



**Single Electricity Market  
(SEM)**

**Capacity Remuneration Mechanism  
2024/25 T-4 Capacity Auction Parameters and  
Compliance with the Clean Energy Package**

**Decision Paper  
SEM-20-034**

**5 June 2020**

## 1. EXECUTIVE SUMMARY

On 5 February 2020, the SEM Committee consulted on the parameters for the 2024/25 T-4 capacity auction. Also included in that consultation were:

- Proposals in relation to the implementation of the Clean Energy Package,
- A proposal to move to Auction Format D for the 2024/25 T-4 capacity auction, and
- A proposal that transmission constraints will continue to be included in the 2024/25 T-4 auction.

16 non-confidential responses were received to the consultation. Having considered these responses, the SEM Committee is making the following decisions:

### *Auction Parameters*

The following parameters will apply for the 2024/25 T-4 capacity auction:

Parameter	Value for 2024/25 T-4 capacity auction
De-Rating Curves, defining De-Rating Factors	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	Horizontal at the Auction Price Cap of 1.5 times Net CONE (Cost of New Entry), 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.
Auction Price Cap	1.5 times Net CONE i.e. €138,450 / de-rated MW / year
Existing Capacity Price Cap	0.5 times 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	€1 = £0.9171 £1 = €1.0904											
Increase Tolerance and Decrease Tolerance by Technology Class	<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>			Technology Class	Increase Tolerance (%)	Decrease Tolerance (%)	All Except DSUs	0	0	DSUs	0	100
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All Except DSUs	0	0										
DSUs	0	100										
Performance Security Posting Dates / Events	<table><tr><th>Date / Event</th><th>Performance Security Rate (€/MW)</th></tr><tr><td>More than 13 months prior to the beginning of the Capacity Year</td><td>10,000</td></tr><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></table>			Date / Event	Performance Security Rate (€/MW)	More than 13 months prior to the beginning of the Capacity Year	10,000	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											

Termination Charges		
	<b>Date / Event</b>	<b>Termination Charge Rate (€/MW)</b>
	More than 13 months prior to the beginning of the Capacity Year	10,000
	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	DSU Theoretical Price
Anticipated values to be applied in determining the Strike Price	Current values to be re-applied.	

### Implementation of the Clean Energy Package

The SEM Committee has decided that a strict interpretation of the Clean Energy Package should be implemented. No capacity that emits more than 550g of CO<sub>2</sub> per of fossil fuel origin per kWh and more than 350kg CO<sub>2</sub> of fossil fuel origin on average per year per installed kWe will be eligible for the 2024/25 T-4 capacity auction.

### *Auction Format D*

The RAs will continue to engage with the System Operators to progress the implementation of Auction Format D in time for the 2024/25 T-4 capacity auction.

### *Treatment of Constraints*

For the 2024/25 capacity auction, the SEM Committee remains open to allowing the 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, after the System Operators have provided the relevant information on Locational Capacity Constraint Areas.

## 2. CONTENTS

1. EXECUTIVE SUMMARY.....	2
Auction Parameters.....	2
Implementation of the Clean Energy Package.....	4
Auction Format D.....	5
Treatment of Constraints.....	5
2. CONTENTS.....	6
3. SUMMARY OF PROPOSALS IN THE CONSULTATION PAPER.....	7
Auction Parameters.....	7
Compliance with the Clean Energy Package.....	7
Auction Format.....	8
Treatment of Constraints.....	8
4. SUMMARY OF RESPONSES.....	9
Auction Parameters.....	9
Compliance with the Clean Energy Package.....	13
Auction Format D.....	17
Treatment of Constraints.....	18
5. SEM COMMITTEE RESPONSE AND DECISION.....	19
Auction Parameters.....	19
Compliance with the Clean Energy Package.....	22
Auction Format D.....	24
Treatment of Constraints.....	24

### 3. SUMMARY OF PROPOSALS IN THE CONSULTATION PAPER

#### *Auction Parameters*

On 5 February 2020, the SEM Committee issued a consultation on parameters for the 2024/25 T-4 capacity auction (SEM-20-006<sup>1</sup>). Within the consultation, the SEM Committee proposed to predominantly retain the parameters from the 2023/24 T-4 capacity auction for the 2024/25 T-4 auction. One exception was the Existing Capacity Price Cap, on which the SEM Committee sought comments on reducing from 0.5 to 0.4 times Net CONE. A full list of proposals can be found in the consultation paper.

