1605



Ref No. KE/BPR/NEPRA/2023/322

December 27, 2023

Engr. Mazhar Igbal Ranjha, Registrar,

National Electric Power Regulatory Authority (NEPRA), NEPRA Tower, Attaturk Avenue (East), G-5/1. Islamabad.

SUBJECT: K-Electric Limited – Tariff Petition for Supply business for the period commencing from July 01, 2023 to June 30, 2030

Dear Sir,

Please find enclosed Tariff Petition ("Tariff Petition") for Supply business for the period commencing from July 01, 2023 to June 30, 2030.

Further, please find enclosed Certified True Copy of resolution passed by K-Electric Limited's Board of Directors to file said Tariff Petition along with Affidavits of the following authorized representatives:

- Syed Moonis Abdullah Alvi, Chief Executive Officer
- Muhammad Aamir Ghaziani, Chief Financial Officer
- Syed Fawad Ali Gilani, Chief Distribution Officer

This Tariff Petition is being filed in accordance with Rule 3(1) of NEPRA (Tariff Standards and Procedure) Rules, 1998. Further, total fees amounting to Rs. 1,031,933/- (net of 8% WHT) being the fee for the said Tariff Petition, has already been submitted vide Cheque No.00004937 dated November 29, 2022 enclosed with letter bearing Ref No. KE/BPR/NEPRA/2022/527 dated December 1, 2022.

It is therefore, requested to admit the Tariff Petition for determination as requested therein.

Moreover, KE would humbly request for provisional approval of interim tariff under Rule 4(7) of NEPRA (Tariff Standards and Procedure) Rules, 1998 till the final determination of the Authority as previous MYT control period has already lapsed and the interim application is necessary to ensure application of fuel cost adjustments both positive and negative to consumers and for provisional settlement of tariff differential claims. The interim tariff will be subject to final decision of the Honorable Authority on the Tariff Petition.

Kindly acknowledge and issue the receipt.

Sincerely

Syed Moonis Abdullah Alvi Chief Executive Officer K – Electric Limited

Enclosed:

- -Supply Tariff Petition
- **Supporting Documents & Annexures**
- Certified True Copy (CTC) of Resolutions
- Affidavits -
- Power of Attorney
- Copy of Cheque no. 00004937

K-Electric Limited 39-BKE House Sunset Boulevard, DHA- Phase 2, Karachi, Pakistan

KELECTRIC

Supply Tariff Petition FY 2024 - FY 2030

By K-Electric Limited (KE)

December 27, 2023



Page 1 of 45

Table of Contents

t

.

| 1. | Details of the petitioner | ۰5 |
|-------|--|-----|
| 1.1. | Name and Address | ۰5 |
| 1.2. | Representatives | •5 |
| 1.3. | Grounds giving rise to petitioner's interests & Licensee details | ۰5 |
| 2. | Confirmation of compliance with Tariff Standards and Procedures | .6 |
| 3. | KE's Overview and FY 2017-23 Multi Year Tariff Structure | •7 |
| 3.1. | Overview | •7 |
| 3.2. | KE's Integrated Multi-Year (MYT) Tariff Regime | •7 |
| 3.3. | Tariff Adjustments under the MYT 2017-23 | •7 |
| 4. | Supply Overview | -9 |
| 5. | Continued Investments in the MYT 2017-23 | 11 |
| 6. | KE Investment across the value chain since Privatization | 12 |
| 7. | Determination Sought | 16 |
| 7.1. | Why proposing a change in I-MYT structure? | 16 |
| 7.2. | What is KE petitioning for? | 16 |
| 7.3. | Tariff Mechanism & timing of adjustments | .17 |
| 7.3.1 | . Cost of Power | 18 |
| 7.3.2 | . Transmission Charges | 20 |
| 7-3-3 | Distribution Charges | 20 |
| 7.3.4 | I.Supply Business Tariff | 21 |
| 7.3.4 | 1.1. O&M Expenses | 21 |
| 7.3.4 | .2. Retail Margin | 22 |
| 7.3.4 | 1.3. Recovery Loss | 23 |
| 7.3.4 | 1.4. Cost of Working Capital | 27 |
| 7.3.4 | 1.4.1.Receivables against Government entities | 31 |
| 7.4. | Costs and adjustments relating to Open Market | 31 |
| 7.4.1 | . Wheeling charges | 32 |
| 7.4.1 | 1.1. Network charges | 32 |
| 7.4. | 1.2. Cross-Subsidy / Surcharge | 32 |
| 7.4. | 1.3. Open Access Cost | 34 |
| 7.5. | Monthly and Quarterly Tariff Variation Adjustment mechanism | 34 |
| 7.6. | Annual Adjustment Mechanism | 35 |
| 7.6.: | 1. Actualization of tariff components | 35 |
| 7.6.3 | 2. Changes in sales mix | 35 |



| 7.6.3 | Adjustment for impact of actual vs allowed T&D losses |
|-------|---|
| 7.6.4 | Adjustment for variation in units billed |
| 7.6.5 | Adjustment for other income / other expenses |
| 7.7. | Economic Merit Order |
| 7.8. | Other income / expense – specific items |
| 7.9. | Cost of SBLC for Purchase of power |
| 7.10. | Income from Non-regulated business / Additional income from Regulated Assets |
| 7.11. | Comparison of existing and proposed tariff |
| 7.12. | Pass through items - Corporate tax and WPPF / WWF |
| 7.13. | Costs relating to MYT 2017 - 23 |
| 7.14. | Costs pursuant to Unbundling in future |
| 8. | Summary of Base Tariff FY 2024 & Indexation Mechanism |
| 9. | Category wise rates based on Cost of Service40 |
| 10. | Summary of evidence |
| Anne | xure |

.

.

.

A 11.5



.

Page 3 of 45

•

7

¥

Disclaimer

....

The projections and forecasts contained in this petition are only intended for NEPRA for the purposes of evaluating and determining KE's MYT for Supply business. The plan contained in this petition is based on expectations, estimates and projections at the time of filing of the same that could differ from actual results or events owing to business and operational risks and change in scope and circumstances.

The information contained in this petition is not intended as a solicitation or recommendation of investments. Under no circumstances should this information be relied on or treated as legal or other professional advice. Although KE has taken the greatest possible care in compiling this information, it assumes no responsibilities for any reliance for investment decisions placed thereon.



Page 4 of 45

;÷

1. Details of the petitioner

Name and Address 1.1.

K-Electric Limited

Head office and Registered office

KE House 39-B, Sunset Boulevard, Phase II, Defence Housing Authority, Karachi, Pakistan

Representatives 1.2.

- Sved Moonis Abdullah Alvi Chief Executive Officer
- Muhammad Aamir Ghaziani Chief Financial Officer
- Fawad Ali Gilani Chief Distribution Officer

Grounds giving rise to petitioner's interests & Licensee details 1.3.

K-Electric Limited (KE), is a vertically integrated electrical supply company, providing public utility services to the city of Karachi and its suburbs. KE is active in Generation, Transmission, Distribution and Supply of electricity. It operates under licenses granted by the National Electric Power Regulatory Authority (NEPRA) for Generation, Transmission, Distribution and Supply. KE is a public limited company and is listed on the Pakistan Stock Exchange.

KE was granted a Distribution license (09/DL/2003) on July 21, 2003 for a period of 20 years, to carry out distribution service and sale of electric power within its service territory. KE's distribution license expired in July 2023 and has been provisionally extended for a period of six months.

Further, as per the requirements of the NEPRA Act and current regulatory framework, KE has filed separate applications for distribution and supply licenses.

KE was granted an integrated Multi-Year Tariff for a control period of 7 years that has 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.

This has been further discussed in section 7.1.

Further, it is requested that KE be permitted to submit additional asks, information, documents, evidences, applications, representations in writing in future and/or further grounds that maybe required in accordance with the prescribed rules or procedures as and when notified, or even otherwise during the proceedings on instant petition.

Moreover, considering the fact that previous MYT control period has already lapsed. KE hereby requests the Authority to allow immediate application of the proposed tariff under Rule 4(7) of NEPRA (Tariff Standards and Procedure) Rules, 1998 till the final determination of the Authority to ensure application of fuel cost adjustments both positive and negative to consumers and for provisional settlement of tariff differential claims. The interim tariff allowed will be subject to final decision of the Authority on the petition.



Page 5 of 45

2. Confirmation of compliance with Tariff Standards and Procedures

This petition is being filed in accordance with Part II Rule 3 of the NEPRA Tariff Standards and Procedure Rules, 1998.

The information required to be filed under the Rules can be found under the following sections:

| (a) | Name and address | 1.1 & 1.2 |
|-----------|---|-----------|
| | Grounds giving rise to petitioner's interest & Licensee details | 1.3 |
| (b) | Grounds and facts on which the petition is based | 3-6 |
| (c) | Determination sought | 7,9 |
| (d) / (e) | Comparison of existing and proposed tariff | 7.11 |
| (f) | Summary of evidence | 10 |



3. KE's Overview and FY 2017-23 Multi Year Tariff Structure

3.1. Overview

Incorporated in 1913, KE is the only vertically integrated power utility (VIU) in Pakistan. The company was privatized in November 2005. KE is responsible for end-to-end planning and execution of Generation, Transmission, Distribution and Supply of power to its consumers within its service area which includes Karachi, Gharo in Sindh and Hub, Uthal, Vinder and Bela in Balochistan region.

3.2. KE's Integrated Multi-Year (MYT) Tariff Regime

KE was awarded an integrated Multi-Year Tariff (MYT 2017-23) for a control period of 7 years, valid till June 30, 2023, which was determined on July 05, 2018, subsequently, notified by Ministry of Energy (Power Division) through SRO 576(I)/2019 dated May 22, 2019. The MYT 2017-23 tariff regime was primarily based on a fixed rate-based structure, wherein costs have been allowed as pass through based on certain benchmarks along with a Return on Regulatory Asset Base. The tariff included fuel cost for KE's power plants, cost of power purchase from external sources, O&M expenses, write-off claim of bad debts, adjustment of other income, Depreciation (on cost basis) and Return on Regulatory Asset Base. Regulatory Asset Base was defined as Property, Plant and Equipment excluding surplus on revaluation (including Capital work in progress), net of Deferred revenue (Consumer funded assets) whereas Return is based on a debt-to-equity ratio of 70:30, cost of debt based on mix of foreign and local borrowings and a USD based return on equity.

Further, MYT 2017-23 included a monthly and quarterly adjustment mechanism to account for changes in fuel costs, power purchase costs, and certain other adjustments based on the defined parameters. To account for recovery loss, NEPRA has allowed claim of actual write off of bad debts based on a defined criterion. MYT 2017-23 also included an allowed investment plan for the control period and there was a mechanism of Mid Term review / End of Term review to reassess certain assumptions including the investment plan.

3.3. Tariff Adjustments under the MYT 2017-23

Adjustments in tariff components are allowed by NEPRA on a monthly and quarterly basis.

Monthly Adjustments

One of the key tariff adjustments is the Fuel Charge Adjustment (FCA) applied to end consumers based on their respective consumption of electricity due to change in fuel costs which are variable in nature and often change frequently. The frequent fluctuations in fuel prices are primarily due to international demand supply factors, global economic changes, PKR devaluation etc. Further, FCA is impacted by movement in fuel prices as well as generation mix since generation is dispatched based on Economic Merit Order which means that when demand is high, generation on expensive fuels is dispatched.

FCA adjustment is an approved adjustment mechanism allowed to electricity utilities by NEPRA to account for monthly variation in fuel prices and generation mix across Pakistan. Accordingly, the change in fuel cost component due to variation in fuel prices, generation mix, and volume is passed on to the consumers as per the defined mechanism.



Quarterly Adjustments

KE was given a base tariff with mechanism of Quarterly Tariff Variations, as per which determined tariff is updated each quarter. Quarterly tariff variations primarily include the following:

والدرائحة بالدين والرابات الرابع بتهيد وتحصيه تهته فقلات المترجبين يتتحان

- Quarterly price reset for KE's Fuel cost and Power purchase costs (Fuel, O&M and Capacity Cost) at the end of every quarter based on the mechanism provided in the MYT 2017-23
- Unrecovered cost including:
 - o Impact of T&D losses on monthly FCA
 - o Impact of changes in O&M and Capacity cost of power purchase
 - Any other pass through costs including KE's tax paid, KE's WPPF / WWF paid, IPP's pass through items as per determination / agreements, adjustments in IPP's costs pursuant to NEPRA's decision and any other relevant items
- CPI indexation on O&M costs and adjustment for change in T&D losses Annual (in last quarter of Financial Year)
- Indexation of other components based on allowed T&D losses,
- Impact of write off claims

GoP has a Uniform Tariff Policy, whereby Consumers across the country are charged Uniform Tariff. Accordingly, KE's quarterly tariff variations impact determined tariff, and generally do not impact consumers, keeping in view Uniform Tariff Policy across Pakistan.



Page **8** of **45**

4. Supply Overview

KE was granted a Distribution license (09/DL/2003) on July 21, 2003, which allowed KE to carry out distribution service and make sales of electric power within its service territory for twenty years till July 2023 and the same has been provisionally extended for additional six months. In accordance with Regulation of Generation, Transmission and Distribution of Electric Power (Amendment) Act, 2018 ('Amended Act'), supply function has been segregated from distribution and holders of distribution licenses. Accordingly, KE and DISCOs were designated to act as deemed supplier of electric power under section 23E of the Act, for a period of 5 years from the date of Amended Act coming into effect. Hence, KE was the deemed supplier of electric power in its service territory till July 2023.

Here KE would like to highlight that in compliance with the Amended Act, the Electric Power Supply (Supply) business has been delineated from Distribution network (Distribution), now operating as an independent licensed activity. Consequently, it is imperative to introduce prudent changes to the existing regulatory framework to ensure a sustainable tariff exclusively for the Supply business. This tariff must address challenges such as recovery issues and market reforms, establishing separate revenue streams with a reasonable EBITA for the upcoming period. Moreover, it should delink existing revenue and Key Performance Indicators (KPIs) from other KE-licensed activities, particularly Distribution.

KE would also like to highlight that during MYT 17-23, KE faced a recovery loss of **PKR 82 billion** (after accounting for revenue from PKR 68 billion in write-off claims for the entire control period, currently under the Authority's determination) due to the absence of a sufficient recovery loss provision. In light of these circumstances, the sustainability of the Supply Business primarily depends on an appropriate Tariff Structure, as further detailed in **Section 7.3.4**, that fundamentally provides a fair mechanism for managing the risks and rewards of operating a viable supply business model on a standalone basis. It is noteworthy that a sustainable Supply tariff will not only address immediate KE challenges but will also serve as a guiding template for the privatization endeavors in other government-run distribution companies, ushering in a new era of efficiency and effectiveness in the power sector.

