



**Single Electricity Market
(SEM)**

**SEM Tariffs and Charges to apply from 1 October
2021 – 30 September 2022**

**Decision Paper
SEM-21-063**

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3 INTRODUCTION AND BACKGROUND

As required under Trading and Settlement Code Part B, a number of Market Parameters require approval by the SEM Committee each year. These parameters consist of four Tariffs/Charges and one Conversion Rate:

- Supplier Capacity Charge Price
- Difference Payment Socialisation Multiplier
- Residual Error Volume Price
- Currency Cost Price and Currency Adjustment Charge Factor
- Annual Capacity Charge Exchange Rate

The charges are required to enable SEMO to calculate and issue credit cover requirements to each participant, which participants will need to put in place before 1 October 2021.

This paper sets out the final values to apply for each of these items in the tariff year 1 October 2021 until 30 September 2022.

A short description and review of the Tariffs and Conversion Rate are given below as well as final values to apply for the 2021/22 tariff year.

4 SUPPLIER CAPACITY CHARGE PRICE

The Capacity Remuneration Mechanism (CRM) awards capacity determined via an auction process. Payment under the CRM is funded through a Capacity Charge that is socialised across all suppliers on a monthly basis, based on their daytime demand profile.

The Market Operator (MO) submitted a proposal for this tariff on 22 June 2021 and the RAs reviewed this submission for consistency with results of the auction for the year in question. These are outlined in Table 1.

Metric	Value (€)
Total (Annual) Capacity Amount for 2021/22	358,837,773

Y-2 K-Factor under recovery	13,862,982
Total	372,700,755

Table 1: Amounts included in Supplier Capacity Charge for Capacity Year 2021/22

The RAs approve the MO proposed tariff of €14.01/MWh for Supplier Capacity Charge Price.

5 DIFFERENCE PAYMENT SOCIALISATION MULTIPLIER

The Difference Payment Socialisation Multiplier relates to the Capacity Market. The purpose of building up the fund through a tariff is to ensure suppliers are fully hedged against high price events in cases in which there is not enough contracted capacity to make difference payments to cover the pricing event. This is separate to the Supplier Capacity Charge itself.

If inadequate funds have been built up at a point where difference payments need to be made from the fund, the Market Operator may use the over recovery of other charges to make difference payments. Otherwise the Market Operator has the right to “suspend and accrue” until funds are built up again.

The MO submitted a proposal for this multiplier on 22 June 2021 of 0.0%. The following table shows the amount that the Capacity Difference Socialisation Fund has reached.

It was deemed reasonable to build up a socialisation fund of €15m based on a calculation of the amount of capacity which did not participate in the initial Capacity Auction which could be a potential source of a ‘hole in the hedge’ during high price events. This calculation is also set out in Table 2.

Estimate of Capacity Difference Socialisation Fund	€
Value of non-bidding capacity (360 MW x Auction Clearing Price of €41,800/MW/Year) to be in place 2 years from Cutover (c. 5% of total value of T-1 2018/2019 annual Capacity pot of €332.5m)	15,048,000
Estimated value of fund in Tariff Year 2020/21	24,200,000
Estimated balance to collect in Tariff Year 2021/22 (€15,048,000 - €24,200,000)	Nil

Table 2

As the Fund has reached an estimated €24.2m for September 2021, significantly higher than the €15m balance, due to difference charges being above difference payments and termination charges received, SEMO has proposed to collect €Nil for the 2021/22 tariff year .

SEMO noted that the estimated value of €24.2m excludes the €9.9m under recovery, in the Capacity Charge revenue, in 2018/19 which was included in the 2020/21 Supplier Capacity Charge Price through the Y-2 K-factor and forms part of the prior year Supplier Capacity Charge Price calculation.

The €24.2m also excludes the €13.9m under recovery in Capacity Charge revenue in 2019/20 which is included in the 2021/22 Supplier Capacity Charge Price through the Y-2 K-factor and forms part of the Supplier Capacity Charge Price calculation.

The RAs are content with the approach and methodology used in the submission and approve the multiplier of 0.0%.

6 RESIDUAL ERROR VOLUME PRICE

Residual Error Volume Price (REVP) relates to differences between actual and metered volumes, that can swing in both positive and negative directions.

