Pursuant to Article 4.8 of the Law on Transmission of Electric Power, Regulator and System Operator in Bosnia and Herzegovina (Official Gazette of BIH, 7/02, 13/03, 76/09 and 1/11) and Article 7, paragraph 5 and 9 of the Rule on Tariff Proceedings (Official Gazette of BIH, 44/05), deciding upon the application of Independent System Operator in Bosnia and Herzegovina number: 53/19 of 28 October 2019, at the session held on 25 March 2020, the State Electricity Regulatory Commission adopted a

DECISION

ON TARIFFS FOR SYSTEM AND ANCILLARY SERVICES

Article 1 (Subject)

This Decision defines a tariff for system service and a tariff for excessive take-on of reactive power from the transmission system of Bosnia and Herzegovina.

Article 2 (System Service)

- (1) The financial scope of the system service in 2020 shall be set to the amount of BAM 54,876,289 and the tariff for system service shall amount to 0.5188 fening/kWh.
- (2) The funds collected on the basis of the tariff for system service shall be used exclusively for procurement of secondary and tertiary control capacity reserve on the market as well as procurement of electricity to cover transmission system losses and compensation of unintended deviations towards the neighbouring control areas.

Article 3 (Excessive Take-on of Reactive Power)

It is determined that the tariff for excessive take-on of reactive power from the transmission network shall amount to zero (0) fening/kvarh.

Article 4

(Calculation of Deviations from Daily Schedule by Balance Responsible Parties)

Values of deviations from a daily schedule by balance responsible parties shall be calculated on an hourly basis. The Independent System Operator in Bosnia and Herzegovina (ISO BIH) shall calculate deviations in energy and financial terms pursuant to the Market Rules (Official Gazette of BIH, 48/15) and relevant procedures.

Article 5

(Calculation and Billing of Ancillary and System Services)

- (1) Pursuant to the Market Rules and relevant procedures, the ISO BIH shall make calculation of ancillary and system services based on which billing and payment of services shall be made.
- (2) The calculation referred to in Item (1) of this Article shall be submitted to ancillary service providers, suppliers of customers connected to the transmission system, distribution system operators in BIH and SERC. The calculation shall include financial and energy positions of the ISO BIH and market participants.

(3) With the aim of making an accurate calculation, distribution system operators shall be obligated to provide the ISO BIH with all required data and information in a timely manner.

Article 6 (Final Provisions)

This Decision shall enter into force on the day of the adoption and it shall be applied as of 1 April 2020.

The operative part of the Decision shall be published in the Official Gazette of BIH and the official gazettes of the Entities and Brčko District of BIH.

Statement of Rationale

The Independent System Operator in Bosnia and Herzegovina (hereinafter: the ISO BIH) is one of the entities in the electric power sector with the task to manage the transmission system operation in Bosnia and Herzegovina. The ISO BIH competences and functions have been defined by the Law on Transmission of Electric Power, Regulator and System Operator in Bosnia and Herzegovina (Official Gazette of BIH, 7/02, 13/03, 76/09 and 1/11) and the Law Establishing an Independent System Operator for the Transmission System of Bosnia and Herzegovina (Official Gazette of BIH, 35/04).

The ISO BIH is a holder of the licence for performance of the independent system operator activity pursuant to the Decision of the State Electricity Regulatory Commission (hereinafter: SERC), number 05-28-12-17-19/19 of 27 June 2019 (Official Gazette of BIH, 45/19). Pursuant to Article 21 of the Tariff pricing methodology for services of electricity transmission, operation of independent system operator and ancillary services – Consolidated version (Official Gazette of BIH, 93/11, 61/14 and 95/16 – hereinafter: Tariff Methodology), the purpose of the tariff for ISO operation is to cover the costs of ISO BIH operation incurred by performance of the activities as set forth in Articles 2 and 7 of the Law Establishing an Independent System Operator for the Transmission System of Bosnia and Herzegovina.

Pursuant to Article 22 of the Tariff Methodology, the tariff is determined on the basis of costs for performance of a regulated activity and a physical scope of services within that activity. Costs for performance of the regulated activity and physical scope of services provided by the regulated entity are determined on the basis of data included in the tariff application. When determining tariffs, SERC may also use additional data if it deems necessary.

While reviewing the tariff application through tariff proceedings, the basic principles prescribing that tariffs will be just and reasonable, non-discriminatory, based on objective criteria and justified costs and set in a transparent manner have to be respected to the maximum extent possible. An applicant seeking approval for a tariff application is obligated 3 to prove that the proposed tariff meets all the requirements of BIH law and SERC rules and regulations.

The tariff proceedings for setting of the tariff for operation of an independent system operator and the tariffs for system and ancillary services were initiated at the request of ISO BIH, number 53/19 of 28 October 2019 (received on 31 October under number 04-28-5-383-1/19).