In view of above, KE has, for the period post 2023, sought separate tariffs for Distribution and Supply businesses with NEPRA along with an appropriate retail margin given the asset light nature of Supply business.

Further, as the distribution service provider for its service area, KE remains committed to further improve network capacity and reliability through planned investments in line with its commitment to meet its service obligation of providing smooth and reliable supply of power to its consumers.

In addition to holder of distribution license, KE being a electric power supplier for end consumers in its service area, shall continue to be responsible for performing the following activities which come under the ambit of supply business:

1. Power Procurement - Generation Segment & IPPs

Under the supply function, KE shall be responsible for procuring power to meet the power demand of its customers in its service area.

2. Bills Printing & Distribution

The supply function will be responsible for billing system and to monitor that the bills are issued in accordance with the relevant provisions while ensuring the correctness of data entered into the system.



Page 9 of 45

2

3. Tariff Rate Application

The supply business will be responsible for the application of applicable tariff rate as approved by NEPRA and notified by GoP including cross subsidy, and cost of open access to consumers.

4. Billing Complaints

The supply business will be responsible for handling billing complaints.

5. Collection of Electricity Dues

The supply function will be responsible for collection of electricity dues. In addition to collection of bill payments, KE facilitates consumers in making bill payments and provides easy methods such as mobile app, internet / online banking. It also facilitates consumers who cannot clear their arrears in one go or have been involved in illegal abstraction of electricity and want to convert to regular paying customers by providing them with options of easy monthly installments to complement network functions initiatives such as provision of low-cost meters and various other schemes including incentivizing for shifting from kunda conversions.



Page 10 of 45

5. Continued Investments in the MYT 2017-23

Despite significant economic slowdown during the current tariff control period including the situation of global pandemic and its impact on macroeconomic factors including significant rupee devaluation, variation in interest rates and the severe cashflow constraints faced by KE due to continued delays / non-payment of dues by government entities, the Company remained resolute in its commitment to invest across the power value chain and improve its service levels. As a result, during the period July 2016 to June 2023, the Company invested **PKR 382,210 million**¹ in all the verticals of the power value chain.

These investments have resulted in below improvements:

- Addition of highly efficient 900 MW RLNG plant (BQPS-III) and improvement in generation fleet efficiency
- Increase transmission capacity by 1,865 MVAs, through addition of 7 new grid stations, 44 power transformers and 237 km of transmission lines
- Increase distribution capacity by **2,506 MVAs**, through addition of over **1,644 km** of HT lines, **544** feeders and **8,230** Distribution Transformers
- Reduce Transmission & Distribution (T&D) losses by **6.9% points** meeting NEPRA's targets
- Improve recovery ratio by **4.3%** points despite significant challenging macroeconomic factors
- Add 1.4 million new consumers
- Convert over **12,500** PMTs on to Aerial Bundled Cable (ABC) and community engagement initiatives to curb power theft and improve recovery levels under Project Ujala and Project Surblandi to help reduce area losses and increase network reliability
- Increase load-shed exemption to around 70% of service territory including all industrial zones
- 'KE Live App' accessible to consumers 24/7 enabling consumers to access power. status, billing history, consumption comparisons and raise complaints etc.
- Technological advancements including installation of Automated Meter Readers (AMRs) at PMT level and implementation of Meter Data Management System (MDMS) Project, providing greater visibility into network performance.



1 Gross amount

6. KE Investment across the value chain since Privatization

At the time of KE's privatization in 2005, KE was a loss-making entity operating with severe lack of investment and old & dilapidated infrastructure resulting in frequent outages and unannounced load-shed. Due to its fragile financial position, KE's ability to undertake investments, both in new capacity and in upgrading existing capacity along with initiatives aimed at achieving customer centricity and operational excellence was constrained. As a result, there was insufficient capacity to meet demand and existing assets were old and less efficient than they would otherwise have been.

.

S. C. S. S. S. Man, "Providence on the second se

Despite the losses and other challenges including macroeconomic factors such as high borrowing rates and significant rupee devaluation along with material shifts in the regulatory regime with respect to KE's tariff, KE remained resolute in their pursuit of KE's turnaround and operational excellence. Accordingly, since privatization and up to FY 2023, KE invested **PKR 544,821 million** of CAPEX across the value chain including accelerated investments since FY 2009, through fresh equity injections into the company, debt and reinvestment of all profits in the business, resulting in significant improvements across the power value chain. Here, it is important to highlight that all these investments that have resultantly benefited the consumers as well as the GoP were made without any sovereign guarantee.

Generation: PKR 236,138 million

KE's generation fleet at the time of its privatization in 2005 comprised of old inefficient power plants. Generation segment had suffered tremendously due to underinvestment for almost a decade as not a single MW had been added to KE's generation fleet since 1997 till privatization and some of the plants in KE's fleet were operating at efficiency levels below 30%.

In addition to setting up new generation, KE was also able to recoup derated capacity of BQPS – I units. Following is a highlight of improvement and addition in generation capacity of KE's generation fleet:

- 247 MW KCCP
- 200 MW SGEPS & KTGEPS
- 560 MW BQPS II
- 50 MW derated capacity recouped at BQPS-I units
- 900 MW BQPS III

With the addition of efficient generation to KE's fleet and continued investments in maintenance and rehabilitation of BQPS-I units, average fleet efficiency improved from 30% in FY 2005 to 42.2% in FY 2023 (41% increase). Considering operations of BQPS III for FY 2024, KE's average fleet efficiency is expected to improve further to around 49.5% (gross HHV) in FY 2024.

Transmission: PKR 145,052 million

Investments in the transmission segment resulted in addition of 19 grid stations and enhancement of transmission capacity by 3,485 MVAs (increased from 3,480 MVAs in FY 2005 to 6,965 MVAs in FY 2023). These capacity additions in the transmission segment enhanced KE's ability to serve the incremental power demand and resulted in significant improvement in network reliability including improvement in SAIFI and SAIDI.



Page **12** of **45**

Distribution: PKR 163,631² million

KE made significant investments in the distribution segment which has resulted in the following:

- Reduction in T&D losses from 34.23% in FY 2005 to 15.27% in FY 2023 (18.96% points);
- Targeted recovery drives and measures resulting in overall recovery ratio to increase to 92.78% (FY 2023);
- Reduction in AT&C losses from 36.6% in FY 2005 to 21.4% in FY 2023 (15.2% points);
- Network upgradation and capacity enhancement through addition of:
 - Over 21,000 PMTs and 4,925 MVAs in distribution capacity (from 3,882 MVAs in FY 2005 to 8,808 MVAs in FY 2023)
 - o Over 1,000 11kV feeders
- Addition of 1.7 million consumers at CAGR of 3.8% in consumer base;
- Customer centric initiatives including launch of KE Live App, alternate payments channels, state of the art customer care centers, social media platforms, etc. providing customers with 24/7 accessibility and improved communication with customers who are now routinely provided with advanced intimation for load-shed; and
- Technological advancements including installation of Automated Meter Readers (AMRs) at PMT level and implementation of Meter Data Management System (MDMS) Project, providing greater visibility into network performance.

Increase in load-shed exempt feeders from 6.6% in FY 2005 to over 70.4% in FY 2023. Here KE would also like to highlight that with continued investments and targeted initiatives, KE has made significant reduction in T&D and AT&C losses³, outperforming the state-owned distribution companies as shown below⁴:



² Includes support CAPEX of PKR 8,637 million

⁴ Source: NEPRA State of Industry Reports available till FY 2022.



Page 13 of 45

³ AT&C loss comparison is from 2008 as data for XWDISCOs recovery ratio prior to 2008 is not available in State of Industry report

In addition to benefiting consumers through improved operational performance and service levels, KE's post privatization targeted investments and resultant efficiency improvements have also benefited consumers in the form of lower tariffs.

In this regard, it is estimated that 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).

| Operational Improvement | June 2023 |
|---|------------|
| Reduction in T&D losses since 2005 | 10.0/ kWh |
| Improvement in Generation Fleet Efficiency since 2005 | 7.3 / kWh |
| KE Tariff would have been higher by | 17.3 / kWh |

Here, it is also important to highlight that pre-privatization, to keep the operations of KE afloat, GoP had to provide operational subsidy of around **PKR 10 billion** annually, however since privatization no operational subsidy has been required. Accordingly, in addition to benefiting consumers in the form of lower tariffs, KE's post privatization operational improvements have also benefited the GoP. These aforementioned improvements resulted in the savings as below which would have otherwise continued to burden the GoP had KE not been privatized:

| Improvement, Service and Se | PKR Mn |
|---|---------|
| AT&C Loss Improvement (including benefits of T&D loss and recovery loss) | 371,647 |
| Generation Efficiency Improvement | 335,987 |
| Impact of annual operational subsidy (PKR 10 billion x 18 years) | 180,000 |
| Total | 887,634 |

KE aims to continue its path to bring operational efficiencies, make capacity additions, improve network reliability and provide maximum facilitation to its customers. In this respect, KE has conceived a comprehensive investment plan for its entire value chain focusing on areas of improvement in the overall network along with enhancing the customer centricity and better delivery of services.

Challenges Going Forward

As explained above, KE has undertaken considerable investments across the power value chain which include reinvestment of all profits made since privatization, resulting in operational improvements including improvement in generation fleet efficiency, reduction in T&D losses and improving the quality and reliability of its power supply.

There are, however, a number of challenges for KE going forward:

Continued investments are required across the power value chain to further improve network reliability and quality of supply

For safe and reliable supply of power to consumers amidst growing power demand in KE service area, continued investments are required especially in the Transmission and Distribution segment. Additionally, lack of urban infrastructure planning and ad-hoc growth of the city has led to the design of an inherently complex power network which along with the coastal climate of Karachi requires frequent maintenance and rehabilitation, and hence increases the CAPEX requirement for KE.

Moreover, learnings from the current tariff control period during which Karachi experienced unprecedent rains, continued investments are required to ensure safety and reliability of the network.



Page 14 of 45

KE has prepared a robust investment plan to improve network reliability and quality of supply to achieve the improvement trajectory as submitted in KE's MYT petitions for Transmission and Distribution segments separately, timely execution of which is dependent upon a sustainable tariff regime.

الوالدية مسودة الا

Supply from National Grid and its consequential impact on KE's ability to manage the demand-supply gap in its service area

Considering the projected growth in power demand, KE had planned addition of 700 MW Coal plant. However, in view of the surplus capacity in the National Grid, KE was asked to forgo its planned project and pursue off-take of additional power from the National Grid.

Here, it is pertinent to mention that KE remains in continued engagements with GoP for finalization of contractual modalities at the earliest to provide better visibility and to enable KE to meet its regulatory obligation including commitment of firm capacity of providing reliable and efficient power supply to its consumers.

Working capital constraints due to circular debt and non-provision of local gas

Given the delays in release of TDS and payment of energy dues by Government entities, it is a significant issue and impacts KE's ability to ensure continuity of smooth operations. Additionally, non-provision of local gas to KE burdens consumers as well as increases the quantum of Tariff Differential Subsidy as KE has to rely on expensive RLNG and Furnace oil to fulfill the demand.

Achieving sufficient level of returns to enable KE to execute its business plan which is premised upon a sustainable tariff determination

Despite significant improvements achieved since privatization, KE returns have remained well below returns made by other private players. KE's average Return on Equity (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.

It is important to emphasize that the supply business, in isolation, faces substantial challenges and risks. The previous tariff mechanism had an unlimited downside risk of performance efficiency loss exposure on the Supply Business due to external factors not within absolute control of the utility (e.g. substantial increase in tariff and inflation impacting propensity of consumers to pay) with no allowed return.

While, KE Investors have demonstrated their commitment to the business and, to date, have not taken any cash out of the business, however, continued investment in the business can only be sustained if KE is allowed a cost reflective tariff that includes an appropriate allowance for recovery loss and allows a reasonable level of return including retail margin for asset light Supply business. This is in the utmost interest of consumers as in case KE is unable to invest, or make timely investment decision, there would be potential drastic consequences for the consumers in the form of increased load shed, cost for consumers as well reduction in quality, reliability and availability of electricity in Karachi and its adjoining areas. Hence, it is imperative that KE should be allowed a tariff that balances the interest of all stakeholders and ensures continuity of investment.



7. Determination Sought

This section details the tariff asks and explains the need for a separate tariff instead of integrated tariff, keeping in view the learnings of the MYT 2017-23 and upcoming market changes. Tariff being filed for Supply includes O&M expenses, Retail margin, Recovery loss and working capital along with pass through of costs determined by NEPRA under the Tariff petitions of KE's Generation, Transmission and Distribution functions as well as power purchase from external sources including National Grid.

7.1. Why proposing a change in I-MYT structure?

The Company operates under an Integrated Multi-Year-Tariff (MYT) regime which includes costs and returns for all three segments i.e., Generation (All plants), Transmission and Distribution based on Regulatory Asset Base (RAB). However, going forward KE has planned to file separate tariffs for these segments considering:

Greater Transparency

While the costs for three segments are defined in the MYT determination, certain components such as base rate component and working capital component are not bifurcated segment wise. Similarly, Plant wise tariff bifurcation in case of Generation segment is not available. Therefore, KE understands that separate tariffs for Generation, Transmission, Distribution and Supply, will not only provide greater transparency and insight regarding segment and plants performance to the Company but also to the regulator and other stakeholders as well. Furthermore, this will also help to determine separate tariffs for generation plants and other segments while going into Central Dispatch system as part of the implementation of CTBCM model.

Power Sector Changes

As per Sections 20 and 23E of the NEPRA Act, 1997 (as amended), Distribution and Supply are now separate licensed activities. Accordingly, separate tariffs for Distribution and Supply business are being sought.

Lastly, separate tariffs for each segment would also help in any future unbundling initiatives.

