

National Electric Power Regulatory Authority Islamic Republic of Pakistan

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No. NEPRA/R/TRF-613/K-Electric/Dist-2024/ 695 1-55

May 23, 2025

Subject:

Decision of the Authority in the matter of Petition filed by K-Electric Limited for Determination of Distribution tariff under Multi Year tariff Regime for the Period from FY 2023-24 to FY 2029-30

Please find enclosed herewith the subject Decision of the Authority (total 57 pages) in the matter of Petition filed by K-Electric Limited for Determination of Distribution tariff under Multi Year tariff Regime for the Period from FY 2023-24 to FY 2029-30 in case No. TRF-613/K-Electric/Dist-2024.

The Decision is being intimated to the Federal Government for the purpose of notification in the 2. official Gazette pursuant to Section 31(7) of the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997 within 30 days from the intimation of this Decision. In the event the Federal Government fails to notify the subject tariff Decision within the time period specified in Section 31(7), then the Authority shall notify the same in the official Gazette pursuant to Section 31(7) of NEPRA Act.

Enclosure: As above

Vasim Anwar Bhinder)

Secretary, Ministry of Energy (Power Division), 'A' Block, Pak Secretariat, Islamabad

Copy to:

- 1. Secretary, Cabinet Division, Cabinet Secretariat, Islamabad
- 2. Secretary, Ministry of Finance, 'Q' Block, Pak Secretariat, Islamabad
- 3. Chief Executive Officer, K-Electric Limited (KEL), KE House, Punjab Chowrangi, 39-B, Sunset Boulevard, Phase-II Defence Housing Authority, Karachi.
- 4. Chief Executive Officer, Central Power Purchasing Agency Guarantee Limited (CPPA-G), Shaheen Plaza, 73-West, Fazl-e-Haq Road, Islamabad

DECISION OF THE AUTHORITY IN THE MATTER OF PETITION FILED BY K-ELECTRIC LIMITED FOR DETERMINATION OF DISTRIBUTION TARIFF UNDER MULTI YEAR TARIFF REGIME FOR THE PERIOD FROM FY 2023-24 TO FY 2029-30

- 1. K-Electric Limited (herein referred to as "KE or K-Electric") is a vertically integrated utility (VIU), providing services in its service territory as per its License. KE was awarded a Multi-Year Tariff (MYT) for a period of seven years starting from 1st July 2016 till 30th June 2023. Upon expiry of its MYT on 30.06.2023, K-Electric filed separate petitions for its Generation, Transmission, Distribution and Supply Tariffs. The distribution tariff petition has been filed for a period of seven (07) years from the FY 2023-24 to FY 2029-30.
- 2. K-Electric requested the following tariff for its distribution function for the first year of tariff control period, to be indexed based on the mechanism provided in the petition;

Rs. /kWh											
	Amortization Working	Washing		RORB							
O&M	of Deferred Revenue	Deferred capital RoRB RORB RORB		RoRB Cost of Equity	Depreciation	Total					
1.9274	(0.189)	0.0821	0.1303	0.8646	0.5535	0.4669	3.8357				

- 3. The Authority admitted the petition, and notice of admission was accordingly published in the newspapers and uploaded on NEPRA website on 03.05.2024, inviting comments from the stakeholders.
- 4. Since the impact of any such determination is to be made part of the consumer end tariff, therefore, the Authority, in order to provide an opportunity of hearing to all the concerned and in the interest of natural justice, decided to conduct a hearing in the matter. The hearing was scheduled on 27.06.2024 at NEPRA tower and through ZOOM, for which notice of hearing / advertisement was published in newspapers on 11.06.2024 and also uploaded on NEPRA website. Individual notices were also served to the relevant stakeholders.
- 5. Based on the submissions made by KE in its petition, the Authority framed the following issues for discussion during the hearing and presenting written/ verbal comments;
 - i. Whether the request to allow Tariff control period of seven years is justified?
 - ii. Whether the projected sent out growth at a CAGR of 2.6% based on FY 2023 sent outs, along-with request to actualize sent outs and allow consequential under / (over) recovery of costs is justified?
 - iii. Whether the request to allow adjustment of distribution loss target due to change in voltage wise sales mix is justified and what will be mechanism to for such adjustment?
 - iv. Whether the requested debt to equity structure is justified?



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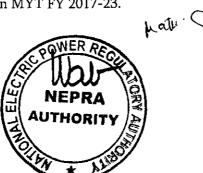
- v. Whether the requested cost of debt and spread along-with request to actualize same based on actual mix of foreign and local loan is justified and what will be mechanism for such adjustments?
- vi. Whether the request to allow actual premium, tax payments on premium & interest/markup, financing fee/transaction cost inclusive of taxes on loans and hedging cost on foreign loans (KIBOR SOFR + CAS + Hedging Spread) is justified?
- vii. Whether the requested US dollar-based Return on Equity of 16.67% and its indexation mechanism is justified?
- viii. Whether the requested O&M cost for the FY 2023-24 along-with proposed adjustment mechanism is justified?
 - ix. Whether the request of KE to not apply any efficiency factor (X factor) while allowing indexation for the O&M cost during the MYT control period is justified?
 - **x.** Whether the request to allow O&M of CAPEX nature transferred from investment plan as part of O&M cost is justified?
 - xi. Whether the requested Other Income, Depreciation, Working Capital, RAB and RORB is justified and what will be the adjustment mechanism during the MYT control period?
- **xii.** Whether the request to share additional income in the ratio of 50:50 in case RAB is used for any activity other than regulated business is justified?
- xiii. Whether the request to allow Corporate Tax/ WPPF and WWF as pass through costs is justified?
- **xiv.** Whether the request for adjustment of wheeling charges as part of supply business tariff is justified?
- **xv.** Whether amortization of Deferred Revenue at an assumed rate of 6.32% per annum, to be actualized annually is justified?
- **xvi.** Whether the service charges for collection of PTV fee needs to be revised as requested by PTV Corporation, in light of notification dated 16.05.2016 issued by the GoP?
- xvii. Whether the requested adjustment mechanism for the investment plan is justified?
- wiii. Whether the request to allow one-time adjustment for additional costs pursuant to unbundling, is justified?



- **xix.** Whether there is any cost/ benefit analysis of the requested tariff on domestic consumers, industrialization and economic growth?
- Whether the request to allow unrecovered cost of MYT 2017-23, as pass through, to be included in the tariff is justified?
- xxi. Whether there will be any claw back mechanism or not?
- **xxii.** Any other issue that may come up during or after the hearing?
- 6. The hearing was held as per the schedule, wherein KE was represented by its CEO along-with financial and technical teams. A large number of stakeholders also participated in the hearing, which included representatives form media, general public, other DISCOs, industrial consumers and representatives from various industrial associations etc.
- 7. K-Electric during the hearing reiterated its submissions made in the petition and presented its issue wise response in the matter. Different commentators raised their concerns on the petition submitted by K-Electric. Written Comments were also received from various commentators.
- 8. A brief of the contention raised by commentators and the subsequent rejoinder by K-Electric is as under;

Mr. Abu Bakr Ismail

- 8.1. Mr. Abu Bakar Ismail, representing Amreli Steel raised concerns over the request of KE to allow USD based return. He however supported sharing of reduction in losses in the ratio of 50:50 between KE and the consumers.
- 8.2. On the point of USD based RoE, KE submitted that other private investors in the power sector in Pakistan benchmark their return to dollarized levels as is the case with (IPPs and HVDC). KE's investors have invested approximately USD 700 Million as well as reinvestment of all profits, which has enabled USD 4 billion in CAPEX since privatization, resulting in improved performance and lowered tariff.
- 8.3. Had KE not improved operationally including reduction in T&D losses and generation efficiency improvements as compared to 2005 levels, KE tariff would have been PKR 17.3/kWh higher (as of June 2023). Furthermore, KE was being provided annually Rs.10 billion as operational subsidy pre-privatization, which has also been completely eliminated.
- 8.4. In addition to the above, despite significant improvements achieved since privatization, KE returns have remained well below returns made by other private players. KE's average RoE has been around 1.42% since privatization, whereas returns made by other private players in the sector range between 22% to 32%, during the period FY 2010 to FY 2023, with significantly lower risk profiles as compared to KE. Hence KE should be allowed the dollarized returns level as allowed by NEPRA in MYT FY 2017-23.



8.5. Regarding sharing of losses, K-Electric acknowledged the comments that a 50:50 sharing mechanism for loss reduction should be allowed, meaning any reductions in losses will be shared equally between KE and consumers as it allows the necessary incentive to improve performance.

Mr. Arif Bilwani

- 8.6. Mr. Arif Bilvani during the hearing and in his written comments opposed the tariff control period of 7 years and submitted that it should be no more than 4 years tariff with mid-year review. No other DISCO has been allowed such a long period of time. The Petitioner becomes lax in fulfilling its commitments and tend to roll over projects on one pretext or other. Even in the allowed period, there must be penal clauses for not undertaking or fulfilling the timely commitments made in the petition.
- 8.7. Mr. Bilvani also opposed the USD based return on equity by submitting that the petitioner is not an IPP which are allowed dollar-based return with an indexation under a certain specific policy, which does not cover the business of the Petitioner. It was further stated that K-Electric is a private company, albeit engaged in a regulated business but that doesn't mean that it can have special treatment. There are scores of foreign investors in Pakistan who have hundreds of millions of dollars in various industrial & service projects which include Lotte Chemical from Korea, Landline telecom business is owned by Emarati group, and 03 oil refineries out of 05 are owned by foreign investors but none has been allowed dollar base returns or extraordinary concessions and favors as are being demanded by the Petitioner KE. Mr. Bilvani also opposed allowing depreciation and return on RAB in line with the previous MYT. He also requested to include the efficiency factor and heavy penal provisions for failure to achieve the benchmarks.
- 8.8. Mr. Bilvani further stated that tax on income, cost of WWF, WPPF, Super tax & other taxes and levies shall not be allowed as pass through items. All commercial organizations bear these if they do business in Pakistan. Citing/quoting examples of IPPs is not relevant. At the time of privatization, the acquirers knew about all these taxes. In the past the regulator allowed these despite opposition from the intervenors & participants.
- 8.9. Mr. Bilvani questioned high loss target of T&D losses allowed to K-Electric while comparing the same with Tata DDL, where losses have come down from 53% in 2002 to total AT&C loss (Transmission + Distribution + Recovery) of only 6.39% in the year 2023, whereas KEs ATC loss in 2022 was only 18.1%. It has been further stated that KE was privatized with the sole objective of getting rid of injecting subsidies arising due to all sorts of losses, providing finances for investment in all sorts of capex, improve the services to consumers in every aspect, get rid of load shedding (in any form), enhance the availability of power and get rid of mismanagement, corruption, unruly unions etc. But even after the lapse of about 20 years of privatization, KE has not been able to meet the expectations.
- 8.10. Mr. Bilvani opposed allowing any recovery loss to K-Electric by stating that all commercial organizations have to bear recovery losses, and not burden the paying consumers. KE's recovery was 96.7% in 2022, therefore it should not be allowed recovery loss of 92.76% to 95.48% in the next 7 years. It is failure of the management which cannot be passed into tariff. It was also

highlighted that no recovery loss is allowed to 05 Discos having service territory in the province of Punjab.

- 8.11. Mr. Bilvani also questioned KE's request of allowing working capital, intend to raise 75% of its debt for investment in foreign loans, US CPI indexation, duplication of Returns, Year wise return components instead of levelized return and cost of unbundling.
- 8.12. Regarding 7-year tariff control period, K-Electric submitted that being a private entity, KE secures borrowings from lenders without a sovereign / government guarantee. When providing financing for projects, financers typically require cashflow projections over the life of the assets which, in KE's case, significantly exceeds the control period of 7 years, since KE's long term loans tenure usually span from 10-12 years, while the assets life ranges from 10-30 years.
- 8.13. Considering the fact that KE has been allowed a 7-year control period by the Authority in the past and the investment plan for T&D approved by the Authority also covers a span of 7 years, KE has requested to allow tariff control period for 7 years (i.e. FY 2024 to FY 2030). Moreover, for execution of investment plan, a viable and sustainable tariff for all segments including Transmission, Distribution & Supply segments is essential as lenders and shareholders require a clear, long-term outlook on KE's revenues and profitability to provide these loans & make equity investments. If KE is granted a shorter tariff control period, it would be challenging to provide the necessary long-term projections to financers, thereby making it difficult for them to assess the viability of the projects for which the financing is being secured.
- 8.14. KE also highlighted that private investment in Pakistan's power sector has occurred only with IPPs and PMLTC in the past, which have been granted tariffs over the life of their assets. KE being unique as the only vertically integrated utility involved in both transmission and distribution, makes it incomparable to other DISCOs in Pakistan. Unlike KE, DISCOs are Government owned that are granted shorter control periods which is viable for them since their financing arrangements are backed by the Government guarantees.
- 8.15. Additionally, KE clarified that approved investment plan includes a detailed investment revision mechanism. If any investment needs to be rolled over to subsequent years, this will be accounted for annually, and any resulting impact will be adjusted in the tariff on a timely basis. This approach ensures timely adjustments.
- 8.16. On the point of USD based RoE, K-Electric reiterated that other private investors in the power sector in Pakistan benchmark their return to dollarized levels as is the case with (IPPs and HVDC). KE's parent company i.e. KES Power Limited is a foreign entity having foreign shareholders, has invested approximately USD 700 Mln as well as reinvestment of all profits, which has enabled USD 4 billion in Capex since privatization, which has helped improved performance and lowered tariff. Had KE not improved operationally including reduction in T&D losses and generation efficiency improvements as compared to 2005 levels, KE tariff would have been PKR 17.3/kWh higher (as of June 2023). Hence KE should be allowed dollarized return levels as allowed in MYT FY 2017-23. Furthermore, KE was being provided annually Rs.10 billion as operational subsidy, pre-privatization which has been completely eliminated.



- 8.17. In addition, despite significant improvements achieved since privatization, KE returns have remained well below returns made by other private players. KE's average RoE has been around 1.42% since privatization, whereas returns made by other private players in the sector range between 22% to 32%, during the period FY 2010 to FY 2023, with significantly lower risk profiles as compared to KE. Hence, KE should be allowed the dollarized returns level already granted by NEPRA in MYT FY 2017-23.
- 8.18. With reference to pass-through of taxes / WWF / WPPF in tariff and receipt of subsidy from GoP, K-Electric opined that under cost-plus tariff regime, tariffs are structured to cover all the prudent costs and provide an appropriate level of return. Any additional taxes, levies, costs, etc., imposed by the government are additional costs that are not accounted for in the given tariff therefore, necessitates pass-through of these costs in tariff. The similar mechanism is followed for other power sector entities operating in Pakistan as well.
- 8.19. Regarding concerns over KE's high losses compared to Tata DDL, KE emphasized that KE and Tata DDL are not directly comparable due to various factors. In India, the Government has implemented incentives to curtail theft and recovery losses, such as rationalized tariffs as well as free electricity for consumers using up to 200 units per month. This subsidy significantly aims to reduce losses since these consumers represent that proportion in the total consumer mix where losses are generally higher than other consumer segments. Moreover, macroeconomic conditions such as inflation, GDP and currency stability and its impact on electricity prices to customers as well as their ability to pay their electricity bills differ significantly between the two countries which are beyond KE's control.
- 8.20. Furthermore, Karachi suffers higher AT&C losses at 21.4%, compared to likes of Islamabad and Faisalabad due to different city dynamics & socio-economic situation. Reasons for variation in losses exist between those DISCOs & KE, which can be observed as per the below table where Karachi has the highest number of slums & population density with the least monthly household income;

City	Population Density (per sq. km)	Household Monthly Income (USD)	Number of Shims	Rank in Quality of Life Index[1]	Rank in World Bank's Ease of Doing Business Assessment (out of 13 cities)
Karachi	4,543	184	900+[2]	166	9
Islamabad	2,211	266	42+[3]	121	4
Lahore	1,653	220	356	155	3
Faisəlabad*	792	184	169[4]	-	11

iti https://www.numbeo.com/quality-of-life/rankings.jsp

Source:

- Pakistan Bureau of Statistics (Population Density)
- 10 Facts About Poverty in Karachi The Borgen Project
- Study by Reall (UK) on Understanding Household Incomes: Pakistan [December 2022]
- Number of Slums: Report of Coverage Survey in Slums / Underserved Areas of 10 Largest Cities of Pakistan by UNICEF (July 2020)

Rank in World Bank's Ease of Doing Business Assessment (World Bank)

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lai Slums in Karachi (unicef.org)

^[3] Slums in Islamabad (unicef.org)

⁽unicef.org)

^{*}Rank of Faisalabad in Quality-of-Life Index is not available.

- 8.21. KE further explained that despite multi-faceted challenges, KE has significantly reduced its T&D losses since privatization which has resulted in decrease in tariff requirements by PKR 155 billion (T&D loss reduction annual impact of improvement from 34.2% in FY 2005 to 15.3% in FY 2023). Further, KE T&D losses are already lower than other regional DISCOs such as HESCO & SEPCO, where losses are 27% & 34% respectively.
- 8.22. Regarding demand growth and energization of KKI, KE apprised that already an actualization mechanism has been proposed under which if the actual growth differs with the projected 2.4% (CAGR), the resultant impact of over / under will be adjusted in the tariff. Furthermore, once the KKI project is energized, KE would be able to off take additional supply from the National Grid, which will result in reducing fuel cost component in the overall tariff.
- 8.23. On the comment over adjustment in sent-outs, KE submitted that sent out projections are based on multiple uncontrollable factors such as economic growth, government policies, incentive packages, technology disruption, etc. Sent outs are actualized for other power sector entities, NTDC and DISCOs as well, hence KE has also requested that annual adjustment for actualization of sent out in tariff should be done i.e. in case of higher sent outs, the tariff should be adjusted downwards and in case of lower sent out the tariff should be adjusted upwards similar to the mechanism followed for DISCOs.
- 8.24. Regarding the application of efficiency factor on O&M, KE explained that its O&M cost is projected to increase beyond CPI & Projected sent-out growth due to planned capacity enhancements along-with increase in consumer base & demand, as more fully explained in KE's tariff petition. Therefore, no X-Factor should be applied as KE has not asked for any incremental O&M (other than CPI & growth in sent outs) owing to proposed capacity enhancements and increase in consumer base.
- 8.25. Furthermore, KE is already efficient in terms of O&M per unit as compared to other DISCOs operating in Pakistan as evident from the table below. Comparison of O&M Costs (net-off other income) with DISCOs allowed O&M (including transmission network costs) based on FY 2023 is as follows:

Description	Sent outs (GWh)	O&M Amount (PKR Mn)	O&M** PKR Per kWh	O&M (inc. NTDC in DISCOs & KE*** Transmission) PKR / kWh
-	A	В	C = B / A	RE Transmission/TRR/RWII
SEPCO	3,869	8,194	2.12	2.34
GEPCO	11,440	24,064	2.1	2.32
HESCO	4,917	9,945	2.02	2.24
IESCO	11,724	17,614	1.5	1.72
QESCO	6,005	8,543	1.42	1.64
FESCO	16,041	21,872	1.36	1.58
PESCO	15,255	19,902	1.3	1.52
MEPCO	19,506	24,089	1.23	1.45
LESCO	26,032	29,581	1.14	1.36
KE	18,357	19,570	1.07	1.36

^{*}Includes above 132kv as well whereas DISCOs does not include above 132kv.

