

**Capacity Remuneration Mechanism 2024/25 T-4
Capacity Auction Parameters and Compliance with
the Clean Energy Package
SEM-20-006**

EirGrid and SONI Response

20 March 2020



1 Executive Summary

EirGrid and SONI welcome the SEM Committee's consultation on the SEM 2024/25 T-4 Capacity Auction Parameters (SEM-20-006)¹. These parameters are an important component of the overall Capacity Market design.

In our response, we outline 4 key areas which we believe are important to address directly in the consultation:

- **The De-Rating Curves, defining De-Rating Factors by Technology Class:** 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.
- **The Existing Capacity Price Cap (ECPC):** EirGrid and SONI support keeping the ECPC at the current 0.5 times Net CONE (€46,150 / de-rated MW / year). The proposal to lower it could have unintended consequences and in the absence of evidence, we do not support this at this time.
- **Treatment of Constraints:** New capacity will be required to replace the existing generators that are due to close in the coming years. The potential location of certain plant is necessary to maintain security of supply standards. EirGrid and SONI believe an additional Rest of Ireland LCCA is therefore an important and practical measure to mitigate future system risks.
- **Clean Energy Package:** In the consultation paper, there are two options provided as to how to deal with generators with regard the Clean Energy Package. In our response, EirGrid and SONI believe that these options need to be investigated further in order to fully understand the impact of each.

There are also some related considerations that we wish to bring to the attention of the SEM Committee to support the efficient and effective running of the capacity market:

- **Termination Charges:** 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.
- **Strike Price:** The SEM Committee proposes to retain the current Strike Price values for the 2024/25 capacity year. EirGrid and SONI note that difference payments remain low despite the poor availability being demonstrated by some units. The

¹ <https://www.semcommittee.com/sites/semc/files/media-files/2024-25%20T-4%20Parameters%20Consultation.pdf>

TSOs therefore believe there is merit in the SEM Committee reviewing the relationship between strike prices, difference charges and capacity availability.

- **Auction Format:** EirGrid and SONI are progressing with the implementation of Auction Format D and will continue to actively engage with the Regulatory Authorities on the delivery timeline for its introduction.

These areas are discussed in greater detail below.

2 Introduction

2.1 EirGrid and SONI

EirGrid holds licences as independent electricity Transmission System Operator (TSO) and Market Operator (MO) in the wholesale trading system in Ireland, and is the owner of the System Operator Northern Ireland (SONI Ltd), the licensed TSO and MO in Northern Ireland. The Single Electricity Market Operator (SEMO) is part of the EirGrid Group, and operates the Single Electricity Market on the island of Ireland.

Both EirGrid, and its subsidiary SONI, have been certified by the European Commission as independent TSOs, and are licenced as the transmission system and market operators, for Ireland and Northern Ireland respectively. EirGrid also owns and operates the East West Interconnector, while SONI acts as Interconnector Administrator for both of the interconnectors that connect the island of Ireland and GB.

EirGrid and SONI, both as TSOs and MOs, are committed to delivering high quality services to all customers, including generators, suppliers and consumers across the high voltage electricity system and via the efficient operation of the wholesale power market. EirGrid and SONI therefore have a keen interest in ensuring that the market design is workable, will facilitate security of supply and compliance with the duties mandated to us and will provide the optimum outcome for customers.

EirGrid and SONI have duties under licence to advise the CRU and UR respectively on matters relating to the current and expected future reliability of the electricity supply. We have also been allocated responsibility for administering the Capacity Market Code through our TSO licences. This response is on behalf of EirGrid and SONI in their roles as TSOs and MO for Ireland and Northern Ireland, including as operators of the Capacity Market.

3 EirGrid and SONI views on the Consultation Topics

In the following section, EirGrid and SONI provide their comments on the topics discussed in the consultation paper and put forward its views on the consultation paper proposals and questions.

3.1.1 *The De-Rating Curves, defining De-Rating Factors by Technology Class (including for Interconnectors)*

EirGrid and SONI notes that the Regulatory Authorities intend to follow the methodology for the Calculation of Capacity Requirement and De-rating factors used in the 2019/20 T-1 Capacity Auction². However, we are of the opinion that it is necessary to re-examine the derating factors and categories used for Demand Side Units (DSUs) for the T-4 2024/25 auction.

