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 Articles 6, 7 and 9 of the Rule on Tariff Proceedings (Official Gazette of BIH, 44/05), deciding upon the application of the Independent System Operator in Bosnia and Herzegovina, number 46/21 of 26 October 2021, at its session held on 22 December 2021, the State Electricity Regulatory Commission passed a

DECISION

- 1. It is determined that the annual revenue requirement of the Independent System Operator in Bosnia and Herzegovina in 2022 shall amount to BAM 9,283,307.
- 2. The tariff for operation of an independent system operator shall be set to an amount of:
 - 0.0062 fening/kWh, which is paid by generators for electricity injected into the transmission system, and
 - 0.0783 fening/kWh, which is paid by customers for electricity withdrawn from the transmission system.
- 3. The annual revenue requirement for 2022 is approved in accordance with the breakdown and amounts as given in the third column of the following table:

Description		2022 requested	2022 approved	Index (3/2)
1		2	3	4
Costs of material		68,000	63,000	0.926
Costs of energy sources and utilities		149,000	130,000	0.872
Costs of services		2,288,120	1,879,094	0.821
Employees' gross salaries and allowances		4,500,000	3,881,925	0.863
Depreciation		1,801,036	1,801,036	1.000
Financial costs		501,000	501,000	1.000
Travel costs		80,000	65,000	0.813
Other taxes and charges		36,000	36,000	1.000
Other expenditures		1,196,000	1,130,640	0.945
A. Total costs and expenditures		10,619,156	9,487,695	0.893
1. Surplus revenue		1,439,274		
2. Surplus expenditure				
3. Other revenues		80,039	204,388	
B. Revenues based on electricity (A+1-2-3)		11,978,391	9,283,307	0.775
C. Energy (kWh)	generation	14,904,293,537	14.904.293.537	1.000
	consumption	10,671,856,721	10.671.856.721	1.000
D. Tariff (fening/kWh)	generators	0.0080	0.0062	0.775
	customers	0.1010	0.0783	0.775

4. Upon the expiry of each calendar month, the Independent System Operator in BIH and Elektroprenos BIH, in cooperation with licence holders for electricity distribution, customers directly connected to the transmission system and licence holders for electricity generation in possession of generation facilities connected to the transmission system including facilities put into trial operation, shall be obligated to prepare a report on energy volumes at all points of injection/withdrawal into/from the transmission system.

- 5. On the basis of the report referred to in point 4 of this Decision, services of an independent system operator for customers connected to the transmission system and customers connected to the distribution system shall be billed to the relevant suppliers and the distribution system operator (DOS), that is, legal person within which DOS operates, respectively. Services of an independent system operator for a generator injecting and/or withdrawing electricity into/from the transmission system shall be billed to the licensed generator, that is, legal person within which the generator operates.
- 6. The tariff for the operation of an independent system operator shall not be charged for energy withdrawn in the pumping mode of operation.
- 7. The tariff set out by this Decision shall be used when setting end-customer tariffs/prices in accordance with the structure of tariff elements within individual consumption categories.
- 8. This Decision shall enter into force on the day of the adoption and it shall be applied as of 1 January 2022.

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

Statement of Rationale

The Independent System Operator in Bosnia and Herzegovina (hereinafter: the ISO BIH) is one of the regulated 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 22 of the Tariff Pricing Methodology for services of electricity transmission, operation of independent system operator and ancillary services – Second consolidated version (Official Gazette of BIH, 68/21), the tariff is determined on the basis of costs of performance of a regulated activity and a physical scope of services within that activity. Costs of 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 should 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 to prove that the proposed tariff meets all the requirements of BIH laws 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 the ISO BIH, number 46/21 of 26 October 2021 (received on 28 October 2021 under number 04-28-5-286-1/21).

The following costs and expenditures for 2022 are stated in the ISO BIH application: costs of material amounting to BAM 68,000, costs of energy sources and utilities amounting to

BAM 149,000, costs of services amounting to BAM 2,288,120, employees' gross salaries and allowances amounting to BAM 4,500,000, depreciation amounting to BAM 1,801,036, financial costs amounting to BAM 501,000 BAM, travel costs amounting to BAM 80,000, other taxes and charges amounting to BAM 36,000, and other expenditures amounting to BAM 1,196,000, making a total of BAM 10,619,156 for costs and expenditures.

