



**Single Electricity Market
(SEM)**

**Trading and Settlement Code Annual
Operational Parameters for 2024**

Decision Paper

**SEM-23-073
25 September 2023**

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1. Introduction

Under the terms of the SEM Trading and Settlement Code (TSC) Part B, the Regulatory Authorities (RAs) shall determine certain parameters proposed by the Market Operator (MO) and the TSOs, as applicable, in relation to the calculation and treatment of participants' Required Credit Cover and matters related to Imbalance Settlement.

In May 2023 therefore, the RAs requested SEMO to review the parameters utilised in the calculation of Required Credit Cover and of the Price Materiality Threshold.

On 6 July 2023, the RAs received reports from SEMO and the TSOs (SEM-23-051a and SEM-23-051b)¹ outlining their recommendations for the proposed values for the parameters referred to above. The RAs subsequently published a consultation paper (SEM-23-051) on the 19 July 2023, requesting the view of market participants on SEMO's and the TSOs' recommendations.

The RAs received one response to the consultation paper (SEM-23-051) from Bord Gáis Energy (BGE). Having considered this response, this paper presents the RAs' decision in relation to the operational parameters consulted on, and is structured as follows:

Section 2: identifies the Credit Cover parameters that were reviewed by SEMO, summarises the stakeholder response to the consultation and details the SEM Committee decision on the 2024 values for these parameters.

Section 3: identifies the SEM Price Materiality Threshold parameter that was reviewed by SEMO, summarises the stakeholder response to the consultation and details the SEM Committee decision on the 2024 value for this.

Section 4: outlines next steps.

¹ SEM-23-051a was SEMO's Recommendation Report on Credit Cover Parameters; SEM-23-051b was SEMO's Recommendation Report on the SEM Price Materiality Threshold

2. Parameters for the Determination of Required Credit Cover

2.1 Overview

The following Credit Cover parameters and their associated values were reviewed by SEMO for 2024:

- i. Fixed Credit Requirement.
- ii. Undefined Exposure Period.
- iii. Historical Assessment Period.
- iv. Analysis Percentile Parameter.
- v. Credit Cover Adjustment Trigger.
- vi. Level of Warning Limit.
- vii. Level of Breach Limit.

2.1.1 Fixed Credit Requirement

This parameter set out the Fixed Credit Requirement that must be in place for each registered Generator Unit and Supplier Unit. Table 2.1 below sets out the current values and SEMO's proposed values for 2024.

Parameter	Current SEM Value	SEMO's Proposed Value for 2024
Fixed Credit Requirement for Generator Units	€5,000	€5,000
Fixed Credit Requirement for Supplier Units	Based on a rate of €8.77/MWh of average daily demand subject to a minimum value of €1,000 and a maximum of €15,000	Based on a rate of €8.77/MWh of average daily demand subject to a minimum value of €1,000 and a maximum of €15,000

Table 2.1: Proposed Values for Fixed Credit Requirements

Respondent's Comments & SEM Committee Decision

The respondent agreed with the proposal to make no change to any of the credit cover parameters consulted on, based on their view that operational experience to date demonstrates that these values are sufficient to cover typical payment requirements without being overly burdensome on market participants. As RAs did not receive any objections to the values proposed above, the SEM Committee has decided that the Fixed Credit Requirements for Generator Units and for Supplier Units will remain unchanged for 2024.

2.1.2 Undefined Exposure Period

SEMO proposed that the number of days in the Undefined Exposure Period remains as 7 days which is the same as last year. The number of days in the Undefined Exposure Period (referred to as UEPBDg in the Trading and Settlement Code) is the period for which settlement amounts are not known, but where participants can incur further liability until they are removed from the market. This parameter was reviewed last year under a separate consultation process looking at collateral requirements and the value of this parameter was changed from 9 days in 2022 to 7 days in 2023.

Table 2.2 below sets out the current and proposed value for the parameter related to the Undefined Exposure Period.

Parameter	Current SEM Value	SEMO's Proposed Value for 2024
Number of days in the Undefined Exposure Period, g, (UEPBDg)	7 Days	7 Days

Table 2.2: Proposed Value for Undefined Exposure Period

Respondents' Comments & SEM Committee Decision

The SEM Committee's decision is that given that there are no objections to the proposed value, this value shall remain unchanged for 2024.

