

Pursuant to Article 4.2 of the Law on Transmission, Regulator and Electricity System Operator in Bosnia and Herzegovina ("Official Gazette of BiH" No. 7/02 and 13/03), and Article 36 of the Procedural Rules of the State Electricity Regulatory Commission ("Official Gazette BiH No. 2/05), the State Electricity Regulatory Commission, on its session held on October 23, 2008 issued

## **CONNECTION RULES**

### **PART I – GENERAL PROVISIONS**

#### **Article 1**

##### ***(Subject)***

These Rules shall prescribe the procedure for connection of new generators' or customers' facilities to the transmission network at 400, 220 and 110 kV voltage level, connection of facilities to 35, 20, 10 and 6 kV medium voltage level at 110/x kV substations of the Transmission Company, as well as connection of the existing facilities in case of an increase in granted capacity, upgrade or reconstruction of facilities.

### **PART II – DEFINITIONS OF BASIC TERMS**

#### **Article 2**

##### ***(Definitions)***

Terms used in these Rules shall have the following meanings:

**SERC** shall mean the State Electricity Regulatory Commission,

**ISO** shall mean the Independent System Operator in Bosnia and Herzegovina,

**Transmission Company** shall mean the Company for Transmission of Electric Power in Bosnia and Herzegovina,

**User** shall mean any legal or natural person, excluding distribution operators, which delivers and/or takes over electricity to/from the transmission network,

**Distribution operator** shall mean a separately organized unit of the power utility for distribution which operates the distribution network or a legal person responsible for the operation, management and development of the distribution system in a particular area,

**Connection** shall mean a set of lines, equipment and devices for transmission of electricity connecting the user's facility to the transmission network, from the metering device to the nearest point in the transmission network at which connection is possible in technical, legal and economic terms,

**Conditions for connection of the user to the transmission network** shall mean a document defining minimum technical, construction and operational criteria which have to be fulfilled by the existing and future users connected to the transmission network,

**Application for the issuance of connection conditions** shall mean an application in defined form submitted by the user applying for connection to the transmission network,

**Approval of connection** shall mean a document confirming that all required technical, legal and economic prerequisites for connection of the user to the transmission network have been fulfilled in accordance with the Rules and Grid Code,

**Connection contract** shall mean a contract between the Transmission Company and the user specifying conditions for connection to the transmission network,

**Creation of technical conditions in the network** shall mean construction of new facilities, reconstruction or upgrade of the existing facilities, as well as network adjustments required for connection of the user,

**Renewable sources** shall mean renewable non-fossil energy sources (wind power, solar energy, geothermal energy, wave and tidal power, hydro power, biomass, landfill gas, sewage gas and biogases),

**Price list** shall mean the price list of services for connection of the user pursuant to Article 21 of the Rules.

### **PART III – CONDITIONS FOR CONNECTION OF THE USER TO THE TRANSMISSION NETWORK**

#### **Article 3**

##### *(Purpose of Conditions for Connection of the User to the Transmission Network)*

- (1) The user shall be obligated to file an application for the issuance of conditions for connection of the user to the transmission network (hereinafter: Connection Conditions) if there is an intention to construct a new facility.
- (2) The existing user shall also be obligated to file an application for the issuance of Connection Conditions in case of:
  - a) An increase in granted capacity,
  - b) Upgrade or reconstruction of facilities in case of an increase of granted capacity, separation or connection of installations within the facility,
  - c) Modification of technical parameters of the connection,
  - d) Modification of the consumption category, or
  - e) Connection of new supply sources or an increase in capacity of the existing supply sources belonging to the user.
- (3) Connection Conditions shall be issued in order to ensure the provision of other required documents with a view to consider possibilities and conditions for connection of the user's facility to the network and conditions for the use of the network.

#### **Article 4**

##### *(Submission of the Request)*

- (1) The user shall file a written application for the issuance of Connection Conditions with the Transmission Company in prescribed form.
- (2) When filing the request for the issuance of Connection Conditions the user shall pay the fee for the submission of the application in accordance with the price list.
- (3) The Transmission Company shall develop and publish the application form.

- (4) The application form can be obtained at the Transmission Company or on its website.

