC)</td><td>€230,000/MWd</td><td colspan="2">No change from T-4 CY2029/30 APC</td></tr>
<tr><td>e</td><td>Existing Capacity Price Cap (ECPC)</td><td>€57,928/MWd</td><td colspan="2">Propose a 2% increase on the T-4 CY2029/30 Capacity auction: €56,792 x 1.02</td></tr>
<tr><td>f</td><td>New Capacity Investment Rate Threshold (NCIRT)</td><td colspan="3">€300,000 /de-rated MW / year.</td></tr>
<tr><td>g</td><td>Annual Stop Loss Limit Factor</td><td colspan="3">1.5</td></tr>
<tr><td>h</td><td>Billing Period Stop Loss Factor</td><td colspan="3">0.5</td></tr>
<tr><td>i</td><td>Indicative Annual Capacity Exchange Rate</td><td colspan="3">To be determined by SOs prior to publication of IAIP.</td></tr>
<tr><td>j</td><td>Increase Tolerance and Decrease Tolerance by Technology Class</td><td colspan="3"><table><tr><th>Technology Class</th><th>Increase Tolerance (%)</th><th>Decrease Tolerance (%)</th></tr><tr><td>All Except DSUs</td><td>0</td><td>0</td></tr><tr><td>DSUs</td><td>0</td><td>100</td></tr></table></td></tr>
<tr><td>k</td><td>Performance Security Posting Dates / Events</td><td colspan="3"><table><tr><th>Date/ Event</th><th>Performance Security Rate (€/MW)</th></tr><tr><td>From Capacity auction completion to 24 months prior to the beginning of the Capacity Year</td><td>20,000</td></tr><tr><td>24-18 months prior to the beginning of the Capacity Year</td><td>30,000</td></tr><tr><td>18-13 months prior to the beginning of the Capacity Year</td><td>40,000</td></tr></table></td></tr>
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	Parameter	Proposed Value for T-4 CY2030/31 Capacity auction	
		From 13 months to beginning of Capacity Year	50,000
		From beginning of Capacity Year	60,000
l	Termination Charges	**Date/ Event**	**Termination Charge Rate (€/MW)**
		From Capacity auction completion to 24 months prior to the beginning of the Capacity Year	20,000
		24-18 months prior to the beginning of the Capacity Year	30,000
		18-13 months prior to the beginning of the Capacity Year	40,000
		From 13 months to beginning of Capacity Year	50,000
		From beginning of Capacity Year	60,000
m	Full Administered Scarcity Price and Reserve Scarcity Price Curve	**Short Term Reserve (MW)**	**Administered Scarcity Price (€/MWh)**
		Demand Control	25% of VOLL Max
		0	25% of VOLL Max
		LSI	RO Strike Price
n	Anticipated values to be applied in determining the Strike Price	Current inputs to be re-applied.	
o	Capacity Aggregation Threshold	10 MW	
p	Early Incentive Start Date for New Capacity	Trading Day 30 September 2029 beginning 23:00	

	Parameter	Proposed Value for T-4 CY2030/31 Capacity auction
-	Intermediate Contract Investment Rate Threshold	€100,000 /de-rated MW / year.

Responses to the proposals within this consultation should be sent to both RA mailboxes CRMSubmissions@uregni.gov.uk and CRMsubmissions@cru.ie by **17:00 03 July 2026**.

We intend to publish all responses unless they have been marked as confidential.

2. CONTENTS

3. INTRODUCTION AND BACKGROUND

The SEM Capacity Remuneration Mechanism (CRM) was developed through an extensive series of consultation and decision papers. The CRM allocates capacity payments through ex-ante Capacity auctions.

A T-4 Capacity auction for the 2030/2031 Capacity Year is scheduled to take place on 25 March 2027. The volumes to be procured in this auction will be determined by the SEM Committee following due process prior to the publication of the Final Auction Information Pack (FAIP).

Before each Capacity auction, the CMC requires the auction parameters to be determined by the RAs.

Parameters to be determined

Paragraph D.3.1.3 of the CMC requires the RAs to determine the following parameters for each Capacity auction, and provide them to the SOs for inclusion in the applicable IAIP:

(a) the De-Rating Curves, defining De-Rating Factors by Technology Class (including for Interconnectors).