Furthermore, the ISO BIH asked for approval of a surplus of revenues over expenditures amounting to BAM 1,439,274 which would ensure funds for investments, loan repayments and covering of losses in 2019 and 2020.

The ISO BIH states that the financial operations in 2022 will be significantly influenced by several factors, in particular emphasising the need to ensure funds to cover losses in 2019 and 2020, loan repayment, the costs of services incurred by participation in activities and projects of the European Network of Transmission System Operators for Electricity (ENTSO-E), the implementation of requirements of the EU energy packages, investments for which depreciation funds are not ensured.

The application also includes the planned physical scope of services in the transmission network in 2022, which relies on the data from the Power Balance in the BIH Transmission Network for 2022 (received by SERC on 25 October 2021 under number 04-28-5-210-23/21) according to which the planned delivery of electricity from the transmission system in 2022 amounts to 10,671,856,721 kWh while planned generation in the transmission network amounts to 14,904,293,537 kWh.

Following the documentation review, the completeness of the ISO BIH application was confirmed by the SERC Conclusion on initiating tariff proceedings for the operation of an independent system operator and tariffs for system and ancillary services number 04-28-5-286-5/21 of 9 November 2021, of which the ISO BIH was informed accordingly by the letter number 04-28-5-286-6/20 of 9 November 2021 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 pursuant to the Rules of Hearing Procedures (Official Gazette of BIH, 38/05), in accordance with the provision in Article 45 thereof, by a short notice in the daily newspapers and on its website SERC informed the public of a summary of the submitted application and the possibility to get familiarised with the application directly and submit comments on the subject of the tariff proceedings in writing, while the entire documentation of the tariff application was published on the SERC website. By the public notice the persons interested to participate in the formal hearing as interveners were also invited and asked to provide the evidence of their interest in writing beforehand, and the formal hearing on the application was announced.

After the submission of requests for intervener status, by its Conclusion number 04-28-5-286-13/21 of 17 November 2021, in order to hear their respective positions and interests SERC allowed the following entities to participate in the tariff proceedings in the capacity of interveners: MH "Elektroprivreda Republike Srpske" Parent Company 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 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 submitted ISO BIH tariff application was held on 23 November 2021 via an internet communication platform due to the Covid-19 pandemic. At

the preliminary hearing a list of questions to be discussed at the hearing was specified and the course of the formal hearing was defined. At the formal public hearing which was also held via an internet communication platform on 30 November 2021, the parties to the proceeding presented their respective proofs for the purpose of determining all relevant facts. Every question was processed by dividing the questions into thematic groups and 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: the Commission) and it was delivered to the applicant and the interveners whose status as such 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 tariff for operation of an independent system operator based on the data provided, arguments and explanations as well as comments of the ISO BIH made on the proposal of this Report. Regarding the subject-matter of this Decision, JP "Elektroprivreda Bosne i Hercegovine", d.d. Sarajevo in the capacity of intervener provided comments on the Presiding Officer's Report which, in a nutshell, assess the Report as fully objective and support the solutions proposed therein.

The ISO BIH provide their comments on four cost items, insisting on approval of the costs in accordance with the amounts provided in the tariff application, and expect the Commission to consider their comments with ultimate seriousness and responsibility and accept the facts provided both in the planning documents and in additional replies during the public hearing and their comments on the Report.

When passing a decision for setting of the tariff for operation of an independent system operator, 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 pass a decision about the submitted application after a comprehensive analysis. In line with these obligations, the Commission presents the following points of view:

When determining the costs of material, the Commission accepts the Presiding Officer's proposal and finds it reasonable to approve an amount of BAM 63,000 for the costs of material in 2022, taking into consideration the actual realisation of this cost in the previous period as well as the realisation which was regularly lower than the planned values, and generally slow dynamics of spare parts procurement.

With regard to the costs of energy products and utilities, in its application the ISO BIH pointed out that a trend of increasing prices of energy products, primarily of electricity, would be present in 2022. Having regard to the Presiding Officer's arguments presented when analysing the planned cost items and the positions expressed by the interveners regarding the supply of electricity to the ISO BIH, the Commission approves an amount of BAM 130,000 for the costs of energy products and utilities in 2022.