#### *Compliance with the Clean Energy Package*

Within the consultation paper, the SEM Committee also made a number of proposals as to how the Capacity Remuneration Mechanism should be adapted to take account of the funding limits through capacity mechanisms for plant with high CO<sub>2</sub> put in place by the Clean Energy Package (EU Regulation 2019/943). Specifically, the consultation asked:

**1. Should the SEM Committee:**

- **Allow high CO<sub>2</sub> emitting plant to continue to participate in the CRM, but be subject to additional derating factors (Option 1); or**
- **Make no change to the CRM, but ensure that any unit with emissions exceeding 550g CO<sub>2</sub>/ kWh comply with CEP annual run-hours limitations. If scarcity occurs, at a point in time where they have already reached their annual emissions limits, the units will still be exposed to Reliability Option Difference Payments for failure to make capacity available (Option 2).**

**2. If the additional de-rating (Option 1) is applied, should it be applied for the 2024/25 capacity year, or held until the 2025/26 capacity year? Alternatively, should the duration of the 2024/25 capacity year be reduced to nine months?**

**3. Should the Long Stop Date be reduced from 18 months to (for example) 12 months or 6 months?**

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<sup>1</sup> <https://www.semcommittee.com/publications/sem-20-006-crm-202425-t-4-capacity-auction-parameters-and-compliance-clean-energy>

### *Auction Format*

For the 2024/25 auction, the SEM Committee proposed to utilise Auction Format D.

### *Treatment of Constraints*

For the 2024/25 capacity auction, the SEM Committee remained open to allowing the 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, after the System Operators have provided the relevant information on LCCA.



## 4. SUMMARY OF RESPONSES

16 Responses were received from:

Aughinish Alumina Limited (Aughinish)  
Belfast Power Limited (BPL)  
Bord Gáis Energy (BGE)  
Bord na Móna (BnM)  
CEWEP (Confederation of European Waste to Energy Plants)  
Demand Response Association of Ireland (DRAI)  
EirGrid & SONI  
Electricity Association of Ireland (EAI)  
Energia  
EP Kilroot Ltd and EP Ballylumford Ltd (EP)  
ESB Generation and Trading  
Fingleton White  
Gas Networks Ireland  
Ibec  
SSE  
Tynagh Energy Limited (TEL)

None of the responses were marked as confidential and are published in full alongside this decision. The most pertinent points in the responses are summarised below.

### *Auction Parameters*

#### **Existing Capacity Price Cap**

The majority of responses on the auction parameters were in relation to the Existing Capacity Price Cap (ECPC), on which the SEM Committee sought comments on reducing from 0.5 to 0.4 times Net CONE. Those respondents that replied on this issue were all of the view that ECPC should not be reduced (some responses called for its increase). Some of the reasons provided were:

- Reducing the ECPC would significantly heighten the perception of regulatory risk in the market, and therefore raise the cost of capital.

- It would be contrary to the principles in Articles 3 and 10 of Clean Energy Package Regulation 2019/943<sup>2</sup>.
- Reducing the ECPC so that the regulators are reviewing more USPC applications undermines what one could reasonably view as a proper functioning market. The USPC process is not a valid substitute for setting the ECPC too low; the USPC process expressly rules out recovery of so-called sunk costs that would neither be denied from or discounted by rational actors in a competitive market.
- The RAs' focus appears to be on the outturn price and bidding strategies, rather than the fact that the majority of capacity in the market is concentrated in the hands of one market participant; the RAs' price outcome concern will perpetuate so long as such a concentrated capacity market share exists, as competitive pressures will be limited in the auction.
- It appears that the role of USPC has changed from one designed to manage market power of plants behind known constraints, to one to put downward pressure on market outcomes.
- Only one of the five auctions to date has been a T-4. It is unreasonable to judge the performance or modify parameters based on the outcomes of T-1 and T-2 auctions.
- ESB also highlight that the CMC does not allow for any appeal of the USPC. Market participants are therefore left exposed to applying for a USPC for the wrong plant. The outcome could therefore be to have all submissions as USPC candidates as the lack of transparency and governance (which is not codified in the CMC) creates uncertainty as to which units the RAs view as requiring a USPC.

