Response of Österreichische Elektrizitätswirtschafts-AG (VERBUND) to the CEER Consultation on „Regulatory aspects of the integration of wind generation in European electricity markets“

Verbund is the largest producer and transporter of electricity in Austria and one of the leading hydropower producers in Europe. With approximately 2,600 employees the company generates annual sales of more than 3 billion Euro. Verbund is active along the entire electrical value chain from the turbine to the power outlet. About 85 % of its electricity generation originates from hydropower, around 15 % is produced in thermal power plants in Austria. Besides water, wind is Verbund's second most important renewable energy source. Verbund operates three wind parks in the east of Austria with a total capacity of 49 megawatts. Further projects in Romania and Bulgaria are currently under development or already under construction.

Verbund operates Austria's supra-regional high-voltage grid which extends over a distance of 3,300 km (route kilometres) and accommodates lines with a total length of approx. 6,500 kilometres. This grid forms the backbone of Austria's electricity supply, enabling the supra-regional, domestic and international exchange of energy between producers and consumers and serves to ensure the stable provision of energy to the underlying distribution grids.

Verbund is also an active trader on the European electricity markets. Around three-quarters of our electricity is sold abroad. Our trading volumes exceed the total amount of electricity consumed in Austria already by a third. Our largest sales markets are Germany, France and Italy. We trade on all major electricity exchanges in Europe. We supply electricity to public utilities and large industrial customers. Moreover, we actively trade in green certificates and CO2 emission rights.

In this context, Verbund appreciates the opportunity to comment on the CEER Consultation on „Regulatory aspects of the integration of wind generation in European electricity markets“.

1. *How will the expected growth in wind generation affect the markets in which you operate? What are the key challenges you foresee?*

   Because of it’s high forecast uncertainty the growth in wind generation leads to increased volatility in the day-ahead and intraday markets with extreme price movements including negative prices. Occasionally intraday auctions have to be suspended because of cross-border-congestion. This indicates that without the appropriate expansion of cross-border-capacity, wind generation could hinder market coupling. Thus the key challenges are to foster market coupling, building up TSO-interconnectors and leading the market back to solely positive prices.

   From a generation point of view, particular importance has to be attributed to question of grid access. For Verbund’s wind generation projects, Eastern European markets are particularly important. Nearly in all Eastern European countries the transmission and especially the distribution grid are not well developed and have to be strengthened in certain areas. Furthermore, grid operators in these countries have little experience in managing wind energy and set very restrictive limits for connecting new wind capacity to the grid. These limits are often based on unnecessarily tight grid security principles, which in consequence lead to less capacity to be connected than actually possible. In addition to that, the sharing of responsibilities between the TSO and DSO in terms of grid access is often not well defined. Information is often not passed on between the TOS and the DSO. Delays in the process of connecting new wind generation capacities to the grid

are the consequence. Thus, clear rules for grid access should be established. In this context, support by grid operators should be increased.

2. *What are the implications for market rules? Can you identify changes which would better facilitate integration of wind generation, including management of intermittency?*

   Before focusing on market rules it is essential to provide the technical requirements for the integration of wind generation into the market. This involves the coordinated realisation network expansions as well as the development of complementary reactive power generation that is able to balance wind generation's intermittency (e.g. pump-storage or gas-turbines). Concerning support schemes it is important that the incentives are compatible with market and network arrangements. In the light of the increased volatility on spot-markets the harmonisation of price ranges on different exchanges in all countries should be promoted.

3. *Would moving the market's gate-closure closer to real-time facilitate the deployment of wind generation? Would this have any adverse consequences on the functioning of the electricity power system?*

   Market players should not be limited in their trading strategies. This implies that where efficient and liquid intraday markets exist, market players should always have the possibility to participate in the intraday market. Trading as close to real-time delivery as the market allows helps reducing balancing costs. Along with trading close to real-time, it is important to avoid that handling costs and complexity increase and compromise the macroeconomic benefit.

4. *Are emerging cross-border congestion management models compatible with wind generation? Should further attention or priority be given to intraday capacity allocation mechanisms and markets, in light of the issues associated with forecasting wind generation?*

   Regarding cross-border congestion management models and wind integration highest priority should be given to the implementation of implicit intraday auctions.

5. *Should wind generation be subject to the same balancing obligations and the same types of charges as other types of generation?*

   There is no reason why wind generation should be treated differently than other types of generation. As stated in the report, balancing arrangements should provide the same incentives for wind generation to balance as for other types of generation. The exemption of wind generation would cause even more market distortion.

6. *Should TSOs engage in research and development (R&D) to address issues associated with a large share of wind generation included in the network? If so, how should the regulatory framework require or support this?*

   As TSOs have the best expertise in issues relating to the network, it seems reasonable that TSOs should engage in research and development (R&D) regarding the integration of wind generation into the network. In this context, we would like to emphasise the importance of the planned ENTSO-E R&D Plan for a EUROGRID 2020 which can help to objectify the potential for new wind capacity to be connected.

7. *Should wind generators face the same types of network charges as other new generators, calculated using the same methodology? What is needed to provide a sufficient incentive for generation in choosing where to locate? What is needed to provide an appropriate balance of risk among market players? When should this not be the case?*

   Yes, wind generators should be subject to the same types of network charges as other new generators.

8. *Broadly, what is the appropriate allocation of responsibilities, risk and cost among market players in developing new network infrastructure (e.g. ahead of or in response to new generation connections)? Should this be different for wind generation? Where is harmonisation required?*

   NRAs are and should remain responsible for the cost approval of network efficiency and structure measures conducted by TSOs. Network investments caused by wind generation should not be treated differently than other types of generation. It is important to note, that the responsibility to provide grid access remains with the TSO.

9. *Do you agree that the "supergrid" issues for regulators identified in 5.1 are relevant? Is there anything else European regulators should be considering?*

   Yes, these issues are relevant, and should already be taken into account.

10. *Is the current ownership structure of the offshore lines or their regulatory framework a potential issue for the integration of offshore network? Are there other considerations affecting this ownership structure?*

    Not of relevance for Verbund.

11. *Do you agree that the Regional Initiatives should be used to address the issues associated with the development of the regional projects? What challenges does this present?*

    The objective of ERGEG's Regional Initiatives is to foster the integration of Europe's national energy markets and open consumers the possibility of free choice of supply. This should not be subordinated to the integration of wind generation.

12. *What other issues should European regulators consider in relation to the integration of wind generation?*

    The most urgent issues regulators have to focus on are the expansion of transmission networks and interconnectors as well as the harmonisation of market rules.

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