^{**} Excludes CAPEX transferred from Investment Plan made part of O&M.



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^{**} Other income items proposed for actualization are netted off.

- *** NTDC O&M as per decision dated 04.11.21 for FY 22 indexed with CPI of FY 23. Further, also includes O&M of PMLTC as per decision dated 08.09.23.
- 8.26. With respect to KE's foreign borrowing, KE clarified that significant portion of its approved investments involve imports over which SBP mandates that foreign exchange for these imports be covered through foreign borrowing. Additionally, local banks have per-party exposure limits, making it impractical to fully fund the approved investment plan through Sukuks and local financing. Additionally, the borrowing mix is projected in the reference tariff which is proposed to be actualized at each year end as per the annual adjustment mechanism.
- 8.27. Regarding US CPI, KE stated that US CPI is requested on the CAPEX allowed by the Authority and not on O&M expenses. US CPI is required to be allowed to cover the increase in prices as international market prices also rise over period, which is not covered in currency depreciation.
- 8.28. With respect to duplication of return, KE highlighted that there is no duplication in the requested returns on RAB as 70% of the RAB is attributed as debt on which cost of debt has been requested, whereas 30% of the RAB has been attributed as equity on which return on equity has been requested.
- 8.29. On the issue of Working capital cost, KE submitted that working capital costs are necessary to be allowed to ensure recovery of finance cost that arise in short-term borrowings to cover operational needs. Furthermore, quarterly variation of KIBOR is requested for timely recovery of prudent costs to avoid accumulation of adjustments at each year end.
- 8.30. On cost of unbundling, KE clarified that the O&M costs requested by KE for the tariff control period are based on O&M of base year i.e. FY 2023. Such costs do not include any cost relating to unbundling neither any provision has been kept in the tariff to cover such costs. In this regard, it is requested that if there is any legal unbundling in future, KE shall be allowed one-time adjustment for additional costs / revision required in tariffs pursuant to unbundling with NEPRA for determination along with rationale.
- 8.31. Regarding year-wise returns, KE submitted that it allows for a more flexible and adaptive tariff setting. This approach responds more effectively to changing economic conditions through indexation and annual adjustment mechanisms, ultimately benefiting both the utility and the consumers. Furthermore, allowing a year wise tariff would also ensure alignment of tariff with other power sector entities across Pakistan.
- 8.32. On the point of T&D loss targets, KE mentioned that same has already been discussed in detail and approved by the Authority as part of KE's in the Investment Plan for FY 2024 to FY 2030, and if KE's losses are lesser than the allowed level of losses, a sharing mechanism for the same has already been included by the Authority in its investment plan decision.

Mr. M. Mughni

8.33. Mr. Mughni raised concerns regarding request of KE for uncovered costs pertaining to the previous MYT.



- 8.34. On the point of Mr. Mughni regarding uncovered costs for previous MYT period, KE explained that it includes certain components such as pending quarterly variations, taxes (such as WPPF and WWF), end-of-term adjustment. Furthermore, similar adjustments are also allowed in case of other DISCOs operating as Prior Year Adjustments in their tariff determinations.
- 8.35. **Amreli Steel** in its written comments stated that the Authority has allowed all DISCOs rupee-based ROE of approximately 14.5%.
- 8.36. **Federal B Area of Trade and Industry** supported KE's petition by submitting that KE was provided a fixed cost of debt with no adjustment, which affected their financial performance the company posted a 31-billion-rupee loss in FY23 compared to a profit of PKR 8.5 billion in FY22. Flexibility must be brought in to address the current economic situation; this can be done through an indexation mechanism that accounts for real-time changes in the interest rates, allowing KE to obtain adjustments that can help it maintain continuity in its investments. Such decisions can greatly determine the outcome of Rs.400 billion investment that has been approved over the next 7 years by NEPRA.
- 8.37. **GEPCO** in its written comments submitted that geographical area of KE is mostly urban compared with GEPCO's geographical area that consists of both rural and urban. However, Transmission and Distribution system of KE is inefficient and costly i.e. Rs. 3.38/kwh (Transmission) and Rs. 3.84/kwh (Distribution) respectively for FY 2024. GEPCO also mentioned that KE's weighted average cost of capital (WACC) for calculation of return on rate base (RORB) is 25.73%. If the same is approved, it shall constitute precedent for other DISCOs and the tariff for other DISCOs will have to be adjusted accordingly, resulting in unaffordable tariffs for consumers. It further highlighted that supplier and distribution/transmission functions are under one organization, therefore, requesting for cost of working capital is misnomer for the fact that the working capital is already in place through receipts from the consumers. In a combined SoLR and Distribution organization, allowing supplier margin calculated as a percentage to cost, including even generation cost shall be extra burden for regulated consumers. GEPCO also questioned recovery loss allowance of Rs. 46.06 billion, by stating that it is simply passing on inefficiency onto paying consumers.
- 8.38. **Korangi Association of Trade and Industry (KATI)** submitted that KE reported a financial downturn in FY23, a stark contrast to its performance in FY22. This has necessitated a flexible regulatory mechanism that account for real time economic shifts, such as an indexation mechanism for interest rates. Such adjustments are vital for sustaining KEs Rs.400 billion investment plan over the next seven years. It also mentioned that KE has successfully halved its line losses post-privatization and continues to address issues like illegal connections (kundas) that stem from unplanned urban sprawl. While operational and maintenance costs remain competitive, it is imperative that future regulatory decisions foster not only efficiency but also the growth.
- 8.39. KATI raised concerns regarding unauthorized Kunda connections by submitting that allowance of such connections, whether official or unofficial, contributes significantly to increased distribution losses and should be addressed decisively. It is crucial that NEPRA takes a firm stance against all forms of unauthorized connections to safeguard the integrity of the electrical network.

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Consumers must be billed through metered connections and learn to pay the actual cost of electricity and NEPRA must disallow any Kunda connections at all costs.

- 8.40. KATI supported K-Electric's request to the extent that it does not result in any increase in industrial tariffs as already we are paying uniform Tariff including cross subsidy and uniform quarterly adjustments and PHL surcharge. NEPRA however should meticulously evaluate and allow necessary cost, and margin for supply business.
- 8.41. Pakistan Leather Garments Manufacture Exporters Association (PLGMEA) submitted that all organizations account for the risk of default and write-offs on consumer end and KE should be extended the same by way of recovery margins so that the company's operations are not hurt by Karachi's widespread Kunda culture. It has also been stated that variations in the exchange rates and inflationary pressures, both are well out of the control of KE, therefore, it becomes essential that the utility should be allowed quarterly indexations with KIBOR and annual adjustment for working capital requirements so that changes to the rate of return do not adversely affect KE's operational activities and service quality.
- 8.42. **SHEHRI** in its written comments has raised several issues, a brief of which is as under;
 - ✓ NEPRA must vigorously evaluate the possible negative impacts on consumers of a fixed rate
 - ✓ Currently, the deferred revenue (consumer funded assets) is not included in the defined RAB, which is not in line with fair business practices. There must be a clear mechanism of consideration of this huge quantum of capital towards the RAB, and its positive impact on rationalization of tariff.
 - ✓ There is a state within state at K-Electric which is syphoning off its earnings through an organized system of illegal connections, generally called as 'kundas.' The way this system is thriving and is untouchable is incomprehensible. Statement of achieving the overall recovery ratio of 92.73%, when viewed together with the prevailing load shedding regime where public has to suffer daily load shedding of up to 12 hours per day in many areas on the pre-text of high-loss areas, becomes self-contradictory. This has very serious implication in that it makes the whole of the petition doubtful.
 - ✓ Recovery loss must not be built as a cost factor in the tariff and must be tied up with NADRA/K-Electric's effective steps to stop the menace of electrify theft. Rather than penalizing the dutiful customers with this unaccounted-for electricity, NEPRA and K-Electric must devise some other mechanism.
- 9. The Authority has considered the submissions made by K-Electric in its petition and during the hearing and comments of stakeholders. On the basis of the pleadings, available record, evidence produced during the course of hearing and afterwards, the issue-wise findings of the Authority are as under;
- 10. Issue No. 1: Whether the request to allow Tariff control period of seven years is justified?
- 10.1. K-Electric submitted that it was granted an Integrated Multi-Year Tariff for a control period of 7 years that expired in June 2023. Further, to align its MYT structure with ongoing changes in



power sector including separation of Distribution and Supply businesses, implementation of CTBCM model, proposed country wide central economic dispatch and for better transparency, KE is filing separate tariffs for Generation, Transmission, Distribution and Supply segments. It also mentioned that new Tariff control period of 7 years FY 2024-30, is in line with the MYT previously allowed by the Authority from FY 2017 to FY 2023. KE during the hearing submitted that Tariff Control period for 7 years provides a greater visibility to KE for its long-term planning & execution of investment plans as KE needs to secure loans from its lenders to implement its investment plan. Moreover, the investment plan for T&D approved by the Authority also covers a span of 7 years i.e. FY 2024-30 and for execution of investment plan, a viable and sustainable tariff for transmission, distribution & supply segment is essential as lenders & shareholders require a clear, long-term outlook on KE's revenues and profitability to provide these loans.

- 10.2. KE further, submitted that private investment in Pakistan's power sector has occurred only with IPPs and PMLTC (HVDC) in the past, which have been granted tariffs over the life of their assets. Unlike KE, DISCOs / NTDC are government owned entities that are granted shorter control periods or yearly tariffs, however, as their financing arrangements are backed by guarantees from the Government of Pakistan, and hence, a shorter tariff control period does not impact them. KE being a private entity secures borrowing from lenders without a sovereign / government guarantee. When providing financing for projects, financers typically require cashflow projections over the life of the assets which, in KE's case, significantly exceeds the control period of 7 years since KE's long term loans tenure usually span from 10-12 years, while the assets life range from 10-30 years.
- 10.3. Moreover, for execution of investment plan, a viable and sustainable tariff for all segments including Transmission, Distribution & Supply segments is essential as lenders and shareholders require a clear, long-term outlook on KE's revenues and profitability to provide these loans & make equity investments. If KE is granted a shorter tariff control period, it would be challenging to provide the necessary long-term projections to financers, thereby making it difficult for them to ensure the viability of the projects. Considering the above, the request to allow a tariff control period for 7 years is justified.
- 10.4. Mr. Arif Bilvani during the hearing and in its written comments opposed the tariff control period of seven years and submitted that it should be no more than four years, with mid-year review. He also submitted that no other DISCO has been allowed such a long period of time, and the Petitioner becomes lax in fulfilling its commitments and tend to roll over projects on one pretext or other. Even in the allowed period, there must be penal clauses for not undertaking or fulfilling the timely commitments made in the petition.
- 10.5. The Authority observed that that KE is being allowed a MYT since 2002. K-Electric (the then KESC), was initially allowed a MYT in 2002, for a period of 7 years, in view of its expected privatization. KE was privatized in 2005 to Al-Jomaih Group and re-privatized to Abraaj Group in 2009. With its re-privatization, the applicability of the allowed MYT to KE was enhanced for another period of 07 years till June 2016. Subsequently, upon expiry of the MYT in June 2016, K-Electric was awarded MYT for another control period of seven years, which expired on 30.06.2023.

- 10.6. The Section 31 (3) (i) of the NEPRA Act states that tariffs should seek to provide stability and predictability for customers. The Authority, in the matter of XWDISCOs, has also allowed MYTs, which are for a period of 05 years. The Authority noted that K-Electric's Transmission and Distribution investment plan has already been approved by the Authority for a period of seven years from FY 2023-24 to FY 2029-30. Similarly, KE's tariff for its power plants has also been approved for a period of seven years except for BQPS-III, which has an 11-year control period, aligned with its debt servicing period.
- 10.7. Given the fact that nearly two years of the proposed MYT control period have already passed, a tariff control period of five years, which effectively would result in three years, may not provide the necessary stability and predictability. The Authority also noted that while approving the investment plan of K-Electric, the Authority decided to appoint an independent third-party for evaluation of the allowed investment plan and the allowed amounts would be subject to adjustment in light of independent 3rd party report. Further, indexation/ exchange rate variations for the approved investment amounts, would be allowed as per the time period allowed for completion of such investments and in case of delay in the completion of the project(s), such variation or any other adjustment may not allowed.
- 10.8. In view thereof and to align execution of the allowed T&D investment plan with tariff, and provide predictability/stability in tariff, the Authority has decided to allow a tariff control period of seven (07) years for the distribution tariff to K-Electric from FY 2023-24 to FY 2029-30.
- 11. <u>Issue No. 2: Whether the projected sent out growth at a CAGR of 2.6% based on FY 2023 sent outs, along-with request to actualize sent outs and allow consequential under / (over) recovery of costs is justified?</u>
- 11.1. According to KE, the projected sent out growth is kept at a CAGR of 2.6% with actualization, based on FY 23 sent out as under;

Description	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	CAGR
Average Demand (GWh)	20,833	21,282	21,726	22,066	22,329	22,584	22,826	1.60%
Load shed (GWh)	1,927	1,494	1,307	1,177	1,085	997	925	-
Sent out (GWh)	18,906	19,788	20,419	20,889	21,243	21,587	21,902	2.56%
Units Served (Sent out – after Transmission losses)	18,660	19,531	20,154	20,617	20,967	21,306	21,617	2.49%

11.2. KE has submitted that it has planned investments as well as dedicated consumer funded assets, that will help in addition of 3,251 MW of load in KE's network and growth of 1.4 million customers in the 7-year control period, which will help to serve the growing demand and customer base. According to KE, the projected growth in Base Energy Demand is kept at 2.4% growth rate while considering captive consumers influx and PV disruption. Further, improvement in technical loss is also incorporated to reduce the demand by improvement in the infrastructure. Further, keeping in view reduction in AT&C losses, KE is projecting to increase the percentage of load shed exempt feeders to 95% by the end of control period, which will result in increase of served energy. KE has highlighted that the Load Shed policy is based on analysis of T&D and recovery ratios of respective feeder. It is essential to acknowledge that various

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to meet financial obligations, which not only have an unfavorable impact on recovery ratios but also leads to an increase in electricity thefts. These external factors encompass, but are not limited to, substantial increases in electricity tariffs, political instability, currency depreciation and inflationary pressures, which ultimately lead to a lower number of load shed free feeders.

- 11.3. KE stated that revenue requirement for the control period of 7 years i.e., FY 2024 2030 has been calculated based on projected units billed. KE is proposing actualization of units billed due to variations in units served at allowed distribution loss each year as allowed to other DISCOs, as the same is based on multiple uncontrollable factors including economic growth, Government policies, incentive packages etc.
- 11.4. KE further submitted that it shall submit details of under / over recovery after completion of every financial year, and the impact of under / over recovery shall be adjusted in remaining part of next year as prior year cost. KE during the hearing submitted that annual adjustment for actualization of sent out in tariff should be done i.e. in case of higher sent outs, the tariff should be adjusted downwards and in case of lower sent out the tariff should be adjusted upwards similar to the mechanism followed for DISCOs. KE has projected following sales during the MYT control period from FY 2024-30;

Description	Unit	Legend	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
Units served	GWh	а	18,660	19,531	20,154	20,617	20,967	21,306	21,617
Distribution Loss	%	b	14.24%	13.93%	13.49%	13.04%	12.72%	12.46%	12.26%
Units billed	GWh o	: = (a x (1-b))	16,004	16,810	17,435	17,929	18,300	18,652	18,967

- 11.5. KE during the hearing submitted that it has considered the historical CAGR growth of 2.4% and incorporated the impact of disruption due to solar influx and increase in demand due to captive onboarding. Taking this into account and projected load shed reduction, sent out CAGR of 2.6% has been projected. It also stated that sent out projections are based on multiple uncontrollable factors such as economic growth, Government policies, incentive packages, technology disruption etc. Considering the above, sent outs are actualized for other power sector entities and NTDC and DISCOs, and hence KE also requested that annual adjustment for actualization of sent out in tariff should be done i.e. in case of higher sent outs, the tariff should be adjusted downwards and in case of lower sent out, the tariff should be adjusted upwards similar to the mechanism followed for DISCOs. Accordingly, a mechanism of over /under recovery due to variation in units sent-out, served & billed is included in Transmission, Distribution & Supply tariff petitions respectively.
- 11.6. The Ministry of Energy (MoE), Power Division (PD) in its comments/ analysis, vide letter dated 13.12.2024, submitted that overall electricity consumption on KE network fell by 7.2% in FY2023, while consumption in the residential and industrial sectors dropped by 7.9% and 1.5% respectively. The MoE proposed that assumptions for expected growth in demand both for Investment Plan and tariff petition be revised to account for reduced sales in FY 2023 and 2024. It also submitted that a downward revision in sales and peak demand growth projections will

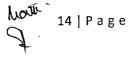
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lead to a proportionate decrease in growth-related infrastructure investment, resulting in a drop in capital expenditure associated with new feeders and PMTs.

