



**Single Electricity Market  
(SEM)**

**Capacity Remuneration Mechanism  
2024/25 T-1 Capacity Auction Parameters**

**Consultation Paper**

**SEM-23-075**

**22 September 2023**

## 1. EXECUTIVE SUMMARY

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 paper describes the SEM Committee's proposals for the relevant parameters to apply in the T-1 2024/25 capacity auction, scheduled to take place on 25 April 2024. This is a supplementary auction to the 2024/25 T-4 auction held in January 2021 and T-3 2024/25 held in January 2022. These auctions procured 7639 MW of de-rated capacity.

The proposed parameters for consultation are:

Parameter	Proposed Value for 2024/25 T-1 capacity auction
De-Rating Curves, defining De-Rating Factors by unit Initial Capacity and by Technology Class (including for 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	The Demand Curve will be based on the following principles: <ul style="list-style-type: none"><li>• horizontal at the Auction Price Cap between 0MW and 100% of the adjusted Capacity Requirement;</li><li>• vertical at 100% of the adjusted Capacity Requirement between the Auction Price Cap and Net CONE;</li></ul>

	<ul style="list-style-type: none"> <li>a straight line slope with a zero-crossing point at 115% of the adjusted Capacity Requirement.</li> </ul>									
Auction Price Cap	1.5 x Net CONE <sup>1</sup> i.e., €160,545 / de-rated MW / year									
Existing Capacity Price Cap	0.5 x Net CONE i.e., €53,515 / 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.									
Increase Tolerance and Decrease Tolerance by Technology Class	<table border="1"> <thead> <tr> <th>Technology Class</th> <th>Increase Tolerance (%)</th> <th>Decrease Tolerance (%)</th> </tr> </thead> <tbody> <tr> <td>All Except DSUs</td> <td>0</td> <td>0</td> </tr> <tr> <td>DSUs</td> <td>0</td> <td>100</td> </tr> </tbody> </table>	Technology Class	Increase Tolerance (%)	Decrease Tolerance (%)	All Except DSUs	0	0	DSUs	0	100
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Performance Security Posting Dates / Events	<table border="1"> <thead> <tr> <th>Date / Event</th> <th>Performance Security Rate (€/MW)</th> </tr> </thead> <tbody> <tr> <td>From 13 months to beginning of Capacity Year</td> <td>30,000</td> </tr> <tr> <td>From beginning of Capacity Year</td> <td>40,000</td> </tr> </tbody> </table>	Date / Event	Performance Security Rate (€/MW)	From 13 months to beginning of Capacity Year	30,000	From beginning of Capacity Year	40,000			
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From beginning of Capacity Year	40,000									

<sup>1</sup> This is 1.5 x Net Cone of €107,030/MW as per [SEM-23-016 BNE Decision 2023.pdf \(semcommittee.com\)](#)

Termination Charges	<b>Date / Event</b>	<b>Termination Charge Rate (€/MW)</b>
	From 13 months to beginning of Capacity Year	30,000
	From beginning of Capacity Year	40,000
Full Administered Scarcity Price and Reserve Scarcity Price Curve	<b>Short Term Reserve (MW)</b>	<b>Administered Scarcity Price (€/MWh)</b>
	Demand Control	25% of VOLL
	0	25% of VOLL
	500	RO Strike Price
Anticipated values to be applied in determining the Strike Price	Current values to be re-applied.	

Responses to the proposals within this consultation should be sent to [CRMSubmissions@uregni.gov.uk](mailto:CRMSubmissions@uregni.gov.uk) and [CRMsubmissions@cru.ie](mailto:CRMsubmissions@cru.ie) by close of business 13 October 2023. 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.

A T-4 auction for the 2024/25 capacity year was held in January 2021. This procured 6,168 MW of de-rated capacity on an all-island basis. A T-3 auction for the 2024/2025 capacity year was held in January 2022, and resulted in 1,471 MW of de-rated capacity being procured.

The SEM Committee has decided to hold a T-1 auction for the 2024/25 capacity year. The volumes to be procured in this auction will be determined by the SEM Committee following their usual process prior to the publication of the Final Auction Information Pack. This consultation paper is about parameter setting.