(b) the Capacity Requirement.

(c) an indicative Demand Curve.

(d) the Auction Price Cap.

(e) the Existing Capacity Price Cap.

(f) the €/MW rate of the New Capacity Investment Rate Threshold.

(g) the Annual Stop-Loss Limit Factor.

(h) the Billing Period Stop-Loss Limit Factor.

(i) the indicative Annual Capacity Payment Exchange Rate.

(j) the Increase Tolerance and Decrease Tolerance by Tolerance Class that may be applied by a Participant in its Application for Qualification to Capacity Market Unit de-ratings.

(k) in respect of Performance Securities:

(i) the final Performance Security Posting Dates/ Events applicable to Awarded Capacity allocated in the Capacity auction; and

(ii) for each Performance Security Posting Date/ Event, the final €/MW rate to be applied in setting Performance Securities applicable to Awarded Capacity allocated in the Capacity auction.

(l) the €/MW fee rates for calculating Termination Charges.

(m) values for the Full Administered Scarcity Price and the Reserve Scarcity Price;

(n) anticipated values for the parameters to be applied in determining the Strike Price;

(o) Final Capacity Aggregation Threshold

(p) Early Delivery Incentive Date for New Capacity – excluding New Capacity that is repowered or refurbished capacity based on previous Existing Capacity, with a Maximum Capacity Duration of more than one year.

4. PARAMETERS REQUIRED BY THE CAPACITY MARKET CODE

As described, the RAs must determine the following parameters:

(a) the De-Rating Curves, defining De-Rating Factors by Technology Class (including for Interconnectors).

A De-Rating Curve is a curve for a Technology Class that represents the De-Rating Factor applicable by unit Initial Capacity and Initial Maximum On Time to be used in a Capacity auction. A De-Rating Factor describes the proportion of Initial Capacity of a Generator Unit or Interconnector that can contribute towards satisfying the Capacity Requirement to be used in a Capacity auction.

Proposal: This is to be determined by the SOs prior to the publication of the IAIP.

(b) the Capacity Requirement.

The Capacity Requirement is the de-rated capacity required to satisfy the SEM Security Standard for a specific Capacity Year to be used in a Capacity auction.

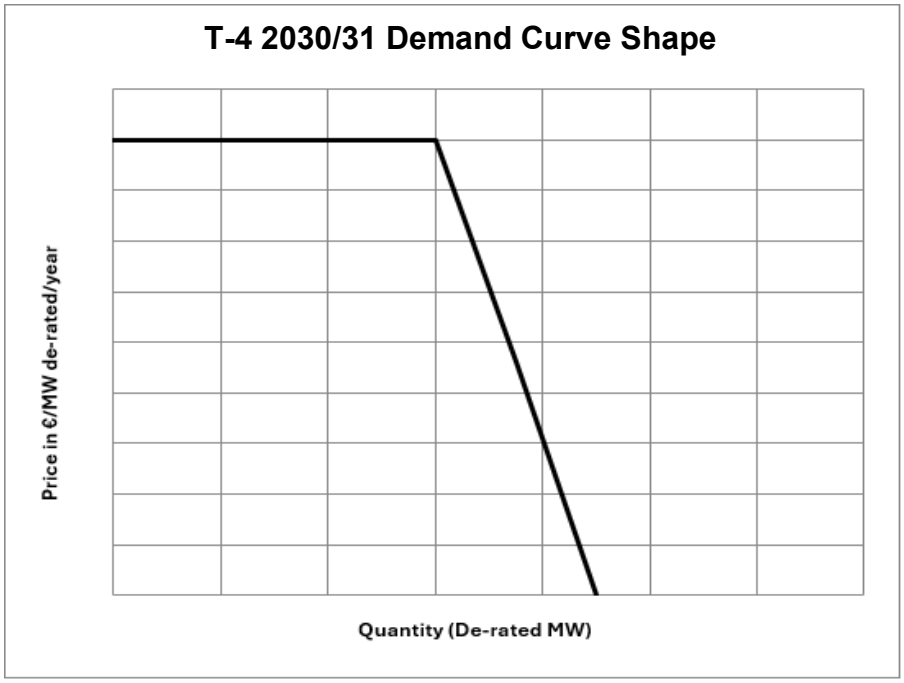
Proposal: This is to be determined by the SOs prior to the publication of the IAIP.

