Pristina, 16 November 2022
ERO Code: V_1634_2022

The Board of Energy Regulatory Office,

Based on:

- Provisions of Article 9, paragraph 1, sub-paragraph 1.7, Article 15, paragraph 1, sub-paragraph 1.5, Article 26, paragraph 1, sub-paragraph 1.2, Article 46, paragraph 1, sub-paragraph 1.1 and Article 48, paragraphs 1, 2 and 3 of the Law on Energy Regulator (Law No. 05/L-084);
- Provisions of Article 16, paragraph 1, Article 28, paragraph 1 of the Law on Electricity (Law No. 05/L-085);
- Provisions of Article 18, paragraph 1 of the Law on Energy (Law No. 05/L-081);
- Provisions of Article 4, Article 5, Article 8, Article 11, Article 17, Article 19 and Article 21 of Rule No. 03/2017 on Determination of Maximum Allowed Revenues of the Transmission System and Market Operator (TSO/MO);
- Provisions of Article 4, Article 5, Article 8, Article 11, Article 15, Article 16 of the Rule No. 05/2017 on Determination of Maximum Allowed Revenues of the Distribution System Operator (DSO);
- Notice on initiation of the Third Periodic Review Process, dated 26.05.2022, issued by ERO;
- Proposal on Input Values – Weighted Average Cost of Capital (WACC), received by KOSTT JSC, on 27 July 2022; and
- Proposal on Input Values – Weighted Average Cost of Capital (WACC), received by KEDS JSC on 29 July 2022, within the Third Periodic Review for the Regulatory Period 2023-2027,

in the session held on 16 November 2022 issued the following:

D E C I S I O N

I. **APPROVAL** - Weighted Average Cost of Capital (WACC) which shall be **7.69% real,** pre-tax (without including inflation, which during annual adjustments shall be calculated as determined in Rules on Determination of Revenues) for the Third Regulatory Period (PRR3) **1 April 2023 – 31 March 2028.**

II. The Transmission System and Market Operator (KOSTT JSC) and the Distribution System Operator (KEDS JSC) are **OBLIGED** to implement this decision for the Third Regulatory Period April 2023 – March 2028.

III. The Weighted Average Cost of Capital (WACC) is determined in point I. of the enacting clause of this Decision, and is the same for the Transmission System Operator, Market Operator (TSO/MO) and Distribution System Operator (DSO).

R E A S O N I N G

- The Energy Regulatory Office (ERO), on 26.05.2022 initiated the Periodic Review Process for the Third Regulatory Period (PRR3) to determine the Maximum Allowed Revenues (hereinafter MAR) of the licensees TSO/MO and DSO, for the period 1 April 2023 until 31 March 2027.
- ERO notified that in the periodic review process, it will review the input values that will be used in the determination of MAR.
- ERO, on 27.07.2022 received from KOSTT JSC the proposals on Input Values – Weighted Average Cost of Capital (WACC), within the Third Periodic Review for the Regulatory Period 2023-2027.
- ERO, on 29.07.2022, received from KEDS JSC the proposals on Input Values – Weighted Average Cost of Capital (WACC), within the Third Periodic Review for the Regulatory Period 2023-2027.
- ERO, on 17 September 2022, published the Consultation Report on Weighted Average Cost of Capital (WACC).
- ERO, through the Consultation Report reflected on the WACC set for PRR2, proposals of the TSO/MO and DSO WACC for PRR3 and the proposals for the values of each parameter in the calculation of WACC.
- ERO proposed a real pre-tax WACC of 7.52% up to 7.84% for TSO/MO and DSO in the Consultation Report, dated 13 September 2022, presenting the values and the basis of each parameter used by ERO in the determination of WACC.
- ERO, within the deadline of the public consultation for the Weighted Average Cost of Capital (WACC), received comments from the stakeholders which were presented in the Final Report.
- ERO, on 07 November 2022 published the Final Report – Weighted Average Cost of Capital and Responses to Comments, presented by stakeholders, in relation to the Consultation Report
- TSO/MO and also the DSO, on 28 September 2022, provided detailed responses on ERO's proposal on WACC.
- TSO/MO proposed a real pre-tax WACC of 8.68%, little above the proposal of ERO of 7.52% to 7.84%. The values for each parameter used in their determination are presented in the Final Report, along with the initial values of ERO, from the Consultation Report for comparison.
- The TSO/MO agreed that the ungeared capital proposed by ERO (40%) is convenient and did not contradict the risk-free rate (of 3.65%) proposed by ERO, by using these two in the WACC proposal. However, TSO/MO did not agree with ERO's proposals on other parameters, such as: debt premium cost, equity beta and capital risk premium.
- The TSO/MO did not contradict the value proposed by ERO for the risk-free rate but recommended a higher debt premium of 2.8%, from 1.7% to 2.12% proposed by ERO.
- In the calculation of the debt premium of 2.61%, TSO/MO was based on the data from the Monthly Statistical Bulletin of CBK – the same source of data that ERO used in the calculation of the debt premium. In its calculation, the TSO/MO used the latest available interest (July 2022) for loans with all maturity terms for the industry. Therefore, the maturity terms of the loans covered the short-term loans (up to a year) as well as the long-term ones.

