

## **RULE BOOK**

### **ON METHODOLOGY FOR CALCULATION OF COSTS OF CONNECTION TO THE DISTRIBUTION OR TRANSPORT SYSTEM OF NATURAL GAS**

Trebinje, May 2014

Pursuant to Article 4 paragraph (2), line a), b) and c) of Article 46 paragraph (2) of the Gas Law (Official Gazette of the Republic of Srpska, number 86/07 and 121/12) and Article 18 paragraph (1) of the Statute of the Regulatory Commission for Energy of the Republic of Srpska – Cleaned text (Official Gazette of the Republic of Srpska, number 6/10) and Article 45 paragraph (2) of the Procedural rules of the Regulatory Commission for Energy of the Republic of Srpska (Official Gazette of the Republic of Srpska, number 59/10), the Regulatory Commission for Energy of the Republic of Srpska, in its 84<sup>th</sup> regular session held on 21<sup>st</sup> May 2015 in Trebinje, made

## RULE BOOK

### ON METHODOLOGY FOR CALCULATION OF COSTS OF CONNECTION TO THE NATURAL GAS DISTRIBUTION OR TRANSPORT SYSTEM

#### PART ONE – GENERAL PROVISIONS

##### Article 1

##### (Subject)

The Rule book on methodology for calculation of costs for connection to the natural gas distribution or transport system (hereinafter: Rule book) determines the method of calculation of fee for connection to the natural gas distribution or transport system.

##### Article 2

##### (The aim of making Rule book)

The aim of making this Rule book to provide with, previously known and clearly defined conditions, determination of the fair amount of the fee for connection to the system of natural gas distribution or transport.

##### Article 3

##### (Definition)

(1) Terms and expressions used in this Rule book and its annexes have the following meaning:

Marginal distance of the structure from the system – distance of the structure from the system for which the variable costs are calculated based on the typical distance.

Group typical connection – is connection with one connecting line and two or more metering points;

Optimal solution – is meant by the connection realization at the lowest price provided that there are technically acceptable characteristics of connections for an appropriate type of structure and equipment, everything pursuant to the law, technical regulations and standards.

System user – a legal person or entrepreneur that supplies the system or are supplied by the system;

Customer – the customer is a wholesale customer or end user or power structure which buys natural gas;

Structure – facility of the customer or natural gas system user which is connected to the transport or distribution system;

Transport system operator – legal person or entrepreneur that controls the transport system on the territory of the Republic of Srpska, responsible for development and interconnections and to ensure the long-term capacities of the system to respond to the needs for the natural gas transport on the territory of the Republic of Srpska;

Distribution system operator – legal person or entrepreneur that carries out the activity of distribution, responsible for operation, maintenance and if necessary, development of the system in a certain area and possibly its interconnections with other systems and to ensure long-term capacities of the system to respond to the gas distribution needs.

Connection – installations, devices, equipment and materials which are used to, pursuant to the approval for connection, connect the structure physically to the system in the nearest point in which the connection is technically and legally possible, including the metering device.

System – is transport or distribution network, TPG structure or storage that owns or controls the energy structure pursuant to the Gas Law of the Republic of Srpska, including the amount of gas in the gas pipeline and facilities for offering ancillary services and services of related companies which are necessary to provide an access to the transport and distribution networks and TPG.

Typical distance from the system – the item for determination of costs of construction of the typical connection;

Typical connection – is the facility connection to the distribution system, as defined in Article 4 of this Rule book;

Costs of the facility connection – costs of construction of the connection and costs of providing conditions for connection;

Costs of providing conditions for connection – a part of costs of the system occurred as the precondition for connection;

Distance of the connection point from the system – is the distance between the connection line and gas installation of the customer to the nearest point at the existing system where it is possible to make the connection, measured by the connection line path;

(2) Apart from the terms and expression given in the paragraph (1) of this Article, in this Rule there are terms and expressions used which are covered by the Law on gas (hereinafter the Law) and secondary legislation of the Regulatory Commission

## PART TWO – CONNECTION TO THE DISTRIBUTION SYSTEM

### CHAPTER I – TYPES OF CONNECTION AND STANDARDIZATION OF THE CONNECTION ELEMENTS

#### Article 4

##### (Type of connection)

(1) Typical connection is the connection at the distribution system (polyethylene or steel) which meets the following requirements:

- a) working pressure is less than 6 bars with the metering point, of the maximum capacity which is no bigger than 10 Sm<sup>3</sup>/h,
- b) typical namely standardized equipment is installed in the connection construction, devices and materials during which the standard works are carried out;

(2) Depending on the maximum capacity of MRS, namely type of the metering device, the following categories of the typical connection are determined:

- a) G – 2,5 maximum capacity of 4 Sm<sup>3</sup>/h,
- b) G - 4 of the maximum capacity of 6 Sm<sup>3</sup>/h,
- c) G – 6 of the maximum capacity of 10 Sm<sup>3</sup>/h;

## Article 5

### (Connection elements)

The connection is consisted of:

- a) connection line with the block organ and pipe elements for connection to the distribution system,
- b) metering point with the accompanying metering and protection equipment,
- c) elements for connecting gas installation of the beneficiary to the connection line,
- d) other material and equipment which can be installed in the connection, pursuant to the provisions of this Rule:

## CHAPTER II – CRITERIA FOR DETERMINATION OF THE COSTS OF CONNECTION AND STRUCTURE OF THE COSTS OF CONNECTION

## Article 6

### (Structure of the connection costs)

(1) The connection costs include:

- a) costs of equipment, devices and material
- b) costs of works,
- c) costs of the project development, obtaining documents and creation of other conditions for connection,
- d) part of the costs of the system occurred as a precondition for connection of the facility to the system, depending on the approved capacity of the connection;

(2) Calculation of costs of connection is carried out pursuant to the norms for the costs referred to in paragraph (1) of this Article, as the sum of the costs determined:

- a) in the fixed amount for each type of connection based on characteristics of the connection defined by the technical rules of the energy structure and is expressed in BAM,
- b) in the variable amount which depends on the distance of the facility which is connected to the distribution system and is expressed in BAM/m.

- (3) Variable costs of the connection construction include the costs which depend on the distance of the facility from the system and are expressed per running meter, and are calculated:
- a) if the distance of the facility from the system is less or equal to the limit value – variable costs equal to the costs for the typical distance,
  - b) if the distance of the facility from the system is more than the limit distance, variable costs are increased for the costs between real and limit distance,
  - c) typical distance of the facility from the system is determined at the length of the line of 15 meters, while the limit value of the facility from the system is determined at the length of the line of 25 meters.
- (4) Energy structures for natural gas distribution (hereinafter: energy structure) determine the norms of works and specifications of the material and equipment for calculation of costs of connection and unit costs for determination of a part of the system costs occurred due to connection, and based on those norms, they determine the amount of costs for each type of connection which characteristics are in accordance with the technical rules and development plan of the energy structure.

#### Article 7

##### (Criteria for determination of the connection costs)

- (1) Criteria for determination of the connection costs are: approved capacity from decisions which approve connection (energy consent), the need for installation of the necessary device, equipment and material, the need for realization of works, costs of development and obtaining documents as well as creation of other conditions for connection.
- (2) If it is necessary for technical or other objective conditions for connection to make the distribution structure or part of the system which capacity is more than maximum approved one at the connection point or to install the equipment and devices which capacity is more than the approved, share of costs of the connection in the costs of connection of the facility per the same base is determined proportionally to the approved capacity at the connection point.

#### Article 8

##### (Determination of the connection costs)

- (1) The connection costs of the facility are determined on the basis of the project documents, norms of works and specification of materials and equipment of the energy structure and market prices and part of system costs occurred due to connection of the facility to the system.

(2) Costs of connection of the facility is calculated applying the following formula:

$$TP = TIP + DTS \quad (1)$$

Where,

TP total costs of connection (BAM)

TIP cost of the connection construction (BAM)

DTS part of the system costs occurred as a precondition for connection (BAM)

## Article 9

### (Costs of the connection construction)

(1) Costs of the connection construction are determined as the sum of real costs of equipment, devices and materials, works, project development, obtaining necessary documents and creation of other documents for construction of connection, such as:

- a) analysis of the optimum connection point,
- b) creation of the connection project,
- c) obtaining prescribed consent, approval and other necessary documents,
- d) settlement of the property-legal relations related to the concrete connection,
- e) realization of the preparatory works,
- f) procurement of equipment, devices and materials,
- g) required mounting works for realization of the connection for costs of works, use of machines, tools, equipment and use of vehicles,
- h) equipment for metering point,
- i) geodetic works,
- j) testing and putting the connection into operation,
- k) doing other necessary professional, operational and administrative conditions for the facility connection to the system, pursuant to technical regulations and rules of the system operation at which the structure is connected and with criteria determined by this methodology.

(2) Costs of the necessary equipment, devices and material and completed works for development of the facility when its distance from the system is less or equal to the limit distances are fixed.

(3) Costs of necessary equipment, devices and materials and completed works for the connection creation in case that the distance of the facility from the system is more than limit distance are divided in fixed and variable.

