Instruction no. 4

on determining of the Initial Margin Values

valid from 11.04.2022

1. **Reference value of the Initial Margin on the Contract**

The formula for calculating the Initial Margin on the Contract is:

Initial Margin = Contract Size * Volatility risk * Market Price

where,

Contract Size = No. of days zile in the delivery period * 1 MWh/day

and

the Volatility risk has the following values

Contract Type	Volatility risk
Week	15.00%
Month	10.00%
Quarter I si Quarter IV	8.00%
Quarter II si Quarter III	8.00%
Calendar semester	8.00%
Cold Season (Oct-Mar)	8.00%
Warm Season (Apr-Sep)	8.00%
Calendar Year	7.00%
Gas Year	7.00%

and

Market Price: is the Daily Settlement Price calculated according to **Instruction 7 on determining the Daily Settlement Price** disseminated and published by BRM daily on

its own website, through the report issued by the BRM Central Counterparty for the MC with the following specifications:

> - the price for **all** WEEK and MONTH type contracts **is that of the contract for the <u>first month</u> of full delivery** available at the time of calculation**for the rest of the contracts for which the Initial Margin is calculated, the market price is the daily settlement price of each individual contract.**

The initial margin is recalculated every Friday, without decimals, applied from the next working day onward, predominantly Monday.

    2. **Determining the Contract's volatility risk**

The volatility risk is determined by statistical methods according to the following criteria, in chronological order:

2.1 Analysis on the evolution of prices on a type of Contract *(eg: Week 1, January, quarter 1, Calendar Year, etc.)* for the last 255 trading days and determining the volatility of that Contract in terms of daily percent variation of market closing price.

Volatility risk $M(a) = (\sum_{i=1}^{n} Xi)/n$ *or the arithmetic mean of the daily volatility risk, being a percent value (%), and where* **"n"** *represents the number of days with data other than 0 in the last n days tracked, while* **Xi** *is the daily volatility.*

Daily volatility risk *(Xi)=* $\Delta\% \left(\frac{Pi}{Pi-1}\right)$ or daily percentual change

> *Where* **"Pi"** *represents the daily closing price of the Market for day* **"i"** *and* **"Pi-1"** *represents the daily closing price of the Market for the previous day*

If there is no data on trading prices for the last year, existing periods with trading data up to one year ago and/along with the combination of the following criteria will be taken into account.

2.2 Analysis of data from transactions with overlapping periods *(eg: 1 quarter = 3 months, 1 year = 4 quarters or 2 semesters)* and translating the results related to volatility on Contracts for which there is no data / not enough data

2.3 Maintaining a high level of Guarantees at the level of the Counterparty through a conservative approach as follows:

> - Increase of the fixed values in the Initial Margins established by the periodic, monthly recalculation, at the end of the month (*and in exceptional situations, weekly*) in accordance with the change in value of a Contract as a result of the increase in prices on the Market

- Maintaining or limiting the decrease of the fixed values of the Initial Margins by periodic monthly recalculation, at the end of the month, in accordance with the change in value of a Contract as a result of the decrease in prices on the Market

2.4 Correlation of the level of risk volatility and implicitly of the reference value of the Initial Margins with representative values from similar EU markets

Note: in case there is not enough trading data on the market, trading data collected on other markets managed by BRM on which the Support Asset is traded will be used.