The cost of services is the second largest cost in the breakdown of total costs of the ISO BIH. The Commission pays special attention to individual costs in this category which are dominant in terms of their amounts and relevance. In the tariff application, the services of physical and software equipment maintenance and the services of SCADA system and telephone switchboard maintenance totalling more than 1.2 million BAM are noticed in particular within the cost of services due to the level of cost.

The Commission accepts the current realisation and the previously approved amounts, and the practice of non-implementation of some projects such as IGCC and development of studies. In order to relieve a heavy cost pressure in 2022 and avoid a hike in the tariff for operation of an independent system operator through service procurement optimisation by the ISO BIH, not deciding on amounts per individual cost items in advance, the Commission is of the opinion that the maintenance services may be realised within the total amount approved for the cost of services.

The ISO BIH stated an amount of BAM 40,000 for the development of studies in 2022. The Commission accepts the facts provided in the Presiding Officer's Report regarding nondevelopment of studies foreseen for 2021 for which an amount of BAM 80,000 was approved. The Commission insists on the development of studies planned for 2021 within the approved amounts and finds it justified to not to approve any funds for this purpose in 2022.

The costs of financing the work of the Coordination Auction Office in South East Europe (SEE CAO) and the Security Coordination Centre (SCC) on an annual basis amounting to BAM 127,000 and BAM 293,375 respectively are recognised and approved. The cost of regulatory fee for 2022 totalling BAM 85,000 is recognised and justified.

Considering that the ISO BIH may influence on amounts of other individual cost items (costs of equipment maintenance, advertising services, other services and entertainment expenses) without jeopardising the functionality and its operation, and monitoring the previous realisation, the Commission approves the cost of services totalling BAM 1,879,094.

Labour costs are the highest costs in business operations of the ISO BIH in absolute value. The Commission does not accept the arguments provided the ISO BIH regarding the request for an increase in salaries and insists on keeping the costs for operation of an independent system operator on the level which is appropriate for performance of all functions. At the same time, the tariff applicant's argumentation for the realistic need to hire new employees in the dispatch centre due to the promotion of the experienced dispatchers to higher positions within the regulated entities is accepted. In this context, the Commission increases the amount for the position of labour costs (employees' gross salaries and allowances) and approves a total of BAM 3,881,925 for this cost in 2022. It is considered that the level of approved funds, with a rational approach to hiring new employees, is sufficient for efficient business operations of the ISO BIH in 2022.

The ISO BIH asked for approval of the depreciation cost for 2022 amounting to BAM 1,801,036, which is an 83% increase in comparison to the estimated realisation of the cost of depreciation in the previous tariff proceedings. At the formal public hearing the interveners did not challenge justification of this request. As in the previous tariff proceedings, the Commission suggests to the ISO BIH to define its accounting policies with regard to the assessment of a useful life of fixed assets so that they would correspond to the SERC's approach when justifying costs. Furthermore, taking into consideration that the new fixed assets (new SCADA system) would be activated in 2022, the cost of deprecation amounting to BAM 1, 801,036 is approved.

With its tariff application, the ISO BIH also submitted loan repayment plans which should be operational in 2022. The largest part of financial costs pertains to interest rates for loans, while a smaller part pertains to insurance premiums. According to the loan repayment plans for domestic loans, total interest rates for 2022 amount to BAM 81,000, including interest rates for overdraft loans, while an amount of BAM 390,000 is planned for interest rates for the existing

loan of the European Bank for Reconstruction and Development (EBRD). The requested costs of insurance amount to BAM 31,000. When defining this cost category, the Commission continues to expect the applicant to fully comply with the provisions of the Law Establishing an Independent System Operator for the Transmission System of Bosnia and Herzegovina, meaning that any loan debt, a loan or acceptance of grants is preceded by the adoption of an investment plan, an investment decision of the ISO BIH management structures while SERC is informed in a timely manner and, if deemed necessary, SERC approval is obtained. Taking into consideration the aforesaid, the Commission recognises financial costs in an amount of BAM 501,000 KM.