2.1.3 Historical Assessment Period

The Historical Assessment Period (DINHAP) is the number of Settlement Days prior to the issue of the latest relevant Settlement Document over which a statistical analysis of a Participant's incurred liabilities shall be undertaken to support the forecasting of the future Undefined Potential Exposure for that Participant. SEMO proposed a change to the HAP due to the volatility seen in market prices in the last few years.

Table 2.3 below sets out the current and proposed value for the parameter related to Historical Assessment Period.

Parameter	Current SEM Value	SEMO's Proposed Value for 2024
Number of days in the Historical Assessment Period (DINHAP)	100 Days	60 Days

Table 2.3: Proposed Value for Historical Assessment Period

Respondents' Comments & SEM Committee Decision

BGE agrees with the recommendation to reduce the value of HAP from 100 days to 60 days due to the market volatility that has been observed by SEMO. However, they asked for clarification regarding if this change to the HAP is to be temporary in nature for 2024 and if it will be revised again ahead of the 2025 consultation process. Other than this clarification, BGE has no objection to the new proposed values.

SEMO also proposed to amend the HAP in last year’s submission but it was decided not to amend the HAP last year as the Undefined Exposure Period was reduced from 9 days to 7 days last year and it was considered that the impact of this change in the Undefined Exposure Period should be reviewed before making any change to the HAP.

The SEM committee is of the view that given the high volatility of prices seen since 2021, the number of days in HAP should be changed to 60 days. SEMO’s quantitative analysis shows that the Undefined Exposure Period values and the Credit Assessment Price are similar values for 60 days and 100 days when prices are stable. However, when the prices become volatile, the HAP is too slow to respond.

The SEM Committee’s decision is that the value of the HAP will be changed to 60 days for 2024. The value of the HAP will be reviewed again next year as part of the 2025 Credit Cover parameters consultation process.

2.1.4 Analysis Percentile Parameter

The Analysis Percentile Parameter (AnPP) is the z-score value taken from the standard normal distribution that determines the percentile confidence value that the Actual Exposure for each Participant, once determined, will fall below the estimate of the Undefined Potential Exposure. In application, the AnPP is a multiplier used in the calculation of undefined exposures for all units and the Credit Assessment Price. The Credit Assessment Price is equal to the mean value of imbalance settlement prices over a period, plus the AnPP multiplied by the standard deviation of imbalance prices over the same period.

Table 2.4 below sets out the current and proposed value for the parameter related to Analysis Percentile Parameter.

Parameter	Current SEM Value	SEMO’s Proposed Value for 2024
Analysis Percentile Parameter	1.645	1.645

Table 2.4: Proposed Value for Analysis Percentile Parameter

Respondents’ Comments & SEM Committee Decision

No objections were raised by participants to the proposed value of the Analysis Percentile Parameter. The SEM Committee’s decision is that the value of this parameter shall be set at 1.645 for 2024.

2.1.5 Credit Cover Adjustment Trigger

The Credit Cover Adjustment Trigger is the expected percentage change in future generation or demand which leads a participant to report to SEMO that it should become an Adjusted Participant rather than a Standard Participant and have its Credit Cover requirements calculated from its forecasts of future demand or generation, rather than analysis of historical data.

Table 2.5 below sets out the current and proposed value for the parameter related to Credit Cover Adjustment Trigger.

Parameter	Current SEM Value	SEMO’s Proposed Value for 2024
Credit Cover Adjustment Trigger	30%	30%

Table 2.5: Proposed Value for Credit Cover Adjustment Trigger

Respondents’ Comments & SEM Committee Decision

No objections were raised by participants to the proposed value of the Credit Cover Adjustment Trigger. The SEM Committee’s decision is that this value shall remain unchanged for 2024.

2.1.6 Level of Warning Limit

The Level of Warning Limit parameter is used to notify participants that they are above an identified ratio in relation to their required credit cover. If the ratio of a Participant’s Required Credit Cover to its Posted Credit Cover exceeds the value of this parameter a Warning Notice will be sent to the Participant.

