

Date: 24 September 2018 ESMA70-155-2938

OPINION on position limits on Swiss Power Base contracts

I.Introduction and legal basis

- 1. On 20 October 2017, 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 the BaFin intends to set for the Swiss power base futures commodity contracts 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.
- 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: EUROPEAN ENERGY EXCHANGE

MIC: XEEE

Venue product code: FC

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 December 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 Swiss Power Base Future is a derivative contract referring to the average power spot market price of future delivery periods of the Swiss market area. The contract is cash-settled. There is no power exchange in Switzerland. For Swiss trading companies EEX is the most important trading venue.
- 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 minimal extent, i.e. by means of battery storage. In fact, electricity is still widely considered as a non-storable commodity.
- 5. 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. In Switzerland this is exacerbated by the fact that the output of hydroelectric power stations depends on the water level of domestic rivers and lakes. Some hydroelectric power stations are capable of storing capacity, though, as water can be held back in reservoirs.
- 6. The Swiss electricity market is distinct from other markets in the EU as Switzerland is on the one hand not an EU member. Yet, on the other hand it has well developed interconnection capacities with its nearby countries (Germany, Austria, Luxembourg, France and Italy) and plays an important role as transit country for EU members. Its interconnection capacity amounts to 21.6% of the total generating capacity. Currently, transmission is based on bilateral agreements between the transmission network provider Swissgrid and the network providers of its nearby countries.
- 7. In 2016 hydropower plants contributed 59% and nuclear plants 32,8% of overall electricity production. Cross-border electricity trading is of major importance for Switzerland in terms of security of supply as generation of hydroelectric power depends to some degree on weather conditions. This dependency is going to grow as the existing power plants are allowed to continue operating, but will not be replaced at the end of their life span.
- 8. In contrast to EU countries the Swiss energy market is not entirely liberalised yet. Only large-scale customers with an annual consumption of more than 100 MWh can choose their electricity supplier freely. The Swiss electricity market is very fragmented and regional. There are approximately 335 utility companies producing 90% of domestic supply. Even the three largest private companies (Axpo, Alpiq and BKW) are owned by the cantons and municipalities. Most other suppliers are public-law institutions. Sole operator of the high-voltage transmission network is Swissgrid. It is a stock corporation owned by the Swiss electricity companies. Swissgrid functions as official contact point for foreign and domestic electricity traders.
- 9. Electricity tariffs are under the control of the Electricity Commission, i.e. the independent national electricity regulator. Price volatility is low. Regulated prices shall be correlated with



generation costs and even large scale-customers are entitled to switch from free market providers to the regulated market.

- 10. The underlying of the Swiss Power Base Contract is the delivery or acceptance of delivery of Swiss electricity with a constant output of 1 MW during the delivery time (00:00 until 24:00) on every day of the week during the delivery period. The possible delivery periods for this contract are: day, weekend, week, month, quarter and year.
- 11. At maximum, the following maturities can be traded: for "Day Futures" the respective next 34 days; for "Weekend Futures" the respective next 5 weekends; for "Week Futures" the current and the next 4 weeks; for "Month Futures" the current and the next 6 months; for "Quarter Futures" the respective next 7 full quarters; and for "Year Futures" the respective next 6 full years.

IV. Proposed limit and rationale

Spot month position limit

Deliverable supply

12. Deliverable supply amounts to 17,871,252 MWh.

13. 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 Switzerland as displayed in the Statistical Factsheet of ENTSO-E for the year 2016 and the average import capacities in relation to nearby countries as displayed on the ENTSO-E transparency website for forecasted transfer capacities in 2017. NGC data of ENTSO-E for the year 2017 was not available for Switzerland at the time the limit was set.

14. The values provided by ENTSO-E have been converted from MW to MWh per year. The overall value was then divided by 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

15. The spot month limit has been set at 3,572,426 MWh, which constitutes 20% of the reference amount.

Spot month position limit rationale

16. The baseline figure for the spot month was calculated as 25% of the estimated deliverable supply, i.e. 25% * 17,871,252 MWh = 4,467,813 MWh. The Swiss power future is a "less liquid" derivative contract according to Article 15(1)(b) of Commission Delegated Regulation (EU) 2017/591 as the open interest is below 20 000 lots (1 lot=720 MWh). The NCA is thus entitled to set a limit between 5% and 40%. Spot month (=calendar month) includes daily contracts, week-end contracts, weekly contracts and monthly contract.