Demand Side Units are an important part of the capacity market and can make an important contribution to the stability of the system, however we believe that the modelling methodology in this category needs to be updated to reflect the latest performance information.

EirGrid and SONI are exploring the possibility of using availability data to calculate outage rates for DSUs. In the existing Methodology for the Calculation of the Capacity Requirement and De-rating Factors³, it is specifically noted that DSUs will use system-wide outage statistics for the initial auctions but will *“eventually form their own categories once their availability data is deemed to be representative of their operation in the SEM under the I-SEM design”*. EirGrid believes it now has sufficient representative data to determine outage rates for DSUs. The methodology notes that increasing the amount of storage or run-hour limited plant on the system will decrease the de-rating factors for all run-hour limited units.

Currently there are two categories of DSUs:

- DSUs with Maximum Down Time > 6 hours
- DSUs with Maximum Down Time ≤ 6 hours

Both categories currently use system wide de-rating factors in the Final Auction Information Pack (FAIP). DSUs with Maximum Down Time ≤ 6 hours are given de-rating factors based

² SEM-18-030a: <https://www.semcommittee.com/news-centre/i-sem-crm-t-1-cy201920-capacity-auction-parameters-and-enduring-de-rating-methodology>

³ [https://www.semcommittee.com/sites/semc/files/media-files/SEM-18-030a Appendix A TSO Capacity Requirement and De-rating Factors Methodology June 2018.pdf](https://www.semcommittee.com/sites/semc/files/media-files/SEM-18-030a%20Appendix%20A%20TSO%20Capacity%20Requirement%20and%20De-rating%20Factors%20Methodology%20June%202018.pdf)

on their initial capacity and hours of downtime/storage. This table is currently bundled with “other storage”.

EirGrid and SONI are proposing that for T-4 2024/25, these categories would have separate availability statistics based on their availability data. DSUs with Maximum Down Time ≤ 6 hours would have a separate de-rating table, distinct from “other storage”.

DSUs with Maximum Down Time > 6 hours would be modelled as conventional plant – essentially assumed to always be available in a generation portfolio, but using outage rates based on availability data, instead of the system-wide forced outage rate. DSUs with Maximum Down Time ≤ 6 hours would be modelled in a similar manner to pumped storage, except without the pumping phase.

EirGrid and SONI 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.

3.1.2 The Existing Capacity Price Cap

EirGrid and SONI acknowledge the proposal to continue to set the ECPC at 0.5 times Net CONE (€46,150 / de-rated MW / year). We note, however, that the SEM Committee are considering dropping it to 0.4 times NET CONE based on previous auction results. EirGrid and SONI accept the need for tension to apply in the successful running of a capacity auction but must also balance that with the need to secure sufficient reliable and deliverable capacity for a given capacity year. The TSOs would therefore be keen to understand any available evidence that the ECPC is set inappropriately high and could be lowered without inadvertently leading to undesirable consequences.

3.1.3 Compliance with the Clean Energy Package

As noted in the consultation paper, to give effect to the Clean Energy Package emissions limits, the enduring arrangements for future capacity auctions will require changes to the Capacity Market Code (CMC). EirGrid and SONI note the proposed options provided in the consultation paper.

In principle, EirGrid and SONI believe that there are merits to adopting option 1 as presented in the consultation paper in the medium to long term. However, provisional analyses which we have undertaken indicate that the extent of additional de-rating required for many units to reflect the CEP emissions limits could be very substantial.

Similarly, under option 2, EirGrid and SONI anticipate that these changes may have a significant effect on the number of annual hours for which high emitting units are dispatched in a given year. Given this situation and the potentially substantial impact of either option on the Transmission System and Market Participants, EirGrid and SONI believe that these options need to be investigated further in order to fully understand the impact of each. EirGrid and SONI intend to engage with the Regulatory Authorities further on this matter in order to ensure that the emissions requirements specified by EU Regulation 2019/943, Article 22(4) are implemented in a managed way as required.

Additionally, EirGrid and SONI note that the Regulatory Authorities have separately submitted a Capacity Market Code modification proposal to incorporate the provisions of the provisions of EU Regulation 2019/943, Article 22(4) into the Capacity Market Code. We note that this modification proposes, in addition to options 1 and 2 detailed in the consultation paper, that EirGrid and SONI assess compliance with emissions limits under EU Regulation 2019/943, Article 22(4) as part of both the Qualification and Substantial Completion processes for each Capacity Auction. EirGrid and SONI intend to engage with all stakeholders with regard to this modification through the CMC modifications process.