11.7. Regarding request of KE to actualize sent outs, the Authority noted that as per its previous MYT, K-Electric was allowed a price cap tariff, wherein no actualization of sent-outs, either upward or downward, from the number built in the tariff was allowed. KE had an opportunity to maximize its profits through higher sales growth and vice versa. In the petition, K-Electric, in a shift from earlier regime, has requested actualization of units billed, in line with other DISCOs. In the matter of XWDISCOs, the Authority allows a revenue capped tariff and any under /over recovery of the allowed revenue, due to variation in sales (based on allowed target of T&D losses and recovery), is adjusted either as part of quarterly adjustments and/or through prior year adjustments (PYA). A comparison of KE's targeted sent outs vis a vis actual sent outs, for the MYT control period FY 2017-23 is given hereunder;

	FY 17	FY18	FY19	FY 20	FY 21	FY 22	FY 23	Total
Sent Outs as per Tariff (GWhs)	17,458	18,189	18,952	19,760	20,613	21,504	22,435	138,911
Actual Sent outs (GWhs)	16,673	17,501	17,771	17,755	19,421	19,792	18,359	127,271
% Change	(4.5%)	(3.8%)	(6.2%)	(10.2%)	(5.8%)	(8.0%)	(18.2%)	(8.4%)

- 11.8. The Authority understands that with the opening up of sector through CTBCM and influx of net metering, risk of utility in terms of switching of consumers has increased, as compared to previous years. Consumers would get more options and potentially greater flexibility, hence reducing their dependence on the utility. With distribution and supply tariffs being fully regulated and applicability of uniform tariff regime in the country, coupled with increasing consumer independence, K-Electric may have little option/ control to offer any incentives to its consumers in order to increase its demand.
- 11.9. In view thereof, and considering the fact that the Authority, in the matter of XWDISCOs, allows actualization of sales (based on allowed target of T&D losses), the Authority has decided to allow actualization of units sent out to K-Electric as well, based on allowed target of T&D losses, alongwith consequential under / (over) recovery of allowed costs for both its distribution and supply of power function.
- 11.10. At the same time, the Authority understands that allowing actualization of sent outs would provide strong incentive to K-Electric, for increased load shed in high loss areas, as its revenues would be protected. Therefore, K-Electric is directed to ensure uninterrupted supply of power to its consumers, as per the applicable documents. This also necessitates a strict monitoring of KE's load shed policy, along-with other performance benchmarks regarding timelines for installation of new connections, SAIFI, SAIDI etc. In case the Authority observes undue load shed by KE or deterioration in other performance benchmarks, the Authority shall initiate legal proceedings against KE as per the applicable documents.
- 12. <u>Issue No. 3: Whether the request to allow adjustment of Distribution loss target due to change in voltage wise sales mix is justified and what will be mechanism for such adjustment?</u>
- 12.1. KE on the issue submitted that current projections of distribution losses are based on current consumer base and growth assumed therein, which also includes BPCs (above 11kV). In case of



changes in sales mix including shift to open market by BPCs above 11kV, the overall Distribution losses will be impacted. Therefore, for Distribution business, Distribution loss target will have to be adjusted, otherwise it will result in under / over recovery of cost.

12.2. KE submitted the following illustration in support of its request;

D≝scription	Units	Units Served	Units billed	Distribution Loss
ALLOWED LOSSES		Projected		
Below 11 kV consumers	GWh	14,269	11,761	17.58%
11 kV consumers	GWh	3,394	3,246	4,36%
Above 11 kV consumers	GWh	99 7	997	0.00%
		18,660	16,004	14.24%

			i	ţi.	iil = 1 - ii / i	1
		Unstratio	n I – Under	recovery		
Relow 22 kV conduments	E	GWh	13,542	11,162	17.58%]
at KV consumers	F	GWh	1,527	3,461	4.36%	Actual units billed on allowed distribution loss
Абрук 11 КУ примижета	G	GWh	399	359	0.0036	
Revised allowed distribution loss	H=E+ F+G	ርሃላጌ	15,468	15,021	15.84%	Allowed Loss adjusted for impact of change in nonsumer mix
Incremental Distribution Luss	l=H-D				1.6%	
Valts lost	J=1°H(i)	CMF	}		(245)	<u></u>
		Illustratio	n 🛚 – Over	recovery		
Below 11 kV consumers	к	GWF	9,152	7,543	17-58%	
13 kV consumers	L	GWa	4,921	4,706	436%	Actual units billed or allowed distribution loss
Above 12 kV consumers	и	GWh	1,396),39 0	0.00%	
Revised allowed distribution loss	N=K+ L+M	GWh	15,468	13,645	11.79%	Allowed Loss all change in consumer mix
Reduced Distribution Loss	0-N-D				(2,4%)	
Units saved	P = 0*N(i)	GWh			379	

- 12.3. KE proposed that change in revenue requirement due to adjustment in distribution losses, pursuant to change in sales mix, shall be calculated in supply annual adjustment.
- 12.4. Regarding request of KE to adjust distribution loss target due to change in voltage wise sales mix, it is submitted that the Authority in its decision dated 24.04.2024, in the matter of Investment Plan and Loss assessment of K-Electric for the period from FY 2023-24 to FY 2029-30, allowed the following targets of T&D losses to K-Electric. However, KE being aggrieved with determination of Investment Plan and Losses Assessment has filed a review which is being processed separately.





	Арргф	ved overall T	'&D losses Ta	rgets for nex	t 7 years		
Description	FY 2023- 24	FY 2024- 25	FY 2025- 26	FY 2026- 27	FY 2027- 28	FY 2028- 29	FY 2029- 30
Distribution Loss Target %	13.46	13.14	12.70	12.25	11.93	11.67	11.48
Transmission Loss %	1.30	1.30	1.30	1.30	1.30	1.30	1.30
T&D Loss Target %	14.58	14.27	13.83	13.39	13.07	12.82	12.63

12.5. To have a fair assessment of KE request, the Authority obtained KE's sales mix data for the previous years. KE provided voltage wise sales data for the past five year as under;

11-14	FY	FY 19		FY 20		FY 21		22	FY 23	
Voltage	Sales	Mix	Sales	Mix	Sales	Mix_	Sales	Mix	Sales	Mix
Below 11 kV	11,088	77.44%	11,172	78.25%	12,221	76.06%	12,414	74.05%	11,489	73.86%
11 kV	2,193	15.32%	2,155	15.10%	2,615	16.27%	3,058	18.24%	3,111	20.00%
Above 11 kV	1,037	7.24%	950	6.65%	1,233	7.67%	1,292	7.71%	955	6.14%
Total	14,318	100.00%	14,277	100.00%	16,069	100.00%	16,763	100.00%	15,555	100.00%

- 12.6. As per the above table, KE's voltage sales mix data indicates variability in sales performance, with high-voltage consumers sometimes experiencing higher sales and other times lower sales. Similar trend has been shown for low voltage sales.
- 12.7. The Authority in the approved investment plan, also decided that in the event KE achieves T&D losses lower than the allowed targets for the respective year, the benefit of additional reduction in losses for that particular year shall be shared with consumers and K-Electric. Thus, no provision for increase in losses beyond the allowed level, for any reason, has been allowed in the approved investment plan. Here it is also pertinent to mention that in case of XWDISCOs, the Authority allows an overall loss target for the year, irrespective of voltage wise sales and no voltage wise adjustment of losses due to change in sales mix is allowed to XWDISCOs.
- 12.8. Given the discussion above, and considering the both ways fluctuations in KE's sales mix, the Authority does not see it appropriate to implement any such mechanism for adjustment of T&D losses.
- 12.9. The Authority has therefore decided not to allow any such adjustment in line with the practice in-vouge for XWDISCOs. However, the Authority would consider this issue going forward across the sector for all DISCOs, once CTBCM becomes operational and after evaluating its impact.
- 13. Issue No. 4: Whether the requested Debt to equity structure is justified?
- 13.1. KE has requested debt to equity ratio of 70:30, as allowed under MYT 2017-23. KE submitted that within the MYT 2017-23, NEPRA had allowed KE, a Return on Regulatory Asset Base based on notional debt to equity ratio of 70:30, whereas KE's actual debt to equity ratio based on debt and invested equity at the time was 24:76 (FY 16). Due to the application of the notional debt to equity ratio above, KE was allowed a lower effective return and its actual invested equity was not considered and the equity over and above the notional thirty percent (30%) was considered as debt for the purposes of determining the return. KE further submitted that the issue of applying notional 70:30 debt to equity ratio for the purpose of determining KE's Return on Regulatory Asset Base and non-consideration of actual invested equity is taken up in the Appeal filed before the NEPRA Appellate Tribunal (NAT). It was further prayed that the submissions

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made in the petition are without prejudice to the Appeal and subject to final outcome of such Appeal, any relief granted by the NAT in such proceedings, the tariff under determination/determined through the petition shall also be amended and / or modified accordingly.

- 13.2. KE during the hearing presented that considering the D:E ratio allowed in the MYT FY 2017-23, it has requested Return on Regulatory Asset Base, based on a notional debt to equity ratio of 70:30 against an actual D:E ratio of 46:54 at FY 23, subject to any relief granted by the NAT in the afore mentioned appeal.
- 13.3. The MoE in its comments stated that KE has challenged the 70:30 debt equity ratio, as the company invested a higher level of equity, however, higher cost of underleveraging cannot be passed to consumers, and this principal has been upheld by the Authority in all tariff decisions.
- 13.4. The Authority observed that K-Electric in its previous MYT FY 2017-23, was allowed a notional debt to equity ratio of 70:30. K-Electric in its instant MYT 2024-30 has requested the same debt to equity ratio, however, has submitted that submissions made in the petition are without prejudice to the appeal filed in the NAT. The Authority also noted that as per KE's annual audited financial statements for the FY 2023, its long term debt to equity ratio is 0.41:1.
- 13.5. The Authority further noted that as per clause 6(4) of the NEPRA (Benchmarks for Tariff Determination) Guidelines, 2018, equity in excess of 30% shall be treated as debt. Similarly, as per NEPRA Guidelines for determination of Consumer end tariff 2015, a minimum of twenty percent (20%) equity will be assumed, when there is negative equity. Equity in excess of thirty percent (30%) may be considered as debt. The Authority in case of other perpetual entities like XWDISCOs, and WAPDA Hydro also allows a capital structures in the range of 70:30 to 80:20.
- 13.6. Therefore, in light of the above discussion, keeping in view request of K-Electric and the Authority's decision in similar cases, the Authority has decided to allow a debt to equity ratio of 70:30 to KE for the MYT control period of seven (07) years from FY 2023-24 to FY 2029-30.

Issue No. 5 & 6

- 14. Whether the requested Cost of debt and spread along-with request to actualize same based on actual mix of foreign and local loan is justified and what will be mechanism for such adjustments?
- 15. Whether the request to allow actual premium, tax payments on premium & interest/ markup, financing fee/ transaction cost inclusive of taxes on loans and hedging cost on foreign loans (KIBOR SOFR + CAS + Hedging Spread) is justified?
- 15.1. KE has submitted that the cost of debt for local component shall be calculated based on 3 months KIBOR plus a spread of 2.5% and cost of debt for foreign component shall be calculated based on 3 months SOFR plus CAS plus spread of 4.5% on ECA backed loans and 5.8% for DFI backed borrowing along with currency devaluation exposure. Accordingly, cost of debt has been calculated using reference 3-month KIBOR of 22.91% (as at June 30, 2023), reference 3 months SOFR of 5.00% (as at June 30, 2023) based on estimated local to foreign debt ratio of 85:15 on a year-on-year basis. KE further submitted that although the projected mix of foreign and local

loans for computation of cost of debt has been used for tariff computation, however, Authority has been requested to allow actualization of debt mix.

Loan parameters:

Category	Legend	ECA backed Loans	Foreign DFIs	Local Loans			
Reference KIBOR / SOFR	Α	5.00%	5.00%	22.91%			
Credit Adjustment Spread – CAS	В	0.26%	0.26%	•			
Spread	c .	4.50%	5.80%	2.50%			
Total Cost	D = A + B + C	9.76%	11.06%	25.41%			
Currency Depreciation		Impact of currency de explained below					
Premium		One time cost - based on actual payment	N/A	N/A			
Tax impact	•	based on actual to be	claimed quarterly	N/A			
Financing fees / Transaction Costs		based on actual to be claimed quarterly					
Hedging Cost		to be claimed on annual basis for hedged loans					

- 15.2. KE also proposed that RoRBCoD shall be indexed based on changes in KIBOR for local portion of cost of debt at the start of each quarter with revised 3 months KIBOR as published by State Bank of Pakistan latest available at the start of each quarter i.e. 1st July, 1st October, 1st Jan, and 1st April.
- 15.3. Furthermore, transaction costs already paid by KE in the past for ongoing financing facilities have been incorporated in the cost of debt on amortization basis for tariff computation purposes.
- 15.4. KE also mentioned that spreads offered in previous transactions were based on stable country rating. However, recent degradation in credit rating of the country by Fitch from 'B-' to 'CCC' on July 10, 2023 and maintained in December 2023, by Moody's from 'B3' to 'Caa3' on February 28, 2023 and by S&P's from 'B-' to 'CCC+' on December 22, 2022, the leading credit agencies, has adversely impacted the investors' confidence and there may be limited access to foreign financing & capital markets, if similar range of sovereign rating continues. Accordingly, in view of the prevailing economic conditions and downgraded Country rating, KE has requested to allow requested spreads over SOFR for foreign loans. In case the actual pricing of loan compared to the projected is lower than requested, the same shall be actualized at the time of Annual Investment Update and passed on to the consumers.
- 15.5. Moreover, at the end of the year, any over / under recovery of RoRB CoD arising due to:
 - ✓ Proposed Investment plan revision mechanism,
 - ✓ Change in foreign portion of RoRBCoD, SOFR along with exchange rate variation and effective actual KIBOR for local portion, should be adjusted annually;
 - ✓ Any change in allowed spreads; and
 - ✓ Actualization of foreign & local loan mix, will be filed as per the provided mechanism.



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Quarterly/ Annual indexation / adjustment of Cost of Borrowing

- i. Quarterly indexation for KIBOR
- ii. Annual adjustment of Foreign Cost of Borrowing along with currency depreciation
- iii. Annual adjustment in loan proportion (Foreign ECA, Foreign DFI and local loan)
- iv. Provision for separate allowance for transaction cost, premium and tax related to foreign loans as period cost based on actual payments.
- 15.6. KE has also requested for the following to be allowed in the instant petition,
 - i. Premium based on actual for ECA backed loans
 - ii. Tax payments on premium and interest / markup
 - iii. Financing fees / transaction cost inclusive of taxes
 - iv. Hedging cost based on the formula (KIBOR SOFR + CAS+ Hedging Spread).
- 15.7. KE has submitted that the foreign borrowing involves payment of premium in case of ECA backed loans and incidence of tax on payments in case of both ECA backed and Foreign DFI loans hence the same has been requested on foreign loans. Further, tax payments on premium and interest/markup which are allowed to other projects as a separate cost, shall also be allowed to KE as separate cost, based on documentary evidence.
- 15.8. KE has also submitted that as per the State Bank of Pakistan, hedging will not be allowed in future which was also communicated to the Authority vide letter dated 17.07.2023. Accordingly, KE has not included hedging cost in the pricing of new and unhedged loans and instead foreign currency revaluation on principal for all unhedged foreign loans is being requested. Moreover, for hedged loans, hedging cost has been requested consistent with the mechanism followed in MYT 2017-23.
- 15.9. KE also submitted that pricing of loans has been provided based on the prevalent economic outlook, however, in case actual pricing of loans turns out to be higher or lower than above, Authority is requested for adjustment in the requested pricing in order to recover prudent cost.
- 15.10.KE also mentioned that SOFR has already superseded LIBOR as a new interest rate benchmark from June 2023 i.e. start of MYT 2024-30, consequently, instead of LIBOR, SOFR along with Credit Adjustment Spread (CAS) has been used as reference for computation of tariff. The CAS for 6-month tenor is 42.826 bps, for 3-month 26.161 bps and for 1-month tenor 11.448 bps and has been determined through historical median difference between USD, LIBOR and SOFR over a five-year period, which has been adopted in the international market.
- 15.11.KE further submitted that it arranges financing facilities from various local and international financial institutions including DFIs and financing is arranged under various structures including ECA cover based financing, guarantee-backed financing, project finance structure etc. KE incurs various fees/costs in relation to arrangement of these financing facilities for funding of capex ("Transaction Costs"). Based on various transaction structures, the specific Transaction Costs for a facility include several of following cost heads:

✓ Debt Advisory & Arrangement Fees/Upfront Participation Fees

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- ✓ Intercreditor Agent Fee
- ✓ Agency Fee
- ✓ Security Trustee/Security Agency Fee, Custodian Fee
- ✓ Commitment Fee
- ✓ Shariah Advisory Fee
- ✓ Shariah Compliance Fee
- ✓ Process Agent's Fee
- ✓ Advisors' Fees, including Lenders/Financiers' Foreign and Local Legal Counsel, Technical Advisor, Insurance Advisor, Environment & Social Consultant, Company's Legal Counsel.
- 15.12.KE stated that major portion of such costs is incurred upfront and thus would need to be allowed as passthrough upfront. KE also requested to allow KIBOR on the pending amount, in case the transaction costs are amortized over the years. In addition, KE stated that certain costs and fees, such as Agency Fee and Trustee Fee are payable annually and will be claimed as passthrough upon incurrence.
- 15.13. Regarding premium cost, KE explained that it is incurred for ECA backed loans as KE needs to arrange financing from commercial banks & financial institutions for various CAPEX projects and lenders of these facilities require ECA insurance cover facility for them to be able to provide financing to KE considering country risks and the internal credit risk requirements of such commercial banks. The premium cost is a onetime cost, based on facility amount and fee is determined based on assessment of various credit and country risks by the relevant Export Credit Agency. It is pertinent to highlight that we expect the ECA premium cost to be on higher side from previous benchmark transactions executed in Pakistan primarily owing to country's economic situation and assessed country risk premium which also takes account of country's credit rating(s). Hence, it is requested as passthrough based on actual. K-Electric requested an amount of Rs.15,922 million as total RoRB for the FY 2023-24 i.e. Rs.0.9949/kWh.
- 15.14. The MoE in its comments submitted that debt costs allowed to K-Electric need to be actualized and any benefit to consumers achieved through lower credit spreads must be reflected in the tariff. On the point of K-Electric that hedge for foreign currency risk is no longer available, the MoE stated that with improvement in macroeconomic indicators and declining interest rate scenario, hedging of foreign currency risk may now be available through SBP or cross currency swaps. It is possible that the pricing of such cross-currency swaps may not exceed the price of local debt plus spread.
- 15.15. The MoE also stated that the petition proposes that the cost of debt be used to calculate return for the portion of the capital structure that is funded by equity and is in excess of 30 percent of capital structure. Such cost of debt be capped at the cost of equity, and the cost associated with high interest rates may not be passed onto the shareholders through such a structure. The cost of debt for equity in excess of allowed limit of '30 percent of capital' should be lower of actual or Kibor in PKR terms, and a maximum of 14.66%.

