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National Electric Power Regulatory Authority
Islamic Republic of Pakistan

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No. NEPRA/R/TRF-612/K-Electric/Dist-2024/ 6957-61

May 23, 2025

Subject: **Decision of the Authority in the matter of Petition filed by K-Electric Limited for Determination of Transmission 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 47 pages) in the matter of Petition filed by K-Electric Limited for Determination of Transmission tariff under Multi Year tariff Regime for the Period from FY 2023-24 to FY 2029-30 in case No. TRF-612/K-Electric/Dist-2024.

2. The Decision is being intimated to the Federal Government for the purpose of notification in the 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**

Waseem Anwar

(Wasim 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 TRANSMISSION 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 to the city of Karachi and its suburbs. 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 transmission 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 transmission function for the first year of tariff control period, to be indexed according to the mechanism provided in the Petition;

Rs./ kWh							
O&M	Amortization of Deferred Revenue	Working Capital	RORB			Depreciation	Total
			Foreign	Local	Cost of Equity		
0.4941	(0.0098)	0.0519	1.1640	0.3661	0.6936	0.2272	2.9871

3. The Authority admitted the Petition, and a notice of admission was accordingly published in newspapers and uploaded on the NEPRA website on 04.05.2024, inviting comments from the stakeholders.

4. Since the impact of any such determination is to be reflected in the consumer end tariff, therefore, the Authority, in the interest of natural justice and to provide an opportunity of hearing to all the concerned parties, 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 12.06.2024 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 request to allow adjustment for any under / (over) recovery of costs, due to variations in sent outs is justified?
   iii. Whether the requested Debt to equity structure is justified?
   iv. 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?
   v. Whether the request to allow actual premium on loans, 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?
   vi. Whether the requested US dollar-based Return on Equity of 15% and its indexation mechanism is justified?
   vii. Whether the requested O&M cost for the FY 2023-24 and proposed indexation mechanism is justified?
   viii. 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?

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ix. Whether the request to allow O&M (CAPEX nature) transferred from investment plan as part of O&M cost is justified?

x. 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?

xi. 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?

xii. Whether the request to allow Corporate Tax/ WPPF and WWF as pass through costs, if separately levied on transmission business is justified?

xiii. Whether amortization of Deferred Revenue at an assumed rate of 5.19% per annum, to be actualized annually is justified?

xiv. Whether the requested adjustment mechanism for the investment plan is justified?

xv. Whether the request to allow one-time adjustment for additional costs pursuant to unbundling, is justified?

xvi. Whether there is any cost/ benefit analysis of the requested tariff on domestic consumers, industrialization and economic growth?

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

xviii. Any other issue that may come up during the hearing.

6. The hearing was held as per the schedule, wherein KE was represented by its CEO along-with its financial and technical teams. A large number of stakeholders also participated in the hearing, including representatives form media, general public, other DISCOs, industrial consumers and various industrial associations etc.

7. During the hearing, K-Electric reiterated its submissions made in the Petition and presented its issue wise response in the matter. Various commentators raised their concerns regarding the petition submitted by K-Electric. Written comments were also received from several commentators.

8. **Comments and Rejoinders**

8.1. A brief of the contention raised by commentators and the subsequent rejoinder by K-Electric is as under;

9. **Mr. Abu Bakr Ismail**

9.1. Mr. Abu Bakar Ismail, representing Amreli Steel raised concerns over KE's request to allow USD based return. However, he supported the proposal of sharing of reduction in losses in a 50:50 ratio between KE and the consumers.

9.2. With respect, USD based RoE, KE submitted that the 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.

9.3. 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.

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9.4. 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.

9.5. 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.

10. **Mr. Arif Bilwani**

10.1. Mr. Arif Bilvani during the hearing and in his written comments opposed the seven-year tariff control period and submitted that it should be no more than 4 years tariff with mid-year review. He submitted that no other DISCO has been allowed such an extended duration. According to him, the Petitioner becomes lax in fulfilling its commitments and often rolls over projects on one pretext or another. He further emphasized that even in the allowed period, there must be penal clauses for not undertaking or fulfilling the timely commitments made in the Petition.

10.2. Mr. Bilvani also opposed the USD based return on equity, submitting that the Petitioner is not an IPP which are allowed dollar-based returns with an indexation under a specific policy that does not extend to the business of the Petitioner. It was further stated that K-Electric is a private company, albeit engaged in a regulated business, and is not entitled to preferential treatment. He pointed out that numerous foreign investors in Pakistan have invested hundreds of millions of dollars in various industrial & service sectors - 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 yet none have been allowed dollar base returns or extraordinary concessions and favors as are being demanded by the Petitioner. 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.

10.3. 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.

10.4. Mr. Bilvani questioned high loss target of T&D losses allowed to K-Electric, drawing a comparison with Tata DDL, where losses have reduced from 53% in 2002 to total AT&C loss (Transmission + Distribution + Recovery) of only 6.39% in the year 2023. In contrast KEs AT&C loss in 2022 were only 18.1%. He further stated that KE was privatized with the sole objective to, eliminate subsidies arising due to all sorts of losses, provide 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.

10.5. Mr. Bilvani has 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

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7 years. It is a failure of the management which cannot be passed into tariff. It was also highlighted that no recovery loss is allowed to 05 Discos of Punjab.

10.6. Mr. Bilvani also questioned KE's request for allowance of working capital, intention to raise 75% of its debt for investment in foreign loans, US CPI indexation, the potential duplication of Returns, Year wise return components instead of levelized return and cost of unbundling.

10.7. Regarding 7-year tariff control period, K-Electric submitted that, as a private entity, it secures borrowings from lenders without a sovereign / government guarantee. For projects financing, lenders 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.

10.8. Considering the fact that KE has previously 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.

10.9. KE also highlighted that private investment in Pakistan's power sector has historically been limited to IPPs and PMLTC, both of 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, is not directly comparable to other DISCOs in Pakistan. Unlike KE, DISCOs are Government owned that operate under shorter control periods which is viable for them since their financing arrangements are backed by the Government guarantees.

10.10. Additionally, KE clarified that the 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.

10.11. 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. KE noted that, had these operational improvements particularly - 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). Therefore, KE maintains that it 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.

10.12. With reference to pass-through of taxes / WWF / WPPF in tariff and receipt of subsidy from GoP, K-Electric stated that under cost-plus tariff regime, tariffs are structured to cover all the prudent costs and ensure a reasonable return. Any additional taxes, levies, costs, etc., imposed by the government are additional costs that are not accounted for in the base tariff and therefore, necessitates their

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treatment as pass-through items The similar mechanism is followed for other power sector entities operating in Pakistan as well.

10.13. 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.

10.14. Furthermore, Karachi suffers higher AT&C losses at 21.4%, compared to the 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 Slums	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
Faisalabad*	792	184	169[4]	-	1

[1] https://www.numbeo.com/quality-of-life/rankings.jsp
[2] Slums In Karachi (unicef.org)
[3] Slums in Islamabad (unicef.org)
[4] Slums in Lahore & Faisalabad (unicef.org)
**Rank of Faisalabad in Quality of Life Index is not available.*

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)*

10.15. 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.

10.16. Regarding demand growth and energization of KKI project, KE informed that 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.