Finally, the consultation paper cites the possibility of reducing the 2024/25 Capacity Year to 9 months (to end June 30th 2025). EirGrid and SONI would be concerned that such a change would be problematic from a systems perspective and would require major changes to the existing Capacity Market Platform at substantial cost. This would also have implications for downstream market systems (e.g. the CSB Settlement system) which may also require substantial Change Requests to accommodate a curtailed Capacity Year. On balance, EirGrid and SONI feel that other means exist (as discussed above) to implement the provisions of the EU Regulation 2019/943, Article 22(4) such that this change is not in any case required.

3.1.4 Treatment of Constraints

EirGrid and SONI welcome the SEM Committee's consultation on the treatment of constraints for CRM 2024/25 T-4. Significant constraints on the transmission network exist and we believe it is important that they are adequately reflected in the 2024/25 auction in order to mitigate potential future locational security of supply risks. We are facing into a period of uncertainty and transition with regard the generation fleet throughout Ireland. Conventional plant closures will mean more new capacity is required which could likely

connect in advance of associated network reinforcements. With this in mind, it is important that new capacity is located in the most optimal and effective locations in order to ensure security of supply on an all-island basis and also at a local level.

We wish to reemphasise what we stated in our response to SEM-19-048⁴ in September 2019, namely, that the introduction of an additional Level 2 Rest of Ireland LCCA is appropriate and necessary to ensure that capacity limits are adhered to especially for the case where there is a significant increase in qualifying generation within the Level 2 Dublin LCCA. The application of the methodology proposed in our response to SEM-19-048 is capable of placing a cap on the amount of generation that can locate in the Level 2 Dublin LCCA and ensures that capacity limits are adhered to. Of course, as the system evolves with existing generation exiting the market and new projects coming forward the TSOs may need to advise the Regulatory Authorities of other constraint areas to mitigate the risk to system security. We are keeping this under review and will revert as necessary.

3.2 Related Considerations

3.2.1 The €/MW fee rates for calculating Termination Charges

The SEM Committee proposes to keep the Termination charges at the same rate for the 2024/25 T-4 as previous auctions. We note however, that these only apply for new and not existing capacity.

The CRM detailed design decision paper SEM-16-022⁵ noted that it is important that New Capacity is required to pay a Termination Fee if it fails to deliver capacity. This is a prudent and important safeguard against speculative entrants. We note however that no such charge exists for Existing Capacity which fails to deliver capacity. We are currently considering a modification to the Capacity Market Code for termination charges to apply to existing capacity that is failing to meet specific capacity requirements. We believe that there is some merit in examining this step to ensure the CRM only rewards performing participants and safeguards the system from a shortage of capacity. We will seek to engage further with the SEM Committee regarding this matter in the coming months.

⁴ <https://www.semcommittee.com/sites/semc/files/media-files/SEM-19-048%20T-4%20CY202324%20LCCA%20Consultation%20Paper.pdf>

⁵ <https://www.semcommittee.com/publication/sem-16-022-i-sem-crm-detailed-design-decision-paper-2>

3.2.2 Anticipated values for the parameters to be applied in determining the Strike Price.

EirGrid and SONI note the SEM Committee's intention to retain all previous values used in determining the Strike Price for the 2024/25 T-4 auction. The TSOs have no comment on the specific strike price used however we do believe it necessary to highlight the limited payment of difference charges to date for the non-delivery of capacity. There have however been a number of occasions where the availability of capacity has been poor. We therefore believe there is merit for the SEM Committee to review and reflect on the relationship between the Strike Prices, Difference Charges and availability statistics.

3.2.3 Auction Format

EirGrid and SONI are progressing with the implementation of Auction Format D. It should be noted however that Auction Format D is a complex implementation that requires expert resources in the System Operators, Regulatory Authorities, Capacity Market Platform vendors and in the certification of the Capacity Auction algorithm. Discussions are currently at a relatively early stage with the Capacity Market Platform vendors and specific timelines for implementation have yet to be agreed. EirGrid and SONI will continue to actively engage with the Regulatory Authorities on the delivery timeline for implementing Auction Format D.