- ERO considers it appropriate to take into account the debt premium using loans with longer maturity periods, when such data is available, taking into account the relatively long life-span of TSO/MO assets (ERO used loans with a duration between 5 and 10 years).
    - ERO does not consider it appropriate to include these shorter-term loans from TSO/MO in the calculation of the debt premium. Furthermore, ERO does not consider it appropriate to rely solely on the latter value, as there is greater potential for anomalies in relying on a single value and the cost of debt allowance (partially) reflects an allowance for historically realized costs of debt (calculated by looking at values over a number of years).
    - TSO/MO proposed a capital beta of 1, repeating the justification from its previous proposal that it considers itself riskier than the average firm (and that the beta should be at least 1).
    - ERO considers that some of the other risks faced by the TSO/MO are similar to those faced by TSOs in other comparable countries and are therefore reflected in the referenced betas. Finally, since the TSO/MO is a regulated segment of the electricity sector, it is entitled to protection that most typical firms do not benefit from (including protection from inflation through index-linked revenues and security in the recovery of previous investments, through RAB). ERO considers that this enables mitigating the risk that the average firm does not benefit from, which is subject to competition.
    - TSO/MO proposed an Equity Risk Premium (ERP) of 5.5%, as was its initial proposal, based on "four recent reliable studies from international organizations".
    - ERO is aware that there is a wide range of potential sources of ERPs and has analysed and taken into consideration these sources. In its Consultation Report, ERO chose to set ERP in line with its previous regulatory approach - referring to ERPs set by other European and regional regulators as more reliable.
    - DSO has proposed a real pre-tax WACC of 15.35%, approximately double the proposal of ERO of 7.52% to 7.84%. DSO's proposal is unchanged from its initial proposal, which ERO reviewed and published in the Consultation Report, dated 13 September 2022. DSO has not addressed the inconsistencies that ERO has pointed out in its Consultation Report in relation to evaluations of DSO WACC.
    - DSO did not agree with any of ERO's proposed values for PRR3 WACC and stated that ERO's evaluation of WACC "significantly jeopardizes the financial stability of the company". In its response, DSO did not provide any evidence or comment regarding the impact on the company's financial stability in support of this claim.
    - DSO has maintained an evaluation of the real cost of debt of 7.4% from its initial proposal. This was based on a 1-year Euribor rate plus an increase for a corporate range of 6.5% for bonds rated BB -, B+ and B. This value appears to be based on a nominal Euribor rate, without including inflation. Therefore, it should be emphasized that the Pricing Rules require a real, not nominal, cost of debt and WACC, as proposed by DSO, and such a proposal was not taken under review.
    - DSO also offered comments on ERO’s evaluation for the costs of debts, which were based on the average rates for investment loans with maturity of 5-10 years, published by CBK during the periods 2016-2022 (5.74%) and 2020 -2022 (5.37%).