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

#### 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.

In 2022, the SEMC requested the System Operators to consult upon enhancements to the Adequacy Calculator which underpins the determination of the Capacity Requirement and the De-Rating Factors associated to each Capacity Auction. These enhancements were approved by the SEMC in SEM-22-097<sup>2</sup>.

SEM-23-053<sup>3</sup>, Information Note on DSU De-Rating Factors in the CRM, points to this decision and the way that DRFs are calculated for Demand Side Units (DSUs). Here, the SEM Committee gave notice to industry that they were minded to maintain the same glidepath for the next T-1 i.e. 2024/2025. The SEM Committee confirm this is still the position and they are minded to maintain the same glidepath approach applied for T-1 2023/2024 in this T-1 2024/2025.

- (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. The SEM Security Standard is the standard specified by the Regulatory Authorities for the annual loss of load expectation to be maintained in the SEM i.e. the number of hours per year for which load curtailment may occur due to demand exceeding available capacity. In CRM Detailed

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<sup>2</sup> [Proposed enhancements to the methodology for determination of the CRM Capacity Requirement and Associated De-Rating Factors.PDF \(semcommittee.com\)](#)

<sup>3</sup> [SEM-23-053 Information Note on DSU De-Rating Factors in the CRM](#)



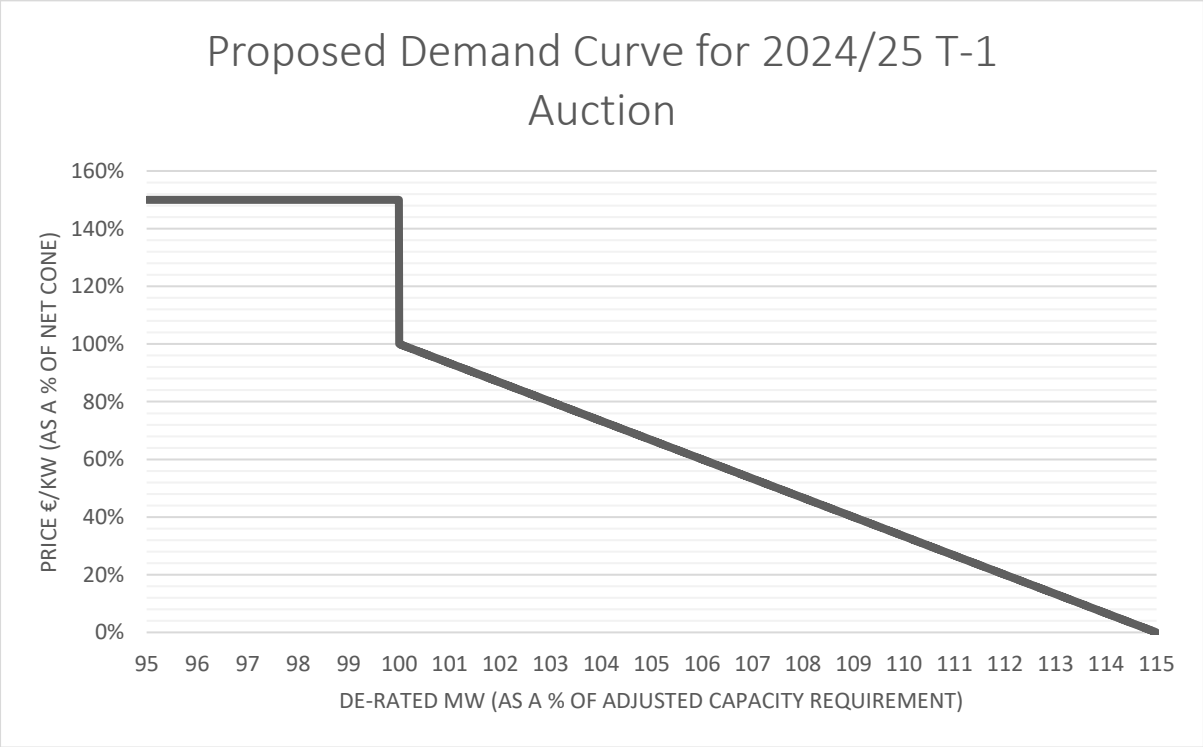
Design Decision 1<sup>4</sup> the SEM Committee decided to retain the security standard at 8 hours LOLE. This is currently under review by the SEM Committee and further updates will be issued to industry in due course.

