Pursuant to Article 89 of the Treaty Establishing the Energy Community (Official Gazette of BiH – International Treaties, 9/06) and Articles 1 and 4 of the Law on Transmission of Electric Power, Regulator and System Operator of Bosnia and Herzegovina (Official Gazette of BiH, 7/02, 13/03, 76/09 and 1/11), at its session held on 27 February 2019, the State Electricity Regulatory Commission adopted

RULES ON CONNECTION NETWORK CODES

Article 1

(Subject Matter)

The transposition of one part of the connection network codes under competence of the State Electricity Regulatory Commission (hereinafter: SERC) which are to be implemented without delay is done by these Rules.

Article 2

(Scope of Application)

- (1) The Rules shall apply to the connection to the transmission network at the voltage level of 400, 220 and 110 kV, and the voltage level of 35, 20, 10 and 6 kV at 110/x kV substations of Elektroprenos Bosne i Hercegovine, as well as to the connection to the distribution network in the Brčko District of Bosnia and Herzegovina (hereinafter: connection).
- (2) These Rules set out modules, facilities and systems to which the connection network codes shall not apply, define the method and procedure for setting out the criteria for derogations to the connection rules for power-generating modules (hereinafter: generating modules), demand facilities, high-voltage direct current systems (hereinafter: HVDC systems) and direct current-connected power park module (hereinafter: DC-connected PPM) and the method and procedure for the classification of the power-generating module as an emerging technology which is exempted from the application of connection network codes.

Article 3

(Content of the Rules)

These Rules include the provisions which are in compliance with the European Commission regulations adapted to the Energy Community legal framework by the Permanent High Level Group Decisions of 12 January 2018, in the electricity sector of Bosnia and Herzegovina as follows:

- a) Decision 2018/03/PHLG-EnC on incorporating Commission Regulation (EU) 2016/631 of 14 April 2016 establishing a network code on requirements for grid connection of generators,
- b) Decision 2018/04/PHLG-EnC on incorporating Commission Regulation (EU) 2016/1447 of 26 August 2016 establishing a network code on requirements for grid connection of high voltage direct current systems and direct current-connected power park modules,

c) Decision 2018/05/PHLG-EnC on incorporating Commission Regulation (EU) 2016/1388 of 17 August 2016 establishing a network code on demand connection.

Article 4

(Definitions and Abbreviations)

The definitions and abbreviations used in these Rules shall have the following meaning:

- "Transmission-connected distribution facility" means a distribution system connection or the electrical plant and equipment used at the connection to the transmission system.
- "Transmission-connected distribution system" means a distribution system connected to a transmission system, including transmission-connected distribution facilities.
- **"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.
- "Main demand equipment" means at least one of the following equipment: motors, transformers, high voltage equipment at the connection point and at the process production plant.
- "Main generating plant" means one or more of the principal items of equipment required to convert the primary source of energy into electricity.
- "HVDC system" means an electrical power system which transfers energy in the form of high-voltage direct current between two or more alternating current (AC) buses and comprises at least two HVDC converter stations with DC transmission lines or cables between the HVDC converter stations.
- "HVDC interface point" means a point at which HVDC equipment is connected to an AC network, at which technical specifications affecting the performance of the equipment can be prescribed.
- "Direct current-connected power park module" (DC-connected PPM) means a power park module that is connected via one or more HVDC interface points to one or more HVDC systems.
- **"Power park module"** means a unit or ensemble of units generating electricity, which is either non-synchronously connected to the network or connected through power electronics, and that also has a single connection point to a transmission system, distribution system including closed distribution system or HVDC system.
- "Connection point" means the interface at which the power-generating module, demand facility, distribution system or HVDC system is connected to a transmission system, offshore network, distribution system, including closed distribution systems, or HVDC system, as identified in the connection agreement.
- "Power-generating module" means either a synchronous power-generating module or a power park module.
- "Network" means a plant and apparatus connected together in order to transmit or distribute electricity in the territory of the Brčko District of Bosnia and Herzegovina (hereinafter: Brčko District BiH).
- **"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 not constitute a demand facility.

