Instruction 4

## on the determination of Initial Margin Values

## Valid starting with date: 20.03.2025

## 1. Reference Initial Margin per Contract

The formula for calculating the Initial Margin per Contract is:

Initial Margin = Contract Size \* Volatility Risk \* Market Price waves,

Contract size = No days in delivery period \*1 MWh/day The volatility risk has the following values

Contract type	Volatility risk
Week	15.00%
Luna	10.00%
Quarter	8.00%
Calendar semester	8.00%
Cold gas season (Oct-Mar)	8.00%
Warm Gas Season (Apr-Sep)	8.00%
An Calendaristic	7.00%
An Gazier	7.00%

**Market Price**, is the Daily Settlement Price calculated according to *Instruction 7 on the determination of the Daily Settlement Price* disseminated through the IT system and published by BRM in the Daily report issued to the CM, with the following specific specifications:

- the price for **all** WEEKLY and MONTHLY contracts *is that of the contract for the first full month of delivery available* at the time of calculation
- for the remaining contracts for which Initial Margin is calculated, the market price is the daily settlement price of each individual contract.

initial margin is recalculated weekly every Friday, without decimals, with application from the immediately following working day, i.e. the Monday of the following week or the first working day thereafter if Monday is not a working day.

For clarity Initial Margins are calculated separately for the Romanian Market and the Bulgarian Market.

## 2. Determination of volatility risk per Contract

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

**2.1** Analyze the price evolution on a Contract type (*e.g.: week 1, January, quarter 1, calendar year, etc.*) over the last 255 trading days and determine the volatility of the Contract by the daily % change in the market closing price.

**The volatility risk** $M(a) = (\sum_{i=1}^{n} Xi)/n$  or the arithmetic average of the daily Volatility Risk being a % value. Where **n** is the number of days with data other than 0 in the last n days tracked and **Xi** is the daily volatility

**Daily volatility risk** (Xi) =  $\Delta \% \left(\frac{\mathbf{p}_i}{\mathbf{p}_{i-1}}\right)$  or daily percentage change

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

In case there are no trading price data for one year ago, existing periods with trading data up to one year ago will be taken into account and the results obtained will be combined with the results of the following criteria

**2.2** Analyzing data from Transactions by overlapping periods (*e.g. 1 quarter = 3 months, 1 year* 

= 4 quarters or 2 semesters) and translating volatility results to Contracts for which no data/not enough data

- **2.3** Maintain a high level of Collateral at the level of the BRM Counterparties through a conservative approach as follows:
  - The increase of the fixed values of the Initial Margins established by recalculation periodically on a monthly basis, at the end of the month (*and weekly exceptionally*) in accordance with the change in the value of a Contract as a result of the increase in the prices on the Market
  - Maintenance or limited decrease of the fixed values of the Initial Margins by recalculation on a monthly basis, at the end of the month, in accordance with the change in the value of a Contract as a result of the decrease of the prices on the Market
- **2.4** Correlation of the level of volatility risk and hence the reference value of Initial Margins with representative values on similar markets in the EU

Note: if the market does not have sufficient trading data, trading data collected on other similar markets in the region that trade similar products in terms of characteristics will be used.