17. BaFin considers the following factors relevant for adjusting the limit downwards:

- a) Article 20(2)(d) of RTS 21: Swiss cantons and municipalities play a major role in power supply. Generally, closed markets with a limited set of suppliers tend to be more prone to manipulation and market abuse. This factor needs to be taken into account as spot and futures market in power are closely intertwined.
- b) Article 20(2)(a) of RTS 21 (restrictions on the supply of the commodity): despite currently sufficient cross border transmission capacities the Swiss power market is in danger to become isolated in the future as Switzerland and the EU have recently failed to enter into an electricity agreement, intended to establish a legal framework for Switzerland's participation in the European electricity market.

18. In accordance with Article 21 of RTS 21, BaFin has assessed the volatility in the price of the underlying commodity. The volatility is considered limited and therefore BaFin considers that the volatility is not a relevant factor to adjust the limit.

19. Therefore, BaFin has made a total downward adjustment of 5% to the baseline figure and set the spot month's limit at 20% of the deliverable supply.

Other months' position limit

Open interest

20. The open interest amounts to 8,200,000 MWh. The open interest value was provided by the exchange. It 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 (April to June 2017). BaFin has abstained from using a one year average number but relied on more recent data as the contract is relatively new and still gaining liquidity. Using older data could have misrepresented the open interest.

Other months' position limit

21. The other months limit has been set at 2,870,000 MWh, which constitutes 35% of the reference amount.

Other months' position limit rationale

22. The baseline figure for the other months limit amounts to 25% of open interest, i.e. 2,050,000 MWh. According to Article 15(1)(b) of RTS 21 the limit is to be set in the range between 5% and 40% as the open interest is below 20,000 lots (1 lot=720 MWh).

23. The following factors were considered relevant for adjusting the baseline upwards:



- a) Article 16(2) of RTS 21 (large number of separate expiries): upward adjustment due to large number of separate expiries; in contrast to daily and weekly contracts, quarterly and yearly contracts are traded in significant volumes.
- b) Article 18(3) of RTS 21: the overall open interest is significantly lower than the deliverable supply (46%);

24. In sum, applying 35% as limit seems adequate as the open interest is lower than the deliverable supply and the contract is a less liquid one.

V. ESMA's Assessment

25. This Opinion concerns positions held in Swiss power base futures contracts.

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

27. 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

28. BaFin has set a single position limit for the whole spot month and a single position limit for the other months.



(*) Position limit as % of Open Interest

(**) Position limit as % of Deliverable Supply

Spot month position limit



- 29. The calculation of the deliverable supply is based on the domestic Net Generating Capacity (NGC) of Switzerland 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.
- 30. 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."
- 31. 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.
- 32. This approach is consistent with Article 10(2) of RTS 21, which sets out that "Competent authorities shall determine the deliverable supply [...] by reference to the average monthly amount of the underlying commodity available for delivery over the one year period immediately preceding the determination".
- 33. Compared with the baseline figure of 25% of deliverable supply, the spot month position limit has been adjusted downwards and set at 20% of the deliverable supply.
- 34. This downward adjustment takes into account the characteristics of the underlying market and in particular the potential restrictions on production due to the dependence of the Swiss power market on the capacities of its nearby countries. ESMA considers that such downward adjustment is consistent with Article 20 of RTS 21.

Other months' position limits

- 35. 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.
- 36. Compared to the baseline figure of 25% of overall open interest, the other months' position limit has been adjusted upward and set at 35% of the open interest.
- 37. The other months' position limit has been adjusted upward to take into consideration *inter alia* the fact that the open interest is significantly lower than the deliverable supply. This is consistent with Article 18(3) of RTS 21.



- 38. The other month's position limit has also been adjusted upward to cater for the large number of separate expiries. ESMA considers such approach consistent with Article 16(2) of RTS 21.
- 39. 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

- 40. 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) of MiFID II.
- 41. Overall, the position limit set for the spot month and the other months appear to achieve a reasonable balance between the need to prevent market abuse and to ensure orderly pricing and orderly settlement, while also ensuring that the development of commercial activities in the underlying market and the liquidity of the contract are not hampered.

VI.Conclusion

42. Based on all the considerations and analysis presented above, it is ESMA's opinion that the 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. The 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, 24 September 2018

Steven Maijoor

Chair

For the Board of Supervisors