15.16. The submissions of KE have been analyzed. The Authority noted that as per the information submitted by KE, its actual spread for different local loans obtained for Distribution function ranges between 1% to 1.7%, as detailed here under;

Facility		Amount	Benchmark	Spread	Start Date	First Repayment	Last repyament	Installements	Transaction Cost
GuarantCo - Local	PKR	4,000,000,000.00	3M KIBOR	1.05%	2-Oct-19	16-Sep-21	16-Dec-24	14	101,624,309
FBL Syndicate - TP 1000	PKR	23,500,000,000,00	3M KIBOR	1.00%	19-Nov-18	16-Dec-20	16-Sep-25	20	160,250,000
Sukuk - 1	PKR	25,000,000,000.00	3M KIBOR	1.70%	3-Aug-20	3-Nov-22	3-Aug-27	20	265,252,937
Sukuk - 2	PKR	6,700,000,000,00	3M KIBOR	1.70%	23-Nov-22	23-Nov-24	23-Nov-29	20	52,027,662

- 15.17. The NEPRA (Benchmarks and Tariff Determination) Guidelines 2018 provides for maximum spread of 2.25% in case of local financing for generation projects. The Authority in the matter of XWDISCOs has also allowed a spread of 2% on KIBOR.
- 15.18.In view thereof and keeping in view the actual spread of K-Electric, the Authority has decided to allow cost of local debt as 3 Month KIBOR + 2.00% spread. The allowed spread of 2.00% shall be the maximum cap based on individual loans, subject to downward adjustment only, in case KE's actual spread remains lower than 2.00%. In case of spread beyond 2.00%, no adjustment would be allowed. The cap of 2.00% on spread shall be applicable for each individual loan, while working out the actual spread. This also addresses the concerns highlighted by the MoE.
- 15.19. Accordingly, the average cost of debt for existing local loans, based on weightage of each loan, has been worked out as 24.37%, which has been used for the purpose of calculation of WACC for the FY 2023-24. Detailed working of the same is as under;

Debt Amount	Rs. Mln
Addition	Rs. Mln
Repayment	Rs. Mln
Qtr. Payment	Rs. Mln
Closing	Rs. Mln
Average outstanding	Rs. Mln
Weightage	
KIBOR	%
Spread	%

Average Cost of Debt- Local

FBL - TP	GuarantCo - PKR	Sukuk - 1	Sukuk - 2	
4,124	1,371	9,138	402	
27.43%	9.12%	60.77%	2,67%	
(1,833)	(914)	(2,150)		
(458)	(229)	(538)		
2,291	457	6,988	402	
3,362	991	7,989	402	
26%	8%	63%	3%	
22,91%	22.91%	22,91%	22.91%	
1.00%	1.05%	1.70%	1.70%	
23,91%	23,96%	24.61%	24.61%	
6.31%	1.86%	15.43%	0.78%	

15.20. For foreign loans, KE requested spreads of 4.5% for ECA backed loans and 5.8% for DFIs, over SOFR, subject to its actualization, if actual pricing of loan compared to the projected remains lower. As per the information submitted by KE, it has obtained one foreign loan for the Distribution function, which is as under;

GuarantCo - US\$ - Hedged

Facility	\$	25,000,000
Rate		3M LIBOR/SOFR
Spread		5.50%
Start Date		2-Oct-19
First Repayment		16-Sep-21
Last Repayment		16-Dec-24
No. of installements		14
Hedge Spread		-1.31%
Transaction Cost		101,225,175
Premium		-
Hedge Rate	İ	
Complete Hedge		



24.37%

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- 15.21.As per NEPRA (Benchmarks and Tariff Determination) Guidelines 2018, in case of power projects, a spread not exceeding 4.5% over LIBOR shall be approved on case-to-case basis for foreign financing. No specific benchmark has been approved by the Authority for the purpose of Distribution Projects, however, K-Electric in its last MYT 2017-23, was allowed a spread of 4.5% over LIBOR.
- 15.22. Keeping in view the above, the Authority has decided to allow cost of debt for foreign financing based on 3 months LIBOR or SOFR + 4.5% spread and hedging cost, if applicable. Hedging cost would be the difference between 3 months KIBOR and 3 months LIBOR / SOFR, as the case may be plus hedging spread, if any. In case of unhedged loans, K-Electric shall be allowed exchange rate variations on cost of debt as well as on principal amount.
- 15.23. Regarding future hedging and inclusion of hedge spread as part of hedging cost, KE submitted that SBP has stopped hedging of foreign loans, therefore, this issue may not arise in future. However, going forward if there is any change in this scenario, the issue of hedge spread for future loans would be decided based on request of KE, once KE manages to avail any hedged loan. For hedged loans, no exchange rate variation shall be allowed.
- 15.24. The allowed spread of 4.50% shall be considered as maximum cap, subject to downward adjustment only based on individual loans, in case KE's actual spread remains lower than 4.50%. In case of spread beyond 4.50%, no adjustment shall be allowed. The cap of 4.50% on spread shall be applicable for each individual loan, while working out the actual spread. Here it is pertinent to mention that K-Electric has an existing foreign loan from GuarantCo having spread of 5.5%. The spared of 5.50% has accordingly been capped at 4.50%. Further, the negative hedge spread of 1.31% on GuarantCo loan also has been accounted for while working out K-Electric's foreign cost of debt.
- 15.25. Accordingly, the average cost of debt for foreign loans, based on weightage of each loan, has been worked out as 29.86% for the existing loans, which has been used for the purpose of calculation of WACC for the FY 2023-24. Detailed working of the same is as under;

Foreign debt obtained		GuarantCo. (H) (in USD Mn)
Debt Amount	USD / Rs. Mln	8.57
Addition	USD / Rs. Mln	-
Repayment	USD / Rs. MIn	(5.7)
Qtr. Payment	USD / Rs. Mln	(1.4)
Closing	USD / Rs. Mln	2,86
Average	USD / Rs. Mln	6.19
SOFR	%	5, 26%
Spread	96	5.50%
KIBOR	%	22.91%
Hedge Spread	%	-1,31%
Hedge cost	%	16.34%
		27.10%
Spread Adjustment	96	-1.00%
EGL on Spread	%	3.76%
Net Financing Cost	%	29.86%

15.26. Here it is also pertinent to mention that K-Electric has been allowed a debt:equity ratio of 70:30 for the purpose of calculation of RoRB. KE's RAB for the FY 2023-24, works out as Rs.86,450 million after taking into account the impact of actual investments, on provisional basis. The average RAB for the FY 2023-24, for the purpose of calculation of RoRB, works out as Rs.83,054



holt? 22 | Page million. After application of allowed debt:equity structure of 70:30, the debt portion of RAB works out as Rs.58,138 million (70% of RAB).

- 15.27. The MOE proposed to allow lower of cost of debt or allowed RoE for the portion of the capital structure that is funded by equity and is in excess of 30 percent of capital structure. As discussed in the ensuing paragraphs, the Authority has allowed KE a USD based RoE of 14% for its distribution segment, which works out as 29.68% in PKR terms, for the FY 2023-24. The local cost of debt for the FY 2023-24 has been worked out as 24.37% and with the current economic scenarios, KIBOR is expected to reduce further. In view thereof, the Authority has decided to allow average local cost of debt of secured loans, for the equity in excess of allowed limit of 30%.
- 15.28. As submitted by KE, its secured debt is only Rs.13,713 million i.e. Rs.969 million foreign loan @29.86% and Rs.12,744 million local loan @24.37%. Therefore, the remaining RAB of Rs.44,425 million (Rs.58,138mln-Rs.13,713mln = Rs.44,425mln), has been considered as local loan, for which allowed average local cost of debt shall be applied. Any change in loan proportion, to account for actual mix of foreign and local loans, shall be adjusted on annual basis.
- 15.29.In view thereof, K-Electric's average cost of debt, for the purpose of calculation of RoRB, works out as 24.46%, which shall be applicable on 70% of the allowed average RAB, subject to adjustment, as per the mechanism provided in the determination. In view of the above discussion, the total RORBCOD of KE for the FY 2023-24 has been worked out as Rs.14,219 million.
- 15.30.KE also requested for provision for separate allowance for transaction cost, premium and tax related to foreign loans as period cost based on actual payments.
- 15.31. The Authority has decided not to allow any separate insurance / Sino sure/ premiums etc. K-Electric shall manage all such associated risks/costs within the allowed spread. For foreign loan, if KE incurs any such cost on upfront basis, and substantiates that its overall margin including all such cost i.e. insurance / Sino sure/ premiums etc. remains within the allowed spread of 4.5%, the Authority may consider to allow such cost as separate cost item. KE shall provide all the required verifiable documentary evidences along-with proper working/ calculations/ justifications in this regard. The same if approved by the Authority shall be allowed either based on yearly amortization schedule of such cost, or as one time cost, keeping in view terms of financing.
- 15.32. The Authority also observed that in the matter of KE's Generation Tariff, withholding tax, paid on interest payments to foreign lenders has been allowed as pass-through costs by the Authority. On the same analogy, the Authority has decided to allow non-adjustable/ non-claimable withholding tax, paid on interest payments to foreign lenders as pass through. KE shall submit verifiable documentary evidences for claiming such non-adjustable/ non-claimable withholding tax on interest payments to foreign lenders.
- 15.33. Regarding Financing fee/ transaction cost for future loans, the Authority in the matter of Generation Projects, allows financing fee @ 2% of the debt amount in line with Tariff benchmark Guidelines 2018, which states that in case of power projects other than hydro projects or power

projects with new technologies, a financing fee not exceeding 2.00% of debt shall be approved. Here it is pertinent to mention that the Authority in the past has allowed financing fee ranging from 3% to 3.5% of the debt amount, however, in recent cases the financing fee is being allowed @2.00% of the debt amount. The financing fee generally includes commitment fee, arrangement fee, appraisal fee, advisory fee, agency fee, monitoring fee and Lenders Advisor (Legal, Technical, Financial). In view thereof, the Authority has decided to allow future financing fee/ future transaction cost to KE, as pass thorough, with maximum cap @ 2% of the debt amount, subject to downward adjustment only, if actual cost remains lower. KE shall submit verifiable documentary evidences for claiming such cost.

15.34. The Authority observed that KE has claimed transaction cost of around Rs.115.220 million for the loans already availed in the previous MYT. These costs were incurred by KE in the previous MYT, the control period of which has ended on 30.06.2023. The Authority also noted that cost of debt allowed to KE, including margins, during the previous MYT control period were not subject to any adjustments. Therefore, all such costs were supposed to be met through the allowed cost of debt and approved margins during the previous MYT. In view thereof, the Authority, has decided not to allow any such cost, pertaining to the previous MYT, as part of the current MYT 2024-30.

15.35. Cost of Debt Adjustments

Loan spread Adjustment

- ✓ **Local Loans:** Spread @2% on Local Loans (obtained for the purpose of RAB) is allowed as maximum cap on individual loan basis, and subject to downward adjustment only in case actual spread is lower.
- ✓ **Foreign Loans:** Spread @4.5% on Foreign Loans (obtained for the purpose of RAB) is allowed as maximum cap on individual loan basis and subject to downward adjustment only, in case actual spread is lower.
- ✓ Exchange rate variation shall be allowed for spread on foreign loans, where spread in not hedged. No exchange rate variation shall be allowed where spread is hedged.
- No separate insurance / Sino sure/ premiums etc. is allowed. K-Electric shall manage all such associated risks/costs within the allowed spread. For foreign loan, if KE incurs any such cost on upfront basis, and substantiates that its overall margin including all such cost i.e. insurance / Sino sure/ premiums etc. remains within the allowed spread of 4.5%, the Authority may consider to allow such cost as separate cost item. KE shall provide all the required verifiable documentary evidences along-with proper working/ calculations/ justifications in this regard. The same if approved by the Authority shall be allowed either based on yearly amortization schedule of such cost, or as one time cost, keeping in view terms of financing.
- ✓ Non-adjustable/ non-claimable withholding tax, paid on interest payments to foreign lenders is allowed as pass through. KE shall submit verifiable documentary evidences for

- claiming such non-adjustable/ non-claimable withholding tax on interest payments to foreign lenders.
- ✓ Hedge spread for future loans would be decided on case-to-case basis, once KE manages to avail any hedged loan.

Cost of Debt Local Portion

- ✓ Average cost of debt for local loans shall be worked out annually, based on outstanding amount of each loan for the quarter, in light of respective loan agreements terms, and changes in 3-month KIBOR along-with spread subject to cap as explained above.
- ✓ Based on the revised cost of debt for local loans, the WACC of KE would be reworked annually and financial impact of such change in local cost of debt component of WACC, shall be made part of PYA in the subsequent tariff adjustment.

Cost of Debt Foreign Portion

- Average cost of debt for foreign loans shall be worked out annually, based on outstanding amount of each loan for the quarter, in light of respective loan agreements terms and changes in 3-month LIBOR / Overnight / Daily/Term SOFR as applicable, along-with applicable spread subject to Cap as explained above, and hedging cost, if applicable (hedging cost shall be the difference between 3 month KIBOR and 3 month LIBOR/SOFR, as the case may be). No exchange rate variation shall be allowed on hedged loans. For existing loans only, which are transitioned from LIBOR to SOFR, CAS if applicable, shall be allowed, as per the loan agreement.
- ✓ In case of unhedged loans, exchange rate variation (the difference between the payment exchange rate and the drawdown exchange rate) shall be allowed, for each quarter based on respective loan agreements, keeping in view the rate published by NBP.
- ✓ Based on the revised cost of debt for foreign loans, the WACC of KE would be reworked annually and financial impact of such change in foreign cost of debt component of WACC, shall be made part of PYA in the subsequent tariff adjustment.
- ✓ Future financing fee/ future transaction cost are allowed to KE, as pass thorough, with maximum cap @ 2% of the secured debt amount, subject to downward adjustment only, if actual cost remains lower. KE shall submit verifiable documentary evidences for claiming such cost.

Loan Mix Adjustment based on Secured Local & Foreign Debt

Debt Mix would be actualized based on average of outstanding foreign and local debts portion during the tariff year. Impact of any such adjustment would be made part of PYA. Debt over and above the outstanding debt employed for RAB if less than 70% of RAB would be considered as local debt instead of equity for which average allowed local cost of debt

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shall be applied. For calculating the loan mix, the average value of outstanding foreign loans shall be based on the original drawdown exchange rates. In case, KE's actual debt exceeds 70% of the worked-out RAB amount, the actual mix of foreign and local loans would be applied to calculate WACC for 70% of the RAB amount.

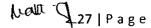
- 16. <u>Issue No. 7: Whether the requested US dollar-based Return on Equity of 16.67% and its indexation mechanism is justified?</u>
- 16.1. KE has requested Return on Equity of USD 16.67% as currently allowed, along with indexation for changes in PKR to USD rates. KE requested USD based RoE of 16.67% on the basis of projected RAB movement, Return on Regulatory Asset Base Cost of Equity (RoRBCoE) which comes out to be Rs.0.5535 / kWh for the FY 2024. According to KE, RoE is proposed to be indexed based on changes in USD to PKR exchange rate at the start of each quarter as per the below formula:

RorbCoE(Rev)	= RoRBCoE(Ref) for relevant year x ER(Ref) / ER(Ref)				
Where;	· · · · · · · · · · · · · · · · · · ·				
RoRBCoE (Rev)	 Revised RoRB cost of equity component of tariff 				
RoRBCoE (Ref)	= Reference RoRB cost of equity component of tariff				
ER _(Rev)	The Revised TT & OD selling rate of USD as notified by National bank of Pakistan latest available at the start of each quarter i.e., 1st July, 1st October, 1st Jan, and 1st April.				
ER _(Ref)	The Reference exchange rate of PKR 287.10 / USD as of 30th June 2023				

- 16.2. KE further submitted that for the purpose of exchange rate, indexation with reference to FY 2016 has been calculated considering weightage of RAB each year till FY 2023 in line with mechanism used by NEPRA in the MYT 2017-23. Accordingly, reference indexed cost of equity has been calculated using reference exchange rate of PKR 287.10 / USD (as of 30th June 2023). Further, the exchange rate will change year on year, based on new investments resulting in RAB movement. So, changes in RAB as detailed in proposed investment plan revision mechanism will also impact calculation of indexation and accordingly, RoE shall be updated.
- 16.3. It has further been stated that Return on Regulatory Asset Base tariff components including RoRBCoD, RoRBCoE and depreciation have been calculated based on proposed addition to RAB, with same Return on Equity i.e. USD 16.67% as currently allowed under the existing MYT. However, change in RoRB components as compared to MYT 2017-23 is due to change in Macroeconomic factors and increase in investments made to ensure reliability and continuity of smooth supply to consumers. Moreover, year wise return components are being requested for tariff consideration instead of levelized return through base rate adjustment component.
- 16.4. In view of the above discussion, K-Electric requested a USD based RoE of 16.67%, which translates into Rs.8,858 million i.e. Rs.0.5535/kWh for the FY 2023-24.
- 16.5. Mr. Arif Bilvani, during the hearing and in his written comments opposed the US dollar based return on equity by submitting that the Petitioner is not an IPP which are allowed dollar based return with an indexation under a certain specific policy, which does not cover the business of the Petitioner. Mr. Bilvani further stated that K-Electric is a private company, albeit engaged in

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- a regulated business but that doesn't mean that it can have very special treatment. There are scores of foreign investors in Pakistan who have hundreds of millions of dollars in various industrial & service projects which include Lotte Chemical from Korea, Landline telecom business is owned by Emarati group, and 03 oil refineries out of 05 are owned by foreign investors but none has been allowed dollar base returns or extraordinary concessions and favors as are being demanded by KE. Mr. Bilvani also opposed allowing depreciation and Return on RAB in line with the previous MYT.
- 16.6. The MOE in its written comments submitted that USD based RoE on regulatory assets is unjustified. The RoE needs to be aligned with similar businesses in the country's power sector and de-linked from the USD. The RoE for the transmission and distributions businesses should be aligned with returns allowed to NTDC and the public sector distribution companies (DISCOs). For instance, the Authority recently allowed RoE of 14.66% PKR based return the Faisalabad Electric Supply Company (FESCO). Any PKR equity either injected into the company or reinvested through retained earnings should not attract USD based indexation. The proposed ROE of 16.67% in USD terms is higher compared to even USD based bond yields in Pakistan and should be revised downwards.
- 16.7. The submissions of KE and other stakeholders have been analyzed. The Authority noted that in the MYT FY 2002-09, which was later extended till FY 2016, KE was not allowed any return component separately, rather was allowed to earn profits by retaining the benefits of efficiency gains. In the MYT FY 2017-23, KE was allowed a USD based return of 16.67% for its distribution segment. however, it was not a guaranteed return and contingent upon the achievement of Regulatory targets in terms of sent outs etc.
- 16.8. For the instant MYT FY 2024-30, KE has been allowed actualization of sent outs, meaning thereby that it has been protected for the associated risks of lower sales. This adjustment necessitates a rationalization of the previously allowed return. Nonetheless, it was also deliberated that in the current MYT, unlike previous MYT, if KE manages to operate efficiently than allowed targets, the resultant gains achieved by KE would either be passed on entirely to the consumers or would be shared between KE and consumers. On the other hand, the treatment approved in the previous MYT, that any losses incurred by KE due to non-achievement of allowed targets would be borne by KE itself and would not be passed on in tariff, has been kept intact. This way, though KE gets a downside protection to the extent of demand fluctuations (actualization of sent outs), however, upside has been limited as consumers would be benefiting from a fair share of efficiency improvements brought by KE. Likewise, the consumers would also be shielded from any inefficiencies or poor management on the part of KE. Thus, avenues for any windfall profits, beyond the allowed returns are limited and KE would be getting returns primarily on its RAB.
- 16.9. On the submissions of MOE and other stakeholders, it was deliberated that rationalization in returns should align with the adjustment of risks outlined in the new tariff scheme, rather than completely altering the basis of previously allowed returns, as this shift would disrupt the principle of regulatory continuity. The Authority also acknowledged the importance of maintaining investor confidence, particularly given that KE remains the only privatized utility



in the country, underscoring the importance that its returns, rationalized after adjusting the risk profile, are not undermined owing to any factors beyond the control of investors like devaluation of PKR, inflation etc.

