

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 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 50/20 of 26 October 2020, at its session held on 29 December 2020, the State Electricity Regulatory Commission adopted a

## DECISION

1. It is determined that the annual revenue requirement of the Independent System Operator in Bosnia and Herzegovina in 2021 shall amount to BAM 8,940,755.
2. The tariff for operation of an independent system operator shall be set to an amount of:
  - 0.0057 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  - 0.0783 fening/kWh, which is paid by customers for electricity withdrawn from the transmission system.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 2021 is approved in accordance with the breakdown and amounts as given in the third column of the following table:

Description	2021 <i>requested</i>	2021 <i>approved</i>	Index <i>(3/2)</i>
<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>
Costs of material	227,500	110,000	0.484
Costs of energy sources and utilities	139,000	130,000	0.935
Costs of services	2,292,918	1,827,241	0.797
Employees' gross salaries and allowances	4,100,000	3,814,925	0.930
Depreciation	1,183,706	1,183,706	1.000
Financial costs	537,000	537,000	1.000
Travel costs	86,000	70,000	0.814
Other taxes and charges	68,000	61,500	0.904
Other expenditures	1,253,800	1,140,640	0.910
<b>A. Total costs and expenditures</b>	<b>9,887,924</b>	<b>8,875,012</b>	0.898
1. Surplus revenue	<b>2,868,934</b>		
2. Surplus expenditure			
3. Other revenues		<b>276,000</b>	
4. Funds for loan repayment		<b>341,743</b>	
<b>B. Revenues based on electricity (A+1-2-3+4)</b>	<b>12,756,858</b>	<b>8,940,755</b>	0.701
C. Energy (kWh)	generation	15,728,170,000	15.728.170.000
	consumption	10,281,712,413	10.281.712.413
<b>D. Tariff (fening/kWh)</b>	generators	<b>0.0081</b>	<b>0.0057</b>
	customers	<b>0.1117</b>	<b>0.0783</b>

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 2021.
9. 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 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 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 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 50/20 of 26 October 2020 (received on 28 October 2020 under number 04-28-5-357-1/20).

The following costs and expenditures for 2021 are stated in the ISO BIH application: costs of material amounting to BAM 227,500, costs of energy sources and utilities amounting to BAM 139,000, costs of services amounting to BAM 2,292,918, employees' gross salaries and allowances amounting to BAM 4,100,000, depreciation amounting to BAM 1,183,706, financial costs amounting to BAM 537,000 BAM, travel costs amounting to BAM 86,000, other taxes and charges amounting to BAM 68,000, and other expenditures amounting to BAM 1,253,800 , making a total of BAM 9,887,924 for costs and expenditures. Furthermore, the ISO BIH asked for approval of a surplus of revenues over expenditures amounting to BAM 1,868,934 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 2021 will be significantly influenced by several factors, in particular emphasising the need to ensure funds to cover losses in 2019 and 2020, the implementation of new SCADA/EMS system, the procurement of equipment and software required for participation in activities and projects of the European Network of Transmission System Operators for Electricity (ENTSO-E), investments for which depreciation funds are not ensured, and the issue of collecting receivables from Aluminij d.d. Mostar.

The financial operations refer primarily to the already standardised structure of tangible and non-tangible costs and services, the existing human resources including hiring five new employees, and material and already achieved technical level at which the ISO BIH performs its activity.

The application also includes the planned physical scope of services in the transmission network in 2021, which relies on the data from the Power Balance in the BIH Transmission Network for 2021 (received by SERC on 30 November 2020 under number 04-28-5-357-30/20) according to which the planned delivery of electricity from the transmission system in 2021 amounts to 10,281,712,413 kWh while planned generation in the transmission network amounts to 15,728,166,713 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 04-28-5-357-2/20 of 11 November 2020, of which the ISO BIH was informed accordingly by the letter number 04-28-5-357-3/20 of 11 November 2020 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 04-28-5-357-14/20 of 19 November 2020, 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, and “B.S.I.” d.o.o. Jajce.