Following sections discuss KE's petition with respect to tariff for Supply segment and its underlying assumptions:

7.2. What is KE petitioning for?

This petition seeks the following determinations:

- Tariff for a control period of 7 years (FY 2024 FY 2030) in line with MYT 2017-23;
- Mechanism for setting up annual references for Cost of power (KE plants as well as external sources) and transmission and distribution costs which are pass through in nature for supply tariff and its monthly and quarterly adjustments, **section 7.3.1**;
- Recovery of O&M expenses for supply business with annual indexation of CPI, section 7.3.4.1;
- Retail margin for supply business as allowed in international markets given the asset light nature of supply business along with annual adjustments, section 7.3.4.2;
- Recovery loss based on yearly targets for each year for the control period along with mechanism for revision in yearly targets due to change in sales mix, annual adjustments due to variation in amounts billed to consumers and floor and cap mechanism, section 7.3.4.3;



Page 16 of 45

ما والمنظور المحمر بالصاري الماري

- Working capital recovery mechanism along with quarterly indexation for changes in KIBOR and annual adjustment for working capital requirements, section 7.3.4.4;
- Mechanism for adjustment of cost of open access, cross subsidy, keeping in view the opening of the markets, section 7.4;
- Annual revision and filing of tariff table for reference setting and mechanism for Monthly, Quarterly and Annual tariff adjustments to ensure prudent recovery of costs, section 7.3, 7.5 and 7.6;
- Determination of category-wise sales mix and determined tariff, section 7.6.2;
- Terms and conditions of Tariff (for supply of power specific to each consumer category) as enclosed in **Annexure N**

7.3. Tariff Mechanism & timing of adjustments

This section explains in detail the tariff mechanism of the proposed tariff for Supply business to ensure cost reflective tariffs including component wise indexation and adjustments to ensure that the prudent costs of the Supply business are adequately recovered.

The below table summarizes the adjustments required along with the related timing of filing of adjustments:

| Component | Timing for filing of adjustments |
|--|---|
| Mechanism for setting up annual references for Cost of power (KE plants as well as external sources), transmission and distribution costs which are pass through in nature for supply tariff and its monthly and quarterly adjustments | References for FY 2024 submitted with the instant petition; Variation based on actual/indexed costs compared with references to be covered via monthly and quarterly adjustment mechanism explained in section 7.3.1.; and Prior to close of a financial year, revised references along with updated tariff table will be filed which will be applicable for next financial year as explained in section 7.3.1. |
| Recovery of O&M expenses for supply business with annual adjustment of CPI | O&M requirement for control period submitted with the instant petition at reference CPI; Update of O&M requirement for next year with updated CPI to be filed with annual reference setting request prior to the close of financial year as explained in section 7.3.4.1. |
| Retail margin for supply business as allowed in international markets given the asset light nature of supply business along with annual adjustments | Standard formula for determining retail margin submitted with the instant petition along with projected requirement for FY 2024; Projected Retail margin for next year with updated references will be filed with annual reference setting request prior to the close of financial year as explained in section 7.3.4.2; and Adjustment for over / under recovery pertaining to each year due to actualization of references in standard formula, to be filed at the end of September for the year ended in June as explained in section 7.3.4.2. |



| Component | Timing for filing of adjustments |
|---|---|
| Recovery loss based on yearly targets for each year for the control period along with annual adjustment | Recovery loss targets for the control period and projected requirement as per standard formula for FY 2024 submitted with the instant petition; Recovery loss projected amount for next year will be provided, based on allowed recovery loss target, with updated references be filed with annual reference setting request prior to the close of financial year as explained in section 7.3.4.3; and Adjustment for over / under recovery pertaining to each year due to actualization of references and revision in recovery loss targets based on actual sales mix, to be filed at the end of September for the year ended in June as explained in section 7.3.4.3. |
| Working capital recovery mechanism along with quarterly adjustment for changes in KIBOR and working capital requirements | Standard formula for setting working capital requirement submitted with the instant petition along with projection for FY 2024; Quarterly indexation of KIBOR at the start of each quarter; Projected working capital requirement for next year, with updated references, will be filed with annual reference setting request prior to the close of a financial year as explained in section 7.3.4.4; and Adjustment for over / under recovery pertaining to each year due to actualization of references in standard formula, to be filed at the end of September for the year ended in June as explained in section 7.3.4.4. |
| Mechanism for adjustment of cost of open access, cross subsidy, keeping in view the opening of the markets | • Adjustment for recovery of charges from BPC consumers will be done as part of quarterly adjustment as explained in section 7.4.1 . |
| Annual recovery adjustment for over / under recovery | • Adjustment for over / under recovery pertaining to each year to be filed at the end of September for the year ended as given in section 7.6. |
| Annual revision and filing of tariff table and category wise rates due to above mentioned adjustments (where applicable) for next year | Tariff table applicable for FY 24 filed with the instant petition; and Revised tariff table for next year due to above revisions to be filed prior to close of Financial Year |

The above mentioned updated references to be filed in prior to close of Financial Year as per the format given in **Annexure M.** Furthermore, adjustments for over / under recovery pertaining to each year as summarized in above table to be filed as per the format given in **Annexure I.**

Tariff break up is explained in detail in subsequent sections along with KE's proposed indexation mechanism for each tariff component.

7.3.1. Cost of Power

. . . .

Cost of Power will account for cost of KE's Generation plants as well as the cost of power purchased from external sources such as IPPs and National Grid. Cost of Power generally includes Energy Purchase Price, Capacity Purchase Price and other pass through items based



Page 18 of 45

on units purchased and available capacity (based on nature of tariff of respective sources), tariffs approved by NEPRA and Agreements with external sources.

Further, KE requests that in case of imposition of any stamp duty/taxes on purchase of Power / Furnace oil / Gas / RLNG / HSD etc. payable to Federal or Provincial Government, which is not of a pass through nature like input sales tax or claimable nature like withholding income tax, shall also be considered as pass through in tariff to enable KE recovery of prudent cost. Accordingly, stamp duty/taxes shall be considered as part of the power purchase/ furnace oil / Gas/ RLNG / HSD cost.

Net Metering

At present, KE purchases the following from the net metering consumers in accordance with NEPRA (Alternative and Renewable Energy) Distributed Generation and Net Metering Regulations, 2015:

- i. Units / power exported by consumer, above the units consumed in a month, which are carried forward to next period for adjustment against future consumption till the end of the quarter. These are required to be purchased at the applicable tariff rate and are currently not included in the sent out used for tariff variations determination; and
- ii. Excess units / power at the end of quarter. These are purchased at notified National Average Power Purchase Price and are currently included in the sent out used for tariff variations determination.

In order to align the proposed MYT with actual power purchases, KE request to also include the surplus power purchased at applicable tariff rate from net metering consumers, as per (i) above, in total sent out and the related power purchase cost be also included as power purchase cost.

Power Acquisition Program

KE's demand and sentout growth assumptions have been explained in petition for Distribution business. Further, KE vide letter dated March 20, 2023 also submitted its Power Acquisition Program (PAP) and public hearing on KE's PAP was held on October 19, 2023. KE's PAP includes details of planned capacity additions to serve the growing power demand and how these will be utilized to serve the projected yearly sentout.

Reference for FY 2024

For the purpose of reference year, Power Purchase Price has been forecasted based on:

- Sent outs calculated on projected growth in base demand;
- Generation / power purchase mix actualized till September 2023 and remaining estimated considering current sources based on EMO;
- Tariffs for KE's Generation plants as requested in Generation Tariff petition applicable for FY 2024 with the adjustments for requested degradation factor and part load adjustments;
- Tariffs for external power purchase as per respective determinations / Agreements;
- EPP and CPP have been indexed with below fuel prices / macro-economic factors

Macro-economic factors

 PKR / USD Exchange Rate of PKR 287.1/USD (June 30, 2023) as per National Bank of Pakistan



- Reference Pakistan CPI of 227.96 (May 2023) as per Pakistan Bureau of Statistics (PBS)

Fuel Prices

Fuel prices for the months July to September have been actualised for tariff computation purposes and prices of September 2023 have been kept constant for the remainder of the year

- RLNG SSGC PKR 3,993 / mmbtu (September 2023)
- RLNG PLL PKR 3,326 / mmbtu (September 2023)
- Indigenous Natural Gas PKR 1,050 / mmbtu (September 2023)
- HSD PKR 234 / litre; or PKR 6,415 / mmbtu (September 2023)
- Furnace oil PKR 161,134 / mton PKR; or 3,955 / mmbtu (September 2023)

Based on expected sent out units for FY 2024, estimated generation mix, tariffs requested for KE plants for FY 2024 onwards and tariffs determined / agreements entered into for external sources, reference Cost of Power comes out as **PKR 502,709 million** translating into **PKR 26.94** / **kWh** on per Units served. With requested Distribution losses, Power Purchase price per unit billed comes out to **PKR 31.41** / **kWh**.

For detailed working, please refer Annexure C – Cost of Power FY 2024.

Monthly / quarterly variation adjustment mechanism

The above reference costs will be adjusted based on actual fuel and power purchase mix, capacity charges and actual fuel prices based on the monthly and quarterly adjustment mechanism including any costs relating to imbalances, under the proposed mechanism of new markets, which shall be settled at the marginal price of the system or any other mechanism approved by NEPRA as explained in **section 7.4.1**.

Revised references for next year

The cost of power purchase will be indexed based on revised references and the variation for the same will be requested as per **Annexure J.** Along with this, updated tariff table will also be filed applicable for the next year.

7.3.2. Transmission Charges

Transmission charges shall be passed through on the basis of Units served and Tariff approved by NEPRA for Transmission business.

For the purpose of reference tariff, estimated Units Served for FY 2024 are **18,660 GWh** and transmission charges amount to **PKR 55,738 million** based on base tariff for Transmission of **PKR 2.99** / **kWh** as requested in KE's Transmission petition FY 2024 – FY 2030. The same will be adjusted based on mechanism proposed in KE's Transmission petition.

7.3.3. Distribution Charges

Distribution charges shall be passed through on the basis of Units billed and Tariff approved by NEPRA.

For the purpose of reference tariff, estimated Units billed for FY 2024 are 16,004 GWh and distribution charges amount to PKR 61,385 million based on base tariff for Distribution of PKR 3.84 / kWh as requested in KE's Distribution petition FY 2024 – FY 2030. The same will be adjusted based on mechanism proposed in KE's Distribution petition.



Page 20 of 45

.

7.3.4. Supply Business Tariff

7.3.4.1. O&M Expenses

O&M cost consist of costs related to salaries, employee benefits and other General & Admin expenses that are necessary for smooth operation of the supply business and to ensure safe and reliable supply of electric power to end consumers.

Reference O&M requirement for control period

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 4,761 million**. KE requests NEPRA to index this amount for onward years with actual CPI against the reference **CPI of 227.96** as of May 2023 alongwith incorporating projected growth in units billed to cater for the increase in consumer base.

It is pertinent to highlight that KE has planned extensive 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 – FY 2030. However, KE has not requested for additional O&M beyond CPI and projected growth and will target to cover this gap through bringing efficiency wherever possible. Therefore, KE has requested for O&M 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 increase in consumer base.

O&M cost for FY 2023 i.e. PKR 4,761 million after indexation to May 2023 CPI and incorporation of projected growth in units billed for FY 2024, translates to PKR 6,758 million. This amount has been translated into PKR 0.4223 / kWh based on projected units billed for FY 2024.

Projected O&M revenue requirement for the control period is given below:

| Description | FY 24 | FY 25 | FY 26 | FY 27 | FY 28 | FY 29 | FY-30. |
|------------------------------|-------|-------|-------|-------|-------|-------|--------|
| O&M Revenue requirement – | 6,758 | 7,098 | 7,362 | 7,571 | 7,727 | 7,876 | 8,009 |
| PKR Mn* | | | | | | | |

*based on reference CPI of May 23 along with projected growth in units billed.

KE would like to highlight that the above O&M includes items of other expense and other income excluding the items which are either to be actualised or excluded from tariff working. Please refer to section 7.6.5. Furthermore, for details of actual O&M please refer Annexure P.

Revised references for next year

The above O&M revenue requirement projections (FY 25 and onwards) are based on reference CPI of May 2023 which will be indexed with actual CPI for the month of May for onward years at the time of filing of Annual Adjustments as summarized in **section 7.3**.

For illustrative purposes, the amount used to compute revenue requirement for FY 25 (i.e **PKR 7,098 million**) will be indexed with CPI of May 2024 at the end of FY 24 as per Annual O&M indexation mechanism given below:

| O&M(Rev) | = O&M(Ref) x CPI(Rev)/CPI(Ref) |
|----------------------|--|
| Where; | |
| O&M(Rev) | = Revised O&M amount for respective year |
| O&M _(Ref) | = Reference O&M amount for respective year |
| CPI(Ref) | = Reference CPI of 227.96 (as of May 2023) |
| CPI(Rev) | = Revised CPI notified by Pakistan Bureau of Statistics for the month of May |
| | each year. |

Page 21 of 45

7.3.4.2. Retail Margin

and the state of t

Tariff needs to include an appropriate retail margin in lieu of the activities to be carried out by Supply business and risks borne having no asset base and being a separate licensed activity. In Pakistan Power Sector, the Supply business faces the most extreme risks and operational circumstances and accordingly, it is imperative to provide a fair compensation against the high risk of doing business, to ensure the commercial viability of the Supply business.

International precedents suggest that regulators in other countries also allow retail margin in tariff on top of retail supply cost to compensate systematic and nonsystematic risks in the retail / supply business. Examples from international markets where regulators have allowed retail margin is enclosed in **Annexure G**.

Moreover, without including retail margin, there would be no EBIT for supply business, which is contrary to regulatory norm, where every licensee is to be allowed a reasonable EBIT corresponding to the risks assumed. Hence it is requested that KE shall be allowed a retail margin component as a part of its supply tariff. The requested retail margin will compensate KE for the retail / supply risks and investments and initiatives undertaken that will enable the Company to improve service quality for its growing consumer base.

Reference for FY 2024

KE has calculated retail margin as per below formula:

| Legend | Retail Margin |
|---------------|--|
| A | Cost of Power – EPP |
| В | Cost of Power – CPP |
| С | Transmission revenue requirement |
| D | Distribution revenue requirement |
| Ē | Supply O&M |
| F = Sum (A:E) | Total Revenue excluding retail margin, recovery loss and working capital |
| G = F x 1.5% | Retail Margin |

KE requests the Authority to allow a retail margin of **1.5%** that shall be applied on total revenue requirement excluding retail margin, recovery loss and working capital which comes out to **PKR 9,399 million** translating into **PKR 0.5873** / **kWh**. Calculations are given in **Annexure E**.

Revised references for next year

The projected retail margin requirement for the next year based on projected references will be filed with annual reference setting request prior to the close of financial year as per the timeline given in **section 7.3** above.

Annual Adjustment mechanism

After each year end, the retail margin shall be actualized based on actualized references and any impact of under/over recovery shall be allowed in next year.