- "Transmission-connected demand facility" means a demand facility which has a connection point to a transmission system.
- **"Rules on connection network codes"** include the European Commission regulations adapted to the Energy Community framework by the Permanent High Level Group decisions of 12 January 2018 referred to in Article 3 of these Rules.
- "Type A power-generating module" is a module with the connection point below 110 kV and maximum capacity of 0.8 kW or above, and which is in compliance with other technical requirements defined by TSO.
- "Synchronous power-generating module" (synchronous generating module) means an indivisible set of installations which can generate electrical energy such that the frequency of the generated voltage, the generator speed and the frequency of network voltage are in a constant ratio and thus in synchronism.
- **"DC-connected power park module owner"** means a natural or legal entity owning a DC-connected power park module.
- "TSO" means the relevant transmission system operator, i.e., the Independent System Operator in Bosnia and Herzegovina and Elektroprenos Bosne i Hercegovine (electric power transmission company) in accordance with their respective competences.
- "DOS" means the distribution system operator.
- "Relevant DOS" means Public Utility "Komunalno Brčko", d.o.o. Brčko.
- "CDOS" means the closed distribution system operator in the territory of the Brčko District BiH, i.e., the system in the territory of the Brčko District BiH which distributes electricity within a geographically confined industrial, commercial or shared services site and does not supply household customers, without prejudice to incidental use by a small number of households located within the area served by the system and with employment or similar associations with the owner of the system;

(Requirements of General Application)

TSO shall be obligated to establish requirements of general application for the connection of electricity generators to the network or the methodology used to calculate or establish these requirements and submit them to SERC for approval no later than 12 July 2020.

Article 6

(Existing Generating Modules)

- (1) A power-generating module shall be considered existing if:
 - a) it is already connected to the network on 12 July 2018, or
 - b) the power-generating facility owner concludes a contract for the purchase of the main generating plant no later than 12 July 2020.
- (2) In the case referred to in paragraph (1) point b) of this Article, depending on the location of connection point, the power-generating facility owner must notify TSO or the relevant DOS of conclusion of the purchase contract no later than 12 January 2021.

- (3) The notification referred to in paragraph (2) of this Article shall at least indicate the contract title, its date of signature and date of entry into force and the specifications of the main generating plant to be constructed, assembled or purchased.
- (4) In specified circumstances SERC may determine whether the power-generating module is to be considered an existing power-generating module or a new power-generating module.

(Existing HVDC Systems and Existing DC-connected Power Park Modules)

- (1) An HVDC system or DC-connected power park module shall be considered existing if:
 - a) it is already connected to the network on 12 July 2018,
 - b) the HVDC system owner or DC-connected power park module owner concludes a contract for the purchase of the main generating plant or HVDC equipment no later than 12 July 2020.
- (2) In the case referred to in paragraph (1) point b) of this Article, the HVDC system owner or DC-connected power park module owner must notify the relevant DOS or TSO of conclusion of the purchase contract no later than 12 January 2021.
- (3) The notification referred to in paragraph (2) of this Article shall at least indicate the contract title, its date of signature and date of entry into force and the specifications of the main generating plant or HVDC equipment to be constructed, assembled or purchased.
- (4) In specified circumstances SERC may determine whether the HVDC system or DC-connected power park module is to be considered an existing HVDC system or DC-connected power park module or a new HVDC system or DC-connected power park module.

Article 8

(Existing Demand Facilities)

- (1) A transmission-connected demand facility, a transmission-connected distribution facility, a distribution system, or a demand unit that is, or can be, used by a demand facility or a closed distribution system to provide demand response services to the relevant DOS or TSO, shall be considered as existing if:
 - a) it is already connected to the network on 12 July 2018,
 - b) the demand facility owner, DSO, or CDSO concludes a contract for the purchase of the main demand equipment or the demand unit no later than 12 July 2020.
- (2) In the case referred to in paragraph (1) point b) of this Article the demand facility owner, relevant DSO, or CDSO must notify TSO or relevant DOS of conclusion of the purchase contract no later than 12 January 2021.
- (3) The notification referred to in paragraph (2) of this Article shall at least indicate the contract title, its date of signature and date of entry into force and the specifications of the main demand equipment or the demand unit to be constructed, assembled or purchased.

(4) In specified circumstances SERC may determine whether the transmission-connected demand facility, the transmission-connected distribution facility, the distribution system, or the demand unit is to be considered existing or new.

Article 9

(Derogations for Power Generating Modules)

- (1) SERC may, at the request of a power-generating facility owner or prospective owner, or relevant system operator (TSO or relevant DOS), grant power-generating facility owners or prospective owners, or relevant system operators derogations from the application of rules for the connection of generating modules, or revoke the derogations already granted.
- (2) Derogations from the application of rules for the connection of generating modules referred to in paragraph (1) shall be granted in accordance with the criteria for granting derogations which shall be specified by SERC after consulting relevant system operators (TSO or relevant DOS), power-generating facility owners and other interested stakeholders.
- (3) SERC shall specify the criteria for granting derogations from the application of rules for the connection of generating modules by a separate decision within one month of the entry into force of these Rules.
- (4) The criteria referred to in paragraph (3) of this Article shall be published on the SERC official website and notified to the Energy Community Secretariat (hereinafter: Secretariat) no later than 12 April 2019.
- (5) The Secretariat may require SERC to amend the established criteria if it considers that they are not in line with the Energy Community acts.
- (6) In the case referred to in paragraph (5) of this Article, the requirements of the Secretariat shall not affect the derogations already granted which shall continue to apply until the scheduled expiry date as detailed in the SERC decision granting the exemption.