10.17. 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

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and in case of lower sent out the tariff should be adjusted upwards similar to the mechanism followed for DISCOs.

10.18. Regarding the application of the 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 the 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.

10.19. 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	B	C = B / A	
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.*
*** Other income items proposed for actualization are netted off.*
*** Excludes CAPEX transferred from Investment Plan made part of O&M.*
**** 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.*

10.20. 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.

10.21. 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 deprecation.

10.22. With respect to the 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.

10.23. On the issue of Working capital cost, KE submitted that such costs must be allowed to ensure recovery of financing expenses arising from short-term borrowings used to meet operational needs. Furthermore, KE requested quarterly variation in KIBOR for timely recovery of prudent costs to avoid accumulation of adjustments at each year end.

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10.24. On the matter of unbundling costs, 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. These 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, KE 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.

10.25. Regarding year-wise returns, KE submitted that it allow 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 those of other power sector entities across Pakistan.

10.26. 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 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.

11. **Mr. M. Mughni**

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

11.2. In response to Mr. Mughni's concern regarding unrecovered costs for previous MYT period, KE explained that these include 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.

12. **Amreeli Steel**

12.1. Amreeli Steel in its written comments stated that the Authority has allowed all DISCOs rupee-based ROE of approximately 14.5%.

13. **Federal B Area of Trade and Industry**

13.1. 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.

14. **GEPCO**

14.1. 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

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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.

15. **Korangi Association of Trade and Industry (KATI)**

15.1. KATI submitted that KE reported a financial downturn in FY23, a stark contrast to its performance in FY 22.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 that naturally follows from it.

15.2. 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. 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.

15.3. KATI supported K-Electric's request to the extent that it does not result in any increase in industrial tariffs. However, it was requested that NEPRA should meticulously evaluate and allow necessary cost, and margin for supply business.

16. **Pakistan Leather Garments Manufacture Exporters Association (PLGMEA)**

16.1. 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.

17. **SHEHRI**

17.1. 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 Regulatory Asset base, 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 "Regulatory Asset Base", 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 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 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.

18. The Authority has considered the submissions made by K-Electric in its Petition, the statements made during the hearing and the comments received from the stakeholders. Based on the pleadings, available record and the evidence produced during the course of hearing and afterwards, the issue-wise findings of the Authority are as under;

Issue No. 1:

19. **Whether the request to allow Tariff control period of seven years is justified?**

19.1. K-Electric submitted that it was previously granted an Integrated Multi-Year Tariff for a control period of 7 years which 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. During the hearing KE also emphasized that a 7 year Tariff Control period 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.

19.2. KE further, that private investment in Pakistan's power sector has historically been limited to IPPs and PMLTC (HVDC), both of 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 annual tariffs. However, these shorter periods do not impact them significantly, as their financing arrangements are backed by guarantees from the Government of Pakistan. KE being a private entity secures financing 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.

19.3. Moreover, to ensure successful execution of its investment plan, a viable and sustainable tariff for all segments including Transmission, Distribution & Supply segments is essential. 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

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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.

19.4. 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.

19.5. The Authority observed that that KE has been operating under a MYT regime since 2002. K-Electric (the then KESC), was initially allowed a MYT in 2002, for a period of 7 years, in anticipation of its expected privatization. KE was subsequently privatized in 2005 by Al-Jomaih Group and later re-privatized to Abraaj Group in 2009. Following this re-privatization, the applicability of the allowed MYT to KE was extended 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.

19.6. Section 31 (3) (i) of the NEPRA Act stipulates that tariffs should aim to provide stability and predictability for customers. In line with this principle, the Authority has granted MYTs to XWDISCOs, 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.

19.7. 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 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 is not allowed.

19.8. 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 transmission tariff to K-Electric from FY 2023-24 to FY 2029-30.

<u>Issue No. 2:</u>

20. **Whether the request to allow adjustment for any under / (over) recovery of costs, due to variations in sent outs is justified?**

20.1. 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;

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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%

20.2. 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 influx of captive consumers and PV disruption. Further, improvement in technical loss is also incorporated to reduce the demand by improvement in the infrastructure. Furthermore, considering the AT&C losses, KE projects that the number of load shed exempt feeders will increase to 95% by the end of the control period, resulting in a corresponding increase in served energy. KE has highlighted that its Load Shed policy is based on an analysis of T&D and recovery ratios of each respective feeder. It is essential to acknowledge that various external variables can exert significant influence on consumer behavior and their ability to meet financial obligations, which not only has 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.

20.3. KE stated that the revenue requirement for the control period of 7 years i.e., FY 2024 – 30 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.

20.4. KE further submitted that it would provide details of under / over recovery after completion of each financial year, and the resulting impact of under / over recovery shall be adjusted in remaining part of next year as prior year cost. During the hearing, KE 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.

20.5. 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.

20.6. The Ministry of Energy (MoE), Power Division (PD) in its comments/ analysis, vide letter dated 13.12.2024, stated that overall electricity consumption on KE's network declined by 7.2% in FY2023,

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while consumption in the residential and industrial sectors dropped by 7.9% and 1.5% respectively. The MoE proposed that assumptions regarding the demand growth in both the 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 would necessitate a corresponding reduction in growth-related infrastructure investment, leading to decrease in capital expenditure associated with new feeders and PMTs.

20.7. 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 new MYT FY2024-30, 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).

20.8. Since this issue pertains to supply tariff, therefore, the Authority has decided to address the same in supply tariff decision already under process with NEPRA.

Issue No. 3:

21. **Whether the requested Debt to equity structure is justified?**

21.1. KE has requested a 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 (RORB) based on a notional debt to equity ratio of 70:30, whereas KE's actual debt to equity ratio, based on its 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 granted a lower effective return, and its actual invested equity was not considered. Instead, the equity exceeding the notional thirty percent (30%) was treated as debt for the purpose of determining the return. KE further submitted that the issue of applying notional 70:30 debt to equity ratio and non-consideration of actual invested equity is being addressed in the Appeal filed before the NEPRA Appellate Tribunal (NAT). The submissions made in this 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 instant Petition shall also be amended and / or modified accordingly.

21.2. KE during the hearing presented that considering the Debt:Equity 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 Debt:Equity ratio of 46:54 at FY 23, subject to any relief granted by NAT in the final outcome of appeal.

21.3. The MoE, in its comments, stated that KE has challenged the 70:30 debt equity ratio, arguing that the company invested a higher level of equity. However, the MOE emphasized that the higher cost associated with underleveraging cannot be passed to consumers, a principle that the Authority has upheld in all tariff decisions.

21.4. 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 prayed the same debt to equity ratio, with a caveat that the submissions made in the Petition are without prejudice to the appeal filed before 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.

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21.5. 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, with equity exceeding 30% potentially being 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.

21.6. 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. 4 & 5

22. **Whether the request 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?**

23. **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?**

23.1. 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	A	5.00%	5.00%	22.91%
Credit Adjustment Spread – CAS	B	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 depreciation further explained below in this section		
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		

23.2. KE also proposed that Return on Rate Based Cost of Debt (RoRBCoD) 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 KIBOR at the start of each quarter i.e. 1st July, 1st October, 1st Jan, and 1st April.