None of the four 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 26 November 2020 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 (63 questions in total) and the course of the formal hearing was defined. At the formal public hearing which was also held via an internet communication platform on 2 December 2020, 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 17 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: 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 after a careful review and assessment of the data provided, arguments and explanations as well as comments of the ISO BIH and any interested party made on the proposal of this Report. Regarding the subject-matter of this Decision, interveners “JP “Elektroprivreda Hrvatske zajednice Herceg Bosne” d.d. Mostar and “BSI” d.o.o. Jajce had no comments on the Presiding Officer’s Report while the comments of the ISO BIH and interveners JP “Elektroprivreda Bosne i Hercegovine”, d.d. Sarajevo and MH “Elektroprivreda Republike Srpske”, Parent Company, a.d. Trebinje are summarised in a nutshell as follows

The ISO BIH provide their comments in eight points per specified 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. Nevertheless, the comment also includes the statement on being aware that end customers may not be exposed to any significant increase in costs stemming from the tariffs for financing of activities managed by the ISO BIH. Enclosed to the comments on the Presiding Officer’s Report, the ISO BIH submitted the correspondence by the Ministry of Civil Affairs of BIH, the Energy Community Secretariat and a letter from ENTSO-E, which were assessed as irrelevant to the decision-making process in these tariff proceedings which is based on the law and regulatory rules.

In their comments on the Presiding Officer’s Report, intervener JP “Elektroprivreda Bosne i Hercegovine” d.d. Sarajevo, state that they agree with the proposal not to approve the major

part of the request for a significant increase in labour costs and the cost of services in 2021. In the given situation, with the reduced consumption by end customers due to the Covid-19 pandemic, they are of the opinion that it would not be suitable to approve a higher increase in costs and the revenue requirement than the one which is recommended in the Report.

In the comments of MH “Elektroprivreda Republike Srpske” Parent Company a.d. Trebinje the issues pertaining to the balancing market operation and ancillary services procurement are pointed out. Specifically, the question was raised as to what extent the level of transmission system loss is affected by electricity transit and domestic consumption and the manner (strategy) of procuring energy to cover losses was considered with the aim of achieving lower prices at tenders, i.e., auctions. Furthermore, the need was expressed for resolving the issue of high voltage levels in the transmission system and finding the way to stimulate generators, particularly thermal power plants, to work in the capacitive operation mode, through an appropriate valorisation of voltage control ancillary service.

When passing a decision in the tariff proceedings 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 make 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 110,000 for the costs of material in 2021, taking into consideration the arguments that the procurement of spare parts for SDH (synchronous digital hierarchy) equipment, which cannot be procured after February 2021, can be approved on reasonable grounds while the remaining necessary parts would be procured in the following period in order to avoid all procurements in one year and relieve the financial pressure in 2021.

With regard to the costs of energy sources and utilities, in its application the ISO BIH pointed out that it would conduct its activities in three locations also in 2021 because the planned closing down of the location in Pofalići had to be postponed for one year due to the Covid-19 pandemic. Having an understanding of the applicant’s arguments in the existing situation, as well as the impossibility to predict more precisely the level of these costs, the Commission approves an amount of BAM 130,000 for costs of energy sources and utilities.

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 1.1 million BAM are noticed in particular within the cost of services due to the level of cost. Furthermore, the Commission accepts the current realisation and the previously approved amounts, and the practice of non-implementation of some projects such as IGCC. In order to relieve a heavy cost pressure in 2021 and avoid a hike in the tariff for operation of an independent system operator through service procurement optimisation by the tariff applicant, 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 80,000 for the development of studies, with the plan including a study on effects of operation of the pumped-storage hydropower plant Čapljinina in compensatory mode which came to the forefront due to high-voltage escalation in the electric

power system (hereinafter: the EPS), and three studies planned for 2020 but which were not done due to the pandemic: EPS Reconstruction Plan, EPS Defence Plan and the Development of Dynamic Models of Generation Modules in the BIH EPS. Acknowledging ISO BIH's efforts to improve operation of the EPS as a whole by developing planned studies and analyses, and in line with the previous practice, the Commission finds it justified to recognise an amount of BAM 80,000 for this purpose.

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 139,000 and BAM 303,154 respectively are recognised and approved.

The cost of regulatory fee for 2021 totalling BAM 80,000 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 1,759,241.

Labour costs are the highest costs in business operations of the ISO BIH in absolute value. Having analysed the previous realisation of labour costs compared to the approved ones, some significant deviations are evident, which in the Commission's opinion, additionally jeopardise business liquidity of the ISO BIH. The interveners also pointed out this deviation, which is the reason why particular attention was paid to this issue at the formal public hearing. The Commission finds the arguments for exceeding labour costs presented by the ISO BIH unacceptable and the level of salaries in comparison to other companies in the electricity sector and insists on the consistent implementation of adopted decisions on approval of costs for operation of an independent system operator. 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 dispatcher to higher positions within the regulated entities is accepted. In this context, starting from the amount of 3.55 million BAM approved in the previous tariff proceedings, the Commission increases the amount for the position of labour costs with the aim of hiring five new employees in 2021, and approves a total of BAM 3,814,925. 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.