Illustration for revised calculation with updated balances for retail margin applicable for next year is given in **Annexure I.**



Page 22 of 45

7.3.4.3. Recovery Loss

Recovery losses are genuine and legitimate cost of power supply businesses and should be taken into account while setting cost reflective tariffs.

This has also been endorsed by National Electricity Policy 2021 promulgated by GoP which clearly states in subsection 5.3.2:

"So as to ensure and put in place efficient tariff structures for sufficient liquidity in the power market, the target for losses and collections shall be revisited by the Regulator, in order to align the same with the current market realities. These targets shall be reflected in the determinations of the Regulator. Moreover, timely recovery of bad debt that is prudent shall be allowed by the Regulator with the incorporation of facilitative provisions in the regulatory framework as per industry practices and procedures".

KE believes that the most viable regulatory measure is a recovery gap allowance approach, encouraging improvement over time. In the absence of this approach, tariff is not cost reflective and may result in solvency issues for the Supply business. Further, it is imperative to note that, unlike other XWDISCOs, KE is not financially supported by the government, therefore, non-provision of recovery gap allowance, which is a genuine cost of business reflected in the form of Provision for doubtful debts in the financial statements, would significantly impact its ability to meet its service obligations.

To improve the recovery of outstanding dues, KE follows a disconnection policy and regular reviews of receivable balances with rigorous follow ups through different means including SMS reminders, follow-up calls or disconnections.

Additionally, to further streamline the recovery process and improve recovery ratio, KE has performed / used the following procedures / basis:

- Disconnection notices served through specific text on the electricity bill of defaulters;
- Disconnections (multiple attempts where deemed necessary);
- Special recovery teams were constituted for conducting door-to-door recovery drives;
- Efforts through external recovery officers and specialized collection agencies for recovery of the amounts;
- Targeted recovery efforts were launched in coordination with law enforcement agencies including Operation Burq, Operation Ujala etc.;
- Easy Payment Plans such as Current Bill ka Wada (FY2019), Qadam Barhao Scheme (FY 2020), Azaadi Scheme (FY2021), Ehad Scheme (FY 2022) and HumQadam (FY 2023) offered to defaulters to enable them to clear their outstanding dues and continue making regular payments of current bills;
- Targeted media campaigns; and
- Introduction of settlement schemes to facilitate payments from consumers and provision of easy monthly installments.

With targeted recovery initiatives and introduction of various recovery schemes for collections from non-paying consumers as listed above, KE's recovery ratio has improved over the current control period from **88.5**% in FY 2016 to **92.76**% in FY 2023.



Page 23 of 45

ورا المرتقة المعنى معالم والمرتق المرتق المحالي والمحالية المحالية المحالية والمحالية والمحالية المحالية والمحا

| Category | FY 2016 | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 | Cumula tive Improv ement |
|--|------------|------------|------------|------------|------------|---------|---------|---------|-----------------------------------|
| Residential, Commercial and others | 83.30% | 83.20% | 86.80% | 89.50% | 91.30% | 91.00% | 91.90% | 87.24% | 3.94% |
| Industry | 99.40% | 99.70% | 100.00% | 100.30% | 94.90% | 100.30% | 100.30% | 99.94% | 0.54% |
| PSC | 80.80% | 98.40% | 89.60% | 88.00% | 88.20% | 98.10% | 110.40% | 100.82% | 20.02% |
| Overall Recovery Ratio (%) | 88.50% | 90.60% | 91.00% | 92.60% | 92.10% | 94.90% | 96.70% | 92.76% | 4.26% |

Strong & Targeted Recovery Improvement Initiatives to Continue in the Next Control Period

In view of experience gained from implementation of initiatives during the current control period, KE has developed a comprehensive plan which addresses reduction in network losses and increase in collection efficiency through investments in technology and improvement of processes. This includes rolling-out of the following major projects:

- Robo-calls program to proactively target forgetful customers as reminder for payment;
- Area-specific camps (internal / agency sponsored) with provision of easy instalments and one-time dues settlement;
- Banking facilities for 1.2 Mn+ consumers in outskirts and empowering Recovery officers to collect KE bill payment at doorstep;
- Multiple ePay Gateways, Acquiring Solution for Website & App, QR Code, POS Machines and RTGS especially for corporate clients and CBM customers;
- Deploy Recovery Officers to door-knock recent defaulting consumers as first line of on premises recovery efforts, BPO Model to capture chronic defaulting consumers and enhance disconnection efforts, success-based payment mechanism to debt collection agencies;
- Area-wise schemes to recover overdue receivable from chronic defaulting consumers and general recovery schemes to capture forgetful payers and sustain their current billing along with collaboration with Welfare Organizations for e.g., Saylani Welfare, to support chronic defaulters settle their dues;
- Onboarding e-Payment partners, Digital Banking Partners & Incentivizing Customers to promote digital payment (e.g.: Cashback, vouchers, points);
- Real Time Payment System for 3.6 Mn customers contributing towards improved customers' experience and operational efficiency across the value chain;
- Consumer loyalty program to motivate and incentivize regular bill payments to ensure timely bill payments before their due date; and
- KYC segmentation program for efficient dunning management and targeted recovery operations. This program aims to use data analytics to augment planning of recovery efforts based on consumer profile.

Since KE is not financially supported by the GoP, unlike XWDISCOs, and non-provision of recovery gap allowance will significantly impact KE's ability to achieve future targets and execute its investments plans, therefore, keeping in view the ground realities and socioeconomic environment in which KE operates, KE requests the Authority that the tariff should



Page 24 of 45

be based on the allowed recovery loss trajectory and KE should be compensated for legitimate costs related to recovery loss.

Further, below is the comparison of historic improvement in AT&C loss of KE compared with XWDISCOs.



The above graph demonstrates that while other DISCOs are struggling to improve their AT&C losses, KE has made substantial improvement in this regard. However, as losses go down, every incremental percent reduction becomes significantly more capital intensive and difficult to achieve. Therefore, in view of the environment in which KE operates and the challenges that it faces, requests NEPRA to have a realistic assessment of the benchmarks to be set for KE.

In view thereof, KE, for the purpose of calculation of base tariff, requests that Recovery loss component shall be included based on amounts actually billed to consumers (including taxes paid on billing basis) and year on year recovery loss % for the next control period of FY 2024 to FY 2030.

Recovery loss % being requested below notionally assumes 100% recovery from Public Sector Consumers. Although there are delays in recovery from PSC consumers coupled with delays in release of Tariff Differential Subsidy (TDS) by the Government, the same is not being requested as it is separately being taken up with Government entities and departments. In case, the Agreements with Government to streamline payment modalities do not materialize, KE reserves the right to request NEPRA for adequate compensation due to nonpayment/delay in payments by Government entities.

Further, KE would also like to highlight that the recovery ratio % for the proposed control period as given below has been projected assuming macroeconomic factors under a stable economy and a projected sales mix.

Recovery loss target for each year

KE proposes following recovery loss % targets to be taken as measure of KE's performance for the proposed control period FY 2024 – FY 2030:

| Category | FY 2024 S | FY 2025 | FY 2026 | FY 2027. | FY 2028 | FY 2029 | FY 2030 |
|--|-----------|---------|---------|----------|---------|---------|---------|
| Residential, Commercial and others | 87.25% | 88.12% | 88.87% | 89.74% | 90.59% | 91.40% | 92.22% |
| Industry | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% |
| PSC | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% |
| Overall Recovery Ratio (%) | 92.76% | 93.20% | 93.64% | 94.12% | 94.58% | 95.03% | 95.48% |
| Recovery loss % | 7.24% | 6.80% | 6.36% | 5.88% | 5.42% | 4.97% | 4.52% |



| Description | FY 2024 | FY 2025 | SEY 2026 | FY 2027 i | FY 2028 | FY 2029 | FY 2030 |
|--|---------|---------|----------|-----------|---------|---------|---------|
| Residential, Commercial and others | 57% | 57% | 57% | 57% | 58% | 58% | 58% |
| Industry | 36% | 36% | 37% | 37% | 36% | 36% | 36% |
| PSC | 7% | 7% | 6% | 6% | 6% | 6% | 6% |
| Total | 100% | 100% | 100% | 100% | 100% | 100% | 100% |

The above recovery loss percentages have been projected based on the sales mix given below:

Recovery loss target revision Mechanism due to change in sales mix

Current projected trajectory of Recovery loss as given above is based on current consumer mix and growth assumed therein. In case, if the sales mix changes due to any reason including lower industrial sales or moving out of BPCs, the overall recovery loss will be impacted. Since the same is uncontrollable for KE, therefore, any gain or loss arising due to change in sales mix shall be adjusted in tariff to ensure recovery of prudent cost by KE.

In this regard and as illustrated below, proposed mechanism for revision of yearly Recovery losses targets is given, which will be calculated annually as part of annual adjustments:

| Description | Legend | Unit 1 | Amount Billed | Amount | Recovery | Comments | |
|---|------------------|--------|------------------|---------|--------------|---|--|
| | | | i | ii | iii = ii / i | | |
| Allowed recovery loss | | | | | | | |
| Residential, Commercial and others | A | PKR Mn | 406,116 | 356,812 | 87.25% | Projected revenue on allowed recovery loss target | |
| Industry | В | PKR Mn | 259,414 | 261,223 | 100.00% | | |
| PSC | С | PKR Mn | 49,316 | 49,659 | 100.00% | | |
| Total | D = A + B + C | PKR Mn | . 714,846 | 667,695 | 7.24% | · . | |
| Allowed recovery loss – updated based on actual sales mix | | | | | | | |
| Residential, Commercial and others | E | PKR Mn | 492,645 | 429,839 | 87.25% | Actual revenue on allowed | |
| Industry | F | PKR Mn | 189,479 | 189,479 | 100.00% | recovery loss target | |
| PSC | G | PKR Mn | 75,792 | 75,792 | 100.00% | | |
| Total | H = E + F + G | PKR Mn | 757,916 | 695,110 | 8.29% | Revised Recovery Loss Target for the year based on actual sales mix | |

Reference for FY 2024

na pasa ang papanana pala

Considering the reference revenue requirement and Recovery loss target for FY 2024, amount of recovery loss comes to **PKR 46,063 million** translating into **PKR 2.8783/ kWh** for the year FY 2024, which would be adjusted based on actual consumer revenue including revenue from wheeling consumers and revised recovery loss targets for each year.

For calculation of recovery loss reference component, please refer Annexure E.



Page 26 of 45

Revised references for next year

Projected recovery loss requirement will be provided for next year based on projected references with annual reference setting request prior to the close of financial year as per the timeline given in section 7.3.

Annual Adjustment mechanism

Cap and floor mechanism

It is important to highlight that current worsening economic situation due to drastic change in macroeconomic factors such as hyperinflation (inflation above 20%), economic slowdown (GDP growth below 2%), abnormal variations in exchange rates (currency depreciation higher than 7-8%), political instability / unrest and increase in tariff and imposition of additional taxes that results in consumer tariff increase beyond CPI), significantly impacts the propensity of the consumers to pay. Similarly, force majeure situations such as COVID-19 also impact the operational performance significantly.

All these external factors/events (referred to as extreme uncontrollable events) result in unavoidable operational and financial implications beyond absolute control of KE which makes the Supply business segment unviable. Hence, to ensure viability of supply business and to restrict the risk exposure (in case of extreme uncontrollable events) and windfall gain, Cap and Floor mechanism is being proposed.

The floor is the maximum amount of recovery loss that KE should be exposed to, given the extreme impact of uncontrollable factor. The floor is proposed to be equivalent to retail margin being petitioned i.e. 1.5% from the recovery loss target requested for that year. For example, the floor for FY 24 would be 8.7%. In case actual recovery loss is greater than the floor, the difference between actual recovery loss and the floor would be allowed as an unrecovered cost.

The cap is the maximum amount of recovery gain that KE should be allowed to retain in case of favorable macro-economic factors. The cap is proposed to be the same as retail margin i.e. 1.5% from the recovery loss target requested for that year. For example, the cap for FY 24 would be 5.7%. In case actual recovery loss is lower than the cap, the difference between actual recovery and the cap would be deducted as an over recovery of cost.

No adjustment would be required if actual recovery loss is between or equal to the floor and cap with the risk of gain / loss with KE.

Through this mechanism, it is proposed that the upside returns and downside risks of operating the Supply Business are managed whereby in case KE beats the recovery ratio target, the benefits are capped to the limit of 1.5% (equivalent to retail margin) denoted as return ceiling. Similarly, in case an unforeseen / external event hampers the recovery efficiency of KE, the downside risk is also limited up to 1.5% of the allowed recovery loss target for the relevant year denoted as risk floor.

Under / over recovery of recovery loss component due to actualization of references and abovementioned cap and floor adjustment, at each year end, for the year ended shall be calculated and included in Annual Adjustments as given in **Annexure I**.

7.3.4.4. Cost of Working Capital

Reference for FY 2024

For the supply business, KE is requesting cost of working capital based on the normal course of business operations based on current assets and liabilities as explained below.

It is important to note that while KE has to incur significant cost of working capital on outstanding amounts against government entities including TDS receivables, energy dues from Public Sector Consumers (PSCs), tax refunds etc., KE has currently not requested for



Page 27 of 45

4

N. M. K. S. M. Haylor M. Lawy

working capital on these amounts as these are separately being taken up with government entities as more fully explained in **section 7.3.4.4.1**.

Moreover, trade debts as at June 30, 2023 pertaining to customers other than PSC have been included as receivable in computation of working capital requirement. In this regard, it is submitted that within the MYT 2017-23, NEPRA allowed KE to claim actual write off of bad debts in lieu of recovery loss, subject to fulfilment of certain conditions and has also acknowledged the working capital requirements due to delay and/or non-payment of bills leading to cash flow issues. Accordingly, KE requests the Authority to allow KE to include claims of actual write off of bad debts for billing made till FY 2023, in the next control period based on criterion defined by NEPRA in the MYT 2017-23 and also consider the unrecovered amount for the MYT 2017-23 in this regard i.e. closing receivable amount (excluding PSC) at June 2023 as working capital requirement in the next tariff control period, which will be actualised at each year end.

In this regard, for the purpose of tariff calculation KE has accounted for following current assets and current liabilities in the calculation of cost of working capital:

Current Assets

Revenue Receivable

Revenue receivable is computed on 30 days of total revenue assuming outstanding amount against the consumers will be recovered in a period of 30 days.