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<sup>2</sup> Article 3 covers principles regarding the operation of electricity markets and requires that market rules encourage free price formation and shall avoid actions which prevent price formation on the basis of demand and supply. Article 10 covers Technical bidding limits and requires, inter alia, regulatory authorities to identify measures that could contribute to restricting wholesale price formation, including capacity mechanisms.

- The option to reduce the ECPC from 0.5 x Net CONE to 0.4 x Net CONE is potentially putting market participants in a perverse situation where they could have implemented a strategy for recovering investment costs through their offers in the first four transitional auctions but are now going to be potentially prevented from recovering those costs in the third and fourth transitional auctions because of the requirement to enter the exemption process which would treat the investment as a sunk cost and prevents it from being included in the calculation of NGFC.

It was also raised by a number of participants that the current BNE, an OCGT, firing on distillate fuel, located in Northern Ireland, is not compliant with Article 22(4)(a) of the Electricity Regulation 2019/943.

### **De-Rating Curves and De-Rating Factors**

BGE has requested before and maintains that increased transparency around the methodology for calculating derating factors would be beneficial.

EirGrid and SONI are of the opinion that it is necessary to re-examine the derating factors and categories used for Demand Side Units for the T-4 24/25 auction and will continue to proactively engage with the SEM Committee regarding the derating factors and categories used for Demand Side Units for the T-4 2024/25 auction.

### **Capacity Requirement**

TEL believe there is a direction of travel towards under procuring capacity. The capacity requirement for the 2022/23 T-4 auction was 7,524MW, but the peak demand in the Generation Capacity Statement is close to 8,000MW under the median demand analysis.

### **Indicative Demand Curve**

Energia discourage withholding capacity procured in the T-4 auction for the corresponding T-1 auction, particularly in constrained areas. This will artificially lower T-4 auction prices and discourage new entry by reliable generation, in favour of less reliable DSU capacity. Energia calls for greater transparency and consultation in a number of areas, including the level of reserves to be included, and the specific volumes proposed

to be withheld for demand uncertainty and DSU participation within the demand curve and each of the LCCAs in the T-4 auction for CY2024/25.

ESB GT stated that it is unclear from the Consultation Paper if the intention is to retain the adjustments to the Demand Curve from the previous T-4 auctions, and asked for greater clarity to be provided.

### **New Capacity Investment Rate Threshold**

BGE is concerned about the functioning of the NCIRT and particularly the type of capacity that it is incentivising. In the sole T-4 auction held to-date, the incumbent secured a number of multi-year contracts for new capacity. Although BGE do not believe that the NCIRT is itself driving the issue at present it is not providing for optimum new investment in our future capacity generation.

### **Increase Tolerance and Decrease Tolerance by Technology Class**

BGE fails to see what benefit consumers can gain from allowing capacity generators to decrease their capacity factor, with the exception of DSUs. Doing so will only dampen the exit signals that inefficient and unreliable units receive and by corollary undermine the entry signals for the types of capacity needed for the low carbon transition. With regard to capacity units increasing their tolerance, BGE is not opposed to this in principle – if generators are willing to invest more to increase their efficiency, they should be allowed to increase their capacity revenues. The de-rating factors used provide a minimum efficiency requirement but incentivizing generators to improve efficiency is a cost-efficient way of increasing available capacity.

Energia would also welcome the introduction of flexibility into the tolerance bands for Gas Turbines. There is “legitimate technical variation” to justify a meaningful (positive) tolerance band for gas turbines in particular.