(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 2024/25 T-1 auction is proposed to be set in accordance with the following principles:

- horizontal at the Auction Price Cap between 0MW and 100% of the adjusted Capacity Requirement;
- vertical at 100% of the adjusted Capacity Requirement between the Auction Price Cap Net CONE;
- a straight line slope with a zero-crossing point at 115% of the Capacity Requirement.



<sup>4</sup> [SEM-15-103](#), section 2.2.16

In accordance with paragraph F.3.1.4 of the Capacity Market Code, other adjustments to the Capacity Requirement will include:

- a) Capacity already awarded for the 2024/25 Capacity Year in other relevant auctions;
- b) an allowance for changes in forecast capacity requirements (as considered appropriate by the Regulatory Authorities);
- c) 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 is the maximum bid price allowed in a Capacity Auction.

The SEM Committee propose to continue to initially apply a multiplier of 1.5 times Net CONE in setting the Auction Price Cap for the 2024/25 T-1 capacity auction. SEM-23-016<sup>5</sup> has set the Net CONE at €107.03/kWd/year. This sets APC at €160,545/MWd/year.

(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 unless they apply to the RAs for a Unit Specific Price Cap (“**USPC**”)<sup>6</sup>. New Capacity and DSUs are not subject to the ECPC.

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 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 only those USPC applications which the RAs need to scrutinise (because they may have a material impact on the clearing

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<sup>5</sup> [SEM-23-016 BNE Decision 2023.pdf \(semcommittee.com\)](#)

<sup>6</sup> Or submit an Opt-Out Notification on the grounds that they are going to close before the end of the relevant Capacity Year.

price or pay-as-bid prices) are scrutinised. 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 value was:

- It was estimated that the vast majority of plant required to meet the Capacity Requirement could bid at its Net Going Forward Cost without applying for a USPC;
- It is consistent with relevant international benchmarks;
- It strikes 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's proposal is to continue to set the ECPC at 0.5 times Net CONE as set out in SEM-23-016 leading to an ECPC of €53,515 / de-rated MW / year), and the Sterling equivalent using the indicative Annual Capacity Payment Exchange Rate from the Initial Auction Information Pack.

Any existing capacity with Net Going Forward Costs higher than the Existing Capacity Price Cap will have the option (if needed) 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 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>7</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 for the 2027/2028 T-4 capacity auction. However, there was insufficient evidence to support a change in the NCIRT. The SEM Committee therefore decided to retain the NCIRT at €300,000 / de-rated MW. The SEM Committee proposes to retain the value of NCIRT at €300,000 / de-rated MW for the 2024/25 T-1 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.

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 investment signals. 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 2024/25 T-1 auction.

*(h) the Billing Period Stop-Loss Limit Factor;*

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<sup>7</sup> [SEM-17-022](#), paragraph 7.2.18

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 one 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 one 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>8</sup>. The SEM Committee proposes to retain this value for Awarded Capacity allocated in the 2024/25 T-1 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.

*(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;*

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<sup>8</sup> 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.

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.

CRM Decision 1<sup>9</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 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 the CRM Capacity Requirement and De-Rating Factor Methodology Decision paper<sup>10</sup>, the SEM Committee decided that, with the exception of DSUs, the tolerance bands will be set to zero for the transitional auctions, with the decision to be reviewed for the enduring auctions once the enduring value of Full Administered Scarcity Price has been determined. The SEM Committee is proposing to retain this decision for the 2024/25 T-1 auction.

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

- (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.*

<sup>9</sup> [SEM-15-103](#)

<sup>10</sup> [SEM-16-082](#), paragraph 4.5.1

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.

In the parameters decision paper for the first capacity auction (SEM-17-022) the SEM Committee decided that all capacity is required to post a Performance Bond to cover 100% of its Termination Fee. The SEM Committee proposes to retain this policy.