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23.3. 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.

23.4. KE also mentioned that spreads offered in previous transactions were based on stable country rating. However, the recent degradation in the 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.

23.5. 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 RoRB CoD, 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.

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.

23.6. 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.

23.7. KE has submitted that foreign borrowing involves payment of a Premium in the case of ECA backed loans, and incidence of tax on payments in case of both ECA backed and Foreign DFI loans. Therefore, KE has requested the same to be applied on foreign loans. Furthermore, tax payments on premium and interest/markup which are allowed as separate costs for other projects, shall also be allowed to KE as separate cost, based on documentary evidence.

23.8. 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.

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23.9. KE also submitted that the pricing of loans has been provided based on the prevalent economic outlook, however, in case of 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.

23.10. 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.

23.11. 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
- ✓ 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.

23.12. 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.

23.13. Regarding the Premium cost, KE explained that it incurs a Premium Cost for ECA backed loans because it needs to arrange financing from commercial banks & financial institutions for various CAPEX projects. 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 the commercial banks. The Premium Cost is a one-time cost, based on the facility amount, and the fee is determined based on the assessment of various credit and country risks by the relevant Export Credit Agency. KE expect that 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 pass through based on actual. K-Electric requested an amount of Rs.24,312 million as total RoRBCoD for the FY 2023-24 i.e. Rs.1.3862/kWh.

23.14. 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. Regarding K-Electric's claim that a hedge for foreign currency risk is no longer available, the MoE

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stated that with improvements in macroeconomic indicators and declining interest rate environment, 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.

23.15. MOE further submitted that foreign debt amounts to PKR 1.1640/kWh and comprises 39% of the total transmission tariff. It is not clear why such high quantum of FX debt exists for the transmission component, and whether the same could not be arranged locally. This quantity needs to be verified and actualized. The cost of foreign debt is assumed to be 22% which takes into consideration a sharp depreciation to PKR preceding the control period. The cost of foreign debt needs to be rationalized with SOFR + actual spread and any cost of credit cover. Any FX losses need to be trued-up on actual and not be front loaded in tariff.

23.16. The MoE also stated that the Petition proposes using the cost of debt to calculate return for the portion of the capital structure funded by equity and exceeding 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%.

23.17. 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 transmission function ranges between 1% to 2.25%, as detailed here under;

Facility	Amount – PKR	Benchmark – KIBOR	Spread	Start Date	First Repayment	Last Repayment	Install.	Transaction Cost – PKR
FBL-TP	23,500,000,000	3 Month	1.00%	19-11-2018	16-12-2020	16-9-2025	20	160,250,000.00
GuarantCo-PKR	4,000,000,000	3 Month	1.05%	2-10-2019	16-9-2021	16-12-2024	14	101,624,308.89
Sukuk-1	25,000,000,000	3 Month	1.70%	2-8-2020	3-11-2022	3/8/2027	20	271,184,941
HBL FP 900	13,904,000,000	3 Month	2.25%	30-12-2021	3-8-2023	3/5/2035	48	236,798,742.67
Sukuk-2	6,700,000,000	3 Month	1.70%	23-11-2022	23-11-2024	23-11-2029	20	56,757,450.00

23.18. The Authority, in the matter of XWDISCOs, has also allowed a spread of 2% on KIBOR. In view thereof and considering 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 if 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.

23.19. Accordingly, the average cost of debt for existing local loans, based on weighting of each loan, has been calculated as 24.28%, which has been used for the purpose of calculation of WACC for the FY 2023-24. A detailed working of the same is as under;

Local Debt Obtained	FBL - TP	GuarantCo - PKR	Sukuk - 1	HBL PF 900	Sukuk - 2
Debt Amount	5,258	248	2,230	1,727	737
Weightage - %	51.55%	2.43%	21.86%	16.93%	7.23%
KIBOR - %	22.91%	22.91%	22.91%	22.91%	22.91%
Spread - %	1.00%	1.05%	1.70%	2.00%	1.70%

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Total	23.91%	23.96%	24.61%	24.91%	24.61%
Weightage	12.33%	0.58%	5.38%	4.22%	1.78%
				W. Average	24.28%

23.20. For foreign loans, KE has requested spreads of 4.5% for ECA-backed loans and 5.8% for DFIs, over SOFR, subject to actualization, if the actual pricing of loan is lower than the projected. As per the information submitted by KE, it has obtained the following foreign loans for the transmission function, which is as under;

Foreign debt obtained	Debt Amount	Addition	Repayment	Opr. Payment	Closing	Average	SOFR	Spread	KIBOR	Hedge Spread	Hedge cost
			USD / Rs. Mln						%		
Sino A (in USD Mn)	31.990		(12.792)	(3.198)	19.198	26.669	5.26%	3.50%	22.91%	1.22%	16.43%
Sino A (in PKR Mn)	3,861.722	-	(1,544.170)	(386.042)	2,317.552	3,219.373	5.26%	3.50%	22.91%	1.22%	16.43%
Sino B (in USD Mn)	19.104	-	(7.641)	(1.910)	11.462	15.925	5.26%	3.50%	22.91%	1.54%	16.11%
Sino B (in PKR Mn)	3,067.811		(1,227.124)	(306.781)	1,840.686	2,557.347	5.26%	3.50%	22.91%	1.54%	16.11%
Hermes TP (in USD Mn)	21.362		(8.545)	(2.136)	12.817	17.807	5.26%	1.69%	22.91%	0.04%	17.69%
Hermes TP (in PKR Mn)	2,555.763	-	(1,022.305)	(255.576)	1,533.458	2,130.501	5.26%	1.69%	22.91%	0.04%	17.69%
Sino 900 (in USD Mn)	20.347	-	(1.809)	(0.452)	18.538	19.381	5.26%	2.90%	22.91%	1.06%	18.71%
Sino 900 (in PKR Mn)	4,516.899	-	(401.502)	(100.376)	4,115.397	4,302.436	5.26%	2.90%	22.91%	1.06%	18.71%
Hermes 900 (in USD Mn)	14.947	-	(1.329)	(0.332)	13.618	14.237	5.26%	1.35%	22.91%	0.07%	17.72%
Hermes 900 (in PKR Mn)	2,787.285		(247.759)	(61.940)	2,539.526	2,651.944	5.26%	1.35%	22.91%	0.07%	17.72%
GuarantCo. (in USD Mn)	2.143		(1.429)	(0.357)	0.714	1.549	5.26%	5.50%	22.91%	1.31%	16.34%
GuarantCo. (in PKR Mn)	335.143		(223.429)	(55.857)	111.714	242.200	5.26%	5.50%	22.91%	-1.31%	16.34%
Sino B (U) (in USD Mn)	6.162	-	(2.465)	(0.616)	3.697	5.137	5.26%	3.50%			
Sino B (U) (in PKR Mn)	1,395.890	-	(558.356)	(139.589)	837.534	1,163.623	5.26%	3.50%			
Hermes TP (U) (in USD Mn)	1.408	-	(0.563)	(0.141)	0.845	1.173	5.26%	1.65%			
Hermes TP (U) (in PKR Mn)	284.268	-	(113.707)	(28.427)	170.561	236.968	5.26%	1.65%			
Sino 900 (U) (in USD Mn)	14.586	-	(1.297)	(0.324)	13.290	13.894	5.26%	2.90%			
Sino 900 (U) (in PKR Mn)	3,003.309	-	(266.961)	(66.740)	2,736.348	2,860.711	5.26%	2.90%			
FMO (U) (in USD Mn)		90.000	(4.500)	(1.125)	85.500	35.668	5.26%	3.95%			
FMO (U) (in PKR Mn)		27,450.000	(1,372.500)	(343.125)	26,077.500	10,878.750	5.26%	3.95%			

23.21. As per NEPRA (Benchmarks and Tariff Determination) Guidelines 2018, a spread not exceeding 4.5% over LIBOR shall be approved on case-to-case basis for foreign financing in case of power projects 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.

