

OPINION on position limits on PXE Hungarian Power Baseload Future contracts

I. Introduction and legal basis

1. On 5 April 2018, the European Securities and Markets Authority (ESMA) received a notification from the Federal Financial Supervisory Authority (BaFin) under Article 57(5) of Directive 2014/65/EU on markets in financial instruments¹ ("MiFID II") regarding the exact position limits BaFin intends to set for PXE Financial Hungarian Future commodity contract in accordance with the methodology for calculation established in Commission Delegated Regulation (EU) 2017/591 supplementing Directive 2014/65/EU of the European Parliament and of the Council with regard to regulatory technical standards for the application of position limits in commodity derivatives² ("RTS 21") and taking into account the factors referred to in Article 57(3) of MiFID II.
2. ESMA's competence to deliver an opinion is based on Article 57(5) of MiFID II. In accordance with Article 44(1) of Regulation (EU) 1095/2010 of the European Parliament and of the Council of 24 November 2010 establishing a European Supervisory Authority (European Securities and Markets Authority)³ ("ESMA Regulation"), the Board of Supervisors has adopted this opinion.

II. Contract classification

Commodity base product: energy (NRGY)

Commodity sub product: electricity (ELEC)

Commodity further sub product: base-load (BSLD)

Name of trading venue(s): EUROPEAN ENERGY EXCHANGE

MIC: XEEE

Venue product code: F9B

¹ Directive 2014/65/EU of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments and amending Directive 2002/92/EC and Directive 2011/61/EU (OJ L 173, 12.6.2014, p. 349).

² Commission Delegated Regulation (EU) 2017/591 of 1.12.2016 supplementing Directive 2014/65/EU of the European Parliament and of the Council with regard to regulatory technical standards for the application of position limits commodity derivatives (OJ L 87, 31.3.2017, p. 479).

³ Regulation (EU) 1095/2010 of the European Parliament and of the Council of 24 November 2010 establishing a European Supervisory Authority (European Securities and Markets Authority), amending Decision No 716/2009/EC and repealing Commission Decision 2009/77/EC (OJ L 331, 15. 12.2010, p. 84).

III. Market description

3. The PXE Hungarian Power Baseload Future is a cash-settled derivative contract referring to the average power spot market price of future delivery periods of the Hungarian market area. Formerly, the contract was traded at Power Exchange Central Europe (PXE). In the course of EEX's acquisition of PXE the contract has been migrated from PXE to EEX. Futures on Hungarian energy are also listed at Hungarian Derivative Energy Exchange (HUDEX). Days, weekend, weekend, months, quarter and years are listed in parallel.
4. Electricity is a grid-bound commodity, where delivery takes place through meshed transmission system grids. This means that market participants have no control over the actual destination of the generated power. Electricity can only be stored to a very minimal extent, i.e. by means of battery storage. In fact, electricity is still widely considered as a non-storable commodity. There are also some seasonal effects in the electricity market. Due to heating demand in winter or higher demand in summer due to air-conditioning, electricity generation tends to be higher in times of climatic extremes. However, such seasonal effects are small.
5. In 2016 Hungary's energy generation mix was composed of 54% nuclear energy, 36% fossil fuels and 10% renewables. According to the country report from the Directorate-General for Energy on Hungary the Hungarian electricity markets is highly concentrated. It is characterised by the dominant position of state-owned Magyar Villamos Művek (MVM), the former monopolist which is still the country's main electricity generation company. MVM, although unbundled, still controls much of the market, including the Paks nuclear generating station and the transmission system operator Magyar Villamosenergia-ipari Átviteli Rendszerirányító ZRt (MAVIR). A review of the International Energy Agency comes to the conclusion that "the continued dominant position of state-owned MVM Group Ltd is a cause for concern".
6. In addition, Hungary's electricity capacity is insufficient to meet the country's electricity demand. Simultaneously, energy companies have come under pressure from the government to reduce end-user prices for households and small and medium sized enterprises. Hungary's power system is well connected to most neighbouring countries. The country has become more and more dependent on electricity imports in recent years, while domestic production has declined, which is partly due to lower profitability as a consequence of government interference. Net electricity imports were 13.7 TWh in 2015, accounting for 36% of total final consumption.

IV. Proposed limit and rationale

Spot month position limit

Deliverable supply

7. Deliverable supply amounts to 7,399,480 MWh.

8. The deliverable supply was estimated based on statistics provided by ENTSO-E (European Network of Transmission System Operators for Electricity). It is composed of the domestic Net Generating Capacity (NGC) of Hungary as displayed in the Statistical Factsheet of ENTSO-E for the year 2016 (8,236 MW⁴) and its average yearly import capacities in relation to neighbouring countries as displayed on the ENTSO-E transparency website for transfer capacities in 2017⁵ (1,900 MW). The NGC data of ENTSO-E for the year 2017 was not taken into account as the data for Hungary was not comprehensive yet. These values of ENTSO-E have been converted from MW to MWh per year. The overall value was then divided by the factor of 12 in order to align the deliverable supply to the time frame of one calendar month for the spot month period.