(c) an indicative Demand Curve.

The Indicative Demand Curve is described by the RAs and represents the deemed per MW value of each level of capacity that could be awarded in the capacity auction.

Proposal: The Demand Curve for the T-4 CY2030/31 auction will be set as the following:

- Horizontal at the Auction Price Cap from 0 MW to xx% (depending on the APC) of the initial Capacity Requirement
- Slopes down in a straight line to a zero-crossing point at 100% of the Net Auction Requirement (after deduction of Previously Awarded Capacity) plus 15% of the initial Capacity Requirement.



The above curve may result in under-procure compared to the adjusted Capacity Requirement, however, any under-procurement in a T-4 auction can be resolved in a subsequent T-1 auction.

The demand curve for the auction will also include adjustments for reserves and demand withholding. Decisions on these volumes will be made prior to the publication of the FAIP.

The Capacity Requirement described above will be adjusted to account for these volumes. In accordance with paragraph F.3.1.4 of the CMC, other adjustments to the Capacity Requirement will include:

- an allowance for changes in forecast capacity requirements (as considered appropriate by the RAs).
- an allowance for capacity to be procured in later auctions for the Capacity Year (as considered appropriate by the RAs); and
- 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 (as considered appropriate by the RAs).

(d) the Auction Price Cap (APC).

The APC is the maximum price that participants are allowed to offer for capacity in the auction. No bid or offer can exceed this cap—anything above it is invalid. Its purpose is to prevent excessively high prices and ensure the auction remains fair and competitive.

Proposal:

Value of APC	Description
€230,000/MWd	No change from T-4 CY2029/30 APC

The SEM Committee may review this parameter at the decision stage, taking account of consultation responses, and furthermore in future auctions.

(e) the Existing Capacity Price Cap.

The Existing Capacity Price Cap (ECPC) is the price cap applicable to Existing Capacity in a Capacity auction. It is a uniform non-technology specific cap on the price that Existing Generators and interconnectors can offer volume at unless they apply to the RAs for a Unit Specific Price Cap (USPC)[1]. New Capacity and DSUs are not subject to the ECPC and may bid up to the APC.

Proposal:

Value of ECPC	Description
€57,928/MWd	2% inflated T-4 CY2029/30 ECPC

The SEM Committee's proposal is a 2% increase to the T-4 CY2029/30 Capacity auction which equates to ECPC - €56,792MWd x 1.02 = €57,928MWd), and the Sterling equivalent using the indicative Annual Capacity Payment Exchange Rate from the IAIP. The SEM Committee continues to see ECPC as an important market power mitigation tool.

Any existing capacity with NGFCs higher than the ECPC will retain the option to submit a USPC application to the RAs.

[1] Or submit an Opt-Out Notification on the grounds that they are going to close before the end of the relevant Capacity Year.

(f) the €/MW rate of the New Capacity Investment Rate Threshold.

The New Capacity Investment Rate Threshold (NCIRT) is an amount determined by the RAs that must be exceeded by the cost per MW of constructing New Capacity for that capacity to be eligible to be allocated Awarded Capacity with a duration of more than one year.

New Capacity is eligible to bid to fix its Reliability Option (RO) for up to ten years. To do so, a capacity provider must meet a substantial financial commitment threshold. This threshold is known as the NCIRT.

The intention of setting the NCIRT is to ensure that only plant making a substantial financial commitment equivalent to the commitment for a new build plant can obtain a multi-year RO.

Multi-year ROs should not be available to plant making a minor refurbishment. However, the threshold should not penalise investors who are able to build efficiently at low capital cost.

Proposal: The SEM Committee proposes to retain the value of NCIRT at €300,000MWd for the T-4 CY2030/31 capacity auction.

(g) the Annual Stop-Loss Limit Factor

The Annual Stop Loss Limit is the multiplier used to establish the annual stop-loss limit for Non-Performing Difference Charges from a Capacity Market Unit (CMU).