The concept and principles applied to REVP in the previous market design are similar in the new market design. As part of the I-SEM design participants wanted to reduce weekly billing volatility associated with REVP and requested the introduction of a tariff arrangement. Thus the key difference in REVP between the old and new SEM arrangements is the manner in which costs are recovered, whereby it moves from a recovery in close to real time in SEM, to a tariff arrangement in I-SEM.

The MO submitted a proposal for this Tariff on 22 June 2021.

The forthcoming year's Residual Error Volume costs have been estimated, based on the actual costs in the first and second years (1 October 2018 to 30 September 2019

and 1 October 2019 to 30 September 2020)), of the new SEM market (valued at €27,533,118 and €11,597,396 respectively) and a current forecast for year 3, given as €33,000,000.

The statistical mean of these three values is determined as the Residual Error Volume, which is determined as €24,043,505. There is also an inclusion of €10,970,407 as a Y-2 K-factor *over recovery*. The total Estimated Residual Error Volume cost for 2021/22 then sums to €13,073,098.

The forecast all Island SEM demand for tariff year 2020/2021 is 36,000 GWh and applied to throughput based on the Non Interval Energy Proportion (the average NIEP for calendar year 2020 was 52%), which gave a forecast NIEP demand of 18,720,000 MWh and resultant tariff of €0.70/ MWh based on the €13,073,098 amount.

The RAs are content with the approach and methodology used and approve the proposed tariff of €0.70/ MWh.

7 CURRENCY COST PRICE AND CURRENCY ADJUSTMENT COST FACTOR

Due to the existence of two currencies within the SEM, variation between these can occur in incoming and outgoing amounts in the market over the year. This variation is covered through the Currency Adjustment Charge.

The concept and principles applied to currency costs in the old SEM are similar in the new market. However the mechanism for the recovery of these costs in the balancing and Capacity Markets has changed. As part of I-SEM design, a tariff arrangement was introduced which reduces weekly and monthly billing volatility associated with currency as seen by suppliers. Therefore recovery of costs have moved from close to real time in the old SEM to a tariff arrangement in the new.

The MO submitted a proposal for this tariff on 22 June 2021 and the RAs have reviewed the submission.

For the current tariff year, 2020/21, the estimate of the Currency Cost Amount was €0.5m which gave rise to a tariff of €0.015/MWh. The MO currently estimates the actual, 2020/21, Capacity and Balancing Market FX exposure against the business out-turning at a similar amount to that estimated, noting that FX rate movements are unpredictable and any variation will be accounted for through a k factor.

The RAs have approved the currency adjustment charge of €0.000/MWh taking into account the Y-2 K-factor correction factor which will be applied in the currency cost price calculations going forward. This over recovery was stated as €927,900, significantly more than the €500,000 forecast.

Based on the over recovery being larger than the forecasted Currency Cost amount, and noting the desire for a negative tariff to be unpalatable, the following amount for the Currency Cost Adjustment factor is requested by the MO for the Capacity Year 2021/22.

The RAs approve the MO proposed tariff of €0.000/MWh for the Currency Cost Price and Currency Adjustment Charge Factor of 1.000 for the 2021/2022 tariff year.

8 ANNUAL CAPACITY CHARGE EXCHANGE RATE

The purpose of the Annual Capacity Exchange Rate is to translate the Annual Capacity Charge from Euro to Sterling, or vice versa for billing purposes.

The Annual Capacity Payment Exchange Rate was published within the Final Capacity Auction Information pack in December 2019 and approved by the RAs and SEM Committee at €1:£0.8916. It is effective for Capacity Year, 1 October 2021 to 30 September 2022.

The MO has proposed the Annual Capacity Charge Exchange Rate is set equal to the Annual Capacity Payment Exchange Rate for the Capacity Year. This exchange rate of €1:£0.8916 means that both Capacity payments and charges related to a T-1 Capacity Auction will be billed using the same rate and will ensure that any currency gains/costs which may arise are not inadvertently recovered through Capacity Charges rather than Currency Adjustment Charges.

The RAs approve the Annual Capacity Charge Exchange Rate of €1:£0.8916.