(4) Costs of the construction connection of the facility is calculated applying the following formula:

$$TIP = TO + TP + TD \quad (2)$$

Where,

TO - total costs of the necessary equipment, devices and materials for the connection construction,

TP - total costs of the completed works,

TD - total costs of obtaining and development of documents and creation of other conditions for the connection construction,

(5) Total costs of the necessary equipment, devices and materials for creation of connection (TO) are calculated applying the following formula:

$$TO = FTO + JVTO * RU \quad (3)$$

Where,

FTO – fixed cost of the necessary equipment, devices and material for creation of connection (BAM)

JVTO – unit variable cost of the necessary equipment, devices and material for creation of the connection (BAM/m),

RU – difference between the distance of the facility from the system measured by the path of the transmission line and border distance (m),

(6) Total costs of the completed works (TP) required for creation of the connection is calculated applying the following formula:

$$TP = FTR + JVTR * RU \quad (4)$$

Where,

FTR – fixed cost of the completed works (KM),

JVRT – unit variable cost of the completed works (BAM/m)

Article 10

(Costs of procurement of equipment, devices and materials)



- (1) Energy undertaking makes specification of the required equipment and materials and standardized amount of such equipment and material which is installed in the connection line and metering point;
- (2) Unit price for each item of equipment and material is determined based on the market (procurement) price of such equipment and materials;
- (3) Market procurement price of the materials and equipment is documented with invoices of the supplier and/or documents on taking the goods from warehouse or some other appropriate document containing these prices, complying to the principle of the lowest cost.
- (4) Costs of the procurement of the specified equipment and material for construction of the connection are calculated applying the unit price referred to in paragraph (2) of this Article on the specified standardized amounts from the paragraph (1) of this Article.

#### Article 11

##### (Costs of works for construction of the connection)

- (1) Works on construction of the connection include the costs of operation, costs of use of machines, special tools and costs of use of vehicles.
- (2) For each type of the connection, the energy undertaking makes specification of the required works and standardized amounts of those works.
- (3) Costs of operation for construction of the connection are calculated, on the basis of the standardized hours of operation of labor of the appropriate professional qualification required for realization of the standardized amounts of works and standardized prices of the working hour (price norm hour).
- (4) The price of the norm hour is determined on the basis of the price of the work of the worker of the appropriate (standardized) qualification structure engaged in construction of the connection and who are employed at the energy undertaking and/or based on the price from the document (contract, invoice and similar) on realization of works engaging the external expert for construction of the connection, whereby the lower determined price is applied.
- (5) The time spent by the workers and machines for realization of some types of works is determined by the standardized working hours of such or similar works or based on the data from the documents on realization of such works by engaging external factors (contract, civil log book, mounting log book, situation, invoice and similar),
- (6) Costs of work of the machines which are used for realization of works are calculated on the basis of the standardized number of hours of work of machines for realization of the standardized amount of works and market price of the working hour of such machine or calculative price determined by the energy undertaking for its machines, whereby the lower determined price is applied.

- (7) Costs of vehicles which are necessary to be engaged for realization of works for construction of the connection are calculated on the basis of the belonging costs according to the standardized number of hours of use of vehicle and costs of fuel for such vehicle and standardized distance of the location of the connection from the head office of the working unit of the energy structure, responsible for construction of the connection.

#### Article 12

(Costs of the project development, obtaining documents and creation of other conditions for connection)

Costs of development of the technical documents of the connection, including its harmonization to the particular location, costs of obtaining prescribed consents and approvals, decisions of property-legal conditions and costs of doing other operational and administrative works are determined based on the specification of the required works and service, standardized number of hours of operation and standardized unit price of the labor engaged by the energy undertaking for the purposes of realization of works and services and specification of other expenses occurred related to realization of other works and services.

#### Article 13

(Correction of calculation of the costs of connection)

- (1) Buyer or the system user, due to favorable conditions and more efficient realization of the connection construction or realization of the works for connection of its structure to the system, may require some works and activities to be carried out on its own, and which are not related to obtaining conditions issued by the stated bodies and authorized organizations, if it obtains written consent of the energy structure for them, at which system it is connected.
- (2) Positions related to works and activities referred to in paragraph (1) of this Article are excluded from the connection costs in a way that the amount of costs which correspond to those positions is deducted from the totally calculated amount of the connection costs, and possible additional costs of the energy undertaking in control of the works' realization are taken into account.

#### Article 14

(Allocation of costs of the group connection line)

Share of costs of some MRS in total costs when it is about group connection of the connecting line is proportional to the share of the capacity of some MRS in total capacity of the group connecting line.

#### Article 15

##### (Costs of connection in special cases)

- (1) Special cases for determination of the connection costs in a sense of this methodology are:
  - a) change of maximum approved capacity at the connection point;
  - b) reconnection of the facility to the system when the application for issuance of approval for connection is submitted because of the disconnection from the system
- (2) Costs of connection in the mentioned special cases are determined in the following way:
  - a) in case of approval of the change of the maximum approved capacity at the connection point, the connection costs are determined according to additional real costs which require such connection;
  - b) in case of approval of connection of the structure when the application for issuance of approval for connection is submitted due to disconnection of the facility from the system, costs of connection are determined according to the real costs which require such connection.

