

Back testing methodology on Balancing Market

1. During back testing we examine directly whether the initial margin requirements specified for individual clearing entities provide sufficient cover for risks arising from daily price changes.
2. Accordingly, back testing is completed at the portfolio level, that is at the level of segregation each clearing entity is checked.
3. We define daily the value of price changes per clearing entity that is not covered by the initial margin.
4. Upon checking the 99% compliance we examine daily on a rolling basis the data available for the last year with respect to the clearing entities.
5. Quarterly we inform the Risk Committee on the consolidated result of back testing and upon case by case requests we provide access to clearing members and related clearing entities to their own results. We publish the consolidated results at our web site.
6. We define actions to be taken should the back testing results fail to meet the expected 99% compliance level.
7. Annually we review our back testing methodology and make recommendations to improve it if necessary.

On Balancing Market, as a different turnover margin calculation methodology is applied for system operator Clearing Member(s) and for the other market participants, the methodology of back testing also differs in case of system operator(s) and in case of market participant Clearing Members. Therefore, separate back test is prepared according to the followings:

- For those Clearing Members, who are not operating on hungarian Gas Market as system operators, the purpose of the backtesting is to verify whether the turnover margin calculated for day T-2 provides sufficient coverage for the aggregated exposure calculated from T-2 to T-1 gas day. The turnover margin calculated for T and T-1 days are not included in the calculation.
- In case of system operator Clearing Member(s) the turnover margin calculated for T-2 gas day is compared to the purchase price calculated for T-1. The purchase price used for calculation can include several days' purchase, for example in case of weekends or holidays. The purchase price related to system operator is calculated from the other (not system operator) Clearing Members' exit and entry data, for a given day, and only the positive values are taken into account.

Besides the daily back tests, KELER K SZF also runs calibration back tests for Balancing Market. In case of calibration back tests, for each settlement day, a separate calculation is prepared for system operator Clearing Member(s) and for the other market participants. During the calibration back tests, the amount of the expert buffer is determined and calibrated. The expert buffer is a parameter used for model correction, and it has a value 0% if the daily back test adequacy is above 99%. In case the daily back test result falls below 99%, the value of expert buffer will take a value greater than 0%, and the value of turnover margin will be increased with this parameter.