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Erneuerbare Energie e.V.

The German Renewable Energy Federation's key points for the Electricity Market Design Communication

The European Energy Union concept is central to the transformation of our energy system. It is also central to achieving the long-term goal of reducing greenhouse gas emissions by 80-95 percent below 1990 levels by 2050, despite there being different expectations about the concept's scope and priorities, as well as there being a certain openness to its interpretation. The German Renewable Energy Federation welcomes the European Commission's Communication from February 2015 and its vision for a common task based on solidarity and trust, as well as the roadmap of legislative and non-legislative initiatives within the power, heating and cooling, and transport sector. It is, however, important to note that the Energy Union must reach beyond diversifying generation from conventional resources or switching suppliers – to pursue a true transformation of the energy system it must put renewable energy at its heart for reasons of competitiveness, growth and security.

This is especially true for the power sector, where increasing shares of fluctuating renewable energy are changing the way the system should operate. It is by now widely agreed that a true energy transformation requires making the grids and markets fit for renewables, and not the other way round: Attempting to integrate RES into markets where there is no level playing field is bound to fail. No nuclear power plant would be in operation today if there was a statutory obligation to take out appropriate insurance policies. Nor would any lignite-fired power plant be running if greenhouse gas costs were fully internalized. As long as subsidies for conventional and nuclear power plants and the resulting market distortions are not phased out, integration of variable and flexible energy sources will either be very difficult or only achievable at higher costs.

As the European Commission President Jean-Claude Juncker and the Commissioners responsible have frequently stated, Europe needs to increase its share of renewable energy if it wants to have affordable energy in the medium and long term. Investment in the renewable energy sector has to continue and grow, given the European and national climate commitments, the need for supply security and many other economic factors. This implies that not only the creation and maintenance of a reliable, regulatory framework is needed, but also the complementary development of adequate markets. Reforming the European Emission Trading System is necessary, but is not enough to forge ahead the much-needed long-term investments in renewable energy. The Commission has recognized the need for change and is planning a market design and regional electricity markets initiative, a move that we welcome. This paper aims to contribute to the discussion on appropriate market design by providing our thoughts on some of the issues that need addressing.

KEY POINTS

1. **Increase flexibility** – Achieving our decarbonisation targets can and will go hand in hand with short and long-term generation adequacy, as long as power systems of the future become more flexible. Today the various flexibility options available – in terms of generation, consumption and storage – are not used to the full. It is especially important to modify the characteristics of the intraday and balancing markets in order to facilitate the inclusion of variable renewable energy. In particular, shortening gate closure times and more flexible prequalification standards for balancing markets are necessary. Flexibility options, including demand side management and flexible generation, can reduce peak loads and with it the need for must-run fossil-fuelled units and large price spreads. It is essential to develop equal market access for all flexibility options in order to ensure they are available when needed. Furthermore, ancillary service markets open to all types of technologies that enable the broad participation of stakeholders should be created for ancillary services that exceed the minimum technical requirements[1]. The latter must be made transparent by means of a cost-benefit analysis.

2. **Strengthen European interconnectivity** – Further reinforcement and expansion of transnational grid capacity is necessary to create a fully integrated European internal energy market and reap all its benefits. We encourage the swift implementation of the Projects of Common Interest (PCIs) as a means to tackle the major bottlenecks identified by the European Network of Transmission System Operators for Electricity (ENTSO-E) and to eliminate supply

[1] European network codes entail the minimum technical requirements for generators. There is currently no incentive for renewable energy producers to provide more ancillary services than required. In order to tap their full potential, the network codes should be revised in a transparent manner.

islands. This will help reach the goal of at least 10% interconnection capacity (and later 15%), which has been identified as an objective by the European Commission[2] and the European Council[3]. Together with further market coupling, a higher degree of interconnection helps balance larger shares of variable renewable energy, reduces the need for generation capacity, and improves supply and grid security. It also reinforces the Commission's approach of fostering more regional cooperation and prevents the artificial splitting of markets.

