HUNGARIAN POWER EXCHANGE (HUPX)

1. Introduction – strategic regional role of Hungarian electricity transmission grids

Hungary has a strategically important role due to its central geographic location, having six cross-border interconnectors with neighbouring countries. It links Central West (Austria, Slovakia), Central East (Ukraine, Romania) and South East regions (Serbia, Croatia). It appears that international power traders consider Hungary as a hub market for their commercial activities. In light of this it is fair to say that there was a strong need for the development of cross-border capacities and the introduction of an exchange market of electricity.

The Hungarian Power Exchange ("HUPX") opened on 20 July 2010. Its primary objectives are

- (i) ensuring a transparent and reliable reference price information mechanism (e.g. Hungarian Energy Office uses auction price as benchmark for the calculation of universal service tariff);
- (ii) stimulating electricity trading by increasing market efficiency;
- (iii) development of Hungarian electricity market by supporting its integration into a Central-European, regional electricity market;
- (iv) facilitating the cooperation of market exchanges and market coupling projects.

2. The corporate structure of HUPX

HUPX Hungarian Power Exchange Company ("HUPX Zrt."), the licensed operator of HUPX power exchange, is a company limited by shares.

The sole owner of HUPX Zrt. is *MAVIR Hungarian Electricity Transmission Grid Operator Company* ("MAVIR" or the "TSO"). MAVIR, a company limited by shares, belongs to the state-owned Magyar Villamos Művek ("MVM") company group as TSO. MAVIR operates in close cooperation with HUPX in terms of physical deliveries and real-time balance management.

3. Foundation of HUPX Zrt.

Energy Office, by its resolution 740/2008, directed TSO – on the basis of Section 177 of Act LXXXVI of 2007 on electricity ("Electricity Act") – to apply for an electricity exchange operator licence. MAVIR therefore founded HUPX Zrt. as its licence holder affiliate.

Power exchange market operation is subject to a licence issued by the Energy Office. In principle, any company with legal personality registered in Hungary or the registered branch of any other company registered in the European Union or the European Economic Area, are eligible to obtain a licence.

Besides HUPX Zrt., another licensed operator of power exchange services is the Hungarian branch of POWER EXCHANGE CENTRAL EUROPE (Prague).

4. Transfer of shares held by the TSO

After the first business year of HUPX Zrt. closed with positive after-tax results, the Energy Office will monitor the return on investments achieved.

Once the investments have been recovered, the shares of MAVIR in HUPX Zrt. will have to be transferred (sold). Acquisition of shares in HUPX Zrt. is subject to certain limitations set by the Electricity Act, namely no shareholder may acquire more than 25% of the registered capital or votes cast in HUPX Zrt., while – after the temporary period - shares held by the TSO may not exceed 30%

of the registered capital or the votes cast. Shares held by affiliated companies must be taken into account in calculating the referred thresholds.

5. Membership and trading rights

Trading and membership rights are subject to Section 53 of Electricity Act. Generators, traders, universal service providers and users of electricity have unlimited right to trade, while TSOs and DSOs (distribution system operators) rights are restricted.¹

The number of trading members is unlimited. HUPX Zrt. must grant membership, if the conditions set by HUPX's Market Rules are met. Certain documents must be attached to the application form, including – *inter alia* – certain filled-out forms, commercial registry extract, copy of licence issued by Energy Office, the last annual report, other technical forms. A further condition for active trading is a clearing services agreement concluded with a clearing service provider.

6. HUPX trading rules and regulation

Trading on HUPX is governed by a specific documentation composed of the Market Rules, the Code of Conduct and the Operational Rules.

Market Rules define the organization of the exchange, the legal and regulatory framework and the admission procedure.

Operational Rules define the contracts' details and trading parameters, the price list and the technical access rules.

Code of Conduct defines the behaviour rules to be followed by HUPX members. The Code of Conduct prohibits any form of manipulation of the trading at HUPX and the prices as well as the unfair use of the market and its facilities are forbidden. The following, in particular, shall be prohibited:

- entering of orders without trading interest (fictitious orders),
- the conclusion of transactions suitable for the manipulation of the market prices (misleading trading transactions)
- collusions or the collusive co-operation of members among each other or with third parties,
- influencing the settlement of prices or indices so that these do not reflect the fair market value.

The organizational bodies of the HUPX are the Organized Market Committee ("OMC") and the Market Surveillance Office ("MSO").