A stop-loss is a cap on Reliability Option Difference Payments (RODPs). RO Difference Payments are charges that must be paid by a generator during a scarcity event. The purpose of the cap is to limit risk on the generator and improve investment incentive. However, a cap on RODPs means that there will be insufficient money to hedge suppliers, which must be funded through the socialisation fund.

The stop-loss limit applies only to uncovered difference payments. It does not apply where the capacity provider has received revenue through the energy market to cover the difference payment. The stop-loss limit applies to the annual option fee. To date in the capacity market, the Annual Stop-Loss Limit Factor has been set at 1.5.

Proposal: The SEM Committee proposes to continue to apply an Annual Stop-Loss Limit Factor of 1.5 to Awarded Capacity allocated in the T-4 CY2030/31 capacity auction.

(h) the Billing Period Stop-Loss Limit Factor.

The Billing Period Stop Loss Limit Factor is a multiplier used to establish the billing period stop-loss limit for Non-Performance Difference Charges from a Capacity Market Unit.

The purpose of stop-loss limits is described above. The purpose of the Billing Period Stop Limit Factor is to limit the level of losses in any Billing Period (week).

If there were no Billing Period Stop Loss Limit Factor, and there were a number of scarcity events at the start of the Capacity Year so that a capacity provider reached its Annual Stop Loss Limit, that capacity provider would have a reduced incentive to maximise its availability for the remainder of the Capacity Year.

By limiting the losses that can apply in any Billing Period, the incentive to remain available for the remainder of the Capacity Year is maximised. The Billing Period Stop Loss Limit Factor is currently 0.5[2].

Proposal: The SEM Committee proposes to retain this value for Awarded Capacity allocated in the T-4 CY2030/31 capacity auction.

(i) the indicative Annual Capacity Payment Exchange Rate.

The Annual Capacity Payment Exchange Rate is an exchange rate applicable to a Capacity Year which converts the Capacity Payment Price for a Primary Trade or a Secondary Trade from Euros to Sterling. This is determined by the SOs using a methodology approved by the RAs.

Proposal: Only the indicative exchange rate is calculated for the IAIP. This will be calculated immediately prior to its publication. The exchange rate will then be updated for inclusion in the FAIP.

[2] Note: in the parameters decision paper for the first Capacity auction (SEM-17-022), the SEM Committee decided that the Billing Period Stop-Loss Limit should be 50% of the Annual Stop-Loss Limit. Because the Annual Stop-Loss Limit Factor was set to 1.5, the Billing Period Stop-Loss Limit Factor was set to 0.75. However, because of the way the Annual and Billing Period Stop Loss Limit Factors interact within paragraph F.18.3.2 and F.18.3.4 of the Trading and Settlement Code, in order to achieve a relation of 50%, a Billing Period Stop-Loss Limit Factor of 0.5 is required.

(j) the Increase Tolerance and Decrease Tolerance by Tolerance Class that may be applied by a Participant in its Application for Qualification to Capacity Market Unit de-ratings.

The Increase Tolerance (INCTOL) is a percentage upwards tolerance that a Participant is permitted to apply to Capacity Market Unit de-ratings in an Application for Qualification. There may be different Increase Tolerances for different Technology Classes.

A Decrease Tolerance (DECTOL) is a percentage downwards tolerance that a Participant is permitted to apply to Capacity market Unit de-ratings in an Application for Qualification. There may be different DECTOLs for different Technology Classes.

Technology Class	Increase Tolerance (%)	Decrease Tolerance (%)
All Except DSUs	0	0
DSUs	0	100

Proposal: The SEM Committee is proposing to retain the decision outlined in the table above for the 2030/2031 T-4 auction.

(k) in respect of Performance Securities:

(i) ***the final Performance Security Posting Dates/ Events applicable to Awarded Capacity allocated in the Capacity auction; and***

(ii) ***for each Performance Security Posting Date/ Event, the final €/MW rate to be applied in setting Performance Securities applicable to Awarded Capacity allocated in the Capacity auction.***

A Performance Security is a security required as a condition of capacity award for Awarded New Capacity that has not reached Substantial Completion.

A Performance Security Posting Date/ Event is a date or event from which a specified €/MW rate shall be applied to Awarded Capacity in setting Performance Securities. There may be multiple different Performance Security Posting Dates/ Events.