Article 10

(Derogations for HVDC systems and DC-connected PPM)

- (1) SERC may, at the request of a HVDC system owner or DC-connected power park module owner, or their prospective owner, relevant system operator or TSO, grant HVDC system owners or DC-connected power park module owners, or their prospective owner, relevant system operator or TSO derogations from the application of rules for the connection of new or existing HVDC systems or DC-connected PPMs, or revoke the derogations already granted.
- (2) Derogations from the application of rules for the connection of HVDC systems or DC-connected PPMs referred to in paragraph (1) shall be granted in accordance with the criteria for granting derogations which shall be specified by SERC after consulting relevant system operators (TSO or relevant DOS), HVDC system owners or DC-connected PPM owners and other interested stakeholders.
- (3) SERC shall specify the criteria for granting derogations from the application of rules for the connection of new or existing HVDC systems or DC-connected PPMs by a separate decision within one month of the entry into force of these Rules.

- (4) The criteria referred to in paragraph (3) of this Article shall be published on the SERC official website and notified to the Energy Community Secretariat (hereinafter: Secretariat) no later than 12 April 2019.
- (5) The Secretariat may require SERC to amend the established criteria if it considers that they are not in line with the Energy Community acts.
- (6) In the case referred to in paragraph (5) of this Article, the requirements of the Secretariat shall not affect the derogations already granted which shall continue to apply until the scheduled expiry date as detailed in the SERC decision granting the exemption.

(Derogations for Demand Facilities)

- (1) SERC may, at the request of a demand facility owner or prospective owner, and a DSO/CDSO or prospective operator, relevant DOS or TSO, grant demand facility owners or prospective owners, and DSOs/CDSOs or prospective operators, relevant DOS or TSO derogations from the applications of rules for the connection of new and existing transmission-connected demand facilities, transmission-connected distribution facilities, distribution systems and demand units, or revoke the derogations already granted.
- (2) Derogations from the application of rules for the connection of demand facilities referred to in paragraph (1) shall be granted in accordance with the criteria for granting derogations which shall be specified by SERC after consulting relevant system operators (TSO or relevant DOS), demand facility owners, DOSs, CDOSs and other interested stakeholders.
- (3) SERC shall specify the criteria for granting derogations from the application of rules for the connection of demand facilities by a separate decision within one month of the entry into force of these Rules.
- (4) The criteria referred to in paragraph (3) of this Article shall be published on the SERC official website and notified to the Energy Community Secretariat (hereinafter: Secretariat) no later than 12 April 2019.
- (5) The Secretariat may require SERC to amend the established criteria if it considers that they are not in line with the Energy Community acts.
- (6) In the case referred to in paragraph (5) of this Article, the requirements of the Secretariat shall not affect the derogations already granted which shall continue to apply until the scheduled expiry date as detailed in the SERC decision granting the exemption.

Article 12

(Exception for Emerging Technologies)

With the exception of the operational notification procedure for connection, the provisions of these Rules and other acts regulating the procedure for the connection of generating modules to the network shall not apply to generating modules classified as an emerging technology in the territory of the Brčko District BiH.

Article 13

(Classification of Power-Generating Module Technology)

(1) Within three months of the entry into force of these Rules manufacturers of Type A power-generating modules seated in the Brčko District BiH may submit to SERC a

- request for classification of their power-generating module technology as an emerging technology type.
- (2) SERC shall decide, in coordination with all the other regulatory authorities of a synchronous area, which power-generating modules should be classified as an emerging technology no later than 12 July 2019.
- (3) When defining an emerging technology SERC may request a prior opinion from the Energy Community Regulatory Board.
- (4) If the Energy Community Regulatory Board issues the opinion referred to in paragraph (3) of this Article within three months of receipt of the request, SERC shall take into account that opinion when defining the emerging technology.

(Entry into Force)

These Rules shall enter into force on the eighth day upon the publication in the Official Gazette of Bosnia and Herzegovina and they shall also be published in the official gazettes of the Entities and Brčko District BiH.

Number: 05-02-2-491-8/18 27 February 2019 Tuzla Chairman of the Commission

Milorad Tuševljak