Considering that revenue receivable has been taken for 30 days, working capital requirement shall also include any additional time taken for receivable of revenue due to time taken for Monthly / Quarterly tariff variations / notifications, including:

- Recovery of Monthly Fuel Cost Adjustment going beyond 30 days due to delay in determination, or any Government directive to defer FCA etc.
- Time taken for recovery of changes in cost of power, Transmission and Distribution charges and other adjustments through quarterly tariff variations beyond 30 days.

This includes opening receivables in lieu of unrecovered amount of write off claims pertaining to MYT 2017-23 as explained above; and

Cash and Bank Balance

Considering anticipated need of cash and bank balance, it has been taken at onesixth of O&M expenses.

Current Liabilities

• Energy Purchase Price (EPP) payables

Supply business will be responsible for purchasing of power and accordingly, will have to pay the power suppliers. In this regard, Energy Purchase Price (EPP) payables shall be calculated based on 30 days of total EPP for the year, assuming KE will pay the amount to power supplier in a 30-day credit period in line with assumptions taken in Generation tariff petitions.

Capacity Purchase Price (CPP) payables

In addition to energy cost, supply business will have to pay for the capacity cost to the power suppliers based on available capacity. Power sources have different credit days for capacity payment, including advance payment arrangements with



Page 28 of 45

some IPPs. For this purpose, Capacity Purchase Price (CPP) payables shall be calculated using weighted average credit days of total CPP for the year in line with assumptions taken in Generation tariff petitions.

Payable to Transmission network

Transmission network payables shall be based on 30 days of total transmission charges in line with assumptions taken in Transmission tariff petition.

Payable to Distribution network

Distribution payables shall be based on 30 days of total distribution charges in line with assumption taken in Distribution tariff petition.

• Deposits in respect of new connections / consumer works

Deposits in respect of new connections / consumer works shall be included in current liabilities based on actual from financial statements.

• Security Deposits from consumers

Security deposit from consumers shall be included in current liabilities based on actual from financial statements.

Further, here KE would also like to submit that a mechanism for regular update of security deposit in line with the consumption pattern of the consumer and the credit period allowed under CSM prior to which the supply cannot be disconnected be determined by NEPRA. This would provide enhanced risk coverage and improve the financial viability of power supply companies as under the existing mechanism for calculation of security deposit, power utilities are not able to fully cover the risk of default from consumers.

Considering the inputs for cost of working capital explained above, KE has forecasted the working capital cost which comes out to be **PKR 33,119 million** based on projected revenue requirement and balances, translating into **PKR 2.0695 / kWh** for the year FY 2024, which would be indexed quarterly using 3 months KIBOR + 2% spread along with annual adjustment for changes in working capital requirements till FY 2030.

| Legend | Working Capital Components | Annual Adjustments |
|---------------|---|--|
| A | Revenue receivable (based on 30 days), any additional impact due to time taken for tariff variation. | Revenue to be actualized (as per given formula) to account for variation between actual & projected costs |
| B | Closing receivable FY 23 | To be actualised each year end based on recoveries during the year |
| С | Cash & bank (1/6 th of O&M expense) | |
| D = A + B + C | Current Assets | |
| Е | Energy Purchase Price (EPP) payables (based on 30 credit period days) | |
| F | Capacity Purchase Price (CPP) payables (based on weighted average credit period days) | Costs to be actualized (as per given formula) to account for |
| G | Payable to transmission network (based on 30 credit period days) | variation between actual & projected costs |
| H | Payable to distribution network (based on 30 credit period days) | |

Calculation of projected working capital as per below formula is given in Annexure F:



Page 29 of 45

| Legend | Working Capital Components | Annual Adjustments | |
|------------------|---|---|--|
| I=Sum (E:H) | Total Payables | | |
| J | Service connection deposits | To be actualized as per Financial Statements | |
| K | Long term deposits | | |
| L = I + J + K | Total current liabilities | | |
| M = D - L | Net Working capital requirement | | |
| N | Cost of debt (3 month KIBOR + short term spread i.e., 2%) | | |
| $O = M \times N$ | Cost of working capital | | |
| Р | Projected Units billed | | |
| Q = O / P | Working capital per unit billed | | |

الورا بالمحاجز الجاجر مرادك والأنار

In addition, working capital cost shall also be allowed on the systematic lag in recovery of FCA. quarterly tariff adjustments and annual adjustment for over / under recovery (excluding working capital adjustment) in line with Strategic Directive 77 of the Notified National Electricity Plan 2023-27.

Indexation for next quarter

¢

The working capital requirement shall be indexed at the start of each quarter using the below formula:

| W.C.(Rev) | | W.C _{1(Ref)} x CoB _(Rev) // CoB _(Ref) |
|-----------------------|---|---|
| Where; | _ | |
| W.C. _(Rev) | H | 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 at 30 th June 2023 |
| KIBOR(Rev) | = | The revised 3 month KIBOR as published by State Bank of Pakistan available at the start of each quarter i.e., 1 st July, 1 st October, 1 st January, and April 1 st |
| KIBOR(Ref) | = | The reference 3 month KIBOR of 22.91% as of 30 th June 2023 |

Revised references for next year

The projected working capital requirement for the next year based on projected references including variables mentioned in the above table along with updated KIBOR will be filed with annual reference setting request prior to the close of financial year as per the timeline given in section 7.3.

Annual Adjustment mechanism

Working capital component shall be actualized after each year based on the standard credit periods as per above formulas and the impact of under recovery / over recovery shall be adjusted in the subsequent quarter as prior period adjustment.



Page 30 of 45

Illustration for revision of working capital is given in Annexure I.

Further, it is submitted that in addition to the above, in case of any additional working capital requirement which may arise as a result of any changes to the regulatory framework including requirement of Security Cover under the Market Commercial Code once CTBCM is implemented, KE would request NEPRA to adjust the reference working capital requirement accordingly.

7.3.4.4.1. Receivables against Government entities

KE would like to highlight that owing to delayed payments by government entities, KE has to incur significant working capital cost. In this regard, KE, at various forums, including the Honorable Courts of Pakistan has raised the issue of non-payment of energy dues by Government and related entities and is also in continuous engagement with relevant departments in this regard, in addition to continuous engagement with GoP and Government of Sindh (GoS) on release of outstanding dues. However, despite these efforts, there have been delays from various Government departments and entities, which have seriously constrained and continue to strain the working capital position of Company, and hence, KE should be compensated for the same accordingly.

Despite above issues, KE is not requesting cost of working capital pertaining to Government entities under the proposed MYT for Supply considering that these are being separately taken up with Government.

In this regard, KE had earlier requested NEPRA to allow to include a mechanism in agreements with GoS entities to enable KE to charge Late Payment Surcharge on outstanding energy dues linked with KIBOR plus a spread agreed among the parties. However, NEPRA did not allow the same and directed to charge LPS as per Tariff terms which is one time charge of 10% that does not fully compensate for the actual cost incurred due to delays / non-payment by the consumers.

Considering the situation of outstanding receivables from Government entities and departments, KE would humbly request NEPRA to re-consider KE's request and allow KE to charge LPS linked with KIBOR and spread on energy dues outstanding on Government entities, so that KE can cover its working capital cost from that LPS.

Here, it is also highlighted that the matter of delayed / non-payment of TDS to KE is being pursued separately by KE with GoP and a draft TDS Agreement has been initialed between KE and the GoP to streamline the payment of KE's TDS claims, which also includes a mechanism for mark-up on delayed payments of TDS by GoP to KE. KE remains in continuous engagements with GoP for execution of the TDS Agreement, however, if the TDS Agreement does not materialize, KE would request NEPRA to allow the same in tariff as it is a legitimate cost of business.

7.4. Costs and adjustments relating to Open Market

The CTBCM model envisages a shift from the existing single buyer regime to a competitive wholesale electricity market and introduces the concept of 'eligibility' used to designate the consumers which are granted the choice to opt their supplier (other than DISCOs and KE) by entering into bilateral contracts. As per CTBCM / existing regulations, currently BPCs are consumers eligible to opt for supplier of their choice. This framework implies that after the introduction of the CTBCM model, two parallel markets will co-exist, namely:

- (i) a competitive market for eligible consumers, and
- (ii) a regulated market for consumers who are not eligible to enter into bilateral contracts until the time the eligibility threshold is modified to include such consumers as well as eligible consumers of competitive market whose competitive supplier defaults in its obligation,



Further, in view of opening up of the market which would be governed through the CTBCM model, NEPRA has promulgated the NEPRA Licensing (Distribution) Regulations, 2022 and NEPRA Licensing (Electric Power Supplier) Regulations, 2022 which further bifurcates electric power suppliers into:

- Supplier of Last Resort (existing DISCOs and KE) responsible for catering to the demand of the regulated consumers or eligible consumers who entered into a bilateral contract, however, their Competitive Supplier failed to discharge its obligations towards such eligible consumers and they fall back on DISCOs. Suppliers of Last Resort will charge GoP's notified tariff.
- Competitive Suppliers allowed to enter into bilateral contracts with eligible consumers (BPC under the current regulatory framework) at bilaterally negotiated rates.

Under the competitive regime, BPCs will be able to procure power directly through bilateral contracts at bilaterally negotiated rates along with wheeling charges for the respective Transmission and Distribution Companies.

Further, even though the market reforms for an efficient competitive electricity are underway. by GoP and NEPRA keeping in view the approved National Electricity Policy 2021 and CCoE approved principles for Competitive Wholesale Markets, there are some potential challenges which need to be addressed.

Hence, prior to implementation of open markets, it is important to take heed of the challenges such as network development, cross subsidization, and recovery of open access cost. Collaborative efforts must be made in developing a mechanism to cope up with the same. Such mechanism will lead to a sustainable transition towards open markets in line with GoP and NEPRA objectives of providing reliable supply of power at least possible cost while also providing for an efficient and competitive electricity market for the future.

Under the CTBCM model, the eligible consumers will be allowed to purchase electricity directly from the open market and hence, have an impact on regulated consumers in terms of cost recovery. Accordingly, following are the key items which will have to be introduced for the function of envisaged market and to overcome the challenges after the implementation of the CTBCM model.

7.4.1. Wheeling charges

The eligible consumers will pay wheeling charges through Competitive suppliers once they enter into bilateral contracts for wheeling of power from Generator to their premises. Wheeling charges shall comprise of, including but not limited to, network charges, cross-subsidy, cost of open access, as well as any other charges determined by NEPRA that may arise due to advent of open access and market liberalization.

7.4.1.1. Network charges

Network charges will be based on Tariff requested for Transmission and Distribution segments at relevant loss levels and will be updated based on the indexations defined therein.

These charges shall be paid by Competitive supplier to Transmission and Distribution network for network services. For the purpose of adjustments of Units sent out / served for Transmission and Distribution, these units shall also be included.

7.4.1.2. Cross-Subsidy / Surcharge

Currently different groups of consumers (high consumption residential, commercial, and industrial) cross subsidize low-consumption domestic consumers and agriculture consumers.

CTBCM model will incentivize eligible consumers (currently BPCs as per the approved



Page 32 of 45

regulatory framework) to enter into bilateral contracts and procure power directly from the market at bilaterally negotiated rates and hence in the absence of recovery of cross-subsidy surcharge from such eligible consumers opting for open markets, there could be significant financial implications on regulated consumers. Here, it is important to note that cross subsidy is a social obligation imposed on DISCOs and KE as per GoP policy and therefore, has no nexus with the efficiency or performance of DISCOs or KE.

Considering the significant financial implications of cross-subsidy surcharge and resultant impact on a sustainable competitive electricity market, the National Electricity Policy 2021 and CCoE approved principles for Competitive Wholesale Markets propose uniform application of cross-subsidy surcharge and other grid charges to consumers of all suppliers in the market.

National Electricity Policy (5.5.2) (f)

Providing a level playing field to all market participants through uniform application of cross-subsidization and other grid charges to consumers of all suppliers

CCoE Approved Principles for establishing Competitive Wholesale Market (v)

Providing a level playing field to all market participants; it includes interalia, equal application of "cross subsidies & other grid charges" to all suppliers in the market; either DISCOs or Competitive Suppliers supplying power to consumers (Level playing field for all market participants in the market to compete)

The issue of cross-subsidization post advent of open markets has also been recognized in the **National Electricity Plan, Strategic Directive 87 which is reproduced hereunder:**

Open access charge shall be recovered from all consumers, opting for open access, through competitive suppliers till the currency of this NE-Plan or as amended by the Government, as per the following mechanism:

a) Grid charges, including use of transmission and distribution system charges, Market and system operator fee, cross subsidy charges, metering service charges etc., shall be applicable to all such consumers;

b) Cost arising on account of open access, comprising of capacity costs, shall be applicable to all such consumers.

Provided further, in case the Government decides to reduce the open access charges or any of its components for the consumers opting for open access, it shall provide the funding to bridge the differential costs. While taking any such decision, the Ministry of Finance shall hire a third-party consultant to evaluate and verify the impact of such change on the national exchequer and consumers of suppliers of last resort. The reduction or removal of such charges shall only be approved where fiscal space is available in the budget to support such reduction and consumers of suppliers of last resort are not burdened with these charges.

In view of the above, KE understands that a Uniform Cross Subsidy charge will be determined as directed in the National Electricity Policy 2021 & National Electricity Plan 2023-27 and would be recovered from BPCs opting for competitive markets.



7.4.1.3. **Open Access Cost**

Recovery of Open Access Cost from eligible consumers/BPCs opting for open market is necessary as the generation capacity for serving such eligible consumers/BPCs is already installed/committed and allowing eligible consumers / BPCs to procure power through bilateral contracts or directly from the market without any mechanism for recovery of generation capacity costs, would ultimately burden the regulated consumers.

Here, it is pertinent to highlight that the National Electricity Policy 2021 as well as CCoE approved principles for Competitive Markets also state that the regulator will provide for recovery of costs arising due to advent of competition, as decided by the Government.

National Electricity Policy (5.6.7)

The Regulator will provide for recovery of costs arising on account of distributed generation and open access in the consumer-end tariff, as decided by the Government. Further, the Government may announce, from time to time, various concessional packages to incentivize additional consumption to minimize such costs.

CCoE Approved Principles for establishing Competitive Wholesale Market (vi)

The Regulator should account for stranded fixed costs that arise due to advent of the competition. The Federal Government should decide whether such costs will be paid through Government subsidy or otherwise charged to consumers through regulatory process (Accounting for fixed costs that become stranded)

In view of the above, KE understands that cost of open access charge will be determined as directed in the National Electricity Policy 2021 and would be recovered from BPCs opting for competitive markets and reduced from revenue requirement of regulated consumers.

