

# Single Electricity Market (SEM)

# Capacity Remuneration Mechanism T-4 CY2028/2029 Capacity Auction Parameters

Consultation Paper SEM-24-019

21 March 2024

## 1. EXECUTIVE SUMMARY

The SEM Committee hosted a Senior Stakeholder Forum on 26<sup>th</sup> January 2024 to invite feedback from industry participants on actions that could facilitate investment and discuss issues faced by industry in terms of delivery and timings. An Information Note outlining some of the matters discussed at this event was published on 09 February 2024 (SEM-24-011). This information Note outlined the SEM Committee's intention to increase the APC for a proposed T-3 CY2027/2028 capacity auction and considered setting an Increase Tolerance (INCTOL) value greater than zero.

On the 04 March 2024, the SEM Committee published a further Information Note (<u>SEM-24-017</u>) stating that after careful consideration and reflecting on industry feedback in relation to the holding of capacity auctions in 2024, the Committee had decided to hold a T-4 2028/2029 auction, with incentives for early delivery of new capacity in the capacity year 2028/2029, in place of the proposed T-3 CY2027/2028 auction. It is anticipated that the T-4 CY2028/2029 auction will be held on the 28 November 2024, although this has still to be confirmed.

Under the revised SEM arrangements, implemented in October 2018, capacity revenues are allocated by capacity auction 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 is described in paragraph D.3.1.3 of the Capacity Market Code.

This consultation paper describes the SEM Committee's proposals for the relevant parameters to apply in the 2028/2029 T-4 Capacity Auction, scheduled to take place on 28 November 2024.

The proposed parameters for consultation are:

Parameter	Proposed Value for 2028/2029 T-4 capacity auction
De-Rating Curves, defining De-Rating Factors by unit Initial Capacity and by Technology Class (including Interconnectors)	To be determined by System Operators prior to publication of Initial Auction Information Pack.
Capacity Requirement	To be determined by System Operators prior to publication of Initial Auction Information Pack.
Indicative Demand Curve	<ul> <li>The Demand Curve for the 2028/2029 T-4 auction will be set as the following:</li> <li>Horizontal at the Auction Price Cap from 0 MW to 92.5% of the adjusted Capacity Requirement.</li> <li>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 to 100% of the adjusted Capacity Requirement and the price equals Net CONE.</li> </ul>
Auction Price Cap	SEM Committee proposes to increase the APC by applying a higher multiplier to Net CONE.  Respondents are invited to consider this question and submit detailed evidence (which can be submitted confidentially) to substantiate an appropriate value. Evidence provided in response to SEM-24-012 will also be taken into account, but we invite respondents to provide further evidence, where appropriate.

Existing Capacity Price Cap	0.5 x Net CONE i.e. €55,678 / de-rated MW /year. As above, this is subject to change.				
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 (IAIP).				
Increase Tolerance and	Technology	Inc	**************************************	Doorooo	
Decrease Tolerance by	Class	Increase Tolerance (%)		Decrease Tolerance (%)	
Technology Class	All Except DSUs	TBC		0	
	DSUs	TBC		100	
				.00	
			Performance Security		
	Date / Event			ite (€/MW)	
	From Capacity Auction		20,000		
	completion to 27 months				
Porformance Security Poeting	prior to the beginning of				
Performance Security Posting  Dates / Events	the Capacity Year				
	27-13 months prior to the				
	beginning of the Capacity		30,000		
	Year				
	From 13 months to				
	beginning of Capacity			40,000	
	Year				
	From beginning of Capacity Year			50,000	
			50,000		