3. **Say no to capacity markets** – Capacity markets distort national energy markets and hinder the completion of a fully integrated and flexible European energy market, thus diminishing the overall acceptance of the energy system transformation. Aside from this, they also lead to additional system costs and the lock-in of inflexible and carbon-intensive generation capacity. Energy markets that have been further developed to enable the use of various flexibility potentials and complemented by a strategic capacity reserve outside the energy market provide sufficient supply security. Furthermore, in the rare circumstances where a lack of generation adequacy requires some Member States to take action, a full and transparent generation adequacy assessment – taking grid expansion measures and regional cooperation into account – needs to be conducted. The adopted measures must be temporary and open to cross-border participation, and the Member State in which the measure is implemented should not restrict the cross-border trade of electricity in times of scarcity. The German Renewable Energy Federation strongly agrees with the experts who advise against the introduction of national capacity markets[4]. The Commission and the Member States should focus their efforts on reducing the persistent surplus of generation capacity in Europe, while continuing to pursue ambitious and stable renewable energy policies.

4. **Create common balancing markets** – Balancing over greater areas not only reduces the need for flexibility, but also the system's vulnerability to unforeseen and disruptive events as well as the variability of renewable energy sources. To this end, the system operators need to improve and intensify regional cross-border cooperation, for example by following a more proactive approach in balancing market arrangements.

5. **Guarantee priority dispatch** – In the absence of a level playing field, priority dispatch for all renewable energy technologies is required for a functioning market. Given the current market structure and operation, which are not designed to accommodate large amounts of renewable energy generation, priority dispatch guarantees operation transparency and prevents discriminatory curtailment. Furthermore, not all renewable technologies display close to zero marginal costs, as is the case for wind and solar power. Therefore, priority dispatch is needed to secure the development of a broad array of flexible technologies that complement each other and can guarantee supply security in the long run.

6. **Enable democratic energy supply in European regions** – The market design of the future should facilitate the transition from consumers to prosumers and strengthen the role of the latter, allowing them to participate in the market on equal footing with centralized power generation. In Germany, community energy projects have democratized power generation and have significantly contributed to revitalizing the local economy, to creating jobs and regional value. Pursuing this approach at European level through cross-border model regions could incentivize regional cooperation for the energy transition between Member States: For example, German and Polish regions could work together on intelligent solutions including power generation from wind, solar, biomass, hydropower and geothermal energy, whilst at the

[2] Communication from the Commission to the European Parliament and the Council, Achieving the 10% electricity interconnection target. Making Europe's electricity grid fit for 2020 (COM/2015/082 final), February 2015. Available online at http://eur-lex.europa.eu/resource.html?uri=cellar:a5bfdc21-bdd7-11e4-bbe1-01aa75ed71a1.0003.01/DOC_1&format=PDF.
[3] European Council, Conclusions (EUCO 169/14), October 2014. Available online at http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/ec/145397.pdf.
[4] BMWi, BDEW, BEE et al., Märkte stärken, Versorgung sichern. Konzept für die Umsetzung einer Strategischen Reserve in Deutschland. Ergebnisbericht des Fachdialogs „Strategische Reserve", May 2013. Available online at http://www.bee-ev.de/fileadmin/Publikationen/Positionspapiere_Stellungnahmen/20130513_Fachdialog_Strategische_Reserve.pdf.

same time developing grid and storage solutions and testing synergies between the power and the heating and cooling sectors.

7. **Further develop the interaction between the power, the heating and cooling and the transport sectors** – In a flexibility-driven energy system, interaction between sectors is crucial. The market design of the future needs to tap into the existing potential and integrate flexibility options across all sectors, such as using excess electricity for heating, using gas grids for storage, power-to-gas, gas-to-power, electric vehicles, and to enable improved integration of smart solutions.

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