#### **Article 5**

##### ***(Content of the Application for the Issuance of Connection Conditions)***

- (1) The application will have to include:
- a) User's basic data,
  - b) Name, type, address and number of the cadastre parcel of the facility to be connected to the network,
  - c) Planned date of the connection,
  - d) Planned granted capacity and annual consumption/generation,
  - e) Purpose of electricity consumption, for customers,
  - f) Regime of the use or generation of capacity and energy,
  - g) Other technical parameters pursuant to the Grid Code.
- (2) Attached to the application for the issuance of Connection Conditions of the generator and/or consumer, i.e. the user, shall be the approval of the Urban Planning Department or pre-approval of the Urban Planning Department in case of construction of a new facility, i.e., an approval pursuant to regulations regarding construction issues, in case of expansion of the existing facility.

#### **Article 6**

##### ***(Issuance of Connection Conditions)***

- (1) Connection Conditions shall be issued by the Transmission Company on the basis of the Project Analysis of the Technical Solution for Connection (hereinafter: Project Analysis).
- (2) The user cannot be connected nor can the user's granted capacity be increased on the basis of Connection Conditions.

#### **Article 7**

##### ***(Content of Connection Conditions)***

- (1) Connection Conditions shall include:
- a) Basic data on the user,
  - b) Name, type, address and number of the cadastre parcel of the facility to be connected to the network,
  - c) Location of connection of the facility to the network,
  - d) Granted capacity and annual consumption/generation,
  - e) Technical conditions for connection to the transmission network,
  - f) Consumption/generation category,
  - g) Technical condition for the billing-metering point,
  - h) Planned deadline for connection,
  - i) Nominal voltage at the billing-metering point,

- j) Allowed power factor,
  - k) Period of validity,
  - l) Conditions for termination of validity, and
  - m) Dispute clauses.
- (2) The Project Analysis shall be a constitutive part of Connection Conditions.

#### **Article 8**

##### ***(Deadline for Issuance and Validity of Connection Conditions)***

- (1) The Transmission Company shall submit Connection Conditions prepared pursuant to paragraph (1) of Article 6 of these Rules, to the applicant, together with the Project Analysis, no later than 90 days from the day of the application submission, i.e., 30 days after the revision of the Project Analysis if prepared by a third party.
- (2) Connection Conditions shall be issued for a 3-year term.

#### **Article 9**

##### ***(Acceptance of Connection Conditions)***

- (1) After receiving Connection Conditions the user shall be obligated to provide to the Transmission Company a written statement confirming the acceptance of Connection Conditions, of which the Transmission Company shall subsequently inform ISO.
- (2) The user's written statement of acceptance shall be provided in standardized form to be defined by the Transmission Company.

#### **Article 10**

##### ***(Project Analysis)***

- (1) The Project Analysis shall include construction of connection to the transmission network and the user's impact on the transmission system.
- (2) The scope and content of the Project Analysis shall be defined by ISO in consultation with the Transmission Company.
- (3) The Transmission Company shall be responsible for the Project Analysis design.
- (4) Estimates and calculations for the Project Analysis design shall be carried out for the year of planned connection of the user to the network, using standard planning methodologies.
- (5) ISO shall review, approve and directly revise the Project Analysis prepared by the Transmission Company.
- (6) Upon a request of the user, the Transmission Company in consultation with ISO can approve the Project Analysis design by another professional institution cited in the request. In this case ISO, in consultation with the Transmission Company, shall define terms and conditions for the Project Analysis design.
- (7) ISO, with active involvement of the Transmission Company, shall review, approve and directly revise the Project Analysis prepared by another professional institution for the user.
- (8) Results of the revision shall be presented publicly.

### **Article 11**

#### ***(Solutions in the Project Analysis)***

Solutions provided in the Project Analysis shall be obligatory for the user and they shall create a basis of the issuance of Connection Conditions.

### **Article 12**

#### ***(Design of the Project Analysis by the Transmission Company)***

The following rules shall be applied if the Project Analysis is designed by the Transmission Company:

- a) Contract on the Project Analysis design shall be concluded between the Transmission Company and the user.
- b) Contract on the Project Analysis design shall also include provisions regarding the revision.
- c) While developing the Project Analysis, the Transmission Company can require additional information from the user.

### **Article 13**

#### ***(Costs of Project Analysis Design)***

- (1) The user shall cover costs of the Project Analysis design and revision.
- (2) The costs of the Project Analysis design shall be determined by the Transmission Company if the Transmission Company is the designer.
- (3) ISO shall determine the costs of the Project Analysis revision.