Moreover, as per the CTBCM design, any imbalances (i.e., energy drawn beyond the bilateral contract) are to be settled at the prevailing marginal price of the system for that particular hour. Accordingly, KE requests that upon implementation of CTBCM and proposed central dispatch, any imbalances relevant to demand of KE consumers (i.e., regulated consumers) or dispatch of generation in KE system to meet the demand of CPPA-G system, which shall be settled at the marginal price of the system or any other mechanism prescribed by NEPRA, be allowed as pass-through in tariff under the Cost of Power.

Monthly and Quarterly Tariff Variation Adjustment mechanism 7.5.

Base tariff for Supply consumers will include Cost of Power (EPP, CPP and others), Transmission and Distribution network charges and Supply tariff components as summarized in section 8.

Annual revision and filing of tariff table will be done prior to the end of fiscal year which will set the basis for reference for calculation of monthly and quarterly variations.

Monthly and quarterly variations to be recovered as follows:

Monthly Variation

Monthly Fuel Charge Adjustment - to account for changes in Fuel cost, on monthly basis as compared to Reference fuel cost i.e., projected fuel cost requirement of corresponding month (on units served)



Page 34 of 45

Quarterly Variations

These include Unrecovered costs as given below:

- Adjustment to recover / pass on actual Cost of Power (less fuel), Distribution, Transmission and Supply charges based on actual units billed for the month as compared to Reference cost i.e., projected Cost of Power, Distribution, Transmission and Supply charges of corresponding quarter;
- Impact of Distribution losses on FCA, not covered in Monthly FCA;
- Impact of Cost of open access & cross subsidy charge;
- Impact of other adjustments and pass through items such as Corporate tax, WPPF and WWF (to be claimed in the quarter in which payment made);
- Impact of annual adjustment of unrecovered cost pertaining to Transmission, Distribution and Supply business, to be computed on annual basis and claimed in Q1 of subsequent Fiscal year; and
- Impact of any amount of FCA not passed on to consumers as per NEPRA / GoP directives.
- Adjustment for recovery of costs from BPC consumers under open market including open access cost and cross subsidy.

Mechanisms and forms for these adjustments have been provided in detail in Annexure J.

7.6. Annual Adjustment Mechanism

In addition to the above monthly and quarterly variations, at the end of each year, KE shall also file Annual Adjustments pertaining to the following:

7.6.1. Actualization of tariff components

- Adjustment for over / under recovery of retail margin and recovery loss components due to actualization of revenue and revision in recovery loss target for each year as per Form 2.2 of Annexure I.
- Adjustment for over / under recovery due to actualization of working capital requirement based on standard credit period at each year end as per Form 2.1 of Annexure I.

7.6.2. Changes in sales mix

Category wise rates

Category wise rates proposed in the petition, is based on estimated sales mix. Considering the mix changes due to uncontrollable factors, KE would like to propose actualization of sales mix each year.

Further KE would also like to highlight that the consumer tariff is based on uniform tariff rates notified by Government of Pakistan (GoP) and the difference between consumer tariff and determined tariff is picked up as Tariff Differential Subsidy (TDS) by GoP. Further, the TDS claims are processed based on applicable notified tariff pertaining to the billing month. Whereas, KE is required to bill the consumers, notified tariff rates pertaining to the consumption period to which it relates regardless of the month in which it is being billed. As a result an (over) / under recovery may be created, which KE requests NEPRA to be allowed to be adjusted annually after the end of the year.

Accordingly, any difference in revenue as per average tariff and revenue as per category wise rates shall be calculated annually and adjusted in last quarter of each financial year.

Please refer Annexure L "Cost of Service study" for category wise rates.

Page 35 of 45
7.6.3. Adjustment for impact of actual vs allowed T&D losses

Considering T&D losses vary seasonally (refer **Annexure K** for historic trend), KE shall pass on costs to the consumers based on actual units billed during the year. Further, to ensure that there is no under or over recovery of prudent cost due to variation in actual T&D losses as compared to allowed T&D losses, KE has proposed a yearly adjustment mechanism at each year end to calculate whether Transmission / Distribution business exceeded the allowed adjusted losses or performed better.

In case Transmission and Distribution networks exceed their allowed losses, the cost of additional tariff shall not be passed on to consumers, rather deducted from total revenue requirement and shall be charged to Transmission / Distribution network in the last quarter of each year.

Moreover, if Transmission or Distribution functions beat the allowed adjusted losses, the tariff saved due to lower losses shall be passed on to consumers.

Illustration for functioning of this mechanism is included in Annexure J.

7.6.4. Adjustment for variation in units billed

Revenue requirement for the supply business shall be translated into per unit tariff based on projected units billed. KE is proposing actualization of units billed and adjustment of any under or over recovery due to variation in units billed after netting off with minimum billing recovery from consumers, as the same is based on multiple uncontrollable factors including economic growth, Government policies, incentive packages etc. It is also important to highlight that the variation in units billed due to difference between allowed and actual Transmission and Distribution losses will be separately calculated and adjusted in tariff as per mechanism explained in **section 7.6.3**.

KE shall submit details of under / over recovery after completion of a financial year as per **Annexure I**, and the impact of under / over recovery shall be adjusted in remaining part of next year as Prior year cost through **Annexure J**.

7.6.5. Adjustment for other income / other expenses

Component of other income and other expenses which are proposed to be pass through at actual in tariff as detailed in sections 7.8, 7.9 and sharing of other income as detailed in section 7.10 are to be adjusted annually through Annual adjustments summary in Annexure I.

7.7. Economic Merit Order

KE's Transmission function (being System Operator for KE's territory as per KE Transmission license) will be responsible for preparing and maintaining Economic Merit Order list for KE's power suppliers on the basis of which dispatch will be executed keeping in view technical considerations such as minimum loading of the respective plants including operations on simple cycle to fulfill demand in case the plant is ranked higher based on the Economic Merit Order.

Further, agreements with SSGC or alternate supplier (existing / future) might involve 'Take or Pay' arrangements, for which KE will need to ensure minimum off take for running the plants. For that matter, the respective plants will be considered as a must run under 'Take or Pay' Gas arrangement for Economic Merit Order.

Moreover, upon implementation of the CTBCM model and KE becoming part of the centralized economic dispatch, Economic Merit Order will be aligned with the regulations applicable for Central Dispatch system at that time.



Page 36 of 45

7.8. Other income / expense - specific items

the areast concern

Below other income / expense specific items are proposed to be actualized each year considering their unpredictable nature:

- exchange gain / loss on liabilities
- Demurrage
- Detention charges
- Miscellaneous income
- Collection income (E-Duty rebate, TV License fee, etc.)

Furthermore, donations, LD recovered from suppliers and contractors, provision for fatal accident, interest income on deposits, other interest income, liabilities written back / assets written off, penalties, scrap sales, return on bank deposits, and markup income/recovery etc. are proposed to be excluded from tariff workings and actualization.

Further, Late Payment Surcharge (LPS) is proposed to be adjusted on receipt basis from allowed working capital requirement on opening receivables as explained in **Section 7.3.4.4**.

Please refer below section for further discussion on income streams from non-regulated business as well as additional revenue from regulated business.

7.9. Cost of SBLC for Purchase of power

KE, as part of payment security, is currently required to provide SBLC for Purchase of power from its existing IPPs including SNPC, STDC, FPCL and Lucky. Furthermore, it will also have to provide SBLCs in future to upcoming power sources pursuant to new Power purchase agreements. Accordingly, cost of SBLC provision shall be allowed on actual basis, with a cap of 1.5% on SBLC amount to allow prudent recovery of cost.

Moreover, KE has also provided payment security in the form of Escrow arrangement to its existing IPPs and is expected to provide similar arrangement to CPPA and other upcoming IPPs in future under their respective power purchase agreements. Accordingly, KE requests that expenses incurred in this regard shall also be allowed on actual basis to KE.

7.10. Income from Non-regulated business / Additional income from Regulated Assets

KE would like to submit 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, additional income from regulated business shall be shared in the ratio of 50:50 between KE and consumers.

7.11. Comparison of existing and proposed tariff

The requested O&M component is based on actual FY 2023 O&M expenses, i.e **PKR 0.2975** / **kWh** (excluding CPI indexation impact from May 2022 to May 2023). This is comparable to the supply O&M allowed in the MYT 2017-23, i.e **PKR 0.2839** / **kWh**⁵ (for FY 2023), reflecting a marginal variation of **PKR 0.0136** / **kWh**.

The impact of indexation of CPI from May 2022 to May 2023 amounts to **PKR 0.1248 / kWh** thereby translating the total requested O&M component to **PKR 0.4223 / kWh**.

⁵ bifurcated at 81% for Distribution and 19% for Supply based on FY 23 break up



Furthermore, KE has proposed working capital requirement for each business including Supply business based on normal business requirements to ensure smooth operations. Within the MYT 2017-23, working capital was included on a combined basis.

.

Moreover, closing receivable balances of FY 2023 have been included as part of working capital requirement for FY 2024 which will be actualised at each year end based on amount received during the year as explained in section 7.3.4.4.

KE has also requested for a retail margin for Supply business being a separate licensed entity having high risk profile and asset light nature of the business.

Under the MYT 2017-23, NEPRA has allowed claim of actual write off of bad debts based on a defined criterion for claim of write offs. For the proposed MYT, KE has proposed a recovery loss component based on a targeted year on year improvement curve.

7.12. Pass through items - Corporate tax and WPPF / WWF

In line with MYT 2017-23, KE is proposing that Corporate tax and WPPF / WWF shall be passed through to consumers in Supply Tariff that will be claimed as unrecovered cost in the quarterly adjustment based on actual payment.

7.13. Costs relating to MYT 2017 - 23

Any unrecovered cost pertaining to MYT 2017-23 and not recovered in MYT 2017-23 shall be included as unrecovered cost in the quarterly tariff adjustments to be filed.

7.14. Costs pursuant to Unbundling in future

In future, if there is any legal unbundling, KE will file for adjustment for additional costs / revision required in tariffs pursuant to unbundling with NEPRA for determination along with rationale.



Page 38 of 45

8.Summary of Base Tariff FY 2024 & Indexation Mechanism

In view of the foregoing, following component wise indexation mechanism is being requested to ensure recovery of prudent costs critical to ensure quality of service.

| L Tariff Component S | Base Tariff PKR/kWh | indexation Mechanism | Reference |
|--|------------------------|---|---|
| Cost of Power - EPP Component | 18.88 | Monthly and Quarterly variation based on cost of power allowed | Given in Section 7.3.1. |
| Cost of Power - Capacity Component | 12.54 | Quarterly variation based on cost of power allowed | Given in Section 7.3.1. |
| Transmission charges | 3.48 | Quarterly variation based on Transmission charges allowed | As per Transmission petition |
| Distribution charges | 3.84 | Quarterly variation based on Distribution charges allowed | As per Distribution petition |
| O&M | 0.42 | Indexed annually with Pak CPI | CPI of 227.96 for May 23 Given in Section 7.3.4.1 |
| Retail Margin | 0.59 | Yearly adjustment due to changes in base amounts Over / under recovery due to actualization of revenue each year | Given in Section 7.3.4.2 |
| Recovery Loss Allowance | 2.88 | Yearly adjustment based on allowed recovery loss trajectory incorporating cap and floor Over / under recovery due to actualization of revenue and revision in recovery loss target each year | Given in Section 7.3.4.3 |
| Working Capital | 2.07 | Indexed quarterly with KIBOR Annual adjustment for over / under recovery. | KIBOR of 22.91% as of 30 June 2023 Given in section 7 .3.4.4 |
| Total Base Tariff | 44.69 | | |
| Units billed adjustment | | Annual adjustment for over / under recovery | Given in section 7.6.4 |

For tariff table and revenue requirement, please refer Annexure A & B.

For monthly, quarterly and annual adjustment mechanism please refer to Section 7.3 and Annexure I & J.



Page 39 of 45

9. Category wise rates based on Cost of Service

¢

KE has projected category wise tariff based on Cost of Service and Category wise rates and Cost of Service study are enclosed in **Annexure L.**

These are based on projected sales mix of FY 2024 and impact of sales mix is proposed to be actualized as given in **Section 7.6.2.**



Page 40 of 45

10. Summary of evidence

- Included in the body of Petition and annexures.

Page 41 of 45

Supply Tariff Petition Sign by Authorized Representatives

1. Syed Moonis Abdullah Alvi, Chief Executive Officer

2. Muhammad Aamir Ghaziani, Chief Financial Officer

3. Fawad Ali Gilani, Chief Distribution Officer

.

Second and an a



Page 42 of 45

Annexure

| Annexure | Description |
|----------|---|
| A | Supply components – Tariff table |
| В | KE Wide Revenue Requirement |
| с | Cost of Power FY 2024 |
| D | Calculation of O&M per unit |
| E | Calculation of Retail Margin & Recovery loss components |
| F | Projected working capital |
| F (i) | Capacity Payables days working for computation of working capital |
| G | Retail Margin examples |
| Н | Units & Losses |
| I | Indexation mechanism of Supply Tariff components |
| J | Monthly / Quarterly tariff variation mechanism and illustration |
| K | Historic trend of quarterly T&D losses |
| L. | Category wise tariff rates based on Cost of service |
| М | References for the year |
| N | Terms and conditions of Tariff |
| 0 | Annual Audited Financial Statements FY 2023 |
| Р | O&M Breakup |



Glossary

ŝ

·

.