OMC is a consultative member committee of HUPX market. Its composition reflects the diversity of HUPX members. OMC is entitled to propose changes to the rules and regulations of HUPX and may opine the introduction of new trading systems, market segments and products.

MSO is an independent body within HUPX, responsible for the permanent monitoring of trading on the exchange and the settlement of exchange transactions. It also carries out relevant investigations and may notify the competent person in case of suspected violations of market rules and other grievances affecting proper trading and settlement.

¹ TSO and DSOs are entitled only to purchase electricity for system maintenance and system loss balancing.

7. Membership and service fees of HUPX

A new member of HUPX must pay an entrance fee in the amount of EUR 15,000 due upon the receipt of the notification on its admittance as a HUPX member. The annual membership fee of HUPX is EUR 12,000 which must be paid in quarterly instalments. An additional amount of EUR 6,600 must be paid for the use of EPEX Trading System (providing two user accounts and their respective portfolios). The transaction fee is 0.05 EUR/MWh.

8. Trading

Power contracts are traded on HUPX in a day-ahead auction (*másnapi szállítású villamosenergia aukció*), using the EPEX Trading System. Block products will be introduced later once the liquidity of the market is established on day-ahead market. Trading days are year around.

Orders are registered and accumulated in the order book, which opens 45 days preceding delivery day. Once the order book is closed, orders may not be modified or cancelled and are irrevocable. The auction takes place after the order book has closed. The price corresponds to the matching of members' aggregate supply and demand curves of orders for each contract.

9. Clearing services

European Commodity Clearing AG ("ECC"), based in Leipzig, provides clearing services for the power spot market transactions concluded on HUPX. ECC ensures financial security for all transactions by acting as a central counterparty between buyer and seller and by setting up guarantee mechanisms like security requirements. Clearing rules are described in ECC Clearing Conditions. In the context of the clearing co-operation, the Budapest based KELER Rt. (Central Clearing and Custodian Ltd.) has been approved as a new clearing member of ECC, and therefore, is be entitled to provide clearing services for trading in the HUPX.²

10. Delivery mechanism

Transactions are nominated by ECC on behalf of HUPX to MAVIR, which manages and guarantees delivery through a separated balance circle system (*külön mérlegkör*). Real-time balancing mechanism (*valós idejű kiegyensúlyozási mechanizmus*) managed by MAVIR maintains grid balance in the event of delivery failures.

11. Obligation to sell electricity through HUPX

The Electricity Act introduced a significant market power ("SMP") regime into the wholesale, retail and ancillary services (generation, balancing) markets of electricity. The Energy Office conducts an assessment of significant market power (dominant position) on the relevant markets. The Energy Office may impose certain obligations on market players with SMP, including transparent capacity auctions. For example, Energy Office designated MVM Trade Zrt. as a wholesale trader SMP in 2008 [Resolution no. 739/2008].

According to Section 111 (1) of Electricity Act, the obligation of selling on the power exchange market may be imposed on market players having SMP on wholesale market of electricity. Until now, no such obligation has been imposed by the Energy Office.

² In addition to HUPX, five exchanges are using ECC as their clearing partner. ECC also provides clearing as well as physical and financial settlement of transactions concluded on APX-ENDEX (the Netherlands, Belgium, United Kingdom), the CEGH Gas Exchange (Vienna), EEX (Leipzig), EPEX Spot (Leipzig) and Powernext (Paris). Clearing and settlement of transactions registered for OTC clearing are also carried out by ECC on these exchanges. HUPX trading participants, therefore, benefit from the standardised settlement processes of ECC.

Another pro-competitive instrument is the opened capacity-auction (*nyilvános termelői kapacitás-aukció*) providing equal and free access to generation capacities in Hungary. All generators above 20 MW and traders with available free capacity(!) are subject to an obligation to sell their free capacities scheduled for the next year, i.e. capacities otherwise not sold until 25 September of the current year, under an open and transparent procedure. This obligation may be carried out by selling capacities through power exchange markets.

12. Volume of trading in the HUPX

HUPX's volume of trade in the first month, i.e. from 20 July 2010 and 20 August 2010, generally exceeded the previously expected 1,500 MWh per day. The aggregate amount was over 47,000 MWh. In September 2010, the volume of trade increased by 40% in comparison to the first month: the daily traded amounts were around 2,300 MWh, while the aggregate amount was about 70,000 MWh.

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