## **PART IV – CONNECTION FEE**

### **Article 14**

#### ***(Purpose of Connection Fee)***

- (1) The connection fee shall be the amount which the user shall pay to the Transmission Company for connection to the network or for an increase in connected capacity.
- (2) The purpose of the connection fee shall be to financially contribute to the creation of technical conditions in the network providing connection of the user and to cover connection construction costs.
- (3) The creation of technical conditions in the network providing connection of the user and construction of connection shall be the responsibility of the Transmission Company.

### **Article 15**

#### ***(Structure of Connection Fee)***

- (1) The connection fee shall consist of fixed and variable parts.
- (2) The connection fee shall be determined by the Transmission Company on the basis of the Project Analysis.

- (3) The user shall cover the connection fee pursuant to Connection Contract provisions.

### **Article 16**

#### ***(Fixed Part of Connection Fee)***

- (1) The fixed part of the connection fee shall be calculated in accordance with the following formula:

For a new user:

$$N = C \cdot P$$

For a user increasing granted capacity:

$$N_2 = C \cdot (P_2 - P_1)$$

where:

$N$  – one-off amount of money to be paid by the user in order to ensure conditions for connection,

$C$  – the price of connected capacity of the user per unit defined by the price list,

$P$  – granted installed capacity of the user,

$N_2$  – one-off amount of money to be paid by the user in order to ensure conditions for increase of connected capacity (increase in connection fee),

$P_2$  – granted capacity of the user upon the user's application for increase of capacity,

$P_1$  – previously granted capacity of the user prior to approval of increase of connected capacity.

- (2) Electricity generation facilities using renewable sources shall pay 50% of the fixed part of connection fee. Facilities using hydro power shall be able to use this benefit if their granted capacity does not exceed 10 MW.
- (3) If established by the Project Analysis or during its revision that granted capacity differs from the one specified in the application, the payment of the fixed part of the connection fee shall be done on the basis of the factual installed capacity.

### **Article 17**

#### ***(Variable Part of Connection Fee)***

- (1) The variable part of the connection fee shall be used to cover the connection costs referred to in Article 18 of these Rules.
- (2) To calculate the variable part of the connection fee for connection of the user to the network, the price of goods, works and services and standard normative works per unit shall be used and their prices shall be made available to the public by the Transmission Company.
- (3) If determined after the acceptance of financial calculations for connection that the difference between the calculated variable cost and the real one is higher than  $\pm 5\%$ , the payment of the fee shall be done on the basis the actual cost.

**Article 18**  
***(Costs of Connection)***

- (1) Costs of connection of the user to the voltage level of 110kV and higher, depending on a technical solution specified in the Project Analysis, shall include costs of preparation, including possible purchase of land, and construction of a high voltage connection transmission line, from the point in the network which is defined by the Project Analysis to the metering device, as well as the equipment of transmission line feeder bay with accompanying busbars at the facilities of the Transmission Company. The costs of connection shall also include costs of the installment of measurement and protection system as well as the installment of devices required for operation and management of the system after connecting the user's facilities to the network.
- (2) The Transmission Company shall be the investor and the owner of the connection.

**Article 19**  
***(Relations between the New User and the Existing One)***

- (1) If the new user connects via the same connection line later or uses some part of infrastructure or facilities for which already connected user has paid the connection fee, the existing user shall be entitled to compensate a part of the variable amount of the fee which shall be regulated by a separate mutual agreement.
- (2) If the users referred to in the previous paragraph cannot reach an agreement on the amount of compensation, it shall be determined by the Transmission Company upon a request of one of the users.
- (3) In case of connection of each following user, all previously connected users who have paid the connection fee and/or compensation shall be entitled to compensation.
- (4) The user shall be able to use the right to compensation during a ten-year period starting from the day of connection of the facility.

**Article 20**  
***(Costs of Creation of Technical Conditions in the Network)***

- (1) The creation of technical conditions in the network shall be conducted in accordance with a long-term transmission network development plan.
- (2) The Transmission Company shall be the investor and the owner of transmission network facilities, i.e. their parts, the construction of which shall create technical conditions in the network enabling connection of the user.
- (3) The facilities referred to in the previous paragraph shall be financed from the tariff and the fixed part of the connection fee.