- 16.10.In light of the above discussion, the Authority has decided to allow RoE of 14% (USD based), being reasonable, to KE for its distribution function for the MYT 2024-30, which works out as 29.68% in PKR terms, for the FY 2023-24. Accordingly, the RoRBCoE of the Petitioner based on 30% of the allowed RAB, for the FY 2023-24 has been worked out as Rs.7,396 million. At the same time, the Authority also understands that the Government is actively pursuing privation of other utilities therefore, the Authority may review this approved RoE of 14% (USD based) downward, or convert it into PKR, keeping in view the returns (RoE) allowed to other DISCOs, once they are privatized.
- 16.11. For the purpose of actualization of RoRB the allowed return on equity shall be recomputed to account for the impacts of;
 - i) Variation in RAB, resulting in changes to allowed weightage of RAB and;
 - ii) Variation in exchange rate which shall be done based on the actual average of TT & OD selling rate of US dollar as notified by the National Bank of Pakistan on last day of each month for the year.
- 16.12. For the purpose of true up of allowed RoE, additions in RAB during the year be trued provisionally based on audited accounts and finally on completion of third evaluation keeping in view the allowed investment on historical cost basis.

Issue No. 8, 9 & 10

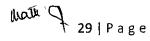
- 17. Whether the requested O&M cost for the FY 2023-24 along-with proposed adjustment mechanism is justified?
- 18. Whether the request of KE to not apply any efficiency factor (X factor) while allowing indexation for the O&M cost during the MYT control period is justified?
- 19. Whether the request to allow O&M of CAPEX nature transferred from investment plan as part of O&M cost is justified?
- 19.1. K-Electric submitted that its O&M expenses consist of costs related to salaries & wages of management / non-management staff, outsourced manpower cost, fleet, fuel, third party services, PPEs, tools and uniforms, repair and maintenance expenses that are essential for smooth running of operations of the distribution network and to ensure reliability of electric supply of power to the consumers.
- 19.2. For tariff calculation purposes, KE has calculated O&M component (FY 24 and onwards) by taking actual O&M amount of FY 2023 i.e. Rs.25,659 million (including Rs.20,898 million for Distribution Function), indexed to May 2023 CPI and incorporation of projected growth in units billed for FY 2024, which translates to Rs.36,424 million (including Rs.29,666 million for

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- distribution Function). KE requested to index this amount for onward years with actual CPI of May each year against the reference CPI of 227.96 as of May 2023, along with incorporating projected growth in units billed to cater for the increase in network capacity and consumer base.
- 19.3. KE also stated that in accordance with the Authority's decision on the Investment plan, routine maintenance capital expenditures and multi-story bus bar replacements have been excluded from Investment plan allowed amount, with the directive to take these up as part of O&M in tariff. KE submitted that in KE's current MYT, the amount allowed in respect of O&M did not include CAPEX nature related maintenance work and accordingly the same are required to be added in addition to O&M revenue requirement. Consequently, the corresponding expenses have been explicitly incorporated into the aforementioned O&M revenue requirement.
- 19.4. KE also stated that in accordance with the Authority's decision on the Investment plan, routine maintenance capital expenditures and multi-story bus bar replacements have been excluded from Investment plan allowed amount, with the directive to take these up as part of O&M in tariff. KE submitted that in KE's current MYT, the amount allowed in respect of O&M did not include CAPEX nature related maintenance work and accordingly the same are required to be added in addition to O&M revenue requirement. Consequently, the corresponding expenses have been explicitly incorporated into the aforementioned O&M revenue requirement.
- 19.5. KE has requested O&M cost of Rs.30,845 million which translates into Rs.1.9274 / kWh, as per KE, based on projected units billed for FY 2024 as detailed below;

Description	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30
O&M Revenue requirement*	29,666	31,161	32,319	33,235	33,923	34,575	35,159
O&M of capex nature transferred from investment plan (At FY- 22 CPI)	820	812	813	813	1,527	1,528	1,578
O&M of capex nature transferred from investment plan at May -23 CPI	1,179	1,168	1,169	1,170	2,197	2,199	2,270
Total O&M revenue requirements	30,845	32,329	33,488	34,405	36,119	36,773	37,430

- 19.6. According to KE, it has planned extensive capacity enhancement based on projected peak demand and increase in consumer base in the proposed control period. Accordingly, O&M is expected to increase beyond CPI indexation for the proposed control period i.e. FY 2024-30. However, KE has not requested for additional O&M beyond CPI and projected sent-out growth and will target to cover this gap through bringing efficiency wherever possible. In view of the aforementioned, KE requested O&M costs, incorporating growth in units billed along with CPI indexation and requests not to apply any X factor as KE has not asked for any incremental O&M owing to proposed capacity enhancements and increase in consumer base.
- 19.7. KE also mentioned that at the end of each year adjustment will be requested for any over / (under) recovery of O&M due to variation in units billed in order to allow recovery of CPI indexed projected O&M revenue requirement of that respective year. In case sent out is higher than



included in the projected O&M revenue requirements, the benefit will be passed on to the consumers and similarly in case of lower sent out the under-recovery will be adjusted in tariff.

- 19.8. KE further submitted that it is better than DISCOs in terms of per unit sent out. DISCOs O&M also include 132kV network cost and accordingly if KE's Transmission segment O&M including 220 kV network and system operations is included, the total O&M increases to Rs.1.36 per unit sent out, which is still significantly better than the regional DISCOs (HESCO and SEPCO). K-Electric also stated that as compared to DISCOs, K-Electric carries out 220 kV operations, System Operation and also is responsible for transmission planning and procurement of its power. In addition to above, KE faces significantly higher operational challenges as compared to DISCOs, where due to lack of planning and influx of Katchi Abadis, it has to deal with significant amount of KUNDA connections, carry out several thousand disconnections each month, manage complaints due to frequent, and in many cases, unauthorized/uninformed road cuffing/digging etc., which results in increase in O&M requirements. However, despite these challenges, KE remains resolute in provision of better services to its consumers and request NEPRA to consider KE request for O&M to allow KE to ensure prudent recovery of costs.
- 19.9. The MoE in its comments stated that K-Electric's proposed base-figure of Rs.30.8 billion for the FY 2024 needs to be assessed against actual expenditure for the FY 2024, which could be lower than the proposed amount. If actual O&M cost for FY 2024 is lower, the same should be used to set base O&M cost for subsequent years. The MoE further submitted that reference CPI of May 2024 (254.78) be set for further indexation for 2025 after review of actual financial results of 2024, as against KE's proposal to use base CPI of 227.96 (May 2023). It further stated that in light of NEPRA Guidelines for Determination of Consumer End Tariff (Methodology and Process), 2015, an efficiency factor in the indexation mechanism may be implemented, as the O&M revenue requirement mainly constitutes expenses of fixed nature. K-Electric has proposed that base-figures for each year of the tariff control period should be adjusted for growth in electricity sales for subsequent years, over and above the base number for FY 2024. This may not be allowed since growth in electricity units does not impact expenses of a fixed nature, and base-figures for each year (adjusted by growth in electricity units sold) is to be further adjusted for CPI change (based on the indexation mechanism proposed by K-Electric). KE's actual historical numbers indicate that a 100% of CPI change does not impact the company's O&M cost streams. The Authority may consider historic change in O&M costs as a baseline for indexing, rather than a vanilla linkage to CPI. Therefore, double adjustments (quantity and price) of O&M costs in each year should not be allowed. Instead, to eliminate the impact of quantity growth, the Authority should impose an efficiency factor under the indexation formula.
- 19.10. The Authority has analyzed submissions of K-Electric and the comments from the stakeholders. The Authority noted that as per NEPRA determination of Consumer-end-Tariff (Methodology & Process) Guidelines, 2015, the Authority shall choose a base year for the purpose of determining the Company's revenue requirement under multi-year tariff regime or annual tariff regime. "Base Year" has been defined as the year on which the annual or multiyear tariff projection is being made, which may be a historical financial year, for which the actual results/audited accounts are available. It may be a combination of actual results and projected results for the same financial year or it may be a pure projection of a future financial year.

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- 19.11. For projections or assessment of OPEX costs, the two commonly used approaches are the Ex-Ante approach and the Ex-Post approach. In a regime where the allowed OPEX is determined Ex-Ante, there will inevitably be deviations between the allowed and actual OPEX in the form of efficiency savings or losses. Thus, resulting in two broad options, one that the utility bears all savings or losses, i.e. no action is taken by the Regulator. The 2nd that the utility shares the savings or losses with consumers. The former provides the utility with a profit incentive to cut costs, but at the same time places the utility at a greater financial risk in the form of losses. The latter somewhat dilutes efficiency incentives, but also limits the losses/gains for the utility and its customers. However, the widely used approach is that no adjustments are made to the allowed Revenues or OPEX allowances, in the next period to compensate for a deviation from allowed OPEX in the current period except for certain allowed adjustments in terms of CPI etc. The Authority in the matter of XWDISCOs also does not make any adjustment in the allowed OPEX except indexation based on change in CPI etc.
- 19.12.K-Electric has filed its MYT for a control period of seven years i.e. FY 2023-24 to FY 2029-30. Thus, cost for first year of the requested tariff control period i.e. FY 2023-24 is to be assessed, which would be used as reference, for future indexation, as per the mechanism prescribed in the instant determination. As mentioned earlier, K-Electric, has calculated O&M component (FY 24 and onwards) by indexing the O&M cost for the FY 2023 i.e. Rs.20,898 million with CPI of May 2023 (Ref. CPI 227.96) and thereafter incorporating the impact of projected growth in units billed for the FY 2024. KE accordingly requested an amount of Rs.29,666 million as O&M cost for the FY 2024. In addition, KE also included routine maintenance CAPEX and multi-story bus-bar replacements of Rs.1,179 million, as part of O&M costs, as per the Authority's decision in the matter of its Investment plan. Thus, KE requested a total O&M cost of Rs.30,845 million for the FY 2023-24.
- 19.13. For comparison purposes, KE's O&M cost i.e. both for the distribution and supply functions, for the FY 2022-23 has been compared with XWDISCOs in Punjab Region, based on different cost drivers. The Authority observed that KE is efficient from these DISCOs on cost/ unit sales basis, however for other benchmarks i.e. per consumer, employee, Area SqKm, KE is less efficient. The likely reasons for these variations, could be different geographical profile, consumer mix, network conditions and accounting practices. Therefore, before carrying out the benchmarking exercise, the Authority understands that coupling/ grouping of DISCOs needs to done based on similarities in geographical profiles, network conditions, consumer density, consumer mix, performance standards etc., through extensive studies. Once this grouping exercise is completed, then benchmarking exercise for the alike DISCOs should be done to set the efficiency improvement targets.
- 19.14. The Authority also being cognizant of the fact that FY 2023-24, for which assessment is being made has already lapsed, decided to obtain detail of actual O&M cost incurred by the Petitioner for the FY 2023-24 to have a fair assessment of its O&M cost for the FY 2023-24. As per the information submitted by KE, its unaudited O&M cost for the FY 2023-24 is Rs.32,352 billion including Rs.26,416 million for Distribution Function and Rs.5,936 million for the Supply function. This also includes actual CAPEX nature O&M cost as Rs.225 million as reported by KE.



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- 19.15. After adjustment of certain costs items i.e. donations, penalties & fines, CSR related activities, exchange gains/ losses, provision against fatal accident cases, demurrage, detention charges, assets written off etc., which are either typically voluntary and discretionary and are not a mandatory part of KE's business operations, or are imprudent costs, or being considered under separate head, and excluding the CAPEX nature O&M, the total O&M cost of the Petitioner for the FY 2023-24 works out as Rs.31,963 million, for both the distribution and supply of power functions, which includes Rs.26,052 million for distribution function and Rs.5,911 million for the supply function.
- 19.16. The Authority noted that KE's projected O&M cost for distribution function, based on actual O&M cost of FY 2022-23, indexed with CPI of December 2022 works out as Rs.26,016 million. Thus, KE's actual distribution O&M cost for the FY 2023-24, as per the unaudited accounts i.e. Rs.26,052 million is on the higher side.
- 19.17. Considering the above discussion and the fact that previous MYT of KE has ended on 30.06.2023, and any gain/loss of the previous MYT control period may not be carried forward in the new MYT, the Authority has decided to allow O&M cost of Rs.26,016 million to KE for the FY 2023-24, for its distribution functions, excluding CAPEX nature O&M cost.
- 19.18. In case KE's actual O&M cost for the FY 2023-24, once its audited accounts for FY 2023-24 are available, is lower than the amount being allowed for the FY 2023-24, the entire difference shall be passed on to the consumers. For remining control period any saving in O&M cost i.e. difference between O&M cost allowed for the respective year vis a vis actual O&M cost as per the Audited accounts for the same year, shall be shared in the ratio of 50:50 between consumers and KE. For future indexation of O&M cost during the MYT control period, the allowed O&M cost or actual O&M cost of the previous year, after excluding therefrom the capex nature O&M and amount of O&M capitalized, whichever is lower shall be considered as reference to be indexed with NCPI-X factor.
- 19.19.If the actual O&M cost for the previous year, as referred above is not available at the time of projecting next year's O&M cost, the allowed cost for the previous year shall be considered as reference to be indexed with NCPI-X factor. Once the audited account for the previous year are available, the already projected O&M cost shall be reworked based on lower of allowed cost or actual O&M cost of the previous year. Any adjustment in this regard, if required, shall be made part of PYA. In addition, the allowed O&M cost shall also be adjusted based on mechanism provided in the instant determination. KE is also directed to disclose its O&M costs in terms of distribution and supply functions separately in its audited accounts.
- 19.20. Here it is pertinent to mention that although KE has requested to index O&M costs with CPI for the month of May every year, however, the Authority considering the fact that KE's tariff would be rebased every year, for which KE would submit its Petition by January, therefore, the available NCPI would be of December, has decided to index the O&M cost with NCPI of December. This approach is also in line with the decision of the Authority in the matter of XWDISCOs. The reference NCPI used for projecting O&M cost for the FY 2023-24 is of December 2022 i.e. 196.86. The reference NCPI for the purpose of future indexation every year, would be of NCPI of December last year.

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NEPRA AUTHORITY A

- 19.21. Any other prudent cost, that may arise in future pursuant to any directions of NEPRA, which is not currently part of KE's O&M, would be considered as pass through only, in case KE's overall O&M cost including cost pursuant to directions of the Authority, exceeds the allowed O&M costs for the relevant year. KE shall provide all the required verifiable documentary evidences alongwith proper working/calculations and justifications for such costs.
- 19.22.On the point of X-Factor, NEPRA determination of Consumer-end-Tariff (Methodology & Process) Guidelines, 2015, states that O&M part of Distribution Margin shall be indexed with CPI subject to adjustment for efficiency gains (X factor). The treatment of applying X-factor is in line with the very spirit of multi-year tariff regime, and also in consistency with the decision of the Authority in the matter of XWDISCOs, wherein X-factor @ 30% of increase in CPI has been levied, from the 3rd year of their tariff control period. While assessing O&M costs of KE, the O&M costs as per the unaudited numbers for the FY 2023-24 have been considered, to be adjusted in the remaining MYT control period as per the allowed mechanism. However, as per the benchmarking exercise, KE cost is on higher side as compared to DISCOs, therefore, the Authority considers it appropriate to apply efficiency factor on KE, in order to enforce it to optimize its overall costs. In view thereof, the Authority has decided to apply X-factor to K-Electric @ 30% of increase in CPI for the relevant year of the MYT control period. The Authority, also in line with XWDISCOs, has decided to implement X-factor from the 3rd year of tariff control period i.e. FY 2025-26, in order to provide KE with an opportunity to improve its operational performance, before sharing such gains with the consumers.
- 19.23. At the same time, KE has also requested for incorporation of projected growth in units billed, to cater for the increase in network capacity and consumer base. The Authority has allowed a CAPEX of over Rs.136 billion to KE for the tariff control (for Distribution business including AMR & digitization), which not only caters for the projected growth in demand and network capacity but also for rehabilitation of the existing network including technological advancements. Therefore, allowing any additional indexation factor would further burden the consumers. Keeping in view of above, KE may have ample opportunities to reduce its existing O&M expenses. In view thereof, the request of KE to allow any further impact of growth in units billed, increase in network capacity and consumer base in its O&M cost is not justified. The Authority therefore has decided not to allow any further impact in O&M cost, except NCPI-X factor indexation, thus, request of KE to allow indexation on account of growth in sent outs is declined.
- 19.24. Regarding request of KE to allow routine maintenance capital expenditures and multi-story bus bar replacements, as part of O&M costs, the decision of the Authority in the matter of KE investment plan states as under;
 - Para 60: "Regarding SCADA, Telecom and Underground Maintenance works, the Authority is of the considered opinion that these are mainly of routine maintenance, upkeep and maintenance of necessary spares nature and may be made part of the O&M in the tariff petition for consideration of the Authority".