.

| Acronym | Definition |
|-------------|---|
| ABC | Aerial Bundled Cables |
| AMR | Automated Meter Reader |
| AT&C | Aggregate Technical & Commercial losses |
| BPC | Bulk Power Consumers |
| BPO | Business Process Outsourcing |
| BQPS | Bin Qasim Power Station |
| CAGR | Compound Annual Growth Rate |
| CAPEX | Capital Expenditure |
| СВМ | Centralized Billing Mechanism |
| CCoE | Cabinet Committee on Energy |
| CPI | Consumer Price Index |
| СРР | Capacity Purchase Price |
| CPPA – G | Central Power Purchasing Agency – Guarantee |
| CSM | Consumer Service Manual |
| СТВСМ | Competitive Trading Bilateral Contract Market |
| DISCOs | Distribution Companies |
| EPP | Energy Purchase Price |
| FCA | Fuel Charge Adjustment |
| GENCO | Generation Companies |
| GOP | Government of Pakistan |
| GOS | Government of Sindh |
| HT | High Tension |
| IPP | Independent Power Producer |
| KE | K – Electric Limited |
| KTGEPS | Korangi Town Gas Engine Power Station |
| KIBOR | Karachi Interbank Offered Rate |
| KYC | Know Your Customer |
| LPS | Late Payment Surcharge |
| MDMS . | Meter Data Management System |
| MMBTU | Million British Thermal Units |
| MVA | Mega Volt Ampere |
| MYT | Multi Year Tariff |
| NEPRA | National Electric Power Regulatory Authority |
| NTDC | National Transmission & Dispatch Company |
| 0&M | Operating & Maintenance |
| PMTs | Pole Mounted Transformers |
| POS Machine | Point of Sale Machine |
| PSC | Public Sector Consumers |
| QR Code | Quick Response Code |

FEL × ЭTI

Page 44 of 45

.

| Acronym | Definition |
|----------|---|
| RAB | Regulatory Asset Base |
| RLNG | Re-gasified Liquified Natural Gas |
| ROE | Return on Equity |
| RoRB | Return on Regulatory Asset Base |
| RTGS | Real Time Gross Settlement |
| SAIDI | System Average Interruption Duration Index |
| SAIFI | System Average Interruption Frequency Index |
| SGEPS | SITE Gas Engine Power Station |
| SRO | Statutory Regulatory Order |
| SSGC | Sui Southern Gas Company Limited |
| T&D | Transmission & Distribution |
| TDS | Tariff Differential Subsidy |
| VIU | Vertically Integrated Utility |
| WPPF | Workers Profit Participation Fund |
| WWF | Workers Welfare Fund |
| XWDISCOs | Ex WAPDA Distribution Companies |

•••

.

بالرابع فأبد محربه جري الجميرات كالفقيلية الاراكان

3



Page **45** of **45**

Annexure A

¢

÷

K-Electric Limited Supply Tariff - FY 2024 to FY 2030 Tariff Table - FY 2024 and onwards

| The second s | | |
|--|----------|-------|
| LEION A | sum(a:h) | 44.69 |
| lejtes | ч | 2.07 |
| ltatilif Recovery loss sallowance | ы | 2.88 |
| Sunau Sunau Retaiu Warein | ب | 0.59 |
| RIRVIWO San | Ð | 0.42 |
| Distribution Distribution | q | 3.84 |
| | U | 3.48 |
| articles (GPP) | q | 12.54 |
| and the second s | æ | 18.88 |
| , NEI | | 2024 |
| JIBN V | | |



2.010710.064

K-Electric Limited Supply Tariff - FY 2024 to FY 2030 KE wide revenue requirement - 7 Year

| Description | : Unite a | References | F 2024 |
|---|-----------|---------------|---------|
| Units billed | GWh | а | 16,004 |
| Cost of Power | | | |
| Amounts | | | |
| EPP | PKR Mn | b | 302,097 |
| CPP | PKR Mn | с | 200,612 |
| Total | PKR Mn | d | 502,709 |
| Per Unit billed | | | |
| EPP | PKR / kWh | e=b/a | 18.88 |
| СРР | PKR / kWh | f=c/a | 12.54 |
| Transmission | | | |
| Per unit served | PKR / kWh | g | 2.99 |
| Units served | No. | h | 18,660 |
| Transmission revenue requirement | PKR Mn | l = g x h | 55,738 |
| Per unit billed | PKR / kWh | j=i/a | 3.48 |
| Distribution | | | |
| Per unit billed | PKR / kWh | k | 3.84 |
| Distribution revenue requirement | PKR Mn | l = a x k | 61,385 |
| Total revenue requirement exc. Supply | PKR Mn | m = d + i + i | 619,832 |
| Supply | | | |
| 0&M | PKR Mn | | 6,758 |
| Retail Margin | PKR Mn | | 9,399 |
| Recovery loss allowance | PKR Mn | | 46,063 |
| Supply revenue requirement exc. Working capital | PKR Mn | n | 62,220 |
| Total revenue requirement inc. Supply | PKR Mn | o = m + n | 682,052 |
| Supply working capital | PKR Mn | þ | 33,119 |
| Total revenue requirement of KE | PKR Mn | q = 0 + p | 715,170 |



Annexure B

3

. .

9

Page 1 of 1

| -Electric Limited | upply Tariff - FY 2024 to FY 2030 | tost of power for FY 2024 |
|-------------------|-----------------------------------|---------------------------|
| K-Electric | Supply Ta | Cost of pc |

| | | Minute | | | | | | | |
|--------|---------------------------|--------|---|---------|-----------|---------|---------|------------------|---------|
| | | MM | GWh | GWh | PKR / kWh | PKR mn | PKR mn | PKR m | c |
| | | | and the providence of | | | | | | f state |
| | BQPS II | 495 | 3,830 | 2,545 | 30.25 | 77,001 | 22,452 | 5 | 9,454 |
| 7 | BQPS III UNIT I | 450 | 3,490 | 2,673 | 21.71 | 58,038 | 19,724 | 4 | 7,762 |
| m | BOPS III UNIT II | 450 | 3,490 | 1,907 | 21.59 | 41,170 | 19,244 | 9 | 0,414 |
| 4 | KCCP | 221 | 1,715 | 43 | 40.09 | 1,744 | 10,917 | - | 2,661 |
| 5 | KTGEPS | 26 | 708 | 10 | 38.00 | 380 | 2,594 | | 2,974 |
| 9 | SGTPS | 63 | 712 | 10 | 38.82 | 389 | 2,947 | | 3,336 |
| ~ | BQPS 1 UNIT 1 - EPP | 168 | 316 | 7 | 46.04 | 325 | 1,190 | | 1,515 |
| 8 | BQPS 1 UNIT 2 - EPP | 172 | . 322 | 23 | 44.91 | 1,029 | 1,213 | | 2,243 |
| ი | BQPS 1 UNIT 5 - EPP | 176 | 1,310 | 215 | 42.98 | 9,261 | 4,934 | | 4,195 |
| 10 | BQPS 1 UNIT 6 - EPP | 177 | 1,281 | 75 | 44.81 | 3,381 | 4,825 | | 8,206 |
| 11 | Gul Ahmed | 128 | 254 | 254 | 37.40 | 9,514 | 783 | , - 1 | 0,296 |
| 12 | Tapal Energy | 124 | 322 | 322 | 37.16 | 11,950 | 1,023 | - | 2,974 |
| 13 | ISL/IIL. | 23 | 201 | 9 | 13.19 | 82 | 8 | | 90 |
| 14 | CPPA - G | 1,000 | 9,582 | 9,582 | 7.99 | 76,591 | 88,439 | 16 | 5,030 |
| 15 | SNPC 1 | 52 | 456 | 117 | 10.34 | 1,207 | 1,899 | | 3,106 |
| 16 | SNPC 2 | 22 | 456 | 380 | 10.38 | 3,947 | 2,174 | | 6,121 |
| 17 | FPCL | 52 | 310 | 310 | 19.25 | 5,961 | 3,731 | | 9,692 |
| 18 | Oursun Solar | 50 | 438 | 92 | - | • | 3,198 | | 3,198 |
| 19 | Gharo Solar | 20 | 438 | 104 | • | • | 1,890 | | 1,890 |
| 20 | Lotte | 74 | 123 | 8 | 38.30 | 118 | 6 | | 127 |
| 21 | Lucky | 5 | 44 | 1 | 11.67 | 6 | 1 | | 10 |
| 22 | Net Metering at Average | , | 155 | 155 | - | • | 5,846 | | 5,846 |
| | Applicable tariff | | | | | | | | |
| 53 | Net Metering at NAPP | 1 | 70 | 70 | • | • | 1,569 | | 1,569 |
| | Units Sent out | | | 18,906 | 15.98 | 302,097 | 200,612 | 50 | 2,709 |
| | Transmission loss - 1.3% | | | (246) | | | | | İ |
| - - | Units Served | | | 18,660 | 16.19 | 302,097 | 200,612 | 50 | 2,709 |
| | Distribution loss - 14.3% | | | (2,656) | | | | | |
| | Units Billed | | | 16,004 | 18.88 | 302,097 | 200,612 | 50 | 2,709 |

.

* Available capacity is same as units purchased for "Take & Pay" IPPs.

.

.

Annexure C

÷

4

بعبرة بعاداتهم

.



| ectric Limited | ply Tariff - FY 2024 to FY 2030 | Vi Expenses |
|----------------|---------------------------------|-------------|
| C-Elect | upply | 8 M E |

Annexure D

| | | Magende | | ANDORY I | A STATES | THE PROPERTY IN | | and and any second s | | |
|---|-------------------|----------------|--------|----------|----------|--|-------------|---|---------------|------------------|
| Assumptions | | | | | | 114843-141-141-141-141-141-141-141-141-141-1 | 39044124634 | 171777778 | GAOCAAR | 13Y 20E0 |
| Units Billed* | GWh | ŋ | 15,554 | 16,004 | 16,810 | 17,435 | 17,929 | 18 300 | 10 CEJ | |
| Pak CP]** | CPI | ą | 165.23 | 227.96 | 227.96 | 227.96 | 227.96 | 227.96 | 227.96 | 18,96/ 227.96 |
| Supply O&M Calculation | | | | | | | | | | |
| Actual O&M FY 23 | PKR Mn | U | 4,761 | : | | | | | | |
| leference O&M after CPI | | | | | | | | | | |
| dJustment for FY 24 and future entout growth | PKR Mn | œ' | | 6,758 | 7,098 | 7,362 | 7,571 | 7,727 | 7,876 | 8.009 |
| er Unit O&M | | | 1 | | | . | | | | |
| | | e=d/a | | 0.42 | 0.42 | 0.42 | 0.42 | 0 47 | CV 0 | |
| * Pak Pol for EV 22 | ard years project | ed | | | | | | 4-5 | 7 + '0 | 0.42 |
| THIN OF THE AS AS DEF May 22 a | nd May 23 for FV | 124. | | | | - | | | | |



· . . . 3

3

Page 1 of 1

K-Electric Limited Supply Tariff - FY 2024 to FY 2030 Retail Margin and Recovery Loss Allowance

| | | | AN 2023 |
|---|------------------|--------------------------------------|-------------------|
| Projected | | | |
| Retail Margin % Units Billed | % No. | с. л | 1.50% 16,004 |
| Projected revenue requirements | | | |
| i Retail Margin | | | |
| Cost of power (Generation and IPPs) Transmission Charges | PKR Mn PKR Mn | Refer Annexure B Refer Annexure B | 502,709 55,738 |
| Distribution Charges | PKR Mn | Refer Annexure B | 61,385 |
| Supply O&M | PKR Mn | Refer Annexure F | 6,758 |
| Total | | U | 626,590 |
| Retail Margin Projected | PKR Mn | d=a x c | 9,399 |
| Retail Margin | PKR/kWh | e = d/b | 0.5873 |
| ii Recovery loss allowance | | | |
| Amount billed with taxes* Recovery loss %** | PKR Mn % | f=c+d 8 | 635,989 7.24% |
| Recovery loss | PKR Mn | h=fxg | 46,063 |

* For the purpose of reference, amount billed has been taken as revenue requirement. This will be actualised, each year including ** Will be adjusted with respect to adjustment for Cap & Floor as per mechanism prescribed in Annual adjustment form. charges billed to BPC consumers, based on actual amount billed inclusive of taxes paid on billing basis.

Kic *

2.8783

l = h / b

PKR/kWh

Recovery loss allowance

ç

| K-Electric Limited Supply Tariff - FY 2024 to FY 2030 Projected Working Capital | | | Annexure F |
|---|------------------|------------------------|-------------------------|
| | | | Si 20020 |
| Assumption | | | |
| Number of days in the year Days Receivable from Customers to Supply | No. No. | a b | 365 30 |
| KIBOR Short term borrowing spread Total | % % | c | 22.9% 2.0% 24.9% |
| Units billed | No. | d | 16,004 |
| Current Assets Stress Market Strengthered Stress Harver | | | |
| Total consumer revenue | PKR Mn | e | 682,052 |
| Total revenue receivable | PKR Mn | f=e/axb | 36,059 |
| Opening receivable excluding PSC as at FY 23* | PKR Mn | g | 142,938 |
| Annual weighted average amount recoverable due to sytematic lag in recovery of FCA** | PKR Mn | h | - |
| Annual over / under recovery adjustment excl. working capital | PKR Mn | i | - |
| Annual weighted average amount recoverable due to sytematic lag in recovery quarterly variations** | PKR Mn | j | - |
| O&M expense | PKR Mn | k = Annexure D | 6,758 |
| Cash & bank (1/6th of O&M expense) | PKR Mn | l=k/6 | 1,126 |
| Current assets for working capital | PKR Mn | m=f+g+h+i+j+l | 200,123 |
| Current Dabilities | | | |
| Energy purchase price (EPP) | | | |
| Total Revenue | PKR Mn | n | 302,097 |
| Credit period days | No. | o=b | 30 |
| WC requirement - EPP payable in respect of Cost of power | PKR Mn | p≃n/axo | 24,830 |
| Capacity purchase price (CPP) | 0 //D 1 4 | | 202 642 |
| Total Revenue*** | PKR MIN | q r = Annevire F(i) | 200,612 |
| WC requirement - CPP payable in respect of Cost of power | PKR Mn | s=q/axr | 8,675 |
| - · · · · | | | |
| Transmission Total Revenue | | + | 55 739 |
| Credit period days | No. | u=b | 30 |
| WC requirement - Payable in respect of Transmission Charges | PKR Mn | v=t/axu | 4,581 |
| Distribution | | | |
| Total Revenue | PKR Mn | w | 61,385 |
| Credit period days | No. | x = b | 30 |
| WC requirement - Payable in respect of Distribution Charges | PKR Mn | y=w/axx | 5,045 |
| Payables | PKR Mn | z = p + s + v + y | 43,132 |
| Deposit in respect of new connection/consumer works* | PKR Mn | aa | 7,324 |
| Security deposits from consumers ² Current Liabilities for working capital | PKR MA PKR Ma | ac = z + aa + ab | <u>16,/14</u> 67,170 |
| Working Capital requirement | PKR Mn | ad = m - ac | 132,953 |
| Projected Cost of working capital | PKR Mn | ae = ad x c | 33,119 |
| Per unit cost of working capital | PKR / kWh | af = ae / d | 2.0695 |

* As per FY 23 Audited Financial Statements and will be actualised at each year end. Further, LPS from non PSC consumers recovered during the year will be netted off from this amount.
 ** Will be actualised at the time of filling of indexation forms.
 *** KE's own generation, transmission and distribution business working capital requirements will be subject to working capital allowed in respective tariff petitions.

