

# Stress test methodology

## 1. Objective of stress tests

Running stress tests by KELER CCP has a double objective:

- on the one hand to check that the default fund (CEEGEX / HUDEX/Gas KGA KGA) is of appropriate size at all times, and
- to check compliance with the requirements on the other financial resources of KELER CCP on the other hand.

#### 2. Historical scenario

Determining historical scenarios KELER CCP took into consideration the price changes from 2010 of the TTF gas traded on ICE-ENDEX as a reference data set, because KELER CCP clears energy market since then. There is no available historical price data set as a result of trades on the HUDEX gas market as there is one on the ICE-ENDEX market. The TTF gas futures is one of the most generally known and liquid gas futures, and that is the reason that TTF gas was considered as a reference product to determine the historical parameters, but the HUDEX gas market price history was also considered for scenario parameter setting.

Based on a historical database on the prices of products in line with the Technical Standards we considered the holding period as 2 days. Based on these KELER CCP determined the historical stress parameters for the products tradable on the HUDEX gas market.

# 3. Hypothetical scenario

We determined one parameter sets (one scenarios) based on experts estimate based on the historical parameter. A scenario had been developed that can be considered extreme but plausible according to the historical data.

## 4. Concluding stress tests

We complete stress testing daily, at the level of the clearing entity (own, omnibus client, individually segregated non-clearing member / client) for all two scenarios. The results are consolidated at clearing member and group level without netting, i.e. only the open risks are added up. In the derivative market the net open interest is taken into account during stress testing.

After the results of the 2 scenarios are determined for the derivative market, we select the first or the second and the third if their sum is larger exposure(s) with uncovered risk in HUDEX gas derivative market, the worst value(s) are compared to the default fund (CEEGEX / HUDEX/Gas KGA KGA) of the HUDEX gas derivative market concerned and the financial resources of KELER CCP to check compliance.