- 19.25.KE, although has included such costs as part of its O&M costs in line with the Authority's afore referred decision of the Investment plan. However, in its Motion for Leave for review, against the approved investment plan, KE submitted that the amount included under these heads include equipment replacement cost and services/ activities which qualifies the definition of CAPEX. The same is not part of O&M expenses in the financial statements and will be required to be added in addition to O&M revenue requirements calculated based on actual FY 23 O&M expenses.
- 19.26. The Authority however has decided to maintain its earlier decision, whereby CAPEX nature O&M is to be made part of O&M cost, and accordingly the CAPEX nature O&M cost is being allowed to KE as a part of its O&M cost as a separate line item. As mentioned earlier KE's as per its unaudited numbers has reported actual expenditure for such costs as Rs.225 million for the FY 2023-24. The same is being allowed to KE as maximum cap, and as a separate line item under the O&M cost, subject to downward adjustment only, once the Audited accounts for the FY 2023-24 are available. KE is directed to clearly disclose such costs separately in its audited accounts and shall exclude the same from its RAB and Deprecation charges for the relevant year accordingly, for the purpose of tariff adjustments. KE shall provide verifiable documentary evidence for such cost.

O&M Adjustment/indexation

Revised $O&M = Ref.(O&M) \times (1 + (NCPI - X - factor))$

- ✓ X-Factor i.e. @ 30% of NCPI, would be effective from 3rd year of tariff control period.
- ✓ Savings in O&M shall be shared with consumers as per the ratio given in the determination.
- Reference O&M for future years during the MYT control period shall be the allowed O&M cost or actual O&M cost of the previous year, after excluding therefrom the capex nature O&M and amount of O&M capitalized, whichever is lower. If the actual O&M cost for the previous year, is not available at the time of projecting next year's O&M cost, the allowed cost for the previous year shall be considered as reference. Once the audited account for the previous year are available, the already projected O&M cost shall be reworked based on lower of allowed cost or actual O&M cost of the previous year. Any adjustment in this regard, if required, shall be made part of PYA.
- ✓ For remining control period any saving in O&M cost i.e. difference between O&M cost allowed for the respective year vis a vis actual O&M cost as per the audited accounts for the same year, after excluding therefrom the capex nature O&M and amount of O&M capitalized, shall be shared in the ratio of 50:50 between consumers and KE.

Issue No. 11

20. Whether the requested Other Income, Depreciation, Working Capital, RAB and RORB is justified and what will be the adjustment mechanism during the MYT control period?

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Other Income

- 20.1. KE has requested specific items in other income/ expense to be actualized each year considering their unpredictable nature;
 - ✓ exchange gain/loss (excluding exchange loss/gain on loans/borrowings/hedging instruments)
 - ✓ expenses incurred based on directives of NEPRA / GoP
 - ✓ Demurrage
 - ✓ Detention charges
 - ✓ Miscellaneous income
 - ✓ Service connection income / new connection income; and
 - ✓ Collection income (E-Duty rebate, TV License fee, Municipal Utility Charges etc.)
- 20.2. KE has proposed to exclude donations, LD recovered from suppliers and contractors, gain / loss on sales of property plant and equipment, interest income on deposits, other interest income, Gain/ loss on hedging instruments, liabilities written back / assets written off, penalties, scrap sales, return on bank deposits, and markup income/recovery etc. from tariff workings and actualization.
- 20.3. The Ministry of Energy in its written comments submitted that all these streams of other income relate to the "distribution business" and all gains, or cash inflow, whether on disposal, scrap sales, markup income, return on bank deposits, etc., must be actualized on the basis of actual proceeds received, and adjusted in tariff.
- 20.4. The Authority has analyzed the submissions of KE and the comments of stakeholders and has decided to adjust Other Income every year based on the audited accounts of K-Electric, with treatment for various items as mentioned hereunder;

Donations

20.5. KE submitted that donations are not related directly to regulated activities of KE. These are typically voluntary and discretionary and are not a mandatory part of KE's business operations, therefore, these should be funded from the Company's own expenses and not from consumers.

The Authority understands that these are voluntary/ discretionary payments and not mandatory part of KE's business operations, therefore, no such cost should be passed on to the consumers. Accordingly, while working out the O&M cost of KE for the FY 2023-24, the amount of donations have not been included as part of O&M costs.

LD recovered from suppliers and contractors;

- 20.6. Regarding LDs, KE submitted that allowing LDs to be passed through in tariffs will reduce the incentive for KE to manage its contracts efficiently.
- 20.7. The Authority has decided to allow KE to retain LDs from its contractors/ suppliers, only in case the Authority does not allow any cost overruns/ time extensions etc., for the said works. However, LDs recovered from IPPs/ captive suppliers as per their approved PPAs shall be NER Rediusted in tariff. Further, LDs charged by KE on its fuel suppliers, shall be passed through in

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tariffs for such power plants, where KE has been allowed capacity charges, despite non-availability of plant on such fuel.

Gain / loss on sales of Property Plant and Equipment (PPE);

- 20.8. KE submitted that returns in tariff are based on the original cost of PPE rather than the revalued amounts, therefore no loss/gain due to revaluation is passed on to the consumer in tariff. Due to this fact, KE shall be allowed to retain gain / loss on sale of PPE. Furthermore, depreciation rates used in the tariff for depreciation component also excludes the scrap value implying that any residual value realized on sale is not accounted for in the tariff computations. Moreover, this would also incentivize KE to manage its assets efficiently as it would encourage KE to optimize its asset portfolio, sell underutilized or obsolete assets and timely reinvest in more productive assets.
- 20.9. The Authority has considered the submission of K-Electric and has decided that any gain on sales of assets, based on historical cost, after accounting for the salvage value, if any, shall be passed on to the consumers as part of other income, as all assets are financed through tariff whereby, KE is allowed to recover their cost through depreciation. Moreover, K-Electric is also allowed O&M cost to efficiently maintain such assets.
- 20.10. The Authority also noted that in addition to RAB used for working out the RoRB, KE has certain assets which are classified under assets held for sale/ investment property, which are not part of KE's RAB for the FY 2023-24 e.g. land for Datang coal power plant, plot located at Gulistan-e-Johar etc. The Authority has decided not to adjust any gain on sale of such assets, as part of other income, if K-Electric has not been allowed any return or depreciation on such assets either in the current MYT or in the previous MYTs. However, if KE has been granted return or depreciation on such assets, any gain on sale of such assets shall to be adjusted as part of other income. K-Electric is directed to disclose the amount of gain/ loss on sale of all assets, both on historical cost and on revalued amounts, if applicable, in its audited financial statements and shall also substantiate that it has not been allowed any return or depreciation previously on such assets, which are not part of RAB.

Interest income on Bank deposits

- 20.11.KE submitted that interest income is not derived from primary operations / regulated activities of KE. It relates from KE's financial management and cash optimization strategies. It reflects how the company manages its liquidity and excess funds, which is separate from the cost of providing electricity. Therefore, KE shall be allowed to retain interest income on deposits.
- 20.12. The Authority understands that KE's submissions merit consideration, therefore, has decided that interest income on deposits and return on bank deposits to the extent of allowed RoRB and Depreciation, needs to be retained by K-Electric. However, interest income on deposits and return on bank deposits, excluding interest income on amount allowed to KE for RoRB and Depreciation, shall be passed on to the consumers as part of other income.

20.13.KE further submitted that it has to maintain significant balances in its MCA accounts, which as WER RESE KE is a binding obligation as per the underlying agreements. KE accordingly requested that

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- income from these accounts shall be allowed to KE to be retained as no adjustment in working capital component has been requested on account of cash stuck under such MCA arrangements.
- 20.14. The Authority noted that while calculating other income of KE for the FY 2023-24, interest income on MCA has not accounted for as part of other income, thus, no further adjustment on account of MCA balances as part of working capital is required. It is however, pertinent to mention that since KE is being allowed to retain income from MCA, and no adjustment in this regard is being made in Other Income, therefore, any supplemental charges billed by CPPA-G to KE, shall not be adjusted against the amount of LPS. KE is directed to disclose interest income on its MCA account separately in its financial statements.

Other interest Income

- 20.15.KE submitted that this includes interest income from delays in TDS payments and such income should be excluded from tariff calculations, as KE incurs finance costs due to borrowings made to cover payments while awaiting receipts of TDS payments. These arise due to KE's financial management decisions and performance to which the consumer shall not be exposed, therefore, these are requested to be excluded from tariff workings.
- 20.16. The Authority observed that KE shall not be allowed any cost arising out on account of delay in tariff determinations/ adjustments and consequently delay in release of TDS claims of KE by the GoP. Therefore, any interest earned by KE from the GoP on account of delay in release of TDS shall also not be captured through other income. However, any other income, service connection income / new connection income etc., and collection income (E-Duty rebate, TV License fee, Municipal Utility charges etc.) shall be adjusted as part of other income.

Gain / loss on hedging instruments;

- 20.17.KE has submitted that under the proposed cost of foreign debt mechanism, KE has not requested any exchange gain / loss on hedged loans amounts (hedge item) except for hedging cost incurred to enter into hedging arrangements being a prudent cost. Gain / loss on hedging instruments offset the aforementioned gain / loss on hedging item, therefore, gain / loss on hedging instruments shall be excluded from tariff workings to offset the gain / loss recorded on hedged item.
- 20.18. The Authority observed that KE has been allowed hedging cost for foreign loans, the impact of which has been included in the tariff, to be borne by the consumers. Therefore, any gain on hedging instruments shall be adjusted as part of Other Income. However, any loss on such account shall not be passed on to consumers and shall be borne by KE, as it is required to manage the hedge efficiently. Exchange gain/loss, on any other account, would not be accounted for, as part of other income.

Liabilities written back / Assets written off/ Scrap Sales;

20.19.KE submitted that these arise due to KE's financial management decisions and performance to which the consumer shall not be exposed, therefore, these are requested to be excluded from tariff workings.

20.20. Regarding assets written off, the Authority considers request of KE reasonable and has decided that assets written off would be KE's own commercial decisions, for which consumers should not be impacted. Accordingly, any scrap sale proceeds from such written-off assets shall not be included as part of other income to the extent of value written off on historical cost basis. However, if the amount of scrap sales exceeds the value written off on historical cost basis, the excess amount shall be included as part of other income. Similarly, for liabilities written-back, for which KE has already been allowed cost in the tariff, the same shall be included as part of other income.

Penalties/ Demurrage/ Detention charges

- 20.21.KE has submitted that penalties are typically the result of non-compliance or breaches of regulatory or contractual obligations. They are not directly related to the operational costs of KE. These are meant to hold the company accountable for failing to meet specific standards or regulations. Passing these costs onto consumers would undermine the purpose of penalties, which is to ensure that the company comply with regulations, compliances and contractual agreements.
- 20.22. As mentioned by KE, penalties are incurred to hold the company accountable for failing to meet specific standards or regulations, therefore, passing on these costs to the consumers would undermine the purpose of penalties. Hence, no such cost shall be passed on to the consumers. Accordingly, while working out the O&M cost of KE for the FY 2023-24, the amount of penalties has not been included as part of O&M costs.
- 20.23. Regarding demurrages / detention charges, the Authority considers that these are not prudent costs and as per practice does not allow any such costs, while processing the fuel cost components of generation companies. In view thereof, the Authority has decided not to include the demurrage / detention charges as part of O&M cost of K-Electric.

Late Payment Surcharge

- 20.24.KE in its working of other Income has not included Late Payment Surcharge as part of other income. K-Electric submitted that in case of delayed payment by consumers, suppliers are paid by KE from its own sources. It further mentioned that benefit of cost received from one person may not be passed on to all consumers.
- 20.25. The Authority observed that in the matter of XWDISCOs, it has allowed them to retain the late payment surcharge to the extent of supplemental charges billed by CPPA-G to each DISCO, on account of delayed payments to CPPA-G. On the same analogy, the Authority has decided to allow KE to retain late payment surcharge to the extent of supplemental charges billed to KE from its power procurement sources, if any, except supplemental charges billed by CPPA-G. Any amount in excess of such supplemental charges shall be included as part of other income. In case, the supplemental charges exceed the amount of late payment surcharge, no adjustment shall be allowed to KE for such excess supplemental charges.

20.26. Based on the above discission, the total other income of KE for the FY 2023-24 for both its Distribution and Supply Functions, based on its un-audited accounts for the FY 2023-24 has been

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worked out as Rs.11,336 million including amortization of deferred revenue. Accordingly, other income for Distribution function works out as Rs.5,096 million, subject to adjustment, once audited accounts of KE for the FY 2023-24 are available. The amount of Rs.5,096 million has been adjusted, while working out the total revenue requirement of KE for its distribution function for the FY 2023-24.

Other income adjustment/indexation

20.27. Other income for future years would be based on actual other income as per the last available financial statements, after making adjustments for different heads. The same shall be trued up as part of PYA, based on the audited accounts for the respective year during the MYT control period. KE is directed to ensure that all required disclosures are properly reflected in its financial statements in order to work out the correct amount of other income.

Depreciation Expense

- 20.28.KE submitted that depreciation shall be calculated every year using a depreciation rate of 3.98% per annum based on current depreciation rates, that accounts for different asset lives, residual value of assets and assets still in service despite fully depreciated. The depreciation amount is computed by applying the above rate on average of opening and closing cost of assets which comes out as Rs.7,472 million i.e. Rs.0.4669 / kWh for FY 2024.
- 20.29. The Authority noted that as per the tariff methodology, depreciation expense will be determined by applying depreciation charge on the Gross Fixed Assets in Operation (GFAIO), including capitalization from the investment allowed for the next year, and will be considered reference for the tariff control period.
- 20.30. The Authority being cognizant of the fact that FY 2023-24, for which assessment is being made has already lapsed, decided to obtain detail of actual depreciation cost incurred by the Petitioner for the FY 2023-24 to have a fair assessment of its depreciation cost for the FY 2023-24. As per the information submitted by KE, its unaudited depreciation cost for the FY 2023-24 is Rs.8,450 million based on Gross Fixed Assets (historical cost basis) of Rs.180,774 million. Although, depreciation expense, includes assets that belong to supply function, however, since KE has allocated its entire depreciation expense to the distribution function, the Authority using the same criteria as adopted by KE, has allocated the entire depreciation expense to KE's distribution function. Accordingly, depreciation charge of Rs.8,797 million for the FY 2023-24, as provided by K-Electric is being allowed for the FY 2023-24, subject to adjustment, once audited accounts of KE for the FY 2023-24 are available.
- 20.31. The allowed amount of Rs.8,797 million would be used as reference cost for working out future depreciation expense for the remaining tariff control period, to be adjusted as per the mechanism provided below;

Depreciation Adjustment/indexation

Formula for Future Indexation

Rev. Dep = Reference Depreciation / Ref. GFA x Revised GFA



✓ Revised Gross Fixed Assets (historical cost basis) based on allowed investment for next year, after accounting for the impact of capitalization keeping in view the historical trend.

Actualization of Previous year

- ✓ Allowed Depreciation of previous year to be trued up provisionally based on Audited Financial statements and finally on the 3rd party evaluation report on historical cost basis, keeping in view the amounts of allowed investments. In case, the Petitioner ends up making higher investments than the allowed, the same would be the Petitioner's own commercial decision and shall not be considered while truing up the depreciation expenses, unless the Petitioner obtains approval of the Authority for the additional investment. Financial impact of change in Depreciation expense, if any, shall be allowed as part of PYA in the subsequent tariff adjustment.
- ✓ In addition, KE is required to disclose the amount of IDC capitalized during the year and adjust its depreciation for the year accordingly after excluding therefrom the impact of IDC. Further KE shall disclose Capex nature O&M separately and shall exclude its impact for calculations of Depreciation.

Cost of Working Capital (WC)

20.32.KE has requested for Rs.0.0821/kWh as cost of working capital component, for its distribution function, with projected working capital requirement of Rs.1,313 million for the FY 2023-24, based on the following formula;

Legend	Working Capital Components		
A	Stores & spares equal to 3% of gross fixed assets		
В	Trade receivables (based on normal billing cycle of 30 days)		
c	Cash & bank balances (1/6 of O&M expenses)		
D = A + B + C	Current Assets		
E	Current liabilities (2/3rd of current assets)		
F = D - E	Net Working Capital		
G	Cost of Debt (KIBOR + short term spread)		
$\mathbf{H} = \mathbf{F} \mathbf{x} \mathbf{G}$	Cost of working capital		
r	Projected units billed		
J = H / I	Working capital per unit		

20.33.KE has calculated Working Capital (WC) component for the control period based on projected movement of balances year on year and reference 3 month's KIBOR of 22.91% as at June 30, 2023 plus a short term spread of 2%. KE further requested that the cost of working capital shall be indexed on quarterly basis according to the mechanism below,



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W.C.(Rev)	= .	W.C _{*(Ref)} x CoB _(Rev) / CoB _(Ref)
Where;		
W.C. _(Rev)	=	Revised Working capital component of Tariff
W.C.(Ref)	. = .	Reference Working capital component of Tariff
CoB _(Rev)	= :	Revised Cost of borrowing; 3 month KIBOR _(Rev) + 2%
CoB _(Ref)	= .	Reference Cost of borrowing; 3 month KIBOR (Ref) + 2% which comes out to 24.91% as 30th June 2023
KIBOR _(Rev)	= :	The revised 3 month KIBOR as published by State Bank of Pakistan latest available at the start of each quarter i.e., $1^{\rm st}$ July, $1^{\rm st}$ October, $1^{\rm st}$ January, and $1^{\rm st}$ April
KIBOR(Ref)	_ :	The reference 3 month KIBOR of 22.91% as of 30th June 2023

20.34.KE further submitted that after each year end, the working capital requirement shall be updated based on balances as per financial statements & given formula and any impact of under/over recovery shall be allowed in next year. Further, the balances going forward for the remaining control period shall also be recalculated based on given formula after each year end. Accordingly, KE requested that working capital requirement shall be actualized for current year over / under recovery adjustment and simultaneously updated for next year as per the following formula;

Legend	Working Capital Components	
A	Stores & spares 3% of gross fixed assets	
В	Trade receivables (based on normal billing cycle of 30 days).	
С	Cash & bank balances (1/6 of O&M expenses)	
D	Annual adjustment (as per Form 2.1 of Annexure F)	
E =A+B+C+D	Current Assets	
F	Current liabilities (2/3rd of current assets)	
G = E - F	Net Working Capital	
н	Cost of Debt (KIBOR + short term spread)	
I=GxH	Cost of working capital	
J	Actual units billed	
K=I/J	Working capital per unit	

20.35. The MoE in its written comments submitted that KE has requested cost of working capital as part of its revenue requirement by quoting the precedent of National Transmission and Dispatch Company. However, there is a considerable difference between the working capital requirements of distribution and transmission businesses and there is no precedent of a DISCO receiving the cost of working capital as part of its revenue requirement. There is a potential for double counting since the same component is also included in all the tariffs. The working capital needs to be calculated on a consolidated basis. Working Capital is calculated arbitrarily, and needs to be actualized based on actual amounts borrowed which are available in the quarterly, and annual financial statements. There is no reason to keep two months of O&M expenses in cash (for working capital calculation purposes).