	Date / Event	Termination Charge Rate (€/MW)
	From Capacity Auction	
	completion to 27 months	20,000
	prior to the beginning of	20,000
	the Capacity Year	
Termination Charges	27-13 months prior to the	
Termination Charges	beginning of the Capacity	30,000
	Year	
	From 13 months to	
	beginning of Capacity	40,000
	Year	
	From beginning of	50,000
	Capacity Year	50,000
	Short Term Reserve	Administered Scarcity
	(MW)	Price (€/MWh)
	Demand Control	25% of VOLL
	0	25% of VOLL
	500	RO Strike Price
Full Administered Scarcity		
	The SEM Committee proposes to retain setting the	
Price and Reserve Scarcity	The SEM Committee prop	ooses to retain setting the
Price and Reserve Scarcity  Price Curve		ooses to retain setting the ion to VOLL. However, the
1	value of Full ASP in relat	•
1	value of Full ASP in relat	ion to VOLL. However, the
1	value of Full ASP in relate SEM Committee request whether any changes could	ion to VOLL. However, the s respondents' views on
1	value of Full ASP in relate SEM Committee request whether any changes could	ion to VOLL. However, the s respondents' views on d be made to the parameters courage availability at times
	value of Full ASP in relate SEM Committee request whether any changes could of the ASP function to end	ion to VOLL. However, the s respondents' views on d be made to the parameters courage availability at times tight.

Responses to the proposals within this consultation should be sent to both mailboxes <a href="mailto:CRMsubmissions@uregni.gov.uk">CRMsubmissions@uregni.gov.uk</a> and <a href="mailto:CRMsubmissions@cru.ie">CRMsubmissions@cru.ie</a> by 11 April 2024 giving a three-week consultation period. We intend to publish all responses unless they have been marked as confidential.

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# 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.

The SEM Committee intends to implement changes to the CRM design to facilitate investment, and is working on the following policy changes with a view to implementing in time for the 2028/29 T-4 auction:

- Early delivery incentives: As stated in SEM-24-017, the SEM Committee intends
  to introduce early delivery incentives into the 2028/29 T-4 auction. The design of
  the early delivery incentives will be consulted on in a separate consultation paper
  to be published in the coming weeks;
- Non-zero INCTOL: This proposal was consulted upon in SEM-24-012, and the SEM Committee intends to move forward with non-zero INCTOLs for the 2028/29 T-4 auction. The proposed approach to INCTOL is discussed further in this document;
- Intermediate Length Contracts: The SEM Committee consulted on the introduction of intermediate length contracts to facilitate refurbishment in November 2023 (SEM-23-093). The SEM Committee signaled that if a decision was taken to proceed with this policy change, the intention would be to implement the necessary changes in time for the 2028/29 T-4 auction. The RAs continue to work with the TSOs on implementation issues and expect to issue a separate decision document in the next few weeks. The intention to implement the changes in time for the 2028/29 T-4 auction remains as stated.

The SEM Committee also notes a decision (SEM-23-101) published on 30<sup>th</sup> November 2023 to implement two CMC Modifications to allow holders of Multi-Year New Capacity contracts to apply for extensions to the Long Stop Date and Capacity Quantity End Date and Time. This decision applies to auctions with capacity delivery from Capacity Year 2024/25 onwards and includes auctions due to take place in 2024.

Before each capacity auction, the Capacity Market Code ("CMC") requires a number of auction parameters to be determined by the Regulatory Authorities ("RAs" (the Utility

Regulator ("UR") in Northern Ireland and the Commission for Regulation of Utilities ("CRU") in Ireland).

#### Parameters to be determined

Paragraph D.3.1.3 of the CMC requires the Regulatory Authorities to determine the following parameters for each Capacity Auction, and provide them to the System Operators for inclusion in the applicable Initial Auction Information Pack:

- (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:
  - 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.
- (I) 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; and
- (o) the Final Capacity Aggregation Threshold for the Capacity Auction.

## 4. PARAMETERS REQUIRED BY THE CAPACITY MARKET CODE

As described, the Regulatory Authorities 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.

This is to be determined by the System Operators prior to the publication of the Initial Auction Information Pack.

(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.

This is to be determined by the System Operators prior to the publication of the Initial Auction Information Pack.

(c) an indicative Demand Curve.

The Demand Curve is a curve determined by the Regulatory Authorities representing the deemed per MW value of each level of capacity that could be awarded in the Capacity Auction. The Demand Curve for the T-4 2028/2029 auction will be set as the following:

- Horizontal at the Auction Price Cap from 0 MW 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 to 100% of the adjusted Capacity Requirement and the price equals Net CONE.

