

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

CEWEP Ireland welcomes the opportunity to respond to the consultation on the 2024/25 T-4 Capacity Auction Parameters.

CEWEP is the umbrella association of the owners / operators of waste-to-energy (WtE) facilities, representing approximately 500 plants across Europe. Our members represent nearly 90% of European WtE capacity.

CEWEP Ireland is the Irish branch of CEWEP Europe and has two members: Indaver, which operates the Meath Waste-to-Energy Facility and is proposing to develop similar facilities in Belfast and Cork; and Covanta, which operates the Dublin Waste-to-Energy Facility.

Over the next few years it is anticipated that members will have a total treatment capacity of over 1,100,000 tonnes per annum residual waste and export more than 90MW electricity and/or heat.

WtE facilities are part-renewable, fully dispatchable plants and treat waste that cannot be prevented, reused or recycled. CEWEP welcomes the SEM Committee's timely consultation on the implementation of the Clean Energy Package's emission limit requirements for participation in the CRM. CEWEP is concerned, however, that the focus of the consultation is too narrow, dealing with the run-hour limitations of generators (reflected in the 350kg/MW/annum) which are likely to be clearly over the 550gCO₂/kWh limit. There is, however, other associated issues with the Clean Energy Package, namely generators with fuels such as Waste to Energy which cannot 100% guarantee that they will remain below the 550gCO₂/kWh limit. This is because operators of WtE plants do not have full control on the characteristics of the input and therefore have no leeway to control or reject fossil-based residual waste input.

Furthermore, the consultation paper does not provide much detail compliance monitoring and potential sanctions.

CO₂ emissions limits

In the consultations, it is unclear for both proposed Options whether the generator is physically run-hour limited in actual operation once the Capacity Market participation run-hour limitations are reached. It is also unclear when the run-hour limitation is reached, whether the limitation is effected by either a) the generator declaring itself unavailable and

therefore being unable to participate in the energy and DS3 markets, or b) continuing to declare itself technically available but the TSO dispatches it to zero in all circumstances (which could potentially result in it earning revenues in the energy markets and DS3 system services, depending on the design of the settlement processes in both cases).

Option 1:

It is CEWEP's understanding that under Option 1 the generator declares its availability as normal throughout the year, irrespective of the CRM annual emissions limitations (effectively "revenue capping" capacity revenues through increased de-rating), and under Option 2 the generator self-declares itself unavailable once the annual emission limitation is reached ("operational capping"). Our response to the two options is made on that basis.

Option 1 proposes that a generator's eligible capacity is further de-rated based on reduced contribution to security of supply arising from reduced running hours (given the annual 350kg/MW/annum emission limit) if the generator is also over the 550gCO₂/kWh limit. Outside of the wider implementation issues identified in the paper (calculation of the new plant-specific de-rating factors in time for the auction) and other potential compliance/sanction matters which do not get a mention (what happens if a generator unexpectedly exceeds the 550gCO₂/kWh limit, but was not de-rated), there is a fundamental question whether this Option is compliant with the Clean Energy Package.

CEWEP's understanding of the Clean Energy Package Regulation is not that capacity payments must be capped to only that which a compliant generator could earn, which appears to be the intent of Option 1. Option 1 allows a generator which has breached the combined 550gCO₂/kWh and 350kg/MW/annum limit to still effectively earn capacity market revenues. It is our understanding that EU Regulation 2019/943 and ACER guidance are clear that such generators should

- a) 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 is therefore not in favour of Option 1 or the concept of "revenue capping" as we are concerned it is not compliant with the Regulation. If Option 1 also requires self-declaration of non-availability when the run-hour limitations are reached ("availability capping"), CEWEP is not in favour of the option for the same reason as given below for Option 2.

Option 2:

Option 2 comes closer to the intent of the Clean Energy Package for monitoring running hour limitations. As CEWEP understands Option 2, a generator which breaches the run-hour limitations over the course of a capacity year would have to stop all electrical generation and therefore earn no energy payments (and be exposed to Difference Payments) and also no longer earn DS3 payments ("availability capping").

For CEWEP members (if they were to breach the 550gCO₂/kWh limit), in the short term, shutting down electrical generation would not stop the processing of waste. Ironically, fuel would continue to be burnt increasing the CO₂ intensity of the energy produced even

further (as measured on average over the capacity year). Furthermore, material extended periods of zero electricity generation will inhibit the ability of some plant to contemporaneously continue to treat waste due to plant-specific technical operational issues arising. Such a mode of operation is fundamentally contrary to the design of some plant.

Secondly, we believe that any “availability capping” can lead to sudden, surprising short-term tightness in capacity margin. It is therefore unacceptable from a security of supply perspective.

CEWEP understands there is another interpretation of Option 2, whereby the generator would be somehow exposed to Capacity Difference Payments once the run-hour limitations were reached. The generator, however, would still be technically available for energy dispatch and DS3 system services for the remainder of the capacity year. How a generator would be exposed to Reliability Option obligations any differently than normal is not clear if energy market participation continues. CEWEP also does not support this version of Option 2 for the same reasons given for Option 1 (a generator which receives 550gCO₂/MWh and 350kg/MW/annum could still earn a Capacity Payment).

A third Option?

In conclusion, “revenue capping” concepts are not compliant with the Clean Energy Package, and “availability capping” concepts potentially lead to unacceptable security of supply issues potentially perverse outcomes for CEWEP members.

It is CEWEP’s contention that that appropriate implementation of the Clean Energy Package requires an ex-ante “participation eligibility test”, followed by monitoring.

While there is a degree of certainty that our members will continue to generate below the 550gCO₂/kWh limit, it cannot be guaranteed due to variability of the waste source. Should a CEWEP member exceed the 550gCO₂/kWh over a period of time (three years is suggested in the ACER guidance, which is supported by CEWEP members), CEWEP members will be effectively prohibited from participation in the CRM under any “availability capping” design. While CEWEP members could participate under Option 1 (assuming it is “revenue capped” only), we have voiced concerns whether this actually compliant with the Clean Energy Package.

Therefore, CEWEP believes the capacity market design needs to qualify applicants for participation in the auction based on available forecast technical characteristics and/or three-year historical data, and continue to review that data at each qualification. CEWEP is keen to keep this as administratively streamlined as possible, but notes it also works for dealing with the run-hour limitations.

In effect, it would operate as follows:

- A generator could choose to participate or not to participate in the CRM. This would remove the mandatory element of participation from the CRM design. 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 required under the Clean Energy Package.

- A generator would not be allowed to participate if its historical performance was within the specified annual thresholds (as measured October to September over a three-year period).
- A generator would be allowed to challenge its exclusion based on historical data with evidence as to why its operational characteristics have changed.
- There would be ex-post monitoring of the qualification forecast emissions data, in line with the EPA reporting timeframes.
- If a generator failed ex-post, it would be excluded from future capacity auctions and receiving capacity payments in future years (if already cleared).
 - These checks should be performed ahead of the T-1 auction for any given year, to allow EirGrid adjust procured volumes and allow the generator reasonable time to propose mitigating measures
- CEWEP proposes no sanction (other than exclusion from future auctions) such as claw-back of the capacity payment made in the year when the thresholds were breached. This is due to the timing of the check and any potential financial sanction occurring so long in arrears after the payment – it would place unreasonable uncertainty on revenues spanning a long duration and quantum. Furthermore, it creates potential credit risk exposure for SEMO in recovery of such penalties.