### CHAPTER III – COSTS AND FEE FOR PROVIDING CONDITIONS FOR CONNECTION

#### Article 26

##### (Base for calculation)

- (1) Costs of providing conditions for connection represent a part of the system costs occurred as precondition for connection of the facility and it includes the costs of construction of the distribution system which the structure is connected to
- (2) Calculation of part of the system costs which occur due to connection is carried out on the basis of the approved capacity of the connection, expressed in Sm<sup>3</sup>/h and unit costs of providing conditions for connection to the distribution system, proportionally to the level of utilization of the capacity of the part of the system which it is connected to.
- (3) System operator may determine the level of utilization of the system separately for each system or unique value for all systems.

- (4) If the end customer bears the costs of construction of the part of the system for the purposes of creation of technical conditions for connection of its structure, part of costs for providing conditions for connection is reduced for the amount of costs of the customer on construction of the part of the system.

#### Article 27

(Fee for providing conditions for connection)

Fee for providing conditions for connection, namely part of costs of the system is calculated on the basis of the maximum capacity of the connection and amount of the unit cost of the capacity:

$$DTS = MKP * K \quad (5)$$

Where,

DTS - part of the system costs (BAM0,

MKP - maximum capacity of the connection (Sm<sup>3</sup>/h)

K - unit cost of the capacity which value is determined by the energy structure (BAM/Sm<sup>3</sup>/h) pursuant to the paragraph (2) Article 16

### PART THREE – CONNECTION TO THE TRANSPORT SYSTEM

#### Article 18

(Structure of the costs of connection)

- (1) Connection costs include:
- a) costs of equipment, devices and material,
  - b) costs of works and
  - c) costs of the project development, obtaining documents and creation of other conditions for connection;
- (2) Natural gas transporter, according to the project of the project development, makes norms of works and specifications of materials and equipment for calculation of the connection costs referred to in paragraph (1) of this Article.

#### Article 19

(Criteria for determination of the connection costs)

Criteria for determination of the connections costs to the transport system are: approved capacity from the energy consent approving connection, the need for determination of the necessary devices, equipment and materials, need for realization of works, costs of development and obtaining of documents as well as other conditions for connection.

## Article 20

### (Determination of the costs of connection)

- (1) Costs of the connection of the facility are determined on the basis of the project documents, norms of works and specification of materials and equipment of the energy structure and market prices.
- (2) Costs of the connection construction are calculated applying the following formula:

$$TIP = TO + TR + TD \quad (6)$$

Where,

TO total costs of the necessary equipment, devices and materials for the connection realization

TR total costs of the completed works

TD total costs of obtaining the making documents and creation of other conditions for the connection construction

- (3) Costs of connection of the facility to the transport system are determined on the basis of the really occurred justified costs.
- (4) Costs of procurement of equipment, devices and materials, costs of works for construction of the connection and costs of the project development, obtaining documents and creation of other conditions for connection are determined pursuant to Article 10, 11 and 12 of this Rule book.
- (5) Correction of the costs calculation of the connection is determined pursuant to Article 13 of this Rule book.

## PART FOUR – DETERMINATION OF THE FEE FOR CONNECTION

### Article 21

#### (Determination of the fee for connection)

- (1) Energy structure makes a document on the amount of the costs of connection, consisted of determination of the norms and unit prices based on which amount of the connection costs are determined and determination of the unit costs for determination of the part of the system costs.
- (2) Document on the amount of the connection costs should contain detailed structure of the determined norms and amount of costs separately, per each of the element determined by this methodology (regarding types of devices, equipment, materials, works, project development, obtaining documents and other conditions for the connection construction).
- (3) Copy of the document referred to in paragraph (1) of this Article is submitted to the Regulatory Commission by the energy undertaking with explained calculation of the determined norms and costs, before beginning of application of calculation of the connection costs pursuant to this Rule.
- (4) Energy undertaking, following the principle of transparency and non-discrimination, provides the applicants for connection, the inspection to the documents based on which the connection costs are determined, and amount and method of determination of those costs.

## PART FIVE – TRANSITIONAL AND FINAL PROVISIONS

### Article 22

#### (Interpretation)

- (1) Interpretation of provisions of this Rule book is given by the Regulatory Commission.
- (2) Amendments to this Rule is done in the proceeding valid for its making.

### Article 23

#### (Effective Date)

- (1) This Rule becomes effective on the eighth day from the date it is published in the Official Gazette of the Republic of Srpska.
- (2) When this Rule becomes effect, the Rule book on tariff methodology in the system of transport, distribution, storage and supply with natural gas (Official Gazette of the Republic of Srpska, number 9/09) is no more valid.

Trebinje, 21 May 2014

President

Milenko Cokorilo