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 Final Auction Information Pack (FAIP).

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

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

#### (d) the Auction Price Cap.

The Auction Price Cap (APC) is the maximum bid price allowed in a Capacity Auction.

Significant feedback was received from industry at the Senior Stakeholder Forum held on 26<sup>th</sup> January 2024, regarding the APC and the impact of generally declining derating factors on the financial viability of projects.

Following the feedback received at the Senior Stakeholder Forum, the SEM Committee consulted on a potential increase to the APC in <u>SEM-24-012</u>, giving industry the chance

to provide evidence in writing, including confidentially if appropriate. In SEM-24-012, the SEM Committee noted that there was insufficient time to re-calculate Net CONE before the next auction, and that it intended to increase the APC by applying a higher multiplier to Net CONE. SEM-24-012 therefore sought responses as to the appropriate Net CONE multiplier.

Responses to SEM-24-012 primarily focused on the benefits of holding a 2028/29 T-4 auction earlier, and including early delivery incentives. A number of respondents expressed a view that the estimated Net CONE was too low and asked the RAs to reestimate Net CONE. However, it will not be feasible to re-estimate Net CONE in time for publication of the 2028/29 T-4 IAIP in early May 2024. For the 2028/29 T-4 auction, the SEM Committee proposes to index Net CONE by 2% inflation and apply a higher Net CONE multiplier to set APC. Therefore, for the 2028/29 T-4 capacity auction, the SEM Committee intends to use the Net CONE value of €109,172/derated MW, as used for the 2027/28 T-4 capacity auction indexed by 2% to €111,355/derated MW.

Only two respondents to SEM-24-012 directly answered the question of the appropriate multiplier to apply to Net CONE. Other market participants have suggested multipliers via other fora but did not provide detail on this question in their responses to the T-3 parameters consultation. Therefore, the SEM Committee invites respondents to consider this question and submit detailed evidence (which can be submitted confidentially) to substantiate an appropriate value. Evidence provided in response to SEM-24-012 will also be taken into account, but we invite respondents to provide further evidence, where appropriate.

## (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")<sup>1</sup>. New Capacity and DSUs are not subject to the ECPC, and may bid up to the Auction Price Cap.

#### ECPC performs two key functions:

- Firstly, it limits the ability of generators with market power (but low Net Going Forward Costs ("NGFCs")) to exercise their market power through making high offers. Given the significant concerns about market power in the CRM (see SEM-16-010), it is important that the ECPC is not set at a level significantly above where the market is expected to clear in current market conditions.
- Secondly, it provides a filter to ensure that the RAs only scrutinise costs where necessary (because they may have a material impact on the clearing price or payas-bid prices). If the ECPC is set too low, then offer prices which are below the clearing price (and therefore will have no impact on the clearing price or pay-as-bid prices) will need to be reviewed, imposing an unnecessary administrative burden on both the RAs and bidders.

In all capacity auctions to date, ECPC has been set at 0.5 times Net CONE. The rationale for this was that the value:

- Estimated that the vast majority of plant required to meet the Capacity Requirement could bid at its Net Going Forward Cost without needing to apply for a USPC;
- Was consistent with relevant international benchmarks: and
- Struck an appropriate balance between the objectives of protecting consumers
  from the potential for bidders to exercise market power, and not placing an
  excessive workload on market participants and RAs from having to respectively
  submit and review significant volumes of USPC applications.

The SEM Committee notes the responses to SEM-24-012 which argued that the Net CONE was understated, and that ECPC should be set at a higher value.

The SEM Committee's proposal is to continue to set the ECPC at 0.5 times Net CONE (€55,678 / de-rated MW / year), and the Sterling equivalent using the indicative Annual Capacity Payment Exchange Rate from the Initial Auction Information Pack. The SEM

<sup>&</sup>lt;sup>1</sup> Or submit an Opt-Out Notification on the grounds that they are going to close before the end of the relevant Capacity Year.