### **Performance Security Posting Dates / Events**

While no change is proposed to the Performance Security Rates, the DRAI is of the view that these are excessively high in the context of existing sites (proven and tested)

demand response sites moving from one AGU/DSU provider to another. The cumulative effect of performance securities across multiple auction years alongside the high rates applied is providing a bias towards larger market players. The DRAI would like to recommend that the applicability of Performance Securities to multiple auctions and to proven demand side capacity that is moving provider is reviewed by the SEM Committee.

### **Termination Charges**

EirGrid and SONI note that New Capacity is required to pay a Termination Fee if it fails to deliver capacity yet no such charge exists for Existing Capacity. EirGrid and SONI are considering bringing forward a modification to the Capacity Market Code for termination fees to apply to Existing Capacity if it fails to meet specific capacity requirements.

### **Anticipated values to be applied in determining the Strike Price**

EirGrid and SONI note that difference payments remain low despite the poor availability being demonstrated by some units. The TSOs therefore believe there is merit in the SEM Committee reviewing the relationship between strike prices, difference charges and capacity availability.

## *Compliance with the Clean Energy Package*

### **General Comments**

#### **Interaction with CHP**

The EAI, Aughinish, GNI, Fingleton & White and Ibec consider Article 22(4) is not sufficiently detailed to identify a specific methodology for the calculation of CO<sub>2</sub> emissions for electricity from CHP. A strict interpretation and application of the ACER guidance could be detrimental to such facilities. The Effective Electrical Efficiency must be used.

## **Eligibility of Each Option**

BNM and CEWEP believe that both options are unlikely to comply with either the letter or spirit of Regulation 2019/943. It is CEWEP's understanding that Regulation 2019/943 and ACER guidance are clear:

- a) that such generators should not be allowed to participate in the capacity market at all; and
- b) that it should be monitored whether these limits were breached after the fact.

CEWEP state that it is unclear for both options whether the generator is physically run-hour limited in actual operation once the Capacity Market run-hour limitations are reached.

Energia consider that the fact that this is an emissions limit rather than a run-hour limit makes Option 2 incompatible with regulation 2019/943. Option 1 can be compatible so long as plants which exceed the emissions limits cease to be eligible for capacity payments.

## **On the question of Option 1 vs Option 2**

Option 1 is preferred by: Belfast Power Limited, Bord Gáis Energy, Bord na Móna, Energia, EP, SSE and Tynagh. Some of the comments received include:

- If the SEMC were to select Option 2 and allow high emission plant to compete with no change to the existing process, this is effectively ignoring legislative changes that serve to send exit signals to the market.
- High-emission inefficient generators that are not central to security of supply need to receive a strong signal to exit the market.
- BNM: the application would strictly need to ensure that there is no additional de-rating of plants which are in compliance with Article 22(b) i.e. plants which emit more than 550g CO<sub>2</sub> per kWh, but which comply with the 350kg CO<sub>2</sub> of fossil fuel origin.
- Under option 2, if run-hour limited units are allowed to enter the auction with no further de-rating applied, but exposed to difference payments beyond their run-hour limitations, then the customer is paying for the reliability that may not be able to reliably respond during a scarcity event.

- Energia: Under Option 1, the limitations of the plant in terms of its effective contribution to capacity are recognised up-front. Setting appropriate derating factors makes management of the run hours by the TSOs in dispatch more acceptable and will also maximise the contribution of the plant to overall capacity requirements and will reduce the risk of the “cliff-edge” (as illustrated by the diagram in the consultation) being reached.
- Energia: If the derating is left “voluntary” (i.e. Option 2), there is a significant risk that the plants would not de-rate on the expectation (or hope) that:
  1. Scarcity events might rarely occur;
  2. They can reduce their run hours by inflating balancing market offer prices (if permitted);
  3. The TSO will husband run hours so they never reach the run-hour limits;
  4. They can back off risk through secondary trading with other plant;
  5. Potential loss is limited by "stop loss" limits.
- SSE: Option 2 could provide an unwitting exit signal at a time when capacity shortfalls are expected and need to be mitigated against. Option 2 will also emphasise an already over-reliance on a large volume of run-hours limited plant. Option 1 provides a simpler signal whilst potentially facilitating additional headroom for New Capacity and allowing CO<sub>2</sub> emitting units to still participate in the CRM.
- TEL: under Option 2 a unit may reach its annual run-hours limitations due to TSO dispatch decisions and therefore it is unfair that they should be exposed to Reliability Option Difference Payments for failure to make capacity available in times of scarcity. This may send exit signals to the plant in question. Therefore, Option 1 is the only feasible option outlined in this consultation.