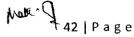


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20.36. The Authority has analyzed the request and workings of K-Electric. The Authority observed that in the matter of NTDC, the Authority allows working capital on the same lines as requested by KE. However, in the matter of XWDISCOs, the Authority only allows them to retain the amount of LPS, to the extent of Supplementals charges to meet their working capital requirements and any amount over and above supplemental charges is adjusted back. In view thereof, and keeping in view the comments of stakeholders, the Authority has decided to allow KE working capital as per the following mechanism;

BETTER TOTAL STORES		
Description	Factors	FY 24
Stores and Spares (3% of GFA)	3%	5,201
Trade debt (30 days of Revenue Receivable)	6/73	4,218
Cash & Bank balance (15 days of O&M Expens	4%	1,069
Total Current Assets	10,489	
Current Liabilities	67%	6,992
Working Capital requirement		3,496
Average working capital Balance		3,496
Cost of Debt Local		23.91%
Working Capital Cost		835.9
Receipt Against Deposit Work		8,821
Cost/Profit on S.D	ĺ	2,109
Total Cost of working capital		(1,273)

- 20.37. The cost of working capital has been worked out @ KIBOR+1% spread. The spread of 1% shall be considered as maximum cap, subject to downward adjustment only in case actual spread is lower.
- 20.38. As mentioned in the table above, KE's working capital requirement for the distribution function has been assessed as Rs.836 million. However, K-Electric did not account for the amount of receipts against deposit works of Rs.8,821 million, as part of working capital calculations for the distribution function, although it has included the same as part of working capital requirements for the supply function. The Authority considers that receipts against deposit works relate to distribution network business, therefore, it is appropriate to account for this amount as part of working capital calculations for the distribution function. By including the amount of receipt against deposit works available with KE, as per the data provided by KE, its net working capital requirement for the distribution function works out as negative Rs.1,273 million for the FY 2023-24, which is allowed to K-Electric for the FY 2023-24. The same is subject to adjustment, as per the mechanism provided below, once audited accounts of KE for the FY 2023-24 are available.



Future Adjustment

Revised cost of working capital = Working capital requirement as per given formula x Cost of debt on allowed parameters

- ✓ Working capital requirement for future years shall be calculated based on assessed revenue requirement under each head for relevant year.
- ✓ Cost of debt shall 3 Months KIBOR + 1% spread as maximum cap, subject to downward adjustment at the end of each financial year.

Actualization of Previous year based on allowed revenue as PYA

Current Assets

- ✓ Lower of 30 days receivables based on allowed revenue (including the impact of allowed adjustments), but excluding WC current cost and WC PYA, **OR** Actual average receivables for the Financial Year (excluding opening receivables).
- ✓ Stores & spares- Lower of 3% of Avg. GFA (opening + closing)/2 **OR** Actual average stores & spares. GFA on historical cost basis, based on Audited account and 3rd Party evaluation to the extent of allowed Investment.
- ✓ Lower of allowed cash & bank balance **OR** actual cash & bank balances.

Current liabilities

- \checkmark 2/3rd of aforementioned current assets
- ✓ Average balance of receipt against deposit work (opening + closing)/2 figure will be actualized based on audited financial statement initially and finally based on third party evaluation.
- ✓ For the purpose of 3-Month KIBOR, the actual weighted average KIBOR of finance cost incurred by KE for WC shall be considered. Similarly, for the purpose of spread, actual spread incurred by KE shall be considered. In case actual spread is lower than 1% cap, the same shall be adjusted downward only. No upward adjustment of spread is allowed.
- ✓ Any under/over recovery of the allowed cost of working capital shall also be adjusted as part of PYA next year.

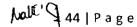
RAB

20.39.KE submitted that Regulatory Asset Base is defined as property, plant and equipment excluding surplus on revaluation including Capital work in progress and Intangibles (mainly software used for regulated business), net of deferred revenue. KE provided the following formula for calculation of the Regulatory Asset Base:



Legend	Description
A	Opening Fixed Assets Cost
В	Capitalization
С	D ispo sal
D = A - B - C	Closing Fixed Assets Cost
E	Accumulated Depreciation
F = D - E	Closing Fixed Assets - WDV
G	Capital Work in Progress – Closing
н	Deferred Revenue - Closing
1 = F + G - H	Net RAB

- 20.40. According to KE, RAB as of FY 2023 amounts to Rs.77,406 million and shall be adjusted based on the proposed Investment Plan revision mechanism. KE further submitted that as part of its investment plan, it would continue to dispose/replace assets at the end of their useful life or in case the same is being replaced with better technology. Further, in case of any asset disposal other than part of its investment or operational plan, KE would seek specific prior approval from the Authority. Moreover, KE has been allowed CAPEX of support functions, mainly information technology, cyber security and civil works amounting to PKR 17,506 million for the next control period along with its indexation mechanism. Furthermore, return component i.e. return on regulatory asset base and depreciation for support function have been calculated and allocated to distribution segment. KE also mentioned that return and depreciation on the investments executed during the control period, would continue post expiry of control period to ensure recovery of prudent costs incurred. It also submitted that no consumer financed assets have been assumed in investment plan, therefore, not included as part of CWIP and additions in the deferred revenue for the FY 2023-24. The same would be adjusted as per actual while truing up of the RAB.
- 20.41. The MoE in its comments submitted that there is no rationale for incorporating IDC as part of investment plan, since neither KE as a company or any of its distribution projects can be considered green field. IDC is only justified in circumstances where a green field project cannot service its debt repayments given a lack of revenue. In KE's case, the IDC is being petitioned against investment network maintenance and expansion in the normal course of business. The cost of capital on regulatory assets already covers the interest component. In such a scenario, incorporating IDC would effectively amount to double charging for the same project investment.
- 20.42. The submissions of K-Electric have been analyzed. The Authority has decided to consider the actual RAB of the Petitioner based on historical costs as of 1st July 2023 as the opening RAB. The closing RAB for the FY 2023-24, shall be worked out after netting-off the depreciation/disposal/amortization charge for the year & consumer financed assets/ deferred revenue, and including therein the impact of CWIP and allowed investments for the FY 2023-24. The average of the opening and closing RAB shall be used for the purpose of calculation of RoRB for the FY 2023-24.
- 20.43. The Authority being cognizant of the fact that FY 2023-24, for which assessment is being made has already lapsed, decided to obtain detail of actual RAB for the FY 2023-24. As per the information submitted by KE, its unaudited RAB for the FY 2023-24 is Rs.86,450 million,



including support function. The average RAB of the Petitioner thus works out as Rs.83,054 million for the FY 2023-24, subject to adjustment once the audited accounts of the Petitioner for FY 2023-24 are available. The same has been considered by the Authority for the purpose of calculation of RoRB for the FY 2023-24. In the matter of KE, since the amount of receipts against deposit works has already been adjusted, while working out the cost of working capital, therefore, no adjustment on this account has been made from the RAB.

20.44. Regarding Interest during Construction, the Authority, while calculating the RoRB, has included balance of CWIP as part of RAB. Thus, the Petitioner is allowed IDC as part of RoRB along-with RoEDC. Since IDC is subsequently capitalized, therefore, again allowing WACC on total RAB, including capitalized IDC, would result in duplication of cost. In view thereof, KE is directed to separately disclose the amount of IDC capitalized every year in its financial statements, and to accordingly adjust its RAB and depreciation for the year, after excluding therefrom the impact of IDC. The RAB so adjusted, shall be used for working out the RoRB for the respective year.

20.45. In view of the above discussion, the RAB of KE for the FY 2023-24 has been worked out as under;

Description	Unit	FY 23	Un Audited FY 24
Opening Gross Fixed Assets in Operation	Rs. Mln	127,315	165,972
Addition in Fixed Assets	Rs. Mln	39,620	15,222
Disposal	Rs. Mln	(963)	(420)
Closing Gross Fixed Assets in Operations	Rs. Mln	165,972	180,774
Opening Accumulated Depreciation	Rs. Mln	39,843	46,810
Depreciation charged for the year	Rs. Mln	7,753	8,797
Disposal	Rs. Mln	786	347
Closing Accumulated Depreciation	Rs. Mln	46,810	55,259
Net Fixed Assets in Operation	Rs. Mln	119,162	125,514
Capital Work in Progress	 		
Opening	Rs. Mln	31,430	8,365
Addition	Rs. Mln	16,555	21,099
Capitalization	Rs. Mln	39,620	15,210
Closing	Rs. Mln	8,365	14,254
Deferred revenue			
Opening	Rs. Mln	40,911	47,868
Additions	Rs. Mln	9,779	8,680
Amortization	Rs. Min	2,821	3,230
Closing	Rs. Mln	47,868	53,318
Net Consumer Finance amount to be	Rs. Mln		
adjusted in RAB	1/2. 141111	47,868	53,318
			
RAB for the Year	Rs. Mln	79,659	86,450
Avgerage RAB	Rs. Mln	73,720	83,054





- 20.46.Based on the aforementioned average RAB of Rs.83,054 million and by applying thereon the allowed WACC of 26.03%, (RoE 14% USD and CoD 24.46%), the RoRB of the Petitioner for the FY 2023-24 has been assessed as Rs.21,615 million. The RAB used for working out the RoRB for the FY 2023-24, shall be trued up subsequently, based on audited accounts of the Petitioner for the FY 2023-24 provisionally, subject to finalization based on 3rd party evaluation Report, keeping in view the amounts of allowed investments, and making adjustments for the amount of IDC capitalized.
- 20.47. KE has also requested for continuation of return and depreciation on the investments executed during the control period, post expiry of control period to ensure recovery of prudent costs incurred. In this regard it is pertinent to mention that the Authority after expiry of tariff control period, determines tariff of each DISCO afresh and no commitment is made in the MYT for continuation of the same beyond the tariff control period. In view thereof, the Authority does not see any justification to accept the request of KE for continuation of return and depreciation post expiry of control period of the instant MYT and hence the request is declined.

Return on Regulatory Asset Base (RORB) Adjustment/indexation

Formula for Future Adjustment

Rev. RORB = Reference RORB/Reference RAB x Revised RAB

Revised RAB (historical cost basis) based on Allowed investment for next year.

Actualization of Previous year

- ✓ Allowed RORB of previous year to be trued up provisionally based on audited financial statements and finally on the 3rd party evaluation report on historical cost basis, keeping in view the amounts of allowed investments.
- ✓ For the purpose of actualization of RoRB, the allowed cost of debt shall be recomputed as per the mechanism entailed in cost of debt section.
- ✓ For the purpose of actualization of RoRB the allowed return on equity shall be recomputed to account for the impacts of;
 - i) Variation in RAB, resulting in changes to allowed weightage of RAB and;
 - ii) Variation in exchange rate which shall be done based on the actual average of TT & OD selling rate of US dollar as notified by the National Bank of Pakistan on last day of each month for the year
- ✓ In addition, KE to disclose the amount of IDC capitalized during the year and adjust its RAB for the year after excluding therefrom the impact of IDC capitalized during the year.
- ✓ Further KE shall disclose Capex nature O&M separately and shall exclude its impact for calculations of RAB.

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✓ KE is directed to disclose its RAB for each segment of business i.e. generation, transmission and distribution including support functions, separately in its audited accounts.

Issue No. 12

- 21. Whether the request to share additional income in the ratio of 50:50 in case RAB is used for any activity other than regulated business is justified?
- 21.1. KE has submitted that any income / revenue which is not part of regulated activities e.g. income from K-Solar, shall not be passed through / form part of Tariff. Further, in case if Regulatory Asset Base is simultaneously used for regulated business as well as any other activity without impacting consumer services, the additional income shall be shared in the ratio of 50:50 between KE and consumers.
- 21.2. The Authority noted that since KE is being allowed Return and Depreciation on its total RAB, therefore, any additional income that arises, based on usage of such RAB for any activity other than regulated business, should logically be shared with the consumers. However, passing on the benefit of such income 100% to the consumers of KE, would not incentivize KE to enter into any such activity. Therefore, the Authority has decided to allow sharing of such gains, if any, in the ratio of 80:20 between Consumers and KE. Here it is pertinent to mention that since presently uniform tariff regime is applicable in the country, therefore, any additional income would be adjusted in KE's tariff as part of other income, thus, lowering KE's tariff and consequently would reduce the GoP subsidy towards KE. In view thereof, KE is directed to separately disclose such income in its audited financial statements.

Issue No. 13

- 22. Whether the request to allow Corporate Tax, WPPF and WWF as pass through costs is justified?
- 22.1. KE in its petition has submitted that currently, corporate tax and WPPF / WWF on overall company level are pass through items within the MYT 2017-23. KE has proposed that considering that legal structure will remain the same, corporate tax and WPPF / WWF shall be passed through to consumers in Supply Tariff. However, going forward, in case of any change in legal structure whereby a corporate tax and WWF / WPPF is separately levied on distribution business, same shall be passed through as done in case of other private entities.
- 22.2. Regarding WWF, WPPF and Corporate tax, the Authority observed that KE is required to make payments on account of these heads under the law as mentioned here under;



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Workers Profit Participation Fund

- As per Section 3(1) of The Companies Profit (Worker' Participation) Act 1968 every 102. Company shall pay 5% of its profit to Worker's Participation Fund. Extracts of Section 3 of the above mentioned act is reproduced below:
 - 1 (3. Escabilishment of fund ...
 - (1) Every company to watch the scheme applies shall-
 - (a) establish a Workers Participation Fund in accordance with, the scheme as soon as the accounts for the year in which the scheme becomes applicable to z are finalized but not later than nine months after the close of that year, $\frac{2}{z} = \frac{z}{z}$
 - 3((b) Subject to adjustments, if any, pay every year to the Fund not later
 - accounts for that year, duty signed by its auditors.]
- As per section 2 of the Companies Profit Worker' Participation Act 1968 "Profits" are 103. defined as follows:
 - (d) "profits" in selation to a company means such of the "net profits" as defined in section 87°C of the Companies Act, 1913 (VII) of 1913)*, as are attributable in its business, trade, undertakings or other operations in Pariston;
- Extract of section 87C of Companies Act 1913 are as follows: 104.

87C. (1) Where any company appoints a managing agent after the commencement of the Indian Companies (Amendment)
Remuneration of Act. 1938, the remuneration of the managing agent shall be a sum based on a fixed percentage of the net annual profits of the company, with provision for a minimum payment in the case of absence of or inadequacy of profits, together with an affica allowance to be defined in the agreement of management.

(2) Any stipulation for remuneration additional to or in any other form than the remuneration specified in sub-section (1) shall not be binding on the company valess tanctioned by a special resolution of the company.

(3) For the purposes of this section 'net profits' means the profits of the company calculated after allowing for all the usual working charges, interest on loans and advances, repairs and outgoings, depreciation, bounties or subsidirs received from Government or from a public body, profits by way of premium on shares sold, profits on sale proceeds of forfeited shares, or profits premium on shares sold, profits on sale proceeds of forfeited shares, or profits from the sale of the whole or part of the undertaking of the company but wilhout any deduction in respect of income-tax or super-tax, or any other tax or duty an income or revenue or for expenditure by way of interest on debentures or otherwise on capital account or on account of any sum which may be set uside in each year out of the profits for reserve or any other special jund.

Workers Welfare Fund

As per Section 4(1) of the Workers Welfare Fund Ordinance, 1971 every Company shall pay 2% of its profit to Worker's Welfare Fund. Extracts of Section 4 of the above mentioned act is reproduced below:

Mode of payment by, and recovery from, industrial establishments.

the Firms industrial existing the vital income of which is any year of account commenting on or lifer the done appealed by the "frequent Government) in the Official Caratio is they behalf is not less than \$ [they light of models that (by to the Funz in impact of that year a burn again to hell per over \$1.7.10 instead moone \$1.7.1 (0.7.5).

As per chapter 1(4)(i) of the Workers Welfare Fund Ordinance, 1971 "total income" is defined as follows

4(p) "Secal Income" much

- b) where Return of Income is required to be fled order the Ordinance, the profe (unitare taxation or growsian for taxation) as per accounts or the declared months as per the return of months, whichever is higher, and
- (ii) where Return of viccins in the required to be taus, the profit (before taxation or provision for taxation) as per accounts or low per cent of the nate of as per the statement field under section 115 of the Certificance, which ever is higher.)