The ISO BIH asked for approval of the depreciation cost for 2021 amounting to BAM 1,183,706, which is a 26.9% increase in comparison to the recognised 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 arrange 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 ISO BIH is in the cycle of large investments in fixed assets, resulting in the activation thereof and an increase of total depreciation accordingly, the cost of depreciation amounting to BAM 1,183,706 is approved.

With its tariff application, the ISO BIH also submitted loan repayment plans which should be operational in 2021. According to the application, total interest rates for all loans amount to BAM 480,993 while the requested costs of insurance amount to BAM 27,700. 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 2021 amount to BAM 99,983, including interest rates for overdraft loans, while an amount of BAM 410,017 is planned for interest rates for the existing loan of the European Bank for Reconstruction and Development (EBRD). 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 management structures while SERC is informed in a timely manner and, if deemed necessary, SERC approval is obtained in accordance with the powers defined by law. Taking into consideration the aforesaid, the Commission recognises financial costs in an amount of BAM 537,000 KM.

Travel costs are a group of costs with rather equal realisation during the previous years. In 2020, 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. Taking into consideration these arguments and the fact that the ISO BIH reduced the requested amount due to the stated reasons, an amount of BAM 70,000 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. Having analysed the realisation of these costs in the previous period, it was evident that an increase was planned for 2021 which the applicant justified by conducting judicial proceedings and the costs to be incurred on that basis. Starting from the value of the stated judicial proceedings which determines the level of costs, the Commission finds it reasonable to approve an amount of BAM 61,500 for this cost item for 2021.

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 916,000. Furthermore, the interveners' argumentation about a high increase in allowances in the tariff application for the Steering Board and Advisory Council is also taken into account. At the same time, the applicant's argumentation about the need to reserve funds for the judicial proceedings in which the ISO BIH is the defendant and to cover costs of projects based on an agreement between ENTSO-E and the system operators of Continental Europe is also taken into account, so an amount of BAM 1,140,640 in total is approved for other expenditures.

The ISO BIH also stated in the tariff application that there was a need to ensure investment funds within the tariff. Aware of the fact that the ISO BIH has an ambitious investment plan but with the immanent obligation to determine tariffs pursuant to the Tariff Methodology, SERC accepts the necessary procurement of routers for connection to the PCN network with the aim of establishing secure communication with ENTSO-E. Without disputing the need for or the relevance of the mentioned procurement, this investment will be treated as an allowed cost, that is, the cost of depreciation in the relevant accounting period following the activation of the mentioned fixed assets as well as through the recognition of the related costs of interest, if the required scope of funds for this purpose is ensured through a loan either partly or in full.

Taking into consideration the reviews and approval of individual costs above, justified costs of the ISO BIH for 202 amount to BAM 8,875,012 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 2021 the ISO BIH will have some revenues from the review of project analyses and its participation in the European Union Program HORIZON 2020 and the CROSSBOW project (Cross Border Management of Variable Renewable Energies and Storage Units Enabling a Transnational Wholesale Market) as well as FARCROSS and TRINITY projects. The Commission supports the Presiding Officer's proposal that this revenue, based on the realisation in 2019 and 2020,

and the information of the ISO BIH on its value for 2021, may be estimated to an amount of BAM 276,000 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.

Taking into account a significant increase in loan debt of the ISO BIH due to the commencement of a large investment to establish construction infrastructure at two locations and subsequently equip both locations (main and reserve control centre) with full information, telecommunication and control infrastructure (SCADA) in equal scope in both the main and reserve centre, the Commission approves an amount of BAM 341,743 which is the missing amount for the principal payment in 2021. This amount is the difference between the principal to be paid in 2021 amounting to BAM 1,525,449 and the cost of depreciation in 2021 amounting to BAM 1,183,706.

By putting into relation total justified costs to other revenues of the ISO BIH, the revenue requirement for 2021 amounting to BAM 8,940,755 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 8,940,755 in total for the annual revenue requirement of the Independent System Operator in Bosnia and Herzegovina in 2021.

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 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 the 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 its discretionary rights 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: 04-28-5-357-42/20  
29 December 2020  
Tuzla

Chairman of the Commission  
Nikola Pejić