Option 2 is preferred by DRAI and ESB. Some of the comments include:

- DRAI state that Option 2 entails minimal intervention in the current competitive market design, while delivering full CEP compliance, and sending an appropriate market exit signal to the highest CO<sub>2</sub> emitting plant. It is DRAI's understanding that an entire AGU or DSU would not be obliged to declare to zero should only one constituent site in the aggregated entity reaches the threshold limits.
- ESB: Option 1 appears to have a number of material impacts that would render the option undesirable. Additional de-rating would appear to

1. increase the cost of the generating unit in the auction and subsequent increase to the consumer,
2. potentially increase the number of USPC applications,
3. potentially increase the likelihood of further DMILC/LRSA type contracts and the associated market distortion effects,
4. increase the number of units to provide the same MW capacity, and
5. increase complexity on defining a methodology for the additional de-rating factor.

CEWEP suggest a third option whereby the mandatory participation element is removed from the CRM. The generator would have to explain and justify to the Regulator that such a choice was being made on the basis of risk of non-compliance with the emissions limits. More detail on CEWEP's proposal is contained in their response.

**If the additional de-rating is applied, should it be applied for the 2024/25 capacity year, or held until the 2025/26 capacity year? Alternatively, should the duration of the 2024/25 capacity year be reduced to nine months?**

BPL and BGE believe that any changes should be implemented for the 2024/25 year.

BnM, DRAI and TEL prefer any prospective changes should be held until the 2025/26 capacity year. BnM do not see any advantage in over-complicating provisions unnecessarily. If it is decided to apply additional de-rating based on CO<sub>2</sub> emissions, it is DRAI's proposal that this be deferred for implementation until 2025/26.

Energia are in favour of reducing the 2024/25 capacity year to nine months, and applying Option 1 from 1 July 2025. This would allow the focus on maximising the lead time of the 2025/26 auction.

SONI and Eirgrid are concerned by the possibility of reducing the 2024/25 capacity year to 9 months; such a change would be problematic from a systems perspective and would require major changes to the Capacity Market Platform at substantial cost.

ESB do not want to see the 2024/25 year reduced to nine months. Before doing so, consideration must be given to how USPCs will be assessed, implications for new build



deadlines, changes to the ECPC (due to no summer months running) and efficient entry and exit (it is harder to enter the market in a nine month capacity year). SSE are also in favour of keeping the 2024/25 capacity year at 12 months, and that no delay to Option 1 is required.

### **Reducing the Long Stop Date**

BPL, BGE, BnM, DRAI, EAI, Energia, ESB GT and SSE believe that no change to the Long Stop date is required. There is no new rationale for changing it. If a new build is granted an RO they already have an incentive to deliver. Decreasing the longstop date will not mean that delays do not occur, but will only increase the punishment for it. Bringing the long stop date closer does not guarantee the delivery of capacity. Instead, it will increase the deficit for the capacity year and next capacity year as it will be too late to procure the replacement capacity. If there is a fear that participants will not deliver on time, then a consultation on the termination fees / non delivery payments needs to be held.

Energia are against the reduction in the long stop date for the following reasons.

1. The dual fuel requirement for generation in Ireland requires additional equipment and therefore commissioning time,
2. Commissioning onto the grid in Ireland is much more difficult than in GB,
3. Risks related to longer leads times because of corona virus.

Rather than reducing the long stop date, other measures such as setting appropriate de-rating factors or reducing the amount of capacity withheld from T-4 auctions, should be adopted.

