Commission Regulation (EU) 2016/1388 of 17 August 2016 establishing a Network Code on Demand Connection (Text with EEA relevance)

COMMISSION REGULATION (EU) 2016/1388

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(Text with EEA relevance)

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Regulation (EC) No 714/2009 of the European Parliament and of the Council of 13 July 2009 on conditions for access to the network for cross-border exchanges in electricity and repealing Regulation (EC) No 1228/2003[(1)], and in particular Article 6(11) thereof,

Whereas:

(1) The swift completion of a fully functioning and interconnected internal energy market is crucial to maintaining security of energy supply, increasing competitiveness and ensuring that all consumers can purchase energy at affordable prices.

(2) Regulation (EC) No 714/2009 sets out non-discriminatory rules governing access to the network for cross-border exchanges in electricity with a view to ensuring the proper functioning of the internal market in electricity. In addition Article 5 of Directive 2009/72/EC of the European Parliament and of the Council[(2)] requires that Member States or, where Member States have so provided, regulatory authorities ensure, inter alia, that objective and non-discriminatory technical rules are developed which establish minimum technical design and operational requirements for the connection to the system. Where requirements constitute terms and conditions for connection to national networks, Article 37(6) of the same Directive requires regulatory authorities to be responsible for fixing or approving at least the methodologies used to calculate or establish them. In order to provide system security within the interconnected transmission system, it is essential to establish a common understanding of the requirements for grid connection applicable to demand facilities and distribution systems, including closed distribution systems. Those requirements that contribute to maintaining, preserving and restoring system security in order to facilitate proper functioning of the internal electricity market within and between synchronous areas, and to achieve cost efficiencies, should be regarded as cross-border network issues and market integration issues.

(3) Harmonised rules for grid connection for demand facilities and distribution systems should be set out in order to provide a clear legal framework for grid connections, facilitate Union-wide trade in electricity, ensure system security, facilitate the integration of renewable electricity sources, increase competition, and allow more efficient use of the network and resources, for the benefit of consumers.

Changes to legislation: *Commission Regulation (EU) 2016/1388 is up to date with all changes known to be in force on or before 24 December 2020. There are changes that may be brought into force at a future date. Changes that have been made appear in the content and are referenced with annotations. (See end of Document for details) View outstanding changes*

(4) System security cannot be ensured independently from the technical capabilities of all users. Historically, generation facilities have formed the backbone of providing technical capabilities. However, in this regard, demand facilities are expected to play a more pivotal role in the future. Regular coordination at the level of the transmission and distribution networks and adequate performance of the equipment connected to the transmission and distribution networks with sufficient robustness to cope with disturbances and to help to prevent any major disruption or to facilitate restoration of the system after a collapse are fundamental prerequisites.

(5) Regulatory authorities should consider the reasonable costs effectively incurred by system operators in the implementation of this Regulation when fixing or approving transmission or distribution tariffs or their methodologies or when approving the terms and conditions for connection and access to national networks in accordance with Article 37(1) and (6) of Directive 2009/72/EC and with Article 14 of Regulation (EC) No 714/2009.

(6) Different synchronous electricity systems in the Union have different characteristics which need to be taken into account when setting the requirements for demand connection. It is therefore appropriate to consider regional specificities when establishing network connection rules as required by Article 8(6) of Regulation (EC) No 714/2009.

(7) In view of the need to provide regulatory certainty, the requirements of this Regulation should apply to new transmission-connected demand facilities, new transmission-connected distribution facilities, new distribution systems and new demand units used by a demand facility or a closed distribution system to provide demand response services to relevant system operators and relevant transmission system operators (‘TSOs’). The requirements of this Regulation should not apply to existing transmission-connected demand facilities, existing transmission-connected distribution facilities, existing distribution systems and existing demand units that are or can be used by a demand facility or a closed distribution system to provide demand response services to relevant system operators and relevant TSOs. The requirements of this Regulation also should not apply to new or existing demand facilities connected at the distribution level unless they provide demand response services to relevant system operators and relevant TSOs. However, the requirements of this Regulation should apply in case the relevant regulatory authority or Member State decides otherwise based on evolution of system requirements and a full cost-benefit analysis, or in case a substantial modernisation or replacement of equipment impacting the technical capabilities of an existing transmission-connected demand facility, an existing transmission-connected distribution facility, an existing distribution system, or an existing demand unit within a demand facility or a closed distribution system connected at a voltage level above 1 000 V has been performed.

(8) Demand response is an important instrument for increasing the flexibility of the internal energy market and for enabling optimal use of networks. It should be based on customers' actions or on their agreement for a third party to take action on their behalf. A demand facility owner or a closed distribution system operator (‘CDSO’)

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may offer demand response services to the market as well as to system operators for grid security. In the latter case, the demand facility owner or the closed distribution system operator should ensure that new demand units used to provide such services fulfil the requirements set out in this Regulation, either individually or commonly as part of demand aggregation through a third party. In this regard, third parties have a key role in bringing together demand response capacities and can have the responsibility and obligation to ensure the reliability of those services, where those responsibilities are delegated by the demand facility owner and the closed distribution system operator.

(9) The requirements should be based on the principles of non-discrimination and transparency as well as on the principle of optimisation between the highest overall efficiency and lowest total cost for all involved parties. TSOs and distribution system operators ('DSOs') including CDSOs can take those elements into account when defining the requirements in accordance with the provisions of this Regulation, whilst recognising that the thresholds which determine whether a system is a transmission system or a distribution system are established at the national level.

(10) The requirements applicable to a demand facility connected to a transmission system should set out the capabilities at their interfaces and the necessary automated responses and data exchange. These requirements aim at ensuring the operability of the transmission system, and the capacity to utilise the generation and demand response embedded in these networks over system operational ranges and critical events.