The SEM Committee proposes that the Performance Security Rates should be as follows:

Date / Event	Performance Security Rate (€/MW)
From 13 months to beginning of Capacity Year	30,000
From beginning of Capacity Year	40,000

(l) *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 2<sup>11</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;
- fails to achieve Substantial Completion by the Long Stop Date; or
- submits false or misleading information in the Qualification process.

The SEM Committee proposes that the Termination Charges should be as follows:

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<sup>11</sup> [SEM-16-022](#)

Date / Event	Termination Charge Rate (€/MW)
From 13 months to beginning of Capacity Year	30,000
From beginning of Capacity Year	40,000

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

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.

For the first two transitional auctions, Full ASP was set at the day ahead market price cap of €3,000/MWh. For the 2022/23 T-4 auction (held in March 2019), Full ASP was set at 25% of the Value of Lost Load (“**VOLL**”). It has been set at this value for all auctions since.

The SEM Committee proposes to retain setting the value of Full ASP in relation to VOLL. Specifically, Full ASP will be set to 25% of VOLL. The VOLL is currently under review by the SEM Committee and further information will be issued to Participants in due course.

In the second CRM detailed design decision paper<sup>12</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 theoretical price of a Demand Side Unit (which in recent years has been set at €500/MWh).

<sup>12</sup> [SEM-16-022](#), section 6.4



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.

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. For example, if the operating reserve requirement is only 450MW, and the available Short Term Reserve falls to 490MW, the ASP function does not apply and prices will be market determined.

(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. The formula for the calculation of the weekly Strike Price ( $PSTR_m$ ) is contained in the Trading and Settlement Code section F.16.2.

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 is 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 <sub>m</sub>	PCARBON <sub>m</sub> Index	€/tCO <sub>2e</sub>
PFUELNG <sub>m</sub>	[PFUELNG <sub>m</sub> Index (p/therm) x 0.01 (£/p) + PFUELNG <sub>m</sub> Transport (£/therm)] x Exchange Rate (€/£) x 9.48 (therm/GJ) x 3.6 (GJ/MWh)	€/MWh
PFUELO <sub>m</sub>	[PFUELO <sub>m</sub> Index (\$/t) x Exchange Rate (€/£) + PFUELO <sub>m</sub> Transport (£/t)] x 0.025 (t/GJ) x 3.6 (GJ/MWh)	€/MWh
PCARBON <sub>m</sub> Index	ICE ECX EUA Futures – EUA - (weekly)	€/tCO <sub>2e</sub>
PFUELNG <sub>m</sub> Index	ICE UK Natural Gas Index (weekly)	p/therm
PFUELNG <sub>m</sub> Transport	0.0424 <sup>13</sup>	£/therm
PFUELO <sub>m</sub> Index	Platt's Forward Curve (weekly) for weekly swap transactions for 1% sulphur free on board (FOB) fuel oil cargoes in North West Europe (NWE) for the relevant month (AAEGR00)	\$/t
PFUELO <sub>m</sub> Transport	50 <sup>14</sup>	€/t
FTHEORYPU <sub>y</sub>	15	%
FCARBONING <sub>y</sub>	0.202	tCO <sub>2e</sub> /MWh
FCARBONINO <sub>y</sub>	0.277	tCO <sub>2e</sub> /MWh
PTHEORYDSU <sub>y</sub>	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 <sup>15</sup>	therm/GJ
LSFO calorific value	0.025 <sup>16</sup>	t/GJ

The SEM Committee proposes to retain these parameter values for the T-1 2024/25 capacity year.

<sup>13</sup> NI natural gas transport adder used in I-SEM PLEXOS Forecast Model 2016-17.

<sup>14</sup> Based on ROI LSFO transport adder used in I-SEM PLEXOS Forecast Model 2016-17.

<sup>15</sup> I-SEM PLEXOS Forecast Model 2017-17

<sup>16</sup> I-SEM PLEXOS Forecast Model 2016-17

## 5. INTERACTION WITH CLEAN ENERGY PACKAGE

The EC's energy package is made up of a number of Directives and Regulations, and are collectively referred to as the Clean Energy Package (CEP). The first tranche of these, listed below, came into force on 24 December 2018:

- The Renewable Energy Directive (2001/2018);
- The Energy Efficiency Directive (2002/2018); and
- The Governance Regulation (1998/2018).

