Unleashing distributed flexibility into the grid



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The right Electricity Market Design is key to enable the achievement of a successful and cost-efficient energy transition. Grasping all the benefits provided by shorter and more dynamic electricity markets and building a future-proofed electricity grid infrastructure is needed to provide robust, smart, flexible and ready solutions to integrate more renewables and efficient distributed generation, while optimizing the overall efficiency of Europe's electricity system.

With this imperative in mind, we would like to highlight three core priorities in both the Electricity Regulation and the Electricity Directive:

1. Maximise the contribution of renewables into the electricity system

According to Europe's renewable energy targets, renewable electricity will grow and provide at least 55% of Europe's electricity consumption by 2030. In parallel, higher volumes of renewable electricity generation are being curtailed and compensated, while inflexible conventional energy production keeps generating even though prices become negative. Introducing **a "last-resort rule"** for curtailment when grid congestion occurs would incentivize system operators to optimise the cost-effective use of flexibility options and maximize the contribution of renewables into the system, while avoiding a significant waste of clean electricity (5 TWh of wind energy last year in Germany).

In a context of decentralization of Europe's electricity system, the definition of redispatching should ensure that this **'last resort rule'** applies irrespectively to units connected either to transmission or distribution grid.

Recommendation in the Electricity Market Design Regulation

Adapt definition of 'redispatching' in article 2(2z) of the Council's General Approach as follows:

(z) 'redispatching' means a measure, including curtailment **and constraint**, activated by one or several system operators by altering the generation and/or load pattern to change physical flows in the transmission **or distribution** system and relieve a physical congestion.

If the presence of **'must-run' conventional generation** is needed for maintaining system security, it must be proven by TSOs and kept to an absolute minimum. Information on the volume, costs and reason for redispatch should be reported and made publicly available. It will increase transparency on the **cost of system inflexibility** and provide a clear overview on the improvements needed to better make use of renewable energy generation on the grid.

Recommendation in the Electricity Market Design Regulation

Support the Parliament's amendment 56 on article 12(3).

2. Guarantee and promote the deployment of flexibility services

a. Market-based procurement of flexibility by system operators

Member States shall allow, incentivize and ensure that System Operators procure flexibility services from all available resources, including renewable energy sources, cogeneration, demand response and energy storage, in accordance with transparent, non-discriminatory and market-based procedures.

Streamlined market products for such services shall therefore be defined at least at national level to avoid market fragmentation and facilitate the uptake of service providers across all European markets.

With such streamlined market products, TSOs and DSOs can indistinctively rely on solid flexibility services and respond to the system needs at all time and locations. For this purpose, TSOs and DSOs shall exchange information and deepen their cooperation, with the aim of maximizing the contribution of decentralized resources to a secure and efficient system operation and facilitating market development.

Recommendation in the Electricity Market Design Directive

Support

- the Parliament's amendment 118 on article 31.5 and the Council's General approach on article 31.5d;
- the Parliament's amendments 119 (without "can" to make this provision less ambiguous) and 120 in article 32.1;
- the Commission proposal in article 40.4 and the Parliament's amendment 142 (without "can" to make this provision less ambitious) in article 40.5a.

b. System operators as neutral market facilitators

The ownership, development, management and operation of energy storage shall be market-based. This will ensure that flexibility providers invest in these solutions based on their competitive value and can combine offering services to various markets, depending on the needs. Any exceptional derogations should be strictly limited to cases of market-failure, time-limited and based on the specific approval by the Regulatory Authority.

Recommendation in the Electricity Market Design Directive

Support:

- the Commission proposal on article 36.1 and the Parliament's amendments 129, 130, 131, 132 and 133 in article 36,
- the Commission proposal on article 54.1 and the Parliament's amendments 149, 150, 151, 152 and 153 in article 54.

c. Cost-reflective network charges to incentivize system operators to invest in flexibility and digitisation of their networks

Charges applied by network operators shall be fair, cost-reflective, transparent and shall consider the need for flexibility and neutrally support overall system efficiency.

In this light, grid tariffs:

- shall incentivize system operators to increase efficiencies and support investments in particular in digitalization and flexibility services;
- shall not create disincentives and discriminations against storage, self-generation, self-consumption and for participation in demand response. In this light, transmission and distribution tariffs shall be cost-reflective and reflect the investment costs, added value of distributed energy resources, flexibility, digitalisation and use of the network by all system users, including active customers;
- shall not include unrelated costs supporting other policy objectives, such as taxes or levies, to avoid distortions.

Recommendation in the Electricity Market Design Regulation

Support Parliament's amendments 78, 79, 80 to article 16.

3. Boost and monitor the development of flexible and smarter grids

Expanding and smartening European electricity grids is crucial: they enable the integration of larger shares of renewables, optimise system management and reduce electricity cost. Most importantly, they rely on innovative European solutions and support an EU leadership in smart energy.

Performance targets for networks operators are therefore important for increasing transparency of the grid operation. These targets should not be limited to energy efficiency but should also include flexibility and digitalisation that are essential to foster demand response and decentralised flexibility, for a more efficient and cost-effective management of the energy resources by the grid.

Recommendation in the Electricity Market Design Regulation

Support amendment 81 to article 16.

Therefore **a "grid smartness monitoring process" must be led by regulatory authorities**. It must rely on a set of harmonised standards, adopted by all regulatory authorities, and result in the publication of report every two years. It is crucial to help regulatory authorities monitor system operators' performance, take grid investments decisions and track smart grids deployment. It would also foster transparency for grid users and support acceptability. In addition, such a tool would support and strengthen the development of a common methodology to make the grid infrastructure more energy-efficient, as agreed in the compromise text on the revised Energy Efficiency Directive (Article 15, paragraph 2).

Recommendation in the Electricity Market Design Regulation

Support the proposal of "grid performance indicators" as in Parliament's amendment 84 to article 16.9, with an additional reference to the Governance Regulation: this monitoring and reporting for more efficient operation of networks shall be included in the National Energy and Climate Plans.

Recommendation in the Electricity Market Design Directive

Support the proposal of a measurement of system operators' performance by regulatory authorities as in the Commission proposal to article 59.1.k.