EP and TEL are in favour of reducing the long stop date to 12 months.

### ***Auction Format D***

There was little support for Auction D in the consultation responses, with the nine months in which to implement it given as an opposing factor. Eirgrid and SONI

responded that they are progressing with the implementation of Auction Format D and will continue to actively engage with the RAs on the delivery timeline for its introduction.

### *Treatment of Constraints*

Within the consultation, the SEM Committee stated that they remained open to allowing the auction to solve using multi-year capacity.

There was mixed support for this within the responses, with BGE and SSE in favour of allowing New Capacity within a Locational Capacity Constraint Area to be eligible for multi-year contracts.

While Energia supports the proposal to include transmission constraints within the auction, they were opposed to allowing New Capacity seeking a multi-year contract to compete with existing capacity for a pay-as-bid RO. This would be inefficient given the emphasis placed elsewhere on resolving grid restrictions.

Eirgrid and SONI believe an additional Rest of Ireland LCCA is an important and practical measure to mitigate future system risks.

## 5. SEM COMMITTEE RESPONSE AND DECISION

### *Auction Parameters*

#### **Existing Capacity Price Cap**

The SEM Committee notes the opposition to reducing the Existing Capacity Price Cap from 0.5 to 0.4 times Net CONE.

In response to some of the specific comments received:

- BGE: The RAs' focus appears to be on the outturn price and bidding strategies, rather than the fact that the majority of capacity in the market is concentrated in the hands of one market participant; the RAs' price outcome concern will perpetuate so long as such a concentrated capacity market share exists, as competitive pressures will be limited in the auction.

#### *SEM Committee Response*

The consultation asked for comments on reducing the Existing Capacity Price Cap; there was no proposal to amend the price at which new capacity can offer into the auction. Any New Capacity will introduce competition into future auctions.

- ESB highlight that the CMC does not allow for any appeal of the USPC. Market participants are therefore left exposed to applying for a USPC for the wrong plant. The outcome could therefore be to have all submissions as USPC candidates as the lack of transparency and governance (which is not codified in the CMC) creates uncertainty as to which units the RAs view as requiring a USPC.

#### *SEM Committee response*

USPC applications should only be made where a Participant has calculated that the Net Going Forward Cost of a unit is higher than the Existing Capacity Price Cap.

### ***ECPC – SEM Committee Decision***

Having considered the evidence from the auctions, and responses made to this consultation, the SEM Committee is not making any change to this auction parameter at this time. The ECPC will therefore be retained at 0.5 times Net CONE for this auction, but will continue to be kept under review.

In relation to the determination of Net CONE and therefore ECPC (and Auction Price Cap), the Best New Entrant determination that was first used in setting the price caps for the 2022/23 T-4 capacity was a theoretical exercise used to inform bidding limits in the auction. The SEM Committee considers that these bid limits are at an appropriate level for this auction and do not consider that any further amendment are necessary at this stage.

### **De-Rating Curves and De-Rating Factors**

The SEM Committee welcomes Eirgrid and SONI's opinion that it is necessary to re-examine the derating factors and categories used for Demand Side Units for the T-4 24/25 auction, and the RAs look forward to active engagement with Eirgrid and SONI on this issue.

### **Capacity Requirement**

The SEM Committee notes TEL's opinion that there is a direction of travel towards under procuring capacity.

The Capacity Requirement for any Capacity Year is calculated by the System Operators using the methodology described in SEM-16-082a (Methodology for Calculation of the Capacity Requirement and De-rating Factors). As described, that methodology builds in the generation adequacy methodology that is employed by the System Operators to produce the annual Generation Capacity Statements. The detailed methodology used to produce the Generation Capacity Statement can be found therein.

## **Indicative Demand Curve**

ESB asked for clarity to be provided as to whether the adjustments made to the Demand Curve from previous T-4 auctions will be retained for the 2024/25 T-4 auction.

### *SEM Committee Response*

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;
- (a) an allowance for changes in forecast capacity requirements;
- (b) an allowance for capacity to be procured in later auctions for the Capacity Year; and
- (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.