Table 2.6 below sets out the current and proposed value for the parameter related to Warning Limit.

Parameter	Current SEM Value	SEMO’s Proposed Value for 2024
Level of Warning Limit	80%	80%

Table 2.6: Proposed Value for Level of Warning Limit

Respondents’ Comments & SEM Committee Decision

No objections were raised by participants to the proposed value of the Level of Warning Limit. The SEM Committee’s decision is that this value shall remain unchanged for 2024.

2.1.7 Level of Breach Limit

The Level of Breach Limit parameter is used to notify participants that they are above an identified ratio in relation to their required credit cover. If the ratio of a Participant’s Required Credit Cover to its Posted Credit Cover exceeds this value a Credit Cover Increase Notice is issued, which will require remedy by the Participant, including by posting additional Credit Cover.

Table 2.7 below sets out the current and proposed value for the parameter related to Breach Limit.

Parameter	Current SEM Value	SEMO’s Proposed Value for 2024
Level of Breach Limit	100%	100%

Table 2.7: Proposed Value for Level of Breach Limit

Respondents’ Comments & SEM Committee Decision

No objections were raised by participants to the proposed value of the Level of Breach Limit. The SEM Committee’s decision is that this value shall remain unchanged for 2024.

2.8 Summary of SEM Committee Decisions

A summary of the decisions made by the SEM Committee in relation to the parameters relating to Credit Cover requirements are summarised in Table 2.8 below.

Parameter	Current SEM Value	SEMO's Proposed Value for 2024	SEM Committee Decision for 2024
Fixed Credit Cover Requirement for Generator Units	€5,000	€5,000	€5,000
Undefined Exposure Period	7 days	7 days	7 days
Fixed Credit Cover Requirement for Supplier Units	Based on a rate of €8.77/MWh of average daily demand subject to a minimum value of €1,000 and a maximum of €15,000	Based on a rate of €8.77/MWh of average daily demand subject to a minimum value of €1,000 and a maximum of €15,000	Based on a rate of €8.77/MWh of average daily demand subject to a minimum value of €1,000 and a maximum of €15,000
Historical Assessment Period	100 Days	60 Days	60 Days
Analysis Percentile Parameter	1.645	1.645	1.645
Credit Cover Adjustment Trigger	30%	30%	30%
Warning Limit	80%	80%	80%
Breach Limit	100%	100%	100%

Table 2.8: Summary of Credit Cover Parameter values for 2024

3. SEM Price Materiality Threshold

3.1 Overview

The Price Materiality Threshold refers to the threshold, approved from time to time by the Regulatory Authorities under paragraph B.19.3.1(b) of the TSC, which is applied in the event of a Pricing Dispute or where a manifest error is identified by the Market Operator for the purpose of Repricing. The Price Materiality Threshold tests when a change to input data as a result of an upheld dispute causes a change in the price greater than the threshold. If the Price Materiality Threshold is exceeded, the price is recalculated and included in a Settlement re-run. Table 4.1 below sets out the current and proposed value of the Price Materiality Threshold.

Parameter	Current SEM Value	SEMO's Proposed Value for 2024
SEM Price Materiality Threshold	5%	5%

Table 4.1: Proposed value for SEM Price Materiality Threshold

Respondent's Comments & SEM Committee Decision

BGE agreed with the proposal to maintain the price materiality threshold at a value of (at least) 5% for 2024, in order to reduce any unnecessary complexity with the repricing process and to avoid excessive re-pricing occurring at a time of increased market volatility. The SEM Committee's decision is that the current value should be retained for 2024.

Parameter	Current SEM Value	SEMO's Proposed Value for 2024	SEM Committee Decision for 2024
SEM Price Materiality Threshold	5%	5%	5%

4. Next Steps

These parameters will apply from 1 January 2024 until 31 December 2024. A consultation will be carried out in 2024 to determine the values to apply from January 2025, as required. The Trading and Settlement Code provides for the RAs amending the values of parameters where necessary outside the normal parameter-setting process. While this would only arise in exceptional circumstances, the RAs have an obligation to balance regulatory certainty with

ensuring that no unnecessary consumer harm arises. On this basis, the RAs will keep all parameters under observation and may propose changes in the interim, if necessary, via consultation.