In the submitted application, the ISO BIH states that the requested amount of the tariff for system service was calculated by taking into account all necessary secondary and tertiary control capacities for 2020, under the assumption that maximum prices of capacity will be reached at the annual bid, that is, price caps as defined in the Decision on determination of coefficients and price caps for ancillary services (Official Gazette of BIH, 68/17). Energy

required to cover losses in the transmission network, i.e., losses, is provided in the Balance for 2020, and the procurement price of 130 KM/MWh was provided as a framework price.

The application also includes the planned physical scope of services in the transmission network in 2020, which relies on the data from the Power Balance in the BIH Transmission Network for 2020 (received by SERC on 29 October 2019 under number 04-28-5-382-1/19) according to which the planned delivery of electricity from the transmission system in 2020 amounts to 10,576,887,535 kWh while planned generation in the transmission network amounts to 15,969,642,361 kWh.

Following the documentation review, the completeness of the ISO BIH application was confirmed by the SERC act number 04-28-5-383-2/19 of 13 November 2019, of which the ISO BIH was informed accordingly by the letter number 04-28-5-383-2/19 of 13 November 2019 so the tariff proceedings could proceed through evaluation of all submitted proofs with SERC keeping the right to ask for additional data and information if deemed necessary.

The ISO BIH application was resolved by conducting a formal public hearing, in full compliance with the provisions of the Rules of Hearing Procedures (Official Gazette of BIH, 38/05), in accordance with Article 45 of which by a short notice in the daily newspapers and on its website SERC informed the public of a summary of the filed application and the possibility to get familiarised with the application directly and submit comments on the subject of the tariff proceedings in writing. The public notice also invited the persons interested to participate in the formal hearing as interveners and to provide the evidence of their interest in writing beforehand and announced the formal hearing on the application.

After the submission of requests for intervener status, by its Conclusion number 04-28-5-383-13/19 of 27 November 2019, in order to hear their respective positions and interests SERC allowed the following entities to participate in the proceedings in the capacity of interveners: MH "Elektroprivreda Republike Srpske" Matično preduzeće a.d. Trebinje, JP "Elektroprivreda Bosne i Hercegovine" d.d. Sarajevo, JP "Elektroprivreda Hrvatske zajednice Herceg Bosne" d.d. Mostar, R-S Silicon d.o.o. Mrkonjić Grad and B.S.I. d.o.o. Jajce.

None of the five mentioned interveners used the right to have a direct insight into the complete documentation of the tariff application at the SERC premises.

A preliminary hearing on the ISO BIH tariff application was held on 3 December 2019 in Tuzla. At the preliminary hearing a list of questions to be discussed at the hearing and the course of the formal hearing were defined. At the formal hearing held on 16 December 2019 the parties to the proceeding presented their respective proofs for the purpose of determining all relevant facts. Every question from the defined list was elaborated by a successive reply of the applicant and comments thereon by the interveners and the Presiding Officer.

The Presiding Officer's report describes the course of the proceeding, offered proofs and established facts, relevant legal provisions and recommendations to the Commissioners (hereinafter: Commission) and it was delivered to the applicant and the interveners whose status was legally acknowledged by SERC. An analysis of costs and revenues as presented in the Presiding Officer's Report confirmed, rejected or adjusted the individual items, values or methods used while preparing the tariff proposal in accordance with the SERC discretionary rights in the tariff proceedings.

The Commission concludes that the Presiding Officer's Report provided reasonable grounds for the Commission to pass its final decision on the tariffs for system and ancillary services after careful review and assessment of the data, arguments and explanations provided in the Report as well as comments of the ISO BIH made on the proposal of this Report. Regarding

the subject-matter of this Decision none of the five interveners had any comment on the section of the Presiding Officer's Report pertaining to the system service.

In their comments on the Presiding Officer's Report, the ISO BIH concludes that a positive balance under the mechanism for the BIH power system balancing can be achieved exclusively in the case of high revenues based on imbalances, i.e., deviations by balance responsible parties, and that the amount proposed for the tariff cannot guarantee the stability of the balancing market in BIH.

When passing a decision in the tariff proceedings for setting of the tariffs for system and ancillary services, the Commission has to focus its analysis on all elements of the cost structure as pointed out by the applicant, the analysis of costs and revenues as presented in the Presiding Officer's Report as well as on the applicant's and interveners' comments presented during the whole proceedings and make a decision about the submitted application after a comprehensive analysis. In line with these obligations, the Commission presents the following points of view:

In the past period, a significant increase in wholesale electricity prices has been evident which caused an increase in ancillary services prices in the procurement procedures both for 2018 and 2019. The results of the ancillary services procurement for 2020 indicate that the prices stopped going up while it has also been noticed that the purchase price for some ancillary services decreased to a certain extent. Consequently, the increased costs of ancillary services procurement had an impact on the decrease of the financial surplus on the account for all services from the previous period. The situation was further complicated by a significant reduction of electricity withdrawal from the transmission system by the customer "Aluminij" d.d. Mostar, and uncollected receivables from the same customer amounting to approximately 3.1 million BAM. Furthermore, the recent development pertaining to the global pandemic and a decline in economic activity may cause further consequences, in particular for electricity consumption, which would have an adverse effect on the revenues from the system service.