The Performance Security Posting Dates / Events applicable to Awarded Capacity allocated in a Capacity auction are determined by the RAs and provided to the SOs.

Proposal: The SEM Committee proposes maintaining the Performance Securities as per the T-4 CY2029/30 capacity auction.

Stages	Date / Event	Performance Security Rate (€/MW)
1	From Capacity auction completion to 24 months prior to the beginning of the Capacity Year	20,000
2	24-18 months prior to the beginning of the Capacity Year	30,000
3	18-13 months prior to the beginning of the Capacity Year	40,000
4	From 13 months to beginning of Capacity Year	50,000
5	From beginning of Capacity Year	60,000

As noted in decision paper SEM-24-035, Existing Capacity winning an ILC will not be subject to termination payments or performance security, but New Capacity winning an ILC will be subject to termination payments or performance security.

(I) the €/MW fee rates for calculating Termination Charges

A Termination Charge is a fee payable by a Participant where Awarded New Capacity is terminated.

The CRM detailed design decision paper[3] noted it is important that New Capacity is required to pay a Termination Fee if it fails to deliver capacity. The Termination Fee will be payable if the project:

- fails to deliver the Substantial Financial Completion milestones by the given date; or
- fails to achieve Substantial Completion by the Long Stop Date; or
- submits false or misleading information in the Qualification process.

For all Capacity auctions to date, the Termination Charges have been set in accordance with the following table:

[3] SEM-16-022

Stages	Date / Event	Termination Charge Rate (€/MW)
1	From Capacity auction completion to 24 months prior to the beginning of the Capacity Year	20,000
2	24-18 months prior to the beginning of the Capacity Year	30,000
3	18-13 months prior to the beginning of the Capacity Year	40,000
4	From 13 months to beginning of Capacity Year	50,000
5	From beginning of Capacity Year	60,000

As noted in decision paper SEM-24-035, Existing Capacity winning an ILC will not be subject to termination payments or performance security, but New Capacity winning an ILC will be subject to termination payments or performance security.

Proposal: The SEM Committee proposes to maintain the Termination Charges as per the T-4 CY2029/30 capacity auction.

(m) values for the Full Administered Scarcity Price and the Reserve Scarcity Price;

The Administered Scarcity Price (ASP) sets a floor on the Balancing Market price when a scarcity event occurs. The Full Administered Scarcity Price is the maximum value of the ASP. The Reserve Scarcity Price Curve is a piece-wise linear curve defining the relationship between the Reserve Scarcity price and the Short-Term Reserve Quantity.

Proposal: The SEM Committee propose to set the price at which the piece-wise linear function of ASP begins at the floor of the Strike Price, as determined below. The ASP will therefore be set in accordance with the following table:

Short Term Reserve (MW)	Administered Scarcity Price (€/MWh)
Demand Control	25% of VOLL Max
0	25% of VOLL Max
LSI	RO Strike Price

To clarify, ASP only applies when the available Short-Term Reserve is less than the operating reserve requirement. If the operating reserve requirement is only 450 MW and the available Short Term Reserve falls to 490 MW, the ASP function does not apply, and prices will be market determined.

At this stage, the SEM Committee proposes to retain setting the value of Full ASP in relation to VOLL.

(n) anticipated values for the parameters to be applied in determining the Strike Price.

If the Market Reference Price exceeds the Strike Price, holders of Reliability Options must make Difference Payments.

Proposal: The formula for the calculation of the weekly Strike Price ($PSTR_w$) is contained in Section F.16.2 of the Trading and Settlement Code (Part B). The SEM Committee proposes to retain these parameter values for the T-4 CY2030/31 capacity auction.