23.22. 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 along with any applicable hedging cost. The Hedging cost would be the difference between 3 months KIBOR and 3 months LIBOR / SOFR, as the case may be plus any hedging spread, if applicable. In case of unhedged loans, K-Electric shall be allowed exchange rate variations both on cost of debt as well as on principal amount.

23.23. 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.

23.24. 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 the spread is 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 the spread of 5.50%. 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.

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23.25. Accordingly, the average cost of debt for foreign loans, based on weightage of each loan, has been worked out as 25.77% for the existing loans. This 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 Calculation

Foreign debt obtained		Sino A (in PKR Mn)	Sino B (in PKR Mn)	Hermes TP (in PKR Mn)	Sino 900 (in PKR Mn)	Hermes 900 (in PKR Mn)	GuarantCo (in PKR Mn)	Sino B (U) (in PKR Mn)	Hermes TP (U) (in PKR Mn)	Sino 900 (U) (in PKR Mn)	FMO (U) (in PKR Mn)
Debt Amount	USD / Rs. Mn	3,861.72	3,067.81	2,555.76	4,516.90	2,767.29	335.14	1,395.89	284.27	3,003.32	-
Additions	USD / Rs. Mn	-	-	-	-	-	-	-	-	-	-
Repayment	USD / Rs. Mn	(1,544.17)	(1,227.12)	(1,022.31)	(401.50)	(247.76)	(223.43)	(558.36)	(113.71)	(266.96)	-
Qtr. Payment	USD / Rs. Mn	(366.04)	(306.78)	(255.58)	(100.38)	(61.94)	(55.86)	(139.59)	(28.43)	(66.74)	-
Closing	USD / Rs. Mn	2,317.55	1,840.69	1,533.46	4,115.40	2,519.53	111.71	837.53	170.56	2,736.36	-
Average	USD / Rs. Mn	3,219.37	2,557.35	2,130.50	4,302.44	2,654.04	242.30	1,163.42	236.97	2,860.71	-
SOFR	%	5.26%	5.26%	5.26%	5.26%	5.26%	5.26%	5.26%	5.26%	5.26%	0.00%
Spread	%	3.30%	3.50%	1.65%	2.90%	1.35%	5.50%	3.50%	1.65%	2.90%	0.00%
KIBOR	%	22.91%	22.91%	22.91%	22.91%	22.91%	22.91%				
Hedge Spread	%	-1.22%	-1.54%	0.04%	1.06%	0.07%	-1.31%				
Hedge cost	%	16.43%	16.31%	17.40%	18.71%	17.72%	16.34%				

23.26. The effective interest rate has been calculated as under:

Foreign Loans - PKR		
Description	**Rate**	**Avg Loan**
Sino A (in PKR Mn)	30.76%	3,219
Sino B (in PKR Mn)	28.30%	2,557
Hermes TP (in PKR Mn)	27.52%	2,131
Sino 900 (in PKR Mn)	26.79%	4,302
Hermes 900 (in PKR Mn)	25.00%	2,655
GuarantCo. (in PKR Mn)	33.10%	242
Sino B (U) (in PKR Mn)	24.32%	1,164
Hermes TP (U) (in PKR Mn)	30.40%	237
Sino 900 (U) (in PKR Mn)	15.35%	2,861
FMO (U) (in PKR Mn)	-	-
Total Average Loan		19,368
Effective Rate		**25.77%**

23.27. It is pertinent to mention that K-Electric has been allowed a debt:equity ratio of 70:30 for the purpose of calculation of RoRB. K-E's RAB for the FY 2023-24, works out as Rs.148,779 million (including support group) million after accounting for 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.140,050 million (including support group). After application of allowed debt: equity structure of 70:30, the debt portion of average RAB works out as Rs.98,034.73 million (70% of RAB).

23.28. The MoE proposed allowing the lower of cost of debt or allowed RoE for the portion of the capital structure that is funded by equity and exceeding 30 percent of capital structure. As discussed in the following paragraphs, the Authority has allowed KE a USD based RoE of 12% for its transmission segment, which works out as 24.46% in PKR terms, for the FY 2023-24. The local cost of debt for the FY 2023-24 has been worked out as 24.28% 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%.

23.29. As submitted by KE, its secured debts totals Rs.29,568 million i.e. consisting of Rs.19,368 million foreign loan @25.77% and Rs.10,199 million local loan @24.28%. Therefore, the remaining RAB of Rs.78,666 million (Rs.98,034.73 mln-Rs.19,368 mln = Rs. 78,666 mln including secured loan of Rs.

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10,199 million), has been considered as local loan, to which the average local cost of debt shall be applied. Any change in loan proportion, reflecting the actual proportion of foreign and local loan, shall be adjusted on an annual basis.

23.30. In view thereof, K-Electric's average cost of debt, for the purpose of calculation of RoRB, is determined as 24.58%. The loan amount of average RAB shall be 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. 24,079 million including support group.

23.31. KE has also requested a separate allowance for transaction cost, premiums and taxes related to foreign loans, to be treated as period cost based on actual payments.

23.32. The Authority has decided not to allow any separate insurance / Sino sure/ premiums etc. K-Electric shall manage all such associated risks and 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 allowing these costs as separate cost item. KE shall provide all the necessary verifiable documentary evidence, along-with proper calculations and justifications. If approved by the Authority, these costs may be allowed either based on yearly amortization schedule or as a one-time cost, depending on the financing terms.

23.33. The Authority noted that, in the case of KE's Generation Tariff, withholding tax paid on interest payments to foreign lenders has been allowed as pass-through costs. On the same analogy, the Authority has decided to allow non-adjustable/ non-claimable withholding tax, paid on interest to to foreign lenders as pass through. KE shall submit verifiable documentary evidences to support its claiming such non-adjustable/ non-claimable withholding tax on interest payments to foreign lenders.

23.34. Regarding Financing fee/ transaction cost for future loans, the Authority, in the case of Generation Projects, allows financing fee @ 2% of the debt amount in line with Tariff benchmark Guidelines 2018. These guidelines specify that for power projects, excluding hydro or those using new technologies, a financing fee not exceeding 2 % of the debt shall be approved. It is noteworthy that in that in the past the Authority has allowed financing fee ranging from 3% to 3.5% of the debt amount. However, in recent cases, the financing fee has been capped @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). Accordingly, the Authority has decided to allow future financing fee/ future transaction cost to KE, as pass thorough, with a maximum cap @ 2% of the debt amount. This is subject to downward adjustment only, if the actual cost remains lower. KE shall submit verifiable documentary evidence for such costs.