While passing the Decision on amendment to the decision on tariffs for system and ancillary services of 31 December 2019, it was concluded that revenues and expenditures in the balancing mechanism depend on a large number of factors such as the physical scope of transmission losses, the scope of provided ancillary services compared to the planned one, prices of control energy and its activation, prices and scopes of imbalances, and it was specified that the application of the tariff would be continuously monitored as well as trends in revenues and expenditures and the circumstances on the electricity balancing market, and announced that an adjustment of the system tariff would be initiated when deemed appropriate.

In the first two months of 2020, a negative balance of services totalling BAM 268,460 was registered, thus further reducing the surplus in the account of services.

The calculation of tariff is based on offers and results of the completed bidding procedures of the ISO BIH for 2020 as well as the trend in revenues and costs in the period from January 2016 to February 2020, which is presented through the balance of services, in accordance with the following table:

1.	Secondary control reserve (BAM)	12,745,820
2.	Upward tertiary control reserve (BAM)	5,268,136
3.	Downward tertiary control reserve (BAM)	866,959
4.	Total amount of secondary and tertiary control reserve for the period III-XII 2020 (BAM) 1.+2.+3.	18,880,914
5.	Total amount of losses in the transmission system for the period III-XII 2020 (BAM)	34,382,210
6.	Total planned costs for the period III-XII 2020 (BAM) 4.+5.	53,263,124

7.	Balance of services in 2016 (BAM)	9,532,807
8.	Balance of services in 2017 (BAM)	4,826,023
9.	Balance of services in 2018 (BAM)	-10,021,408
10.	Balance of services in 2019 (BAM)	-774,077
11.	Balance of services in the period I-II 2020 (BAM)	-268,460
12.	Balance of services in the previous period (BAM) 7.+8.+9.+10.+11.	3,294,885
13.	Revenue based on balance of imbalances and balancing energy (BAM)	5,902,778
14.	Total for calculation of tariff for system service (BAM) 61213.	44,065,462
15.	Energy III-XII 2020 (kWh)	8,630,430,155
16.	Tariff for system service (fening/kWh)	0.5106

Given that the tariff for system service calculated in the table above amounting to 0.5106 feninga/kWh is 1.6% lower than the applicable tariff, which amounts to 0.5188 feninga/kWh, and the planned financial scope for 2020 amounting to BAM 54,876,289, and taking into consideration that that there is a high level of uncertainty in the forthcoming period with regard to the realisation of the values affecting the revenues, primarily consumption, that is, withdrawal of electricity from the transmission system, the Commission decides to keep the tariff for system service at the existing level of 0.5188 feninga/kWh. As revenues and expenditures depend on a high number of factors such as a physical scope of losses in the transmission service, the scope of provided ancillary services in comparison to the planned one, the price of control energy and engagement thereof, prices and scopes of imbalances, the application of the tariff will be monitored continuously as well as trends of revenues and expenditures and developments on the electricity balancing market, and an adjustment of the tariff for system service will be initiated when appropriate.

Taking into account that the problem of reactive power surplus causes high voltage in the transmission system, in the 220 kV and 400 kV networks in particular, and that this problem has become even more evident due to a significant reduction of electricity withdrawal by the customer Aluminij d.d. Mostar, given that the required investments in the relevant infrastructure have not been made (shunt reactors) in the past period, which would resolve the issue of the existing surplus of reactive capacity and power in the transmission system, the Commission is of the opinion that it is not justified to charge excessive withdrawal of reactive power. Namely, the users that withdraw reactive power in these situations actually help the power system operation, which is the reason why the Commission decides that the tariff for excessive withdrawal of reactive power from the transmission system amounts to zero (0) fening/kvarh, with the obligation to carefully monitor the application thereof and make adjustments if required.

Taking into consideration the fact that the balancing market in Bosnia and Herzegovina is one of few functional markets in the region of Southeast Europe and that the trends on the regional wholesale market have the significant impact on its operation and prices of services, SERC will continuously monitor the implementation of this decision and rules regulating this field.

Pursuant to Article 14 of the Rule on Tariff Proceedings, the applicant as a regulated entity is obligated to enable public access to the officially approved tariff so as to enable the tariff as approved by the decision to be at disposal to the public at its main business office during working days and published on its website.

Pursuant to Article 9.2 of the Law on Transmission of Electric Power, Regulator and System Operator of Bosnia and Herzegovina, proceedings may be initiated before the Court of Bosnia

and Herzegovina against this Decision by filing a lawsuit within sixty (60) days of receipt thereof.

Number: 04-28-5-383-40/19 25 March 2020 Tuzla Chairman of the Commission

Suad Zeljković