Committee continues to see ECPC as an important market power mitigation tool. Any existing capacity with Net Going Forward Costs higher than the Existing Capacity Price Cap will retain the option to submit a USPC application to the RAs.

(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 for up to ten years. In order 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 is able to obtain a multi-year Reliability Option.

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.

As described in the initial CRM parameters decision paper<sup>2</sup>, NCIRT for the first transitional auction was set at approximately 40% of the gross BNE cost, or €300,000 / de-rated MW. The BNE was re-evaluated in 2023 but the SEM Committee proposes to retain the value of NCIRT at €300,000/de-rated MW for the 2028/29 T-4 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.

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<sup>&</sup>lt;sup>2</sup> SEM-17-022, paragraph 7.2.18

A stop-loss is a cap on Reliability Option Difference Payments. Reliability Option 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 investability. However, a cap on RODPs means that there will be insufficient money to hedge suppliers, which has to 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.

The SEM Committee propose to continue to apply an Annual Stop-Loss Limit Factor of 1.5 to Awarded Capacity allocated in the 2028/2029 T-4 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-Loss 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<sup>3</sup>. The SEM Committee proposes to retain this value for Awarded Capacity allocated in the 2028/2029 T-4 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 System Operators using a methodology approved by the RAs.

Only the indicative exchange rate is calculated for the Initial Auction Information Pack. This will be calculated immediately prior to its publication. The exchange rate will then be updated for inclusion in the Final Auction Information Pack (FAIP).

(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 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 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 Decrease Tolerances for different Technology Classes.

The SEM Committee Decision SEM-15-103<sup>4</sup> allowed for the possibility of tolerance bands to be applied to the unit-level De-Rating Factors determined for capacity providers. These tolerance bands would allow some flexibility in the level of participation required from

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<sup>&</sup>lt;sup>3</sup> Note: in the parameters decision paper for the first capacity auction (<u>SEM-17-022</u>), 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.

<sup>&</sup>lt;sup>4</sup> SEM-15-103

dispatchable plant in the auction. This allowance was made in relation to mandatory participation, although all generators would still be required to participate. It would reflect the fact that not all generators of the same technology class have the same degree of reliability.

In previous auctions, the Increase Tolerance (INCTOL) has been set at zero for all capacity. In SEM-24-012, the SEM Committee stated that it was considering changing this decision for the 2027/2028 T-3 auction, and was consulting on:

- Whether to set a non-zero INCTOL, and if so, what value to set INCTOL at.
- Whether a non-zero INCTOL should apply to all capacity, New Capacity only, or only capacity which is less than a certain threshold number of years old.

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

SEM-24-012 set out the rationale for implementing non-zero INCTOL, some of the options for how it might be applied and some of the complexities in applying a "one-size fits all" approach to INCTOL.

A range of responses were received on INCTOL. Whilst the majority of respondents were broadly in favour of non-zero INCTOL for some types of technology, views varied on which technologies they should be applied to, whether it should be applied to existing and/or new technology and the appropriate value(s) of INCTOL.

Some respondents argued that INCTOL could be based on historical evidence on a unit-by-unit basis. One respondent argued that new capacity did not necessarily have better availability than existing units, with new unit suffering "teething" problems in the first few years of their operation. An EPRI study<sup>5</sup> came to these conclusions but showed that outage rates increased substantially after about 20 to 25 years, however this depended on the extent to which units are required to cycle up and down.

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<sup>&</sup>lt;sup>5</sup> EPRI, Impact of Cycling on the Operation and Maintenance Cost of Conventional and combined Cycle Power Plants, 2013

One respondent argued that certain types of new capacity can typically obtain manufacturer's guarantees with respect to the availability of new equipment and that new capacity should be able to INCTOL up to the level of availability guaranteed by the manufacturer.

The SEM Committee is giving consideration to implementing the following proposals for the 2028/29 T-4 auction:

- Existing Capacity: Allowing any unit which can demonstrate a higher average availability than its marginal derating factor over the last 5 years to INCTOL up to a maximum of its historical average availability;
- New Capacity: Allowing any unit which can provide evidence to demonstrate that it can exceed its marginal derating factor, to INCTOL up to the level of the demonstrable value.