This formula bases the Strike Price on the cost of a hypothetical low efficiency peaking unit and includes a floor price on the strike price at the price of a theoretical demand side unit in €/MWh; this reflects the cost incurred by the DSU in switching off, which may not be related to the cost of energy. The values of each of these parameters for each Capacity auction to date were:

Strike Price Component	Value	Unit
$PCARBON_m$	$PCARBON_m$ Index	€/tCO_2e
$PFUELNG_m$	[$PFUELNG_m$ Index (p/therm) x 0.01 (£/p) + $PFUELNG_m$ Transport (£/therm)] x Exchange Rate (€/£) x 9.48 (therm/GJ) x 3.6 (GJ/MWh)	€/MWh
$PFUELO_m$	[$PFUELO_m$ Index ($/t) x Exchange Rate (€/$) + $PFUELO_m$ Transport (€/t)] x 0.025 (t/GJ) x 3.6 (GJ/MWh)	€/MWh
$PCARBON_m$ Index	ICE ECX EUA Futures – EUA - (monthly)[4]	€/tCO2e
$PFUELNG_m$ Index	ICE UK Natural Gas Index (monthly)	p/therm
$PFUELNG_m$ Transport	0.0424[5]	£/therm
$PFUELO_m$ Index	Platt's Forward Curve (monthly) for monthly swap transactions for 1% sulphur free on board (FOB) fuel oil cargoes in North West Europe (NWE) for the relevant month (AAEGR00)	$/t
$PFUELO_m$ Transport	50[6]	€/t
$FTHEORYPU_y$	15	%
$FCARBONING_y$	0.202	tCO2e/MWh
$FCARBONINO_y$	0.277	tCO2e/MWh
$PTHEORYDSU_y$	500	€/MWh
Exchange Rate (€/£)	The Trading Day Exchange Rate as defined in the Trading and Settlement Code	€/£
Exchange Rate (€/$)	The rate set at 17:00 the day before the Trading Day, from the same source as used for the Trading Day Exchange Rate	€/$
therm per GJ	9.48[7]	therm/GJ
LSFO calorific value	0.025[8]	t/GJ

(o) Capacity Aggregation Threshold for the Capacity auction

The Capacity Aggregation Threshold operates as an eligibility condition for aggregation as set out in paragraph E.7.6 of the CMC, restricting the combination of Candidate Units into a Capacity Market Unit to smaller units (or variable generation), thereby helping to maintain an efficient and transparent market structure while facilitating the participation of smaller units.

Proposal: The SEM Committee propose to maintain the capacity aggregation threshold at 10MW for the T-4 CY2030/31 capacity auction.

[4] The December price for a given year will apply to all months falling within that year.
[5] NI natural gas transport adder used in I-SEM PLEXOS Forecast Model 2024-33.
[6] Based on ROI LSFO transport adder used in I-SEM PLEXOS Forecast Model 2024-33
[7] Universal constant, utilised in the I-SEM PLEXOS Forecast Model 2024-33
[8] Universal constant, utilised in the I-SEM PLEXOS Forecast Model 2024-33

(p) Early Delivery Incentive Start Date for New Capacity excluding New Capacity that is repowered or refurbished capacity based on previous Existing Capacity, with a Maximum Capacity Duration of more than one year.[9]

Proposal: The SEM Committee confirm that The Early Delivery Incentive Start Date shall commence at the start of the Trading Day beginning at 23:00 on 30 September 2029.

(-) the €/MW rate of the Intermediate Contract Investment Rate Threshold

The Intermediate Contract Investment Rate Threshold (ICIRT) is an amount determined by the RAs that must be exceeded by the cost per MW of Existing and New Capacity seeking to make intermediate levels of investment for that capacity to be eligible to be allocated Awarded Capacity with a duration of more than one year.

New and Existing Capacity are eligible to bid to fix its Reliability Option for up to five years. To do so, a capacity provider must meet a substantial financial commitment threshold. This threshold is known as the ICIRT.

The intention of setting the ICIRT is to ensure that only plant making a significant investment commitment can obtain a multi-year Reliability Option of up to five years. As noted in SEM-24-035[10], the ICIRT was not set at a level too high, because of the potential it would prevent genuinely beneficial investments in refurbishment taking place, nor at a level too low, which would produce frequent repeat applications for ILCs.

Proposal: The SEM Committee proposes to retain the value of ICIRT at €100,000/de-rated MW for the T-4 CY2030/31 T-4 Auction.

[9] Capacity Market Code Workshop 37B Decision Paper
[10] SEM-24-035

5. NEXT STEPS

Responses to the proposals within this consultation should be sent to both email addresses CRMSubmissions@uregni.gov.uk and CRMsubmissions@cru.ie, by **17:00 03 July 2026.**

We intend to publish all responses unless they have been marked confidential.