23.35. The Authority observed that KE has claimed transaction cost of approximately Rs. 265 million for the loans availed during the previous MYT. These costs were incurred by KE during the previous MYT, the control period of which has ended on 30.06.2023. The Authority also observed that cost of debt allowed to KE, including margins, during the previous MYT control period was not subject to any adjustments. Therefore, all such costs have been covered by the allowed cost of debt and approved margins from 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.

23.36. **Cost of Debt Adjustments**

23.37. **Loan spread Adjustment**

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Local Loans

- A maximum spread @2% on Local Loans (obtained for the purpose of RAB) is allowed on an individual loan basis, and subject to downward adjustment only in case actual spread is lower.

Foreign Loans

- A maximum spread @ 4.5% on Foreign Loans (obtained for the purpose of RAB) is allowed on an individual loan basis, subject to downward adjustment, if the 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.

23.38. **Cost of Debt Local Portion**

- The average cost of debt for local loans shall be calculated annually, based on the outstanding amount of each loan for the quarter, in accordance with the terms of the respective loan agreements, 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.

23.39. **Cost of Debt Foreign Portion**

- The average cost of debt for foreign loans shall be calculated annually, based on the outstanding amount of each loan for the quarter, in accordance with the terms of the respective loan agreements and changes in the 3-month LIBOR, Overnight, Daily, or Term SOFR, as applicable, along with the applicable spread, subject to the cap outlined above, and hedging costs, if applicable (hedging costs shall be the difference between the 3-month KIBOR and the 3-month LIBOR/SOFR, as applicable). No exchange rate variation shall be allowed on hedged loans. For existing loans that have 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, in accordance with the respective loan agreements, based on the rate published by NBP.

- Based on the revised cost of debt for foreign loans, KE's WACC will be recalculated annually, and the financial impact of changes in the foreign cost of debt component, will be included in the PYA for the subsequent tariff adjustment.

- Future financing fee/ future transaction cost are allowed to KE, as pass thorough, with a maximum cap @ 2% of the secured debt amount, subject to downward adjustment only, if actual cost remains lower. KE shall submit verifiable documentary evidence to support its claim for such costs.

23.40.**Loan Mix Adjustment based on Secured Local & Foreign Debt**

- The debt Mix will be actualized based on the average of outstanding foreign and local debts portions during the tariff year. The impact of any such adjustment will be made part in the PYA. Debt exceeding the outstanding debt employed for RAB, if less than 70% of RAB, will be considered as local debt instead of equity, for which the average allowed local cost of debt 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.

23.41. For comparing the actual cost of debt employed for RAB, including IDC incurred by KE, with the allowed cost of debt employed for RAB (excluding exchange rate variation on principal repayment) the amount allowed for the equity portion considered as debt will be excluded from the allowed cost of debt for RAB.

Issue No. 6

24. **Whether the requested US dollar-based Return on Equity of 15% and its indexation mechanism is justified?**

24.1. KE has requested Return on Equity of USD 15% as currently allowed, along with indexation for changes in PKR to USD rates. KE requested USD based RoE of 15% on the basis of projected RAB movement, Return on Regulatory Asset Base – Cost of Equity (RoRBCoE) which comes out to be Rs. 0.6936/ 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 $ER_{(Rev)}$ / $ER_{(Ref)}$**
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

24.2. 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.

24.3. 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 15% as currently allowed under the existing MYT. However, change in RoRB components as compared to MYT 2017-23 is due to change in Macro-economic 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. In view of the above discussion, K-Electric requested a USD based RoE of 15%, which translates into Rs. 12,943 million i.e. Rs.0.6936/kWh for the FY 2023-24.

24.4. Mr. Arif Bilvani, during the hearing and in its written comments, opposed the US dollar-based return on equity, by submitting that the Petitioner is not an IPP which is eligible for a dollar-based return with an indexation under a specific policy, that does not cover the business of the Petitioner. Mr. Bilvani further stated that K-Electric is a private company, albeit engaged in a regulated business, this does not entitle it to 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.

24.5. The MoE in its written comments, submitted that a (USD) based return on equity (RoE) on Regulatory Assets is unjustified. The RoE should be aligned with similar businesses in the country's power sector and de-linked from the USD. Specifically, 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 for the Faisalabad Electric Supply Company (FESCO). Any PKR equity, whether injected into the company or reinvested through retained earnings, should not be subject to USD-based indexation. The proposed ROE of 15% in USD terms is higher compared to even USD based bond yields in Pakistan and should be revised downwards.

24.6. The submissions made by KE and other stakeholders have been thoroughly analyzed. The Authority observes that, under the MYT for FY 2002-09, which was subsequently extended until FY 2016, KE was not granted a separate return component. Instead, KE was permitted to retain the benefits of efficiency gains. Under the MYT for FY 2017-23, KE was granted a USD-based return of 15% for its transmission segment. However, this return was not guaranteed and was contingent upon the achievement of regulatory targets, such as sent outs etc. 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

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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.

24.7. 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.

24.8. In light of the above discussion, the Authority has decided to allow RoE of 12% (USD based), being reasonable, to KE for its transmission function for the MYT 2024-30. Accordingly, the RoRBCoE of the Petitioner based on 30% of the allowed RAB, for the FY 2023-24 has been worked out as Rs.10,278 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 12% (USD based) downward, or convert it into PKR, keeping in view the returns (RoE) allowed to other DISCOs, once they are privatized.

24.9. 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 year.

24.10. 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. 7, 8, & 9

25. **<u>Whether the requested O&M cost for the FY 2023-24 along-with proposed adjustment mechanism is justified?</u>**
<u>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?</u>
<u>Whether the request to allow O&M of CAPEX nature transferred from investment plan as part of O&M cost is justified?</u>

25.1. 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 & uniforms, repair & maintenance expenses that are essential for smooth running of operations of the network and to ensure reliability of electric supply of power to the consumers.

25.2. 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. PKR 5,408 million indexed to May 2023 CPI and incorporation

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of projected growth in units billed for FY 2024, which translates to PKR 7,649 million. KE has 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 to cater for the increase in network capacity and consumer base.

25.3. 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.

25.4. The requested O&M component is based on actual FY 2023 O&M expenses, i.e. PKR 0.2898 / kWh (excluding CPI indexation impact from May 2022 to May 2023). This is comparable to the Transmission O&M allowed in the MYT 2017-23, i.e. PKR 0.2958 / kWh (for FY 2023), reflecting a saving of PKR (0.0060) / kWh. Further, KE has included routine maintenance CAPEX nature expenses that are excluded as per the investment plan decision, as part of O&M component having an impact of PKR 0.0841 / kWh, resulting in total requested O&M component of PKR 0.4941 / kWh, inclusive of CPI impact of Rs. 0.1201/kWh. The details are as under:

Description	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30
O&M Revenue Requirement *	7,649	8,006	8,262	8,452	8,595	8,734	8,862
O&M of capex nature transferred from investment plan at FY 22 CPI	1,092	903	614	516	585	670	651
O&M capex nature transferred from investment plat at May 23 CPI	1,571	1,299	883	742	841	964	936
Total O&M Revenue Requirement	**9,220**	**9,305**	**9,145**	**9,194**	**9,436**	**9,698**	**9,798**

25.5. The total amount of O&M i.e. PKR 9,220 million has been translated into PKR 0.4941 / kWh based on projected units served for FY 2024. 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.