Travel costs are a group of costs with rather equal realisation during the previous years. In 2020 and 2021, due to the restrictions imposed by the Covid-19 pandemic, a significant decrease in these costs is evident. The interveners pointed out that the requested amount of BAM 86,000 was too high taking into consideration that the stabilisation of circumstances and normalisation regarding business trips were not expected anytime soon and the practice of organising meetings via online communication platforms is widespread. Taking into consideration these arguments, an amount of BAM 65,000 is approved for travel costs.

Other taxes and charges are a group of costs which primarily includes charges and taxes that do not depend on business results. During the public hearing there was no discussion or interveners' comments. The Commission finds it reasonable to approve the requested amount for this cost item for 2022, that is, BAM 36,000.

With regard to determining the level of other expenditures, the Commission takes into account the fact that the ENTSO-E (European Network of Transmission System Operators for Electricity) membership fee is high and approves it at the requested level of BAM 962,000. Furthermore, the interveners' argumentation about a high increase in allowances for the Steering Board and Advisory Council, which is requested in the tariff application, is also taken into account. Having regard to the fact that the costs in this group are controllable as the ISO BIH may exercise some control over them, the Commission approves an amount of BAM 1,130,640 for other expenditures.

Taking into consideration the reviews and approval of individual costs above, justified costs of the ISO BIH for 2022 amount to BAM 9,487,695 in total. The revenue of the ISO BIH should cover all mentioned justified costs of the regulated entity, that is, it should equal the amount of these costs. However, it has to be taken into consideration that in 2022 the ISO BIH will have some revenues from the review of project analyses and its participation in the European Union Program HORIZON 2020, more specifically in the Project for Cross Border Management of Variable Renewable Energies and Storage Units Enabling a Transnational Wholesale Market (CROSSBOW project) as well as FARCROSS and TRINITY projects. The Commission supports the Presiding Officer's proposal that this revenue may be estimated to an amount of BAM 204,388 in total and the total revenue requirement may be reduced by that amount, having in mind that, according to the accounting rules, the ISO BIH enters the same amount as expenditures, with the allocation thereof mainly for labour costs, so the effect is neutral from the aspect of income statement.

By putting into relation total justified costs to other revenues of the ISO BIH, the revenue requirement for 2022 amounting to BAM 9,283,307 is obtained which should be achieved from the tariff for ISO operation. Having analysed the requested costs, expenses and other revenues of the applicant, the State Electricity Regulatory Commission sets and approves an amount of BAM 9,283,307 in total for the annual revenue requirement of the Independent System Operator in Bosnia and Herzegovina in 2022.

The tariff for operation of an independent system operator is set by putting into relation the revenue requirement to be achieved from the tariff to the energy injected into the transmission network by generators and withdrawn from the transmission network by customers, taking into consideration the 90%:10% ratio of L and G component. The same as in the previous tariff proceedings, pursuant to the Tariff Methodology, a part of the ISO BIH revenue requirement pertaining to the tariff paid by generators for electricity injected into the transmission system is determined in an amount of 10% of the revenue requirement realised from the tariff. Taking into consideration all the aforesaid in this statement of rationale, the tariff for operation of an independent system operator operation is set as stated in the operative part of this Decision.

The same as in the previous tariff proceedings, the Commission will continuously monitor the application of determined tariff and the realisation of the Power Balance in the BIH Transmission Network and make its adjustment if deemed necessary. The ISO BIH is obligated to finance the individual elements of the revenue requirement within the values as approved by this Decision.

It is the opinion of the Commission that the tariff set in the stated amount ensures the revenue requirement for efficient, safe and reliable operation of the ISO BIH, that is, it enables covering of all costs and expenditures reasonably incurred in its business activities. Within the reasonable discretionary right of the Commission to confirm the representativeness and validity of all submitted data and statements, to estimate the level of possibility of realising all projected costs and expenditures, having comprehensively considered all the proofs pointed out in the application, Presiding Officer's Report and comments of the applicant and the interested parties (interveners), the Commission decided as stated in the operative part of the Decision.

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 by making tariffs approved by a decision accessible to the public at its main business office during working days and publishing them 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: 04-28-5-286-35/21 22 December 2021 Tuzla Chairwoman

Branislava Milekić