The SEM Committee seeks feedback on these revised proposals.

- (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 Regulatory Authorities and provided to the System Operators.

Interested parties are asked to comment in their response, on the amounts the SEM Committee have set with regards to the Performance Security Rate and the Termination Charges (of course the Bond amount should be a one for one to the Termination amount) but also on the milestones, participants are asked to give the SEM Committee their view as to whether the number of milestones is suitable and / or whether a greater timeframe is required.

Date / Event	Performance Security Rate (€/MW)
From Capacity Auction completion to 27 months prior to the beginning of the Capacity Year	20,000
27-13 months prior to the beginning of the Capacity Year	30,000
From 13 months to beginning of Capacity  Year	40,000
From beginning of Capacity Year	50,000

# (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<sup>6</sup> noted that 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

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<sup>&</sup>lt;sup>6</sup> SEM-16-022

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:

Date / Event	Termination Charge Rate (€/MW)
From Capacity Auction completion to 27 months prior to the beginning of the Capacity Year	20,000
27-13 months prior to the beginning of the Capacity Year	30,000
From 13 months to beginning of Capacity  Year	40,000
From beginning of Capacity Year	50,000

The SEM Committee seeks feedback on the changes outlined above, and also those of the Performance Security rates.

(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 Administered Scarcity Price. The Reserve Scarcity Price Curve is a piecewise linear curve defining the relationship between the Reserve Scarcity price and the Short-Term Reserve Quantity.

In the second CRM detailed design decision paper<sup>7</sup>, the SEM Committee decided that the piece-wise linear function of ASP will be static, and the price from which the function begins will be the Reliability Option Strike Price.

However, the Reliability Option Strike Price is not strictly static. As described below, it is set in relation to weekly carbon, gas, and oil prices, but has a floor price equal to the

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<sup>&</sup>lt;sup>7</sup> SEM-16-022, section 6.4

theoretical price of a Demand Side Unit (which has most frequently been set at €500/MWh).

The SEM Committee proposes 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 Administered Scarcity Price will therefore be set in accordance with the following table:

Short Term Reserve (MW)	Administered Scarcity Price (€/MWh)
Demand Control	25% of VOLL
0	25% of VOLL
500	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. However, the SEM Committee requests respondents' views on whether any changes could be made to the parameters of the ASP function to encourage availability at times when system margins are tight.

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

If the Market Reference Price exceeds the Strike Price, holders of Reliability Options must make Difference Payments. The formula for the calculation of the weekly Strike Price (PSTR<sub>w</sub>) is contained in Section F.16.2 of the Trading and Settlement Code (Part B).

## 5. TREATMENT OF CONSTRAINTS

For the purposes of a Capacity Auction, a number of Locational Capacity Constraints Areas ("LCCA") can be determined by the System Operators. A Locational Capacity

Constraint Required Quantity is the minimum de-rated capacity quantity that is required to satisfy the Locational Capacity Constraint.

The Capacity Auction is initially run on an unconstrained (i.e., location agnostic) basis. If following the initial solution, any of the Locational Capacity Constraints has not been satisfied, additional capacity must be procured. This capacity will be procured on a payas-bid basis.

When procuring this additional capacity, New Capacity with an offered capacity duration of more than one year should be excluded. However, if there is insufficient capacity within an LCCA to allow the constraint to be met without it, this new, multi-year, Capacity must be considered.

For the 2028/2029 T-4 capacity auction, the SEM Committee remains open to allowing the constrained element auction to solve using multi-year New Capacity. A decision on this will be made prior to the publication of the Final Auction Information Pack (FAIP), after the System Operators have provided the relevant information on LCCAs.

# 6. NEXT STEPS

Responses to the proposals within this consultation should be sent to both email addresses <a href="mailto:CRMsubmissions@uregni.gov.uk">CRMsubmissions@cru.ie</a>, by 11<sup>th</sup> April 2024.

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

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<sup>&</sup>lt;sup>8</sup> Under Auction Format C and D, this constrained capacity can replace capacity that was used to satisfy the initial solution.