25.6. 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.

25.7. 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

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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.

25.8. The MoE in its comments stated that K-Electric's proposed base-figure for the FY 2024 needs to be assessed against actual expenditure for the FY 2024, which could be lower than the proposed amount. O&M cost should be reduced through predictive maintenance and an effective maintenance strategy, while also benefiting from FILO accounting treatment of spares inventory pricing. 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.

25.9. The Authority has analyzed submissions of K-Electric and the comments from the stakeholders. The Authority noted that as per NEPRA 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.

25.10. In projecting or assessing OPEX costs, two commonly used approaches are the Ex-Ante approach and the Ex-Post approach. Under a regime where the allowed OPEX is determined Ex-Ante, deviations between the allowed and actual OPEX will inevitably occur, leading to efficiency savings or losses. This results in two primary options: (1) the utility bears all savings or losses, with no action taken by the Regulator, or (2) the utility shares the savings or losses with consumers. The first option incentivizes the utility to cut costs but places it at greater financial risk in the form of potential losses. The second option somewhat reduces efficiency incentives but limits the financial impact of losses or gains for both the utility and its consumers. However, the widely adopted approach is that no adjustments are made to the allowed revenues or OPEX allowances in the subsequent period to account for deviations from the allowed OPEX in the current period, except for certain allowed adjustments such as those related to CPI changes. In the case of XWDISCOs, the Authority similarly does not make any adjustments to the allowed OPEX, except for indexation based on CPI changes.

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25.11. K-Electric has submitted its MYT for a control period of seven years i.e. FY 2023-24 to FY 2029-30. Therefore, the cost for the first year of the requested tariff control period i.e. FY 2023-24 is to be assessed, which will serve as the reference, for future indexation, as per the mechanism prescribed in the instant determination. As previously mentioned, K-Electric, has calculated the O&M component (FY 24 and onwards) by indexing the O&M cost for the FY 2023 i.e. Rs. 9,220 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. Accordingly, KE has requested an amount of Rs.9,220 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.1,571 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.9,220 million for the FY 2023-24.

25.12. The Authority also being cognizant of the fact that FY 2023-24, for which assessment is being made has already lapsed, and the Authority has decided to obtain the details 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. 6,661 million for transmission function. This amount also includes actual CAPEX nature O&M cost as Rs. 185 million as reported by KE.

25.13. This cost works out 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. In case of FY 23 requested cost of Rs. 5,408 million is indexed with CPI of December 2023 i.e. 255.24 it works out as Rs. 7,011 million. Since the un-audited amount indicated by KE is on lower side therefore the same has been allowed in the instant case.

25.14. Considering the above discussion and the fact that previous MYT for KE ended on 30.06.2023, with any gain/loss from the previous MYT control period not being carried forward in the new MYT, the Authority has decided to approve an O&M cost of Rs. 6,661 million to KE for the FY 2023-24, for its transmission functions, excluding CAPEX nature O&M cost of Rs. 185 million.

25.15. In the event that KE's actual O&M cost for the FY 2023-24, upon the availability of its Audited accounts for FY 2023-24, is lower than the amount being allowed for the FY 2023-24, the entire difference shall be passed on to the consumers. For the remaining 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.

25.16. 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 accounts 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

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the instant determination. KE is also directed to disclose its O&M costs in terms of transmission functions separately in its audited accounts.

25.17. Here it is pertinent to mention although KE has requested to index O&M costs with the CPI for the month of May each year, the Authority, considering that KE's tariff will be rebased annually and KE will submit its petition by January, has decided to index the O&M cost with the NCPI for December, as the NCPI available at that time will be based on the December data. The reference NCPI used for projecting the O&M cost for FY 2023-24 is the December 2022 NCPI, which is 196.86. For future indexation, the reference NCPI each year will be the NCPI for December of the preceding year.

25.18. 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 along-with proper working/calculations and justifications for such costs.

25.19. On the point of X-Factor, the treatment of applying X-factor is in line with the very sprit 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. The Authority considers it appropriate to apply efficiency factor on KE, in order to enforce it to for 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.

25.20. 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.185 billion to KE for the tariff control (for transmission business), 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.

25.21. 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*".

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25.22. 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.

25.23. The Authority however has decided to maintain its earlier decision in the matter 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.185 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.

25.24. **O&M Adjustment/indexation**

Revised O&M = Ref.(O&M) x (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 remaining 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. 10

26. **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?**

Other Income

26.1. 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

26.2. 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.

26.3. The MoE in its written comments submitted that all these streams of other income relate to the "transmission business". All gains, or cash inflows, whether from disposal, scrap sales, markup income, return on bank deposits, etc., must be actualized on the basis of actual proceeds received, and adjusted in tariff accordingly.

26.4. The Authority has reviewed the submissions of KE and the comments from the stakeholders and has decided to adjust Other Income annually based on the audited accounts of K-Electric, with treatment for various items as outlined hereunder;

Donations

26.5. 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.

26.6. The Authority recognizes that these are voluntary and discretionary payments, not mandatory component 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;

26.7. Regarding LDs, KE submitted that allowing LDs to be passed through in tariffs will reduce the incentive for KE to manage its contracts efficiently.

26.8. 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 adjusted in tariff. Further, LDs charged by KE on its fuel suppliers, shall be passed through in 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;

26.9. 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.

26.10. The Authority has reviewed the submission of K-Electric and has decided that any gain on sales of Assets, based on historical cost, and after accounting for the salvage value, shall be passed on to the consumers as part of other income. This is because all assets are financed through tariff, with KE being allowed to recover their cost through depreciation. Moreover, K-Electric is also allowed O&M cost to efficiently maintain such assets.

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26.11.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

26.12.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.

26.13.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.

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

26.15.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. KE is directed to disclose interest income on its MCA account separately in its financial statements.

Other interest Income

26.16.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.

26.17.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.

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Gain / Loss on hedging instruments;

26.18. 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.

26.19. 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 KE 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;

26.20. 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.

26.21. Regarding assets written off, the Authority finds KE's request reasonable and has decided that the decision to write off assets shall 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

26.22. 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.

26.23. 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.

26.24. 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.

26.25. Based on the above discussion, the total Other Income of KE for the FY 2023-24 for transmission Functions, based on its un-audited accounts for the FY 2023-24 has been worked out as Rs. 1,591 million including amortization of deferred revenue i.e. Rs. 127 million. Accordingly, Other Income

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for transmission function works out as Rs. 1,591 million, subject to adjustment, once audited accounts of KE for the FY 2023-24 are available. The amount of Rs. 1,591 million has been adjusted, while working out the total revenue requirement of KE for its transmission function for the FY 2023-24.

Other income adjustment/indexation

26.26. 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

26.27. Regarding Depreciation, KE submitted that depreciation shall be calculated every year using a depreciation rate of 2.69% 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.3,654 million for the FY 2024.

26.28. 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.