**Article 21**  
***(Price List)***

- (1) The Transmission Company shall create a price list for connection of the user which shall also contain the amount of the application fee as well as the price of connected capacity of the user per unit.
- (2) The price list shall be submitted to SERC for approval.

- (3) The price list shall be published on the website of the Transmission Company.
- (4) The procedure of the modification of the price list shall be the same as the procedure for its adoption.

## **PART V – CONNECTION CONTRACT**

### **Article 22**

#### ***(Connection Contract)***

- (1) In accordance with Connection Conditions issued and the construction permit, upon a request of the user, the Transmission Company and the user shall enter into a contract pursuant to the Grid Code.
- (2) The Transmission Company shall provide ISO with one copy of the signed contract.

### **Article 23**

#### ***(Content of Connection Contract)***

- (1) The Connection Contract shall regulate technical, legal and economic conditions for connection to the network as well as all details of construction of connection, future ownership relationships as well as future relationships between the user and the Transmission Company regarding operation and maintenance of the constructed facilities of the user's connection.
- (2) The Connection Contract shall include but shall not be limited to:
  - a) Data on contracting parties,
  - b) Subject of the contract,
  - c) Specification of work and equipment for construction of connection to the network as defined by the Project Analysis,
  - d) Specification of technical parameters of the user's equipment in accordance with the Project Analysis,
  - e) The amount of the connection fee in accordance with the Project Analysis,
  - f) The deadline and schedule of payment of the connection fee,
  - g) The deadline for completion of works which are the subject of the contract,
  - h) The deadline for connection,
  - i) Conditions for the installation of connection,
  - j) The manner and responsible parties for the solution of legal and property-related issues,
  - k) Conditions for making the connection operational in accordance with the Grid Code,
  - l) Ownership relationships and boundaries,
  - m) Accountability for damage and the amount of a contracted penalty in case of non-compliance or partial compliance with the contract,
  - n) Duration of the contract



- o) Reasons for termination of the contract,
- p) Other requirement and conditions, and
- q) Dispute clauses.

## **PART VI – APPROVAL OF CONNECTION**

### **Article 24**

#### ***(Approval of Connection)***

- (1) Upon a request of the user, the Transmission Company shall issue the approval of connection, in accordance with the Connection Contract and professional evaluation confirming that the user has provided all necessary technical and legal conditions from the Contract on connection to the network.
- (2) The approval of connection shall be based in accordance with:
  - a) Connection Contract,
  - b) Necessary investment and technical documentation,
  - c) Acquirement of entitlements to construction and ownership or easement for the use of the connection,
  - d) Necessary construction permits for connection and construction permits for the creation of technical conditions for connection,
  - e) Conducted construction works with necessary material and equipment,
  - f) Conducted electrical installation works with necessary material and equipment,
  - g) Equipping the metering point with necessary metering tools,
  - h) Final ISO's verification of readiness of the connection for initial energizing in accordance with the Grid Code, and
  - i) Conducted testing.
- (3) The Transmission Company shall provide ISO with one copy of the approval of connection.

### **Article 25**

#### ***(Content of Approval of Connection)***

The approval of connection shall include, but shall not be limited to:

- a) Data on the user,
- b) Name, type, address and number of the cadastre parcel,
- c) Number of the construction permit and the date of issuance,
- d) The purpose of granted capacity of the user,
- e) Nominal voltage of the connection point,
- f) Granted capacity,
- g) Allowed power factor (inductive/capacitive),

- h) Annual consumption, i.e. generation, of electricity,
- i) Consumption/generation category,
- j) Location and technical characteristics of the connection,
- k) Technical characteristics of the billing-metering point,
- l) Protection type and setting,
- m) Specific conditions relating to technical parameters and equipment as provided by the Project Analysis,
- n) Obligation to comply with the Grid Code,
- o) Validity conditions, and
- p) Dispute clauses.

## **PART VII – CONNECTION TO MEDIUM VOLTAGE LEVEL**

### **Article 26**

#### ***(Connection to Medium Voltage Level at the Transmission Company's Facilities)***

- (1) The connection of the user via medium voltage lines of 35, 20, 10 and 6 kV to substations of the Transmission Company (hereinafter: MV connection) shall be conducted upon a request of the competent distribution operator.
- (2) The competent distribution operator shall issue an approval for connection of the user to the medium level network, including MV facilities at the substations of the Transmission Company, taking into account an optimal development of the distribution and transmission networks.
- (3) The Transmission Company shall issue conditions for MV connection upon a request of the competent distribution operator.
- (4) The users who, in the distribution operator's opinion, can obtain approvals for connection to the distribution network at 35, 20, 10, 6 and 0.4 kV voltage levels shall not be able to file an application for connection to the transmission network at 110 kV level and higher.