(11) The requirements applicable to a distribution system connected to a transmission system or another distribution system should set out the operational range of these systems and the necessary automated responses and data exchange. These requirements should ensure the effective development and operability of the transmission system, and the capacity to utilise the generation and demand response embedded in these networks over system operational ranges and critical events.

(12) The requirements applicable to a demand unit used by a demand facility or a closed distribution system to provide demand response services to relevant system operators and relevant TSOs should ensure the capacity to use the demand response over system operational ranges thereby minimising critical events.

(13) The administrative burdens and costs associated with providing demand response should be kept within reasonable limits, in particular as regards domestic consumers, who will play an increasingly important role in the transition to low carbon society and their uptake should not be unnecessarily burdened with administrative tasks.

(14) Due to its cross-border impact, this Regulation should aim at the same frequency-related requirements for all voltage levels, at least within a synchronous area. That is necessary because, within a synchronous area, a change in frequency in one Member State would immediately impact frequency and could damage equipment in all other Member States.

(15) Voltage ranges should be coordinated between interconnected systems because they are crucial to secure planning and operation of a power system within a synchronous area. Disconnections because of voltage disturbances have an impact on neighbouring

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systems. Failure to specify voltage ranges could lead to widespread uncertainty in planning and operation of the system with respect to operation beyond normal operating conditions.

(16) Appropriate and proportionate compliance testing should be introduced so that system operators can ensure operational security. In accordance with Article 37(1)(b) of Directive 2009/72/EC, regulatory authorities are responsible for ensuring that system operators are compliant with this Regulation.

(17) The regulatory authorities, Member States and system operators should ensure that, in the process of developing and approving the requirements for network connection, they are harmonised to the extent possible, in order to ensure full market integration. Established technical standards should be taken into particular consideration in the development of connection requirements.

(18) System operators should not specify technical requirements for equipment that hinder the free movement of goods in the internal market. Where system operators make technical specifications resulting in requirements for the placing on the market of equipment, the respective Member State should follow the procedure referred to in Articles 8 and 9 of Directive 98/34/EC of the European Parliament and of the Council[3].

(19) A process for derogating from the rules should be set out in this Regulation to take into account local circumstances where exceptionally, for example, compliance with those rules could jeopardise the stability of the local network or where the safe operation of a transmission-connected demand facility, a transmission-connected distribution facility, a distribution system, or a demand unit used by a demand facility or a closed distribution system to provide demand response services to relevant system operators and relevant TSOs, might require operating conditions that are not in line with this Regulation.

(20) Subject to approval by the relevant regulatory authority, or other authority where applicable in a Member State, demand facility owners and relevant system operators should be allowed to propose derogations for certain classes of transmission-connected demand facilities, transmission-connected distribution facilities, distribution systems and demand units used by a demand facility or a closed distribution system to provide demand response services to relevant system operators and relevant TSOs.

(21) According to Article 28 of Directive 2009/72/EC, Member States may provide for the classification of a system which distributes electricity as a closed distribution system in certain circumstances. The provisions of this Regulation should apply to closed distribution systems only where Member States have so provided according to Article 28 of Directive 2009/72/EC.

(22) This Regulation has been adopted on the basis of Regulation (EC) No 714/2009 which it supplements and of which it forms an integral part. References to Regulation (EC) No 714/2009 in other legal acts should be understood as also referring to this Regulation.

(23) The measures provided for in this Regulation are in accordance with the opinion of the Committee referred to in Article 23(1) of Regulation (EC) No 714/2009,

HAS ADOPTED THIS REGULATION:

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TITLE I

GENERAL PROVISIONS

Article 1

Subject matter

1 This Regulation establishes a network code which lays down the requirements for grid connection of:

a transmission-connected demand facilities;

b transmission-connected distribution facilities;

c distribution systems, including closed distribution systems;

d demand units, used by a demand facility or a closed distribution system to provide demand response services to relevant system operators and relevant TSOs.

2 This Regulation, therefore, helps to ensure fair conditions of competition in the internal electricity market, to ensure system security and the integration of renewable electricity sources, and to facilitate Union-wide trade in electricity.

3 This Regulation also lays down the obligations for ensuring that system operators make appropriate use of the demand facilities' and distribution systems' capabilities in a transparent and non-discriminatory manner to provide a level playing field throughout the Union.

Article 2

Definitions

For the purposes of this Regulation, the definitions in Article 2 of Directive 2012/27/EU of the European Parliament and of the Council[(4)], Article 2 of Regulation (EC) No 714/2009, Article 2 of Commission Regulation (EU) 2015/1222[(5)], Article 2 of Commission Regulation (EU) 2016/631[(6)], Article 2 of Commission Regulation (EU) No 543/2013[(7)] and Article 2 of Directive 2009/72/EC shall apply.

In addition, the following definitions shall apply:

(1) ‘demand facility’ means a facility which consumes electrical energy and is connected at one or more connection points to the transmission or distribution system. A distribution system and/or auxiliary supplies of a power generating module do no constitute a demand facility;

(2) ‘transmission-connected demand facility’ means a demand facility which has a connection point to a transmission system;

(3) ‘transmission-connected distribution facility’ means a distribution system connection or the electrical plant and equipment used at the connection to the transmission system;

(4) ‘demand unit’ means an indivisible set of installations containing equipment which can be actively controlled by a demand facility owner or by a CDSO, either individually or commonly as part of demand aggregation through a third party;

(5) ‘closed distribution system’ means a distribution system classified pursuant to Article 28 of Directive 2009/72/EC as a closed distribution system by national regulatory