KELER CCP Ltd.'s (Vol. 04-2017)

Announcement on CEEGEX spot market

Effective from: 31 January 2017

In line with KELER CCP Ltd.'s General Business Rules, KELER CCP Ltd. approved the **CEEGEX spot market margin requirements** for its Clearing Members as follows:

Calculation of the spot margin requirement

The calculation of spot margin requirement consists from two parts, the turnover margin and the delivery margin.

$$\mathrm{M}_{(t+1)} = max \begin{cases} \text{Min\_value} + \text{Round. up}\ [\mathrm{M}_{\mathrm{delivery}(t+1)}\ *\ (1+\mathrm{VAT});\ -3] \\ \text{Round. up}\ [(\mathrm{M}_{\mathrm{spot}(t+1)}\ +\ \mathrm{M}_{\mathrm{delivery}(t+1)}\ )\ *\ (1+\mathrm{VAT});\ -3] \end{cases}$$

where:

- $M_{(t+1)}$: spot margin requirement
- VAT: the current value of the value-added tax in %, except in case of foreign clearing members, where the value of VAT – in this calculation - is 0%.
- Round up: rounding up to thousand HUF
- The minimum value of the spot margin requirement is 0 HUF

Turnover margin ($M_{turnover}$)

The calculation of the turnover margin is based on the data of the daily net purchase price amount (on a 7/7 daily basis)

- **Short average**

$$S\_average_{(t)} = Average\_if\ [(SN)_{[t-d1];} > 0\ ]$$

where,

d1=14 – number of the days of the short lookback period
SN –net purchase price amount (on a 7/7 daily basis)

- **Long average**

$$L\_average_{(t)} = Average\_if\ [(SN)_{[t-d2];} >= S\_average_{(t)}]$$

where,

d2=365 - number of the days of the long lookback period.
SN –net purchase price amount (on a 7/7 daily basis)

- **Lookahead period (E)**

The lookahead period is the number of the days that remains until the next settlement day

Parameters:

- Monday, Tuesday, Wednesday, Friday: **2,**
- Thursday: **3,**
- on holiday weekends the parameter could differ, and be bigger than 3 .

- **Cap**

  Upper limit for turnover margin

$$Cap_{(t+1)} = Max(TN_{[t-d3]})$$

where,

TN – daily settlement net purchase price amount
d3 =60 - number of the days of the lookback period

- **$M_{spot(t+1)}$**

$$M_{spot(t+1)} = Min(L\_average_{(t+1)} * E \; ; \; Cap_{(t+1)})$$

Delivery Margin $M_{delivery(t+1)}$

In case of products that are in the delivery cycle, the calculation is based on the daily delivery payments

$$M_{delivery(t+1)} = D_{(t+1)} + D_{(t+2)}$$

where,

t – date of the calculation
D – payment amount

CEEGEX Position limit

$$\text{position limit} = ((B_{asset(t)} \div (1+VAT)) - M_{futures(t)} - M_{delivery(t)} \pm S_{purchase\ price(t)}) + \sum_{n=1}^{n} K\,(B;S)_{daily}$$

where,

$B_{asset(t)}$ =	the value of the assets blocked with CEEGEX title and with KELER CCP being the beneficiary of the blocking
VAT=	the current value of value-added tax. In this calculation, the value of VAT is 0% for non-resident clearing members.
$M_{futures(t)}$ =	margin requirement for open CEEGEX physical futures position
$M_{delivery(t)}$=	actual delivery margin requirement for physical future products that are in the delivery cycle
$S_{purchase\ price(t)}$ =	financially settled net purchase price on t day
K_{daily} =	financially not settled CEEGEX spot trades' cumulated financial position, where B = buy-side trade and S = sell-side trade
n =	number of trading days within the clearing cycle

Budapest, 9 January 2017
KELER CCP Ltd.