26.29. 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.3,654 million. Accordingly, Depreciation charge of Rs.3,654 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.

26.30. The allowed amount of Rs. 3,654 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

26.31. Formula for Future Indexation

Rev. Dep = Depreciation $_{(Ref)}$/ GFA $_{(Ref)}$ x GFA $_{(Rev)}$

- ✓ 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

- ✓ The 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

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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 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)

26.32. KE has requested for Rs.0.0519/kWh as cost of working capital component, for its distribution function, projected working capital requirement of Rs.968 million for the FY 2023-24, based on the following formula;

Legend	Working Capital Component
A	Stores & spares equal to 3% of gross fixed assets
B	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)
H = F x G	Cost of working capital
I	Project units
J = H / I	Working capital per unit

26.33. KE has calculated Working capital component for the control period based on projected movement of balances year on year and reference 3 month 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,

$W.C._{(Rev)}$	=	$W.C._{(Ref)} \times CoB_{(Rev)} / CoB_{(Ref)}$
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., 1st July, 1st October, 1st January, and 1st April
$KIBOR_{(Ref)}$	=	The reference 3 month KIBOR of **22.91% as of 30th June 2023**

26.34. 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

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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 Component
A	Stores & spares equal to 3% of gross fixed assets
B	Trade receivables (based on normal billing cycle of 30 days)
C	Cash & Bank balances (1/6 of O&M expenses)
D	Annual adjustment
D = A + B + C + D	Current Assets
E	Current Liabilities (2/3rd of current Assets)
F = D – E	Net working capital
G	Cost of debt (KIBOR + short term spread)
H = F x G	Cost of working capital
I	Actual Unit served
J = H / I	Working capital per unit

26.35. The MoE in its written comments submitted that KE has submitted that it is unclear why the transmission business needs working capital debt other than for stores and spares. To further reduce working capital, the consumer billing cycle can be reviewed to match monthly requirements against payable credit days allowed by suppliers. Cost of working capital needs to be trued-up on the basis of actual cost.

26.36. The Authority has analyzed the request and workings of K-Electric. Accordingly, the calculations have been made as under:

Legend	Working Capital Components	Amounts in PKR Mn
A	Gross Fixed Assets (Transmission)	134,756
B	O&M Expenses	6,661
C	Revenue Receivables	43,080
D (A * 3%)	Stores & spares (3% of GFA)	4,042
C / 365 * 30	Trade receivables (based on 30 days)	3,541
B / 365 * 15	Cash & bank balances (15 days of O&M expenses)	274
E	**Total Current Assets**	**7,857**
F (E / 3 * 2)	**Current liabilities (2/3rd of Current assets)**	**5,238**
G	**Net Working Capital Requirement**	**2,619**
H	**Cost of Working Capital**	
H(i)	KIBOR	22.91%
H (ii)	Margin	1%
I	Total	23.91%
J	Cost of Working Capital	626

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Legend	Working Capital Components	Amounts in PKR Mn
K	Consumer Deposit	1,866
L (I x K)	Return on Consumer Deposit	446
M (J – L)	Net Cost of Working Capital Requirement	180

26.37. 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. The allowed cost of working capital i.e. Rs. 180 million is subject to adjustment, as per the mechanism provided below, once audited accounts of KE for the FY 2023-24 are available.

Future Adjustment

26.38. 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.

26.39. **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 15 days Cash & bank balance **OR** actual Cash & Bank Balances whichever is lower

Current liabilities

- ✓ 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.

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RAB

26.40.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
B	Capitalization
C	Disposal
D = A + B – C	Closing Fixed Assets Cost
E	Accumulated Depreciation
F = D – E	Closing Fixed Assets – WDV
G	Capital Work in Progress – Closing
H	Deferred Revenue – Closing
I = F + G – H	Net RAB

26.41.According to KE, RAB as of FY 2023-24 amounts to Rs. 169,408 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 185 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.

26.42.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.

26.43.The submissions of K-Electric have been analyzed and 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.

26.44.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

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submitted by KE, its unaudited RAB for the FY 2023-24 is Rs. 148,779 million, including support function. The average RAB of the Petitioner thus works out as Rs. 140,050 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.

26.45. Regarding Interest during Construction (IDC), 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.

26.46. Based on the aforementioned average RAB of Rs. 140,050 million and by applying thereon the allowed WACC of 24.50 (RoE 24.46% USD and CoD 24.58%), the RoRB of the Petitioner for the FY 2023-24 has been assessed as Rs. 34,357 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.

26.47. 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.

26.48. **Return on Regulatory Asset Base (RORB) Adjustment/indexation**

Formula for Future Adjustment

$$\mathbf{RORB_{(Rev)} = RORB_{(Ref)} / RAB_{(Ref)} \times RAB_{(Rev)}}$$

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

26.49. **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;

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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.
- ✓ 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. 11

27. **<u>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?</u>**

27.1. 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.

27.2. The Authority observed that since KE is allowed Return and Depreciation on its total RAB, any additional income generated from the use of this RAB for activities outside its regulated business should, in principle, be shared with consumers. However, passing on the full benefit of such income to KE's consumers would diminish KE's incentive to engage in such activities. Therefore, the Authority has decided that any such gains, if they arise, shall be shared in an 80:20 ratio between the consumers and KE. It is important to note that, under the current uniform tariff regime in the country, any additional income would be adjusted in KE's tariff as part of Other Income, which would lower KE's tariff and, consequently, reduce the Government of Pakistan's subsidy to KE. In light of this, KE is required to separately disclose such income in its audited financial statements.

Issue No. 12

28. **<u>Whether the request to allow Corporate Tax, WPPF and WWF as pass through costs is justified?</u>**

28.1. 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.

28.2. 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

102. As per Section 3(1) of The Companies Profit (Worker' Participation) Act 1968 every 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. **Establishment of fund.**--
>
> (1) Every company to which 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 it are finalized but not later than nine months after the close of that year; [2][* * *];
>
> [3][(b) Subject to adjustments, if any, pay every year to the Fund not later than nine months after the close of that year five percent of its profits during such year, [4][* * * *] and
>
> (c) furnish to the Federal Government and the Board, not later than nine months after the close of every year of account, its audited accounts for that year, duly signed by its auditors.]

103. As per section 2 of the Companies Profit Worker' Participation Act 1968 "Profits" are defined as follows:

> (d) "profits" in relation 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 to its business, trade, undertakings or other operations in Pakistan;

104. Extract of section 87C of Companies Act 1913 are as follows:

> ***87C. (1)** Where any company appoints a managing agent after the commencement of the Indian Companies (Amendment) Act, 1936, 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 office allowance to be defined in the agreement of management.*
>
> *Remuneration of managing agent.*
>
> ***(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 unless sanctioned 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 subsidies 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 from the sale of the whole or part of the undertaking of the company but without any deduction in respect of income-tax or super-tax, or any other tax or duty on 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 aside in each year out of the profits for reserve or any other special fund.*

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:

> **4. Mode of payment by, and recovery from, industrial establishments.-**
>
> (1) Every industrial establishment, the total income of which in any year of account commencing on or after the date specified by the [1][Federal Government] in the Official Gazette in this behalf is not less than [2][five] lakh of rupees shall pay to the Fund in respect of that year a sum equal to two per cent [3][* *] of its total income [* * *][* * *]

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

> [4](i) "total income" means
>
> (i) where Return of Income is required to be filed under the Ordinance, the profit (before taxation or provision for taxation) as per accounts or the declared income as per the return of income, whichever is higher, and
>
> (i) where Return of Income is not required to be filed the profit (before taxation or provision for taxation) as per accounts or four per cent of the receipt as per the statement filed under section 115 of the Ordinance, whichever is higher.)