- 22.3. Since these costs have not been included as part of the allowed O&M cost of K-Electric, therefore, in case KE pays any such amount, it would be paying the same from its allowed returns, thus, effectively reducing its allowed RoE. The Authority also noted that in the matter of IPPs, the WWF/WPPF payments are allowed as pass through items, as per their PPAs. Similarly, KE in its previous MYT was allowed such costs as pass through.
- 22.4. In view thereof, the Authority has decided to allow corporate tax to KE as pass through, to the extent of current tax paid after netting off all adjustable taxes (without the impact of deferred tax) subject to provision of verifiable documentary evidences, and shall be allowed through adjustment in tariff on annual basis as part of PYA.
- 22.5. Regarding WWF and WPPF, the Authority has also decided to allow these costs as pass through, on actual payment basis, as part of annual PYA, subject to provision of verifiable documentary evidences, in the subsequent tariff adjustments. However, in case there is a policy decision not to allow WWF or WPPF as pass through costs in future owing to recent negotiations being carried out with power companies, the Authority may consider to review its decision for KE as well.

Issue No.14

- 23. Whether the request for adjustment of wheeling charges as part of supply business tariff is justified?
- 23.1. KE has submitted that the units served for the purpose of tariff shall include both, units served for regulated consumers as well as units served for non-regulated consumers and units served adjustment and revenue requirement for Distribution segment to be passed on to supply business shall be calculated accordingly.
- 23.2. KE further submitted that the wheeling charges, including use of system charges, open access costs and cross subsidy are required to be recovered on uniform basis and subject to determination by Authority and these will be deducted at actual while calculating the revenue requirement for regulated consumers in supply business.
- 23.3. In addition to wheeling charges, KE submitted that it is important to highlight that any bilateral contract between a BPC and a competitive supplier must ensure grossing up of BPC demand to account for the allowed level of technical losses as determined by NEPRA for KE's Distribution segment such that the total demand to be served by the Competitive Supplier for the respective BPC is inclusive of the allowed losses determined by NEPRA for KE's distribution network. Any shortage or excess energy (imbalances) shall be recovered / adjusted from BPCs/Competitive Supplier as per the applicable provisions of the regulatory framework and passed on to regulated consumers. Moreover, in case wheeling of power involves another DISCO / NTDC network, KE as part of its CTBCM Evaluation & Integration Plan currently under NEPRA approval, has already requested clarity from NEPRA on treatment of losses in such cases.
- 23.4. Further, KE stated that cost of open access and cross subsidy or other charges recovered from consumers pursuant to open access costs determined by NEPRA shall be recovered from



consumers as per the applicable framework and be adjusted as part of supply business tariff adjustments.

23.5. The Authority noted that any charges to be recovered by KE on account of open access, including use of system charges, open access costs, cross subsidy, marginal price, or any other cost, as per the applicable framework, would be adjusted in the allowed revenue requirement of KE.

Issue No. 15

- 24. Whether amortization of Deferred Revenue at an assumed rate of 6.32% per annum, to be actualized annually is justified?
- 24.1. KE in its petition has requested a negative component of Rs. 0.1890/ kWh, as the amortization deferred revenue for the FY 2023-24, by assuming an amortization rate of 6.32% on the unamortized revenue. According to KE, currently two different type of deferred revenue treatments exist in the company that are as follows:

Related to Sharing Charges: It includes funds paid by customers for utilizing existing installed capacity for their dedicated connection as per Sharing Policy.

Related to Dedicated Consumer Funded Scheme: It relates to the dedicated consumer funded schemes.

- 24.2. For these customers, similar to MYT 2017-23, KE proposes to deduct deferred revenue from RAB as it represents consumer funded assets. Accordingly, income on amortization of deferred revenue shall be included in other income component of tariff to offset the related depreciation allowed in tariff.
- 24.3. KE has submitted that for additions to deferred revenue, KE has not included the same in estimated plan and requests the Authority to allow deferred revenue addition on actual basis from FY 24 onwards for which KE has proposed annual investment update.
- 24.4. The MoE in its comments stated that KE had petitioned amortization of deferred revenue at 6.28% (or 16 years), while Depreciation was at 3.98% (or 25 years). Due to a shorter life, KE was able to increase its Regulatory Asset Base (and correspondingly returns) through such a maneuver. Deferred revenue is effectively earned an asset purchased by customer and transferred to KE so that the company does not have any capital outlay associated with the same. Considering the similar nature of equipment that is bought by customers, a useful life of 25 years is being considered, aligning with other assets of KE. However, if KE can demonstrate that average life of customer bought assets is lower than 25 years, through historical data, then the same can be adjusted downwards accordingly.
- 24.5. KE in response explained that depreciation rate used in the distribution tariff petition of 3.98% is estimated based on the depreciation amount to be recorded in the financial statements on the average of opening & closing cost of assets in the RAB including fully depreciated assets (cost being higher due to cost of fully depreciated assets included) whereas, the amortization rate for deferred revenue is being applied on closing value, net of amortization and hence is not directly

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comparable. However, both rate of depreciation of distribution assets and on amortization of deferred revenue in the financial statements is around 5%. Moreover, KE has also requested actualization of depreciation and amortization of deferred revenue as per the financial statements at each year end in order to avoid any under / over recovery due to the rates used in the financial statements

- 24.6. The Authority noted that amortization of deferred revenue has been made part of 'Other income' for the FY 2023-24, therefore, no separate amortization component is required to be included in the tariff. Further, the balance of amortization of deferred revenue shall be actualized, for the relevant year, provisionally based on the audited accounts of KE and finally as per the 3rd party evaluation, during MYT control period.
- 24.7. KE shall ensure that amortization of consumer Finance assets shall be on same rates/percentage as used for depreciation of its own financed assets class. KE is further directed to disclose segment wise amortization of deferred revenue i.e. transmission and distribution including support functions, separately in its audited accounts.

Issue No. 16

- 25. Whether the service charges for collection of PTV fee and other such charges like ED, Municipal Charges etc., needs to be revised as requested by PTV Corporation, in light of notification dated 16.05,2016 issued by the GoP?
- 25.1. PTV has requested for revision in the service charge paid to KE on account of PTV fee being collected from consumers on TV license fee, from existing level of Rs.5/paid bill to Rs.1/paid bill in line with the directives of the Honorable Prime Minster of Pakistan.
- 25.2. KE during the hearing submitted that notification dated 16.05.2016 issued by the MoW&P, directed to revise the services fee on collection of TV license fee to Rs.1 from Rs.5 per paid bill. However, the "Other income" component in tariff of KE was based on FY 2016, under which the collection fees was included at Rs.5 per bill, hence revision could not be made prior to June 30, 2023 without revision in tariff. Since KE has requested the collection fees as passthrough in MYT FY 2024-30, once approved by NEPRA, KE would revise the service fee income w.e.f. July 01, 2023.
- 25.3. The Authority has considered the request of KE and has decided to pass on the benefit of service charges on account of collection of PTV fee, ED, municipal charges etc., as part of other income during the MYT control period.

Issue No 17.

- 26. Whether the requested adjustment mechanism for the investment plan is justified?
- 26.1. KE has submitted that in MYT 2024-30, tariff components i.e. RoRB-Cost of Debt, RoRB-Cost of equity, depreciation and amortization of deferred revenue shall be calculated for the control period of 7 years i.e., FY 2024-2030, based on approved investment plan and current



ivalli' \f 51 | Page macroeconomic factors including exchange rates, KIBOR, SOFR and estimated mix of foreign and local borrowings.

26.2. According to KE, these amounts will be required to be indexed for changes in macroeconomic factors such as variation in exchange rates, KIBOR, SOFR, Pak / US CPI. Further, these amounts will also have to be revised in the event of any changes in scope of investments including revision in phasing of investments owing to NEPRA / GoP directives, unforeseen situations. Accordingly, KE proposed a mechanism for periodic revision in the investment plan, and adjustment of the tariff components accordingly.

Annual Investment Update – Annual investment update shall be carried out to account for changes in the following:

- ✓ USD to PKR rates for foreign CAPEX The revised exchange rate shall be the average of 12 monthly exchange rates (i.e. last available rate for each month);
- ✓ US CPI for foreign CAPEX The revised US CPI shall be the average of 12 month as published by US Bureau of Labor Statistics;
- ✓ Pak CPI for local CAPEX The revised PAK CPI shall be the average of 12 month as published by PBS;
- ✓ Actualization of Custom duties, IDC & contingencies, along with supporting evidence of the claimed amount:
- ✓ KIBOR, Foreign cost of debt, Foreign / local loan ratio, and indexation on RoRBCoE;
- ✓ Downward adjustment on account of any amounts not invested and carry forward of investments to next years; and
- ✓ Adjustment to account for amount specifically approved during the year.
- 26.3. While doing Annual Investment update, investments for remaining years of control period shall be indexed to aforementioned macro-economic factors including Exchange rate, USCPI & Pak CPI.
- 26.4. For execution of investment plan a sustainable cost-reflective tariff is a key pre-requisite. This tariff is crucial for KE to obtain Board approvals, secure funds and negotiate financing with both local and international lenders for undertaking this investment plan. In the absence of tariff, the execution of investments has been delayed. Consequently, this will cause delays in meeting the approved completion timelines based on which the Investment Plan was prepared and approved. In this regard, KE humbly requests the Authority that the allowed completion period shall be taken as the period requested by KE for completion of planned investments with the addition of days between the date of distribution, transmission and supply tariff determination, whichever is later, and July 01, 2023.
- 26.5. Furthermore, if the anticipated increase in consumer demand and sent outs differs from the initial projections, based on which the Investment plan was devised, KE will seek NEPRA's approval for revisions with necessary justifications.

- 26.6. At the end of fiscal year, KE shall submit the impact of over/under investments based on actual amount invested compared with the allowed Distribution CAPEX updated on macro economic factors of completed year and actualization of other factors.
- 26.7. Calculation for revised allowed CAPEX is given below:

Description	Reference Factors	Updated factors - Average FY 2024*
US CPI	282.03 - FY 2022	319.33
Pak CPI	158.48 - FY 2022	250.76
PKR / USD	206 - 30 th June 2022	314.59

Description	Legend	FY 2024
Base CAPEX	A	24,540
CAPEX after indexation - [Base Capex - FCC x 319.33 / 282.03 x 314.59 / 206 + Base Capex - LCC x 250.76 / 158.48]	. в	41,352
Actualization of IDC, Taxes & Custom duties, Contingencies and others	c	1,673
Allowed indexed CAPEX	D = B + C	43,025

26.8. This comparison shall be made on total allowed amount and there can be multiple scenarios, as explained below:

Scenario No.	Scenario	Treatment	
Scenario 1	Actual CAPEX incurred is equal to the updated allowed indexed CAPEX	Updated allowed indexed CAPEX to be considered for RAB	
0	Delay in CAPEX i.e. CAPEX in a		
Scenario 2	year is lower than updated allowed indexed CAPEX	Carry forward the remaining to next year and shall be considered part of allowed CAPEX for next year.	
Scenario 3	Early CAPEX incurred i.e., CAPEX in a year is higher than allowed indexed CAPEX without any specific approval by NEPRA	The overspent amount is proposed to be netted off from the amount allowed in next year	
Scenario 4	Higher CAPEX incurred based on NEPRA's specific approval	Actual CAPEX to be allowed and made part of RAB	

- 26.9. As per KE, this mechanism will ensure provision of a defined indexation mechanism and will also give some flexibility to KE to move investments between years and investment heads to meet its operational needs, scope changes, sharp exchange variation at the end of the period which cannot be recovered through average indexation mechanism and price shocks.
- 26.10. The Authority approved KE investment plan for its transmission and distribution functions for the period FY 2023-24 to FY 2029-30, through a separate decision dated 24.04.2024. KE filed Motion for leave for Review (MLR) against the approved investment plan, wherein KE also proposed an adjustment mechanism for the allowed investment plan. The Authority noted that

since this issue is being separately deliberated as part of KE's MLR in the matter of investment plan, therefore, has decided that adjustment mechanism for the allowed Investments shall be given in MLR decision of the Investment plan. Based on the approved adjustment mechanism for the allowed investments, any adjustment if required in the allowed RAB, RoRB, depreciation, deferred revenue etc., would be accounted for as part of Tariff adjustment/indexations decisions.

Issue No 18.

- 27. Whether the request to allow one-time adjustment for additional costs pursuant to unbundling, is justified?
- 27.1. KE has submitted in its petition that if there is any legal unbundling in future, KE will file for one-time adjustment for additional costs /revision required in tariffs pursuant to unbundling with NEPRA for determination along with rationale.
- 27.2. The Authority would consider this request of KE, once any such cost is incurred. Allowing or disallowing any such cost would be decided after carrying out the required due diligence and regulatory proceedings, keeping in view the principles of prudency.

Issue No 19

- 28. Whether there is any cost/ benefit analysis of the requested tariff on domestic consumers, industrialization and economic growth?
- 28.1. KE during the hearing submitted that pursuant to uniform tariff policy, the applicable tariff for consumers is based on the tariff of XWDISCOs and incorporates the element of socio-economic policy etc. Hence, KE tariff does not have any direct link with industrialization and economic growth.
- 28.2. A cost reflective tariff for KE with appropriate returns comparable with other private sector investors is necessary to ensure continued efficiency and performance improvements
- 28.3. Despite challenging operating environment, through investments of USD 4 billion into the infrastructure since privatization, KE has improved generation efficiency and reduced T&D loses which has resulted in decrease in tariff requirements by PKR 113 billion (generation efficiency annual impact of improvement from c. 30% in FY05 to 42.2% in FY23) and PKR 155 billion (T&D losses reduction annual impact of improvement from 34.2% in FY 05 to 15.3% in FY23).
- 28.4. In addition, pre- privatization KE was being provided annually PKR 10 billion as operational subsidy which has been completely eliminated. Hence, privatization and investments into KE has financially benefited the exchequer.

Issue No. 20

29. Whether the request to allow unrecovered cost of MYT 2017-23, as pass through, to be included in the tariff is justified?

29.1. KE has requested that that any unrecovered cost pertaining to MYT 2017-23 but not recovered shall be included as unrecovered cost in the quarterly tariff adjustments to be filed.

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29.2. The Authority considers that any cost pertaining to MYT 2017-23, if subsequently allowed to KE by the Authority, would be allowed as part of PYA in the MYT Tariff of FY 2024-30.

Issue No. 21

30. Whether there will be any claw back mechanism or not?

- 30.1. KE during the hearing submitted that NEPRA has already proposed a mechanism to claw-back the savings pertaining to T&D loss at the end of each year in investment plan approval. Furthermore, KE has already requested to actualize cost of debt, working capital balances as per standard limits, sent out and other income (excluding certain specific items) annually. Moreover, KE has also proposed to share the gains beyond the cap proposed in recovery loss mechanism. KE requests that it be allowed to retain O&M gains as it is already amongst the DISCOs with low O&M cost per unit.
- 30.2. The Authority understands that sharing mechanism for any savings is provided under each head separately, therefore, no such mechanism is separately required.
- 30.3. Here it is pertinent to mention that for the purpose of assessment of KE's distribution tariff for the FY 2023-24, the information as submitted by KE has been relied upon. In case of any variation, error, omission or misstatement/ misrepresentation observed at a later stage, KE shall be held responsible for the consequences arising out of such misstatement/ misrepresentation, under NEPRA Act and its Rules & Regulations, and any adjustment will be made accordingly, if required.

31. Order

31.1. In view of the discussion made in preceding paragraphs and accounting for the adjustments discussed above, the allowed revenue requirement of the Petitioner, for the FY 2023-24, to the extent of its distribution function is summarized as under;

Description	Unit	Distribution FY 2023-24
Sentouts	[GWh]	17,768
K.E System	7	7,471
Power Purchase		1,758
CPPA-G]	8,538
T& T	[%]	0.75%
D Losses	[%]	13.90%
Total T&D Losses	[%]	14.55%
Total T&D Losses	[GWh]	2,584
Units Sold	[GWh]	15,183
Margin	Rs. Mln	
O&M Cost	7	26,016
O&M Capex		225
Working capital	i	(1,273)
Depreciation		8,797
RORB		21,615
Gross Margin		55,380
Other Income		(5,096)
Net Margin	1	50,284
Prior year adjustment	Rs. Mln	
Total Revenue Requirement	Rs. Mln	50,284
Total Avg. Tariff	Rs./kWh	3.31



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- 31.2. Responsible to provide distribution services within its service territory on a non-discriminatory basis to all the consumers who meet the eligibility criteria laid down by the Authority.
- 31.3. To make its system available for operation by any other licensee, consistent with applicable instructions established by the system operator.
- 31.4. To follow the performance standards laid down by the Authority for distribution of electric power, including safety, health and environmental protection instructions issued by the Authority or any Governmental agency or Provincial Government;
- 31.5. To develop, maintain and publicly make available, with the prior approval of the Authority, an investment program for satisfying its service obligations and acquiring and selling its assets.
- 31.6. To disconnect the provision of electric power to a consumer for default in payment of power charges or to a consumer who is involved in theft of electric power on the request of other Supply Licensee.
- 31.7. The Petitioner shall comply with, all the existing or future applicable Rules, Regulations, orders of the Authority and other applicable documents as issued from time to time.

32. Summary of Direction

- 32.1. A summary of all directions passed in this determination by the Authority are reproduced hereunder. The Authority hereby directs the Petitioner to;
 - i. To disclose its O&M costs in terms of distribution and supply functions separately in its audited accounts.
 - ii. To clearly disclose such capex nature O&M costs separately in its audited accounts and shall exclude the same from its RAB and depreciation charges for the relevant year accordingly, for the purpose of tariff adjustments.
 - iii. To disclose the amount of gain/ loss on sale of all assets, both on historical cost and on revalued amounts, if applicable, in its audited financial statements and shall also substantiate that it has not been allowed any return or depreciation previously on such assets, which are not part of RAB.
 - iv. To disclose interest income on its MCA account separately in its financial statements.
 - v. To ensure that all required disclosures are properly reflected in its financial statements in order to work out the correct amount of other income.
 - vi. To separately disclose the amount of IDC capitalized every year in its financial statements, and to accordingly adjust its RAB and depreciation for the year, after excluding therefrom the impact of IDC.
 - vii. To disclose its RAB for each segment of business i.e. Generation, Transmission and Distribution including support functions, separately in its audited accounts.
 - viii. To disclose segment wise amortization of deferred revenue i.e. Transmission and Distribution including support functions, separately in its audited accounts.

- 32.2. To submit its annual adjustment / indexation requests by February every year, so that adjustment / indexation for the next year is determined in timely manner.
- 32.3. The determination of the Authority, is hereby intimated to the Federal Government in terms of section 31(7) of the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997.

<u>AUTHORITY</u>

Rafique Ahmed Shaikh

Member

Amina Ahmed Member

Waseem Mukhtar

Chairman

Member