Spot month position limit

9. The spot month limit has been set at 2,219,844 MWh, which represent 30% of the deliverable supply. It includes daily contracts, weekend contracts, weekly contracts and one monthly contract.

Spot month position limit rationale

10. Since the PXE Hungarian Power Baseload Future is not a food contract, the baseline figure for the spot month amounts to 25% of the deliverable supply i.e. 1,849,870 MWh.

11. BaFin considered the following factors for adjusting the limit upwards:

- Article 18(2) of RTS 21: the open interest is significantly higher than the deliverable supply. Based on the concept of Article 18(2) of RTS 21 it is therefore legitimate to adjust the spot limit upwards.
- Article 20(2)(d) and (e) of RTS 21: upward adjustment due to state ownership of key market participant and low prices of commodity for customers; additional upward adjustment could be justified by lack of storage capabilities.

12. BaFin considered the following factors for adjusting the limit downwards:

- Article 20(2)(d) of RTS 21: with MVM there is one vertically integrated key market player that still dominates parts of the underlying power spot market.
- Article 17 of RTS 21: Hungarian power is also used as the deliverable supply for other commodity derivatives in the EU, for instance at HUDEX.

⁴ https://docstore.entsoe.eu/Documents/Publications/Statistics/Factsheet/entsoe_sfs_2016_web.pdf

⁵ https://transparency.entsoe.eu/transmission-domain/ntcYear/show?name=&defaultValue=false&viewType=TABLE&areaType=BORDER_BZN&atch=false&dateTime.dateTime=01.01.2017+00:00|UTC|YEAR&border.values=CTY|10YHU-MAVIR----U|BZN_BZN|10YHU-MAVIR----U_BZN_BZN|10YSK-SEPS----K&direction.values=Export&direction.values=Import

13. All the other potential adjustment factors set out in Article 21 have been considered by BaFin and are not regarded as material or relevant to require additional adjustments, either up or down, from the baseline. In considering the volatility in the contract, as required by Article 21 of RTS 21, BaFin has noted that there has been some variation in the price of the commodity derivative but has not found evidence that this is excessive or that lower position limits would reduce volatility.

14. BaFin has decided to set a total upward adjustment of 5 percentage points resulting in an adjusted baseline of 30% of the open interest because the open interest is significantly higher than the deliverable supply. Other factors such as market position of MVM and high import rates were not taken into account because BaFin considered that they were balancing each other. This provides a figure of 2,219,844 MWh.

Other months' position limit

Open interest

15. The open interest amounts to 14,956,594 MWh.

16. The open interest value was provided by the exchange and was calculated by aggregating all contracts across all maturities and converting them to MWh. The number provided is the average size of daily open interest throughout three consecutive months (October, November, December 2017) since the open interest of the Hungarian Future has been constantly rising, rendering it liquid recently. The most recent quarter is therefore considered the most meaningful period.

Other months' position limit

17. The other months' limit has been set at 2,991,319 MWh, which constitutes 20% of the open interest. It includes monthly, quarterly and yearly contracts.

Other months' position limit rationale

18. The baseline figure for the other months limit amounts to 25% of open interest, i.e. 3,739,149 MWh, as required by Article 11(1) of RTS 21.

19. BaFin considered the following factors for adjusting the baseline upwards:

- Article 16 of RTS 21: there is a large number of separate expiries (seven monthly contracts, seven quarterly contracts and six yearly contracts).
- Article 20(2)(d) and (e) of RTS 21: upward adjustment due to state ownership of key market participant and low prices of commodity for customers; additional upward adjustment could be justified by lack of storage capabilities.

20. BaFin considered the following factors for adjusting the limit downwards:

- Article 18(2) of RTS 21: the open interest is higher than the deliverable supply (open interest is twice the deliverable supply).
- Article 20(2)(d) of RTS 21: with MVM there is one vertically integrated key market player that still dominates parts of the underlying power spot market.
- Article 17 of RTS 21: Hungarian power is also used as the deliverable supply for other commodity derivatives in the EU, for instance at HUDEX.

21. All the other potential adjustment factors set out in Article 21 have been considered by BaFin and are not regarded as material or relevant to require additional adjustments, either up or down, from the baseline. In considering the volatility in the contract, as required by Article 21 of RTS 21, BaFin has noted that there has been some variation in the price of the commodity derivative but has not found evidence that this is excessive or that lower position limits would reduce volatility.

22. BaFin has decided to set a total downward adjustment of 5 percentage points resulting in an adjusted baseline of 20% of the open interest because the open interest is significantly higher than the deliverable supply. Other factors such as market position of MVM and the large number of separate expiries and high import rates were not taken into account because BaFin considered that they were balancing each other. This provides a figure of 2,991,319 MWh.