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28.3. 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, therefore, 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. In view thereof, the Authority has decided to allow corporate tax 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.

28.4. 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.13

29. **<u>Whether amortization of Deferred Revenue at an assumed rate of 5.19% per annum, to be actualized annually is justified?</u>**

29.1. KE in its Petition has requested a negative component of Rs. (0.0098)/ kWh, as the amortization deferred revenue for the FY 2023-24, by assuming an amortization rate of 5.19% on the un-amortized 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.

29.2. 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.

29.3. 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.

29.4. KE in response to MOE comments explained that depreciation rate used in the transmission tariff petition of 2.69% 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 comparable. However, both rate of depreciation of transmission assets and on amortization of deferred revenue in the financial statements is around 2.69%. 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

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29.5. 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.

29.6. 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. 14

30. **<u>Whether the requested adjustment mechanism for the investment plan is justified?</u>**

30.1. 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 macroeconomic factors including exchange rates, KIBOR, SOFR and estimated mix of foreign and local borrowings.

30.2. 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.

30.3. **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.

30.4. While doing Annual Investment update, investments for remaining years of control period shall be indexed to aforementioned macro-economic factors including Exchange rate, USCPI and Pak CPI.

30.5. 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

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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 Transmission, Distribution and Supply tariff determination, whichever is later, and July 01, 2023.

30.6. 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.

30.7. 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.

30.8. 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 - 30th 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]	B	41,352
Actualization of IDC, Taxes & Custom duties, Contingencies and others	C	1,673
Allowed indexed CAPEX	**D = B + C**	**43,025**

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

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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
Scenario 2	Delay in CAPEX i.e. CAPEX in a year is lower than updated allowed indexed CAPEX	Actual CAPEX (being lower) to be considered for RAB
		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

30.10.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.

30.11.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, the Authority has decided that adjustment mechanism for the allowed Investments shall be given in the 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 15.

31. **Whether the request to allow one-time adjustment for additional costs pursuant to unbundling, is justified?**

31.1. 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.

31.2. 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 16

32. **Whether there is any cost/ benefit analysis of the requested tariff on domestic consumers, industrialization and economic growth?**

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32.1. 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.

32.2. A cost reflective tariff for KE with appropriate returns comparable with other private sector investors is necessary to ensure continued efficiency and performance improvements

32.3. 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 FY 05 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).

32.4. 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. 17

33. **<u>Whether the request to allow unrecovered cost of MYT 2017-23, as pass through, to be included in the tariff is justified?</u>**

33.1. 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.

33.2. 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 as part of supply function

Issue No. 18

34. **<u>Whether there will be any claw back mechanism or not?</u>**

34.1. 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.

34.2. The Authority understands that sharing mechanism for any savings is provided under each head separately, therefore, no such mechanism is separately required.

35. it is important to note that, for the purpose of assessing KE's Transmission Tariff for FY 2023-24, the information provided by KE has been relied upon. In the event of any variation, error, omission, or misstatement/misrepresentation discovered at a later stage, KE shall be held responsible for any consequences arising from such misstatement/misrepresentation under the NEPRA Act and its Rules & Regulations. Any necessary adjustments will be made accordingly, if required.

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36. **Order**

36.1. In light of the foregoing discussion and the adjustments outlined above, the allowed revenue requirement for the Petitioner for FY 2023-24, specifically with regard to its transmission function, is hereby summarized as follows:

36.2. K-Electric Limited, being a transmission licensee, is allowed to charge its consumers, the following "Use of system charge" (UOSC) for the FY 2023-24, or as amended by the Authority from time to time;

Description	Allowed
	Rs in Mln
O&M	6,661
CAPEX nature O&M	185
Other Income	(1,591)
RORB – Cost of Borrowing Local	19,089
Cost of Borrowing Foreign	4,991
RORB – Cost of Equity	10,278
Depreciation	3,654
Working Capital	180
Total	**43,447**

36.3. In order to work out the Rs/kW/Month rate, K-Electric was asked to provide MDI data for the FY 2023-24. KE has provided the following month wise detail of MDIs.

Description	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Total	Avergae
MDI (MW)	3,411	3,055	2,846	2,863	2,541	1,755	1,684	1,861	2,494	2,743	3,412	3,550	**32,214**	**2,684**

36.4. Based on the information provided by K-Electric, whereby the average MDI works out as 2,684 MW, the Use of System Charge has been worked out as Rs.1,348.66/kW/month.

36.5. Recording of the maximum demand in kW and energy delivered in kWh shall be carried out at meters installed at the common delivery metering points i.e. inter-connection point between:

a. KE System and the bulk power consumer.

b. KE system and the transmission system of a special purpose transmission licensee.

c. KE system and the transmission system of another country connected under an arrangement approved by the Federal Government.

d. KE system and a distribution company receiving power in bulk either for sale to its own consumers or on behalf of another distribution company or a BPC located in another distribution company.

37. **Terms and Conditions:**

Definitions:

- Bulk Power Consumer (BPC) means a Bulk Power Consumer as defined in NEPRA Act.

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- Billing Period means a period determined by NEPRA for the purpose of charging the transfer charge to BPC or any other user of transmission system in respect of power delivered. The billing period for the purpose of applying a transfer charge shall be on a one-month basis (starting 24:00 hrs of the 1st day of the month and ending 12:00 hrs on the last day of the month) till a shorter billing period is specified by NEPRA through a Competitive Trading Arrangement Transitional Order.
- Delivery metering point means the interconnection point at the grid stations where power is delivered by KE, BPCs connected directly to the transmission system or other users of the transmission system and where relevant meters are installed to measure such power delivered.
- System Peak Demand = The highest system peak demand recorded during a billing period measured over successive periods of 30-minute interval at the receiving metering point of user of the transmission system. Maximum demand measuring apparatus used for recording the maximum system peak demand during a billing period shall be based on a 30 minutes interval reset basis.
- Month means a calendar month according to the Gregorian calendar.
- Power Factor: the rate expressed as a percentage of the kilowatt hours to the kilovolt hours consumed during a billing period.
- To make its system available for operation by any other licensee, consistent with applicable instructions established by the system operator.
- To follow the performance standards laid down by the Authority for transmission of electric power, including safety, health and environmental protection instructions issued by the Authority or any Governmental agency or Provincial Government;
- 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.
- 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.

38. **<u>Summary of Direction</u>**

38.1. 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 transmission 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 Deprecation 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.

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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.

38.2. To submit its annual adjustment / indexation requests by February every year, so that adjustment / indexation for the next year is determined in timely manner.

38.3. 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.

AUTHORITY

Engr. Rafique Ahmed Shaikh Member	Amina Ahmed Member
Engr. Maqsood Anwar Khan Member	Waseem Mukhtar Chairman

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