

**KELER CCP's Announcement - No.
103/2022.
Margin requirements
Energy Market**

Effective from: 23 June 2022

On basis of its General Business Rules, KELER CCP Ltd. approved the below listed margin requirements for the Energy Market.

Guarantee system for Spot Market

Energy market turnover margin

With regards to the determination of the spot energy market turnover margin KELER CCP applies, as a general rule, the values calculated by the European Commodity Clearing AG (ECC).

The method of ECC calculation is defined in the prevailing "ECC margining" document announced by ECC.

The values received from ECC will be continuously multiplied by KELER CCP with its own Internal Risk Factor.

- Internal Risk Factor: 1
As long as the margin requirement calculated by ECC equals the minimum amount of the turnover margin internal risk factor will not be used.
- The currency of the margin value: EUR
- Accepted collaterals:
 - Up to the sum of ECC calculated margin: solely EUR
 - Beyond the sum of ECC calculated margin ("Internal Risk Factor"-1): solely EUR
- Minimum margin requirement is 50,000 EUR

Main elements of turnover margin calculation method applied by ECC:

- Frequency of the margin revision: daily
- Considered period: last 250 days
- Elements of the sample: daily exposures in the period reviewed
- The Spot Margin is calculated as the maximum of:
 - a statistic (based on the arithmetic mean and the standard deviation with unique weights determined by ECC) of the past 250 daily exposures (the method of calculation and the parameters are on the web page of the ECC, under Risk Management/Margining),
 - a multiple of the maximum of the daily exposures over the past 30 days,
 - minimum margin requirement is 50,000 EUR

Guarantee system for derivative market

Energy market initial margin

With regards to the determination of the derivative energy market initial margin KELER CCP applies, as a general rule, the values calculated by ECC.

The method of ECC calculation is defined in the prevailing "ECC margining" document announced by ECC.

The values received from ECC will be continuously multiplied by KELER CCP with its own Internal Risk Factor.

- **Internal Risk Factor (in case of open positions): 1,71**
 - the value is reviewed on a weekly basis, in case of modification it is announced on Thursday until 12:00 AM CET
 - in case the margin requirement changes due to the reviewed risk factor, it shall be settled on the following settlement day morning, 10:00 AM CET
- Internal Risk Factor (positions in the delivery period): 1
- The currency of the margin value: EUR
- Accepted collaterals:
 - Up to the sum of ECC calculated margin: solely EUR
 - Beyond the sum of ECC calculated margin ("Internal Risk Factor"-1): solely EUR

Main elements of energy market initial margin calculation method applied by ECC:

- Frequency of the margin revision: daily
- Considered period: last trading day
- Elements of the sample: open position on the last trading day
- Algorithm for defining the energy market initial margin
 - Net open position × contract size × initial margin parameter × expiry month factor
 - Other spread between products and expiries

The parameters required for calculation of the initial margin will be announced by ECC according to its rules.

Budapest, 23 June 2022

KELER CCP Ltd.