### **Article 27**

#### ***(Content of Condition for MV Connection)***

In addition to data referred to in Article 7 of these Rules, the conditions for MV connection shall also include:

- a) Data on the distribution operator,
- b) Name, type and voltage level of MV line to be connected, and
- c) The location of connection of MV line to a 110/x kV substation.

## **Article 28**

### ***(Fee for MV Connection)***

- (1) The distribution operator shall pay to the Transmission Company the fee for MV connection referred to in paragraph 1 of Article 26 of these Rules.
- (2) The fee for MV connection shall be defined per cubicle and voltage level and determined on the basis of the price of goods, works and services and standard normative works per unit, which shall be made publically available by the Transmission Company.
- (3) The fixed part of the fee referred to in Article 16 of these Rules shall also be paid for MV connection.
- (4) Obligations of the user towards the distribution operator shall be defined by acts of the distribution operator.

## **Article 29**

### ***(Costs of MV Connection)***

- (1) The fee for MV connection, in case of connection at a 110/x kV substation, depending on the voltage level, shall include costs of construction of medium voltage outgoing feeder at the substation of the Transmission Company with accompanying busbars. The above mentioned costs shall also include costs of the installment of metering and protection system as well as operational and telecommunication systems, which are necessary for operation and control of the system after connection. The construction of MV connection line (transmission line/cable) to the 110/x kV substation of the Transmission Company shall be an exclusive responsibility of the distribution operator.
- (2) The remaining necessary investments in the network shall be performed in accordance with a long-term transmission network development plan.

## **Article 30**

### ***(Investor and Owner)***

The Transmission Company shall be the investor and owner of MV cubicles (35, 20, 10, 6 kV) in case of connection at a 110/x kV substation.

## **Article 31**

### ***(Detailed Rules of MV Connection)***

- (1) In accordance with these Rules, the Transmission Company shall develop detailed rules and procedures pertaining to MV connection and publish them on its website.
- (2) The Transmission Company shall consult the public while developing rules and procedures.

## **PART VIII – CONNECTION REGISTER**

### **Article 32**

#### ***(Connection Register)***

- (1) The Transmission Company shall keep a connection register.
- (2) The connection register shall include all documents pertaining to individual connections, including their attachments and granted installed capacity of the user's facility.
- (3) The Transmission Company shall also keep a summary of the register in electronic form which shall include basic data pertaining to the connection.
- (4) The summary of the register in electronic form shall be published on the website of the Transmission Company.

### **Article 33**

#### ***(Register of Requests)***

- (1) The Transmission Company shall keep a list-register of all applications filed, which are under procedure and for which the connection procedure has not been completed. The list shall provide an assessment of the time period required for decision making upon each individual application, including the current stage of each application at the given moment.
- (2) The list of applications filed shall be published on the website of the Transmission Company.

## **PART IX – FINAL AND TRANSITIONAL PROVISIONS**

### **Article 34**

#### ***(Transitional Provisions)***

- (1) The Transmission Company shall define and submit to SERC for approval the first Price List from Article 21 no later than 90 days from the day of entry into force of these Rules.
- (2) The Transmission Company shall prescribe and publish the application form referred to in Article 4 of these Rules no later than 90 days from the day of entry into force of these Rules.
- (3) For applications filed before the adoption of the price list, the fixed part of connection fee and the application fee shall be calculated after its adoption.
- (4) Pending the issuance of the application form, applications can be filed in form of a letter which shall contain all required data prescribed by these Rules.

### **Article 35**

#### ***(Dispute Resolution)***

- (1) SERC shall be competent for the resolution of disputes caused by application of these Rules.

(2) SERC decisions regarding disputes referred to in the previous paragraph shall be final.

**Article 36**

***(Entry into Force and Publication)***

These Rules shall enter into force on the eighth day after the publication in the “Official Gazette of BiH” and they shall also be published in the entity official gazettes.

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October 23, 2008

Tuzla

Chairman of the Commission

Nikola Pejić