It is likely that the adjusted volume for each Capacity Auction will be different.

In response to the calls from Energia for greater transparency on the level of reserves to be included, and the specific volumes proposed to be withheld for demand uncertainty and DSU participation within the demand curve, the SEM Committee intends to continue to publish an Information Note on Auction Volumes following each T-4 auction.

## **Increase Tolerance and Decrease Tolerance by Technology Class**

BGE and Energia called for an Increase Tolerance to be permitted in the capacity auction.

### *SEM Committee response*

Tolerance bands were introduced in the Capacity Market to allow some flexibility in the level of participation required from dispatchable plant in an auction. However, apart from allowing a Decrease Tolerance for DSUs, these were set at zero for I-SEM go-live. If tolerance bands are introduced, there may be an incentive for all capacity to offer into the capacity auction making use of the positive tolerance band independent of its reliability. This skewed offering of capacity undermines the basis of the Capacity Requirement and would weaken the

security standard and the hedge provided to consumers. The RAs will however examine options around tolerance settings further ahead of the next auction exercise.

### **Termination Charges**

The SEM Committee notes Eirgrid and SONI's consideration for bringing forward a modification to the Capacity Market Code for termination fees to apply to Existing Capacity if it fails to meet specific capacity requirements.

### **Anticipated values to be applied in determining the Strike Price**

The SEM Committee notes the System Operators' belief that there is merit in reviewing the relationship between strike prices, difference charges and capacity availability. This is something which may be reviewed for a future capacity auction with a specific proposal consulted upon in advance.

There were limited responses to the remainder of the auction parameters, although the SEM Committee notes BGE's support for retaining the existing values.

### ***SEM Committee Decision***

The SEM Committee is retaining the remainder of the parameters at the same value as the 2023/24 T-4 capacity auction.

### ***Compliance with the Clean Energy Package***

A number of comments were raised concerning the methodology for the calculation of CO<sub>2</sub> emissions for electricity from CHP.

### ***SEM Committee Response***

The RAs published draft technical guidance on the determination of CO<sub>2</sub> emissions as an Appendix to CMC Modification Consultation CMC\_05\_20 on amendments relating to the Clean Energy Package. Within the technical guidance, the RAs stated that for CO<sub>2</sub> capacity, emissions will be determined on the basis of the relevant ISO standard, if such

a standard exists, or otherwise on the same basis as is (or would be) applied under the EU Energy Trading Scheme.

Taking account of some of the concerns raised against the technical guidance, the RAs decided not to include this with the decision on the Modifications. The RAs have continued to progress work on the technical guidance, and it will be published shortly.

### **Option 1 vs. Option 2, and timing of the implementation**

Given the range of responses on these issues, the SEM Committee has decided to combine its response to these issues.

Based upon the responses to the consultation, the SEM Committee have decided to impose a strict interpretation of the Clean Energy Package for the start of the 2024/25 capacity year, which will not be altered in duration.

Because of the requirements on existing capacity within Article 22(4) of the Clean Energy Package Regulation, which commence on 1 July 2025, generation capacity 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 kW<sub>e</sub> shall not be eligible for this 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.

### **Long Stop Date**

The consultation suggested it may be necessary to reduce the Long Stop Date. Based on the responses received, and the fact that there is no change to the duration of the capacity year the SEM Committee is not making any changes to the Long Stop Date at this time.

### *Auction Format D*

The SEM Committee notes the opposition to Auction Format D. However, this is the intended enduring solution as described the Capacity Market design decisions.

Analysis carried out by the RAs on the four most recent capacity auctions, including the two T-4 auctions, indicates that social welfare would be improved in all of these auctions in some cases quite significantly, if Auction Format D had been utilised.

The RAs will continue to engage with the System Operators regarding the implementation of Auction Format D for the 2024/25 T-4 auction.

### *Treatment of Constraints*

The SEM Committee notes the comments received on the treatment of constraints within the 2024/25 T-4 capacity auction.

The SEM Committee will make a decision on allowing the auction to solve 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.