V. ESMA's Assessment

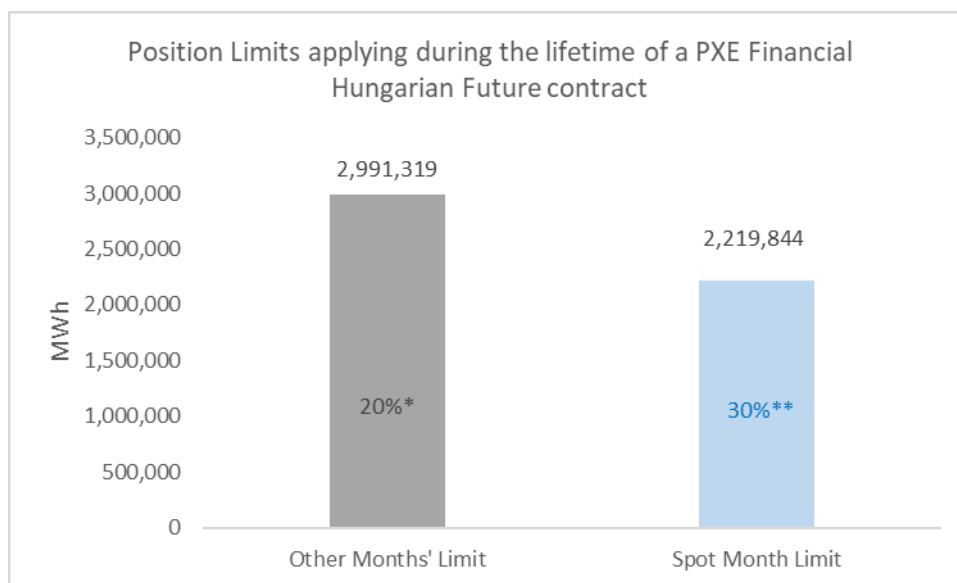
23. This Opinion concerns positions held in PXE Hungarian Power Baseload Future contract.

24. ESMA has performed the assessment based on the information provided by BaFin.

25. For the purposes of this Opinion, ESMA has assessed the compatibility of the intended position limits with the objectives of Article 57(1) of MiFID II and with the methodology for calculation of position limits established in RTS 21, in accordance with Article 57(3) of MiFID II.

Compatibility with the methodology for calculation of position limits established in RTS 21 in accordance with Article 57(3) of MiFID II

26. BaFin has set one position limit for the spot month and one position limit for the other months.



Spot month position limit

27. The calculation of the deliverable supply is based on the domestic Net Generating Capacity (NGC) of Hungary for the year 2016 and the average import capacity in relation to neighbouring countries forecasted in 2017. The source of data used to calculate deliverable supply (ENTSO-e statistics) ensures publicly available figures that are consistent at the European level.
28. ESMA considers that this methodology to calculate deliverable supply is consistent with Article 10(1) of RTS 21 that sets out that deliverable supply shall be calculated “by identifying the quantity of the underlying commodity that can be used to fulfil the delivery requirements of the commodity derivative.”
29. The monthly deliverable supply figure has been calculated by converting the capacity (expressed in MW) to MWh per month. Given the characteristics of the contract (i.e. delivery of electricity 24 hours per day during every day of the delivery period), this conversion is performed as follows: monthly deliverable supply (in MWh) = total capacity (in MW) x 24 hours x 365 days / 12 months.
30. Compared to the baseline figure of 25% of the deliverable supply, the spot month position limit has been adjusted upward and set at 30% of the deliverable supply.
31. ESMA agrees with the upward adjustment made by BaFin based on the fact that the Open Interest is significantly higher than the deliverable supply.

Other months' position limit

32. The open interest was calculated as the daily average over three consecutive months of the number of open contracts that have not been closed out or expired. ESMA considers such



an approach sensible in this case as an average for a period of time gives a more stable measure of open interest and considers such approach consistent with Article 12 of RTS 21.

33. Compared to the baseline figure of 25% of overall open interest, the other months' position limit has been adjusted downward and set at 20% of the open interest.

34. ESMA agrees that a downward adjustment of the other months' position limit is justified in accordance with Article 18(2) of RTS 21 given that the open interest is significantly higher (twice higher) than the deliverable supply.

35. Consequently, these position limits have been set following the methodology established by RTS 21.

Compatibility with the objectives of Article 57(1) of MiFID II

36. ESMA has found no evidence indicating that the proposed position limits are not consistent with the objectives of preventing market abuse and supporting orderly pricing and settlement conditions established in Article 57(1) MiFID II.

37. Overall, the position limit set for the spot month and the other months, in conjunction with the position management powers of the trading venue, appear to achieve a reasonable balance between the need to prevent market abuse and to ensure an orderly market and orderly settlement, while ensuring that the development of commercial activities in the underlying power market and the liquidity of the PXE Hungarian Power Baseload Futures contract are not hampered.

VI. Conclusion

38. Based on all the considerations and analysis presented above, it is ESMA's opinion that this spot month position limit does comply with the methodology established in RTS 21 and is consistent with the objectives of Article 57 of MiFID II. This other months' position limit does comply with the methodology established in RTS 21 and is consistent with the objectives of Article 57 of MiFID II.

Done at Paris, 11 March 2019

Steven Maijoor

ESMA Chair