The remaining elements came into force on 4 July and have applied from 1 January 2020. These are:

- Regulation of risk preparedness in the electricity sector (2019/941);
- Regulation to establish ACER (2019/942);
- Electricity Regulation (2019/943); and
- The Electricity Directive (2019/944).

Electricity Regulation (2019/943) Article 22(4)<sup>17</sup> sets limits on the funding through capacity mechanisms of plants with high CO<sub>2</sub> emissions limits. It stipulates:

- a) From 4 July 2019 at the latest, generation capacity that started commercial production on or after that date and that emits more than 550g of CO<sub>2</sub> of fossil fuel origin per kWh of electricity shall not be committed or to receive payments or commitments for future payments under a capacity mechanism;
- b) From 1 July 2025 at the latest, generation capacity that started commercial production before 4 July 2019 and that emits more than 550g of CO<sub>2</sub> of fossil fuel origin per kWh of electricity and more than 350kg CO<sub>2</sub> of fossil fuel origin on average per year per installed kWe shall not be committed or receive payments or commitments for future payments under a capacity mechanism.

In SEM-20-034<sup>18</sup> the SEM Committee decided that for the Capacity Year 2024/25 a strict interpretation of the Clean Energy Package should be implemented. The SEM Committee are clear that because of the requirements on existing capacity within of the Clean Energy Package Regulation, which commences on 1 July 2025, shall not be eligible for this

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<sup>17</sup> [REGULATION \(EU\) 2019/ 943 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL - of 5 June 2019 - on the internal market for electricity \(europa.eu\)](#)

<sup>18</sup> See [SEM-20-034 CRM 2024-25 T-4 Capacity Auction Parameters decision paper.pdf \(semcommittee.com\)](#) for details

capacity auction. Capacity wishing to qualify for a capacity auction should provide a value for Specific Emissions as part of their application.

Where specific emissions are greater than 550g of CO<sub>2</sub> per kWh, the application should also provide a value for annual emissions. On 17 December 2019, ACER published an opinion on the calculation of the values of CO<sub>2</sub> emission limits (Opinion 22/2019). Within this opinion, the Agency recommends that the last three full calendar years should be considered when calculating average Annual Emissions.

The SEM Committee remind industry that Modification CMC\_07\_23<sup>19</sup> which seeks to extend the Interim Secondary Trading Arrangements (ISTA) to cover capacity that cannot operate for the whole Capacity Year is currently under consideration. It is important for plants that come under the CEP legislation to note they could still make an important contribution to security of supply.

As the Clean Energy Package becomes live on 1 July 2025, winners of Reliability Options for the Capacity Year 2024/25 can be awarded for the full affected Capacity Year in each case, but the Participant will be able (and expected) to trade out the portion of the Capacity Year for which the awarded cannot be delivered under the CRM.

The Government of Ireland has also published its 2019 Climate Action Plan (CAP). The 2019 CAP set out targets for achieving 70% renewable electricity by 2030, which will involve phasing out coal-fired and peat-fired electricity generation plants.

Alongside this, the new Energy Strategy in Northern Ireland has been published by the Department for the Economy. The Path to Net Zero<sup>20</sup> was published in December 2021, similar to CAP The Path to Net Zero aims to meet at least 70% of electricity consumption from a diverse mix of renewables by 2030.

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<sup>19</sup> See [WP-05: Institutional Arrangements \(semcommittee.com\)](#) for details on this modification.

<sup>20</sup> See [The Path to Net Zero Energy. Safe. Affordable. Clean. \(economy-ni.gov.uk\)](#) for full details

## 6. NEXT STEPS

Responses to the proposals within this consultation should be sent to [CRMSubmissions@uregni.gov.uk](mailto:CRMSubmissions@uregni.gov.uk) and [CRMsubmissions@cru.ie](mailto:CRMsubmissions@cru.ie) by 13 October 2023. We intend to publish all responses unless they have been marked confidential.

A decision on the parameter values will be published in November 2023 and the parameter values included in the Initial Auction Information Pack developed by the System Operators.