- ERO has used 5- to 10-year loan values, since rates over ten years are rarely reported. Therefore, based on the responses provided in the final report given to TSO/MO and DSO, ERO in the final evaluation has assessed as appropriate that the cost of debt should be the upper threshold of the range 5.37%-5.74%, respectively 5.74%.
- DSO proposed a risk-free rate for Kosovo of 8.45%, which includes a risk-free rate of 1.22% (based on 20-year German government bonds) and a country risk premium for Kosovo of 7.23% (based on the analysis of Damodaran, 2022).
- The DSO used this value to calculate the real WACC, even though it was not made clear by DSO, this appears to have been a nominal risk-free rate, not a real risk-free rate, and for this reason has been overestimated by inflation.
- ERO acknowledges that DSO has not proposed the use of these resulting values and the approach to establish the real risk-free rate, but has a number of concerns: the values used in the calculation seem to be nominal and not real (e.g. returns of selected European bonds - for illustrative purposes, assuming projected inflation of 2.7%, the nominal risk-free rate of 7.9% turns out to be 5.0% real (using Fisher's equation).
- ERO evaluates that the analysis of Damodaran 2022 applies a Country Risk Premium and proposes a series of possible adjustments to it (such as increased volatility above), there is little academic support for these approaches, so it did not consider it as reliable in the Final Report for WACC.
- ERO considers that the Rules on Revenues state that in WACC the risk-free rate should be established "using evidence on the cost of non-concessional sovereign debt for Kosovo and/or, when this is not available or is insufficient, the cost of non-concessional sovereign debt for countries that are considered to have credit status similar to Kosovo". The proposed approach is a significant step away from this approach (of using known data), instead relying on a subjective calculation with multiple assumptions to derive an implied estimate of 20-year bond returns of Kosovo. In the Consultation Report, ERO has reported real returns in a selection of countries in Central and Eastern Europe. Of these, Hungary has the lowest credit rating and the highest real return (of 1.45% in April 2022) - ERO calculates the real return in mid-October as 5.7%.
- The DSO proposed an Equity Risk Premium (ERP) of 6.25% supported by the evidence provided in its initial proposal. In its response to the Consultation Report, it identified another source of information, placing the ERP at 6.01%.
- ERO emphasized that the ERP it had proposed in its consultation report was somewhat above the ERP based on US markets, and much higher than for the world markets (excluding the US) when it took a long-term perspective (122 years). In addition to this reference and the review of Total Market Return (TMR - in relation to long-term TMR reviews), ERO considers that its proposed ERPs (and resulting actual TMRs) set by reference to precedent European and regional regulation is reasonable.
- DSO proposed a net equity beta of 1, but did not provide new evidence to support this value. DSO had previously presented a range for unlevered beta.
- ERO, in its consultation report, used data from the same source that DSO used in determining the upper level of its range (CEER, 2022), but ERO's evaluation of equity beta was 0.88.

- DSO proposed a small company premium of 3.25% in addition to the equity cost (a value it considered modest – citing a value of 6.25% if market capitalization criteria had been taken into account). DSO also states that "based on best practice and methodology, it is generally accepted that small companies tend to have higher returns compared to large companies".
- ERO notes that it is not a common practice, let alone best practice, for regulators to include a provision for a premium in a small company's cost of equity. ERO's framework for determining WACC (i.e. Appendix 4 of the Rule on Maximum Allowed Revenues of the Distribution System Operator (Rule on DSO Revenues, 16 March 2017) does not include the premium of the small company. DSO provides no evidence of any regulator including a premium in the cost of equity of a small company. The only jurisdiction of which ERO is aware of offering a premium for micro and a small company is Latvia. While Latvia and Kosovo have similar populations, Latvia is served by eleven DSOs and is therefore much smaller in size than the DSO.
- The DSO proposes a base capital of 36.62% (the lower end of the range of 36.62% to 40% it presented in its initial proposal) and uses this value in the calculation of its WACC. The DSO declares that the impact of the application on 40% of the unlevered capital is insignificant for WACC.
- ERO sees no reason to change the conceptual unlevered capital from the 40% proposed in its Consultation Report, given that even the DSO itself considers this difference to be irrelevant.
- ERO has allowed licensees reasonable WACCs to cover their investment financing costs and provide a reasonable return on their equity.
- The allowed level of WACC will ensure quality investments by improving the level of service for electricity customers.
- The WACC level of the third regulatory period of 7.69%, compared to that of the second regulatory period of 8.3%, came as a result of the change in the determining factors of the WACC, during the last years, such as the real cost of debt (real risk-free rate and Debt Premium), Beta Equity.

- ERO Board, following the evaluation and analysis of relevant reports as well as review of the comments received by parties, and based on legal provisions mentioned in the introductory section of this Decision, has decided as in the enacting clause to this decision.

IV. The decision is issued and published in the official languages of the Republic of Kosovo.

V. The decision shall enter into force on the date of approval by the ERO Board and will be published on the official website of ERO.

Legal advice: The party dissatisfied with this decision may initiate an administrative dispute at the competent court, within thirty (30) days, from the date of receipt of the decision or the date of its publication on ERO's website, whichever occurs last.

ERO Board:

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Ymer Fejzullahu, Chairman

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Selman Hoti, Member

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Izet Rushiti, Member

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Lutfije Dervishi, Member

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Gani Buçaj, Member

This decision is sent to:

- (KOSTT JSC.),
- (KEDS JSC.), and
- ERO Archive