E Y Э L'

3

Page 1 of 1

Annexure F(i)

K-Electric Limited Supply Tariff - FY 2024 to FY 2030

لا الانتخابية الديني

12

Capacity Payable days working for computation of working capital

| Period IPP Nemesory | (PRR Mn) | Days | Weightage of GPD | Days for Working Capital |
|---------------------|----------|------|--------------------|-----------------------------|
| | a | b | c = a / Total of a | d = b x c |
| BQPS II | 22,452 | - | 11.19% | - |
| BQPS III UNIT I | 19,724 | - | 9.83% | - |
| BQPS III UNIT II | 19,244 | - | 9.59% | - |
| КССР | 10,917 | - | 5.44% | - |
| KTGEPS | 2,594 | - | 1.29% | - |
| SGTPS | 2,947 | | 1.47% | - |
| BQPS 1 CPP | 12,163 | _ | 6.06% | |
| Gul Ahmed | 783 | 25 | 0.39% | 0.10 |
| Tapal Energy | 1,023 | 25 | 0.51% | 0.13 |
| ISL/IIL | 8 | 25 | 0.00% | 0.00 |
| CPPA-G | 88,439 | 30 | 44.08% | 13.23 |
| SNPC 1 | 1,899 | 9 | 0.95% | 0.09 |
| SNPC 2 | 2,174 | 9 | 1.08% | 0.10 |
| FPCL | 3,731 | 15 | 1.86% | 0.28 |
| Oursun Solar | 3,198 | 30 | 1.59% | 0.48 |
| Gharo Solar | 1,890 | 30 | 0.94% | 0.28 |
| Lotte | 9 | 24 | 0.00% | 0.00 |
| Lucky | 1 | 30 | 0.00% | 0.00 |
| Net Metering | 7,415 | 30 | 3.70% | 1.11 |
| | 200,612 | | 100% | 15.78 |



<u>Annexure G</u>

_ _ _

<u>Retail Margin examples</u>

| Company Name | Retail margin | Comments | |
|---|---------------------------|---|--|
| Utility Regulator North – Northern Ireland | ern Ireland ("Uregni") | The retail margin allowed by Uregni is in addition to allowance for operating expenses which includes | |
| Power NI | 2.2% of forecast Turnover | costs, bad debt and corporate overhead charges. | |
| Independent Pricing an ("IPART") - Australia | d Regulatory Tribunal | | |
| AGL | 5.7% of EBITDA | The retail margin allowed by both IPART & TERP is in addition to cost allowed for providing services to | |
| Origin Energy | 5.7% of EBITDA | customers including billing, revenue collection, customer enquiries and advise, distribution network | |
| Tasmanian Electricity F ("TERP") - Australia | ricing Regulation | services cost and retail operating and maintenan- costs allowance, plus any pass-through costs. | |
| Aurora Energy | 5.25% of total costs | | |
| Independent Competiti Commission - Australia | on and Regulatory | The retail margin allowed by ICRS is in addition to costs allowed for wholesale electricity costs such as energy purchase cost, network costs which comprise of T&D costs and retails costs which includes | |
| ActewAGL | 5.6% of total cost | operating costs, smart meter costs and compliance costs. | |
| Queensland Competitio Australia | on Authority (QCA) - | QCA has allowed retail margin in addition to wholesale electricity costs which includes energy purchase cost, network costs and retails operating costs which include the costs associated with sustained administration call contrast components | |
| Ergon Retail | 5.7% of total Cost | overheads, billing and revenue collection, IT systems, regulatory compliance, and customer acquisition and retention costs (CARC). | |

.

. -

.

. 7

-1

.

4



Annexure H

£

¢

K-Electric Limited Supply Tariff - FY 2024 to FY 2030 Units & Losses

| a 18,660 19,531 20,154 20,617 20,967 21,306 21,617 b 14.24% 13.93% 13.49% 13.04% 12.72% 12.46% 12.26% x(1-b) 16,004 16,810 17,435 17,929 18,300 18,652 18,967 | mts | المراجع كالألاف المحاولة المحا | | X124-21-22-22-22-22-22-22-22-22-22-22-22-22- | 12020 | Notal States | (F2028 | N.S.O.F. BALL | <u>1111111111111111111111111111111111111</u> |
|---|-----|---|------|--|--------|--------------|--------|---------------|--|
| b 14.24% 13.93% 13.49% 13.04% 12.72% 12.46% 12.26% x (1-b) 16,004 16,810 17,435 17,929 18,300 18,652 18,967 | | a 18 | ,660 | 19,531 | 20,154 | 20,617 | 20,967 | 21,306 | 21,617 |
| x (1 - b) 16,004 16,810 17,435 17,929 18,300 18,652 18,967 | | b 14 | .24% | 13.93% | 13.49% | 13.04% | 12.72% | 12.46% | 12.26% |
| | | a x (1 - b) 16. | ,004 | 16,810 | 17,435 | 17,929 | 18,300 | 18,652 | 18,967 |

*Units received by Distribution from Transmission.



Annexure I

K-Electric Limited Supply Tariff - FY 2024 to FY 2030 Summary of Indexation Forms (based on sample data)

| Consumer revenue receivable additional impact Working Capital adjustment for Unrecovered Cost and Quarterly variation Annual Capacity Payable days working for computation of working capital Annual Retail Margin and Recovery loss allowance adjustment Adjustment of Recovery Loss due to change in consumer mix Annual Units billed adjustment | 2.1.1 2.1.2 2.1.3 2.1.3 2.1.3 2.2 2.2 2.3 |
|---|--|
| Working Capital adjustment for Unrecovered Cost and Quarterly variation | 2.1.2 |
| Consumer revenue receivable additional impact | 2.1.1 |
| Annual Working Capital adjustment | 2.1 |
| Summary of Annual Adjustments | 1.2 |
| Quarterly indexation | 1.1 |
| Pauticulars | FORMINGS . |

numbers and will be amended at the time of filing, depending upon the actual scenario prevailing at that time, based Note: Complete Tariff table will be updated after Annual adjustments. Further, these forms represents illustrative on actual numbers.



K-Electric Limited

Supply Tariff - FY 2024 to FY 2030 Quarterly indexation

Year 1 - FY 2024 Quarter 2 Year Quarter

Sources for indexation

| CPI published by Pakistan Bureau of Statistics available at the start of each quarter | The revised 3 month KIBOR as published by State Bank of Pakistan available at July 1, 2023 | Same as allowed in reference | KIBOR(Ref) + Sp-WC |
|---|--|------------------------------|------------------------|
| 234.8 | 22.4% | 2.0% | 24.4% |
| CPI(Rev) | KIBOR _(Rev) | Sp-WC | CoB(Rev) |
| 228.0 | 22.9% | 2.0% | 24.9% |
| CPI(Ref) | KIBOR _(Ref) | Sp-WC | CoB(Ref) |
| CPI | KIBOR | Spread for working capital | Cost of borrowing - WC |

 $1 \quad 0 \& M \text{ - Once in every year with indexation of } Q1 \\$

| N | O&M (Ref) | 0.4223 | O&M (Rev) | 0.4349 | O&M(Ref) for relevant year x CPI(Rev) / CPI (Ref) | |
|---|-----------|--------|-----------|--------|---|--|
| | | 0.4223 | | 0.4349 | | |

e.

:

2 Working capital

| W.C.(Ref) x CoB(Rev) / CoB(Ref) | |
|---------------------------------|--------|
| 2.0279 | 2.0279 |
| W.C.(Rev) | |
| 2.0695 | 2.0695 |
| W.C.(Ref) | |
| Working capital | Total |

Note: The quarterly indexation will be filed at the start of every quarter.



Form 1.1

K-Electric Limited

Supply Tariff - FY 2024 to FY 2030 Summary of Annual Adjustments After completion of Year 1 - FY 2024

| Under / (over) recovery on account of actualization of working capital component | PKR Mn | Form 2.1 | 851 |
|--|--------|----------|--------|
| Under / (over) recovery on account of actualization of Retail Margin | PKR Mn | Form 2.2 | (280) |
| Under / (over) recovery on account of actualization of recovery loss allowance | PKR Mn | Form 2.2 | 19,263 |
| Under / (over) recovery on account of units billed | PKR Mn | Form 2.3 | 6,152 |
| Adjustment for Other (Income) / expense actualised items | PKR Mn | Note 1 | 100 |
| Adjustment for change in sales mix on Determined tariff and Consumer Tariff differences | PKR Mn | Note 2 | I |
| Actual Cost of SBLC | PKR Mn | Note 3 | I |

Note 1: To be submitted as per details given in **Section 7.8** of petition. Note 2: To be submitted as per details given in **Section 7.6.2** of petition. Note 3: To be submitted as per details given in **Section 7.9** of petition.

Form 1.2



26,085

PKR Mn

Total adjustment

Page 3 of 11

| c-Electric Limited upply Tariff - FY 2024 to \nnual Working Capital a |
|---|
|---|

•

| | | | ANOLANE . | NAUN-F | |
|---|--------|-----------|-----------|---------|---|
| Assumptions-> a Train 2-4 (care over the state of the state | | | | | |
| Number of days in the year | No. | cu | 365 | 365 | |
| Days Receivable from Customers to Supply | No. | q | 30 | 30 | |
| KIROR | % | U | 21.9% | 21.9% | |
| Short term borrowing spread | % | q | 2.0% | 2.0% | |
| Total | % | e = c + d | 23.9% | 23.9% | |
| Units billed | No. | e1 | 14,876 | 16,810 | Actual for FY 24 and onward years revised projected. |
| Current Assets | | | | | |
| Total Revenue | PKR Mn | 20 | 703,593 | 976,749 | Actualized as per consumer revenue for FY 2024. Projected for FY 25 |
| Total revenue receivable | PKR Mn | h=g/axb | 57,830 | 80,281 | |
| Opening receivable excluding PSC | PKR Mn | h1 | 127,938 | 115,144 | FY 2024 actualized and projected balance for FY 25. |
| Annual weighted average amount recoverable due to sytematic lag in recovery of FCA | PKR Mn | - | 1,704 | , | Refer Form 2.1.1 |
| Annual over / under recovery adjustment excl. working capital | PKR Mn | ŭ | 25,235 | | Refer Form 1.2 |
| Annual weighted average amount recoverable due to sytematic lag in recovery of quarterly variations | PKR Mn | | (365) | • | Refer Form 2.1.2 |

Form 2.1

4

ł



•

0.40 6,668 1,111 1,111 196,536

0.38 6,081 1,014 213,354

k |= k x f m = 1 / 6 n = h + 1 + i 1 + j + m

PKR / KWh PKR Mn PKR Mn PKR Mn

Per unit supply O&M O&M expense Cash & bank (1/6th of O&M expense) Current assets for working capital - -

Form 2.1

41.00

. .

Supply Tariff - FY 2024 to FY 2030 Annual Working Capital adjustment K-Electric Limited

| Ourient Liabilities in the many statement of the statement of the statement of the statement of the statement of | | | | | |
|--|-----------|--------------------|--------------|--------------|--|
| Energy purchase price (EPP) | | | 026 806 | רור סכב | Je VT and based base basilender Acte VT |
| rurar neveriue Cradit naving dave | | | 6/5'0N5 | 117,200 | FT 2024 actualized and projected for FT 25. |
| create period uays WC requirement - EPP payable in respect of Cost of power | PKR Mn | p q=o/axp | 30 25,346 | 05 27,881 | |
| Capacity purchase price (CPP) | | | | | |
| Total Revenue | PKR Mn | L | 180,551 | 198,606 | FY 2024 actualized and projected for FY 25. |
| Credit period days | No. | S | 20 | 20 | Refer Form 2.1.3 |
| WC requirement - CPP payable in respect of Cost of power | PKR Mn | t=r/axs | 9,747 | 10,721 | |
| Transmission | | | | | |
| Total Revenue | PKR Mn | р | 54,374 | 59,811 | FY 2024 actualized and projected for FY 25. |
| Credit period days | No. | > | 30 | 30 | |
| WC requirement - Payable in respect of Transmission Charges | PKR Mn | w = u/a x v | 4,469 | 4,916 | |
| Distribution | | | | | |
| Total Revenue | PKR Mn | × | 57,900 | 63,690 | FY 2024 actualized and projected for FY 25. |
| Credit period days | No. | γ | 30 | 0E | |
| WC requirement - Payable in respect of Distribution Charges | PKR Mn | z = x / a x y | 4,759 | 5,235 | |
| Payables | PKR Mn | aa = q + t + w + z | 44,321 | 48,753 | |
| Deposit in respect of new connection/consumer works | PKR Mn | | 13,000 | 14,300 FY | 2024 actualized as per average opening & closing balances of |
| Security deposits from consumers | PKR Mn | | 17,000 | 18,700 | FS and projected balance for FY 25. |
| Current Liabilities for working capital | PKR Mn | ab | 74,321 | 81,753 | |
| Working Capital requirement | PKR Mn | ac ⊨ n - ab | 139,033 | 114,783 | |
| Actual Cost of working capital for the year | PKR Mn | ad = ac x e | 33,243 | 27,445 | |
| Indexed Cost of working capital included in reference revenue requirement | PKR mn | ae | 32,392 | | |
| Under/ {Over} Recovery of Working Capital Cost | PKR mn | af ≂ ad - ae | 851 | | |
| Working capital requirement | PKR / kWh | ag = ad / e1 | | 1.63 | |
| | | | | | TRIC * |

2



ŵ

K-Electric Limited Supply Tariff - FY 2024 to FY 2030 Consumer revenue receivable additional impact

| 203 593 | andra i | 19,997 |
|------------------------------|------------------------------------|---|
| Constitution Total - DVD Min | CONSUME LEVENDE - LOCAL - LAN INTE | FCA incldued in consumer revenue - PKR Mn |

| | 赣赣 | 167 | 225 | 162 | 199 | (174) | (199) | 202 | 223 | 334 | 126 | 89 | 350 | l,704 | |
|------------------|--------------|-----------------|---------|------------|---------|-------------|----------|--------|---------|--------|---------|---------|--------|--------|---|
| | 1166 | | | | | | | | | | | | | | |
| | HERKI | | | | | | | | | | | | | | |
| 1000 IUW | | | | | | | | | | | | | | | |
| | | 31 | 31 | 31 | 31 | 32 | 80 | 30 | 31 | 31 | 31 | 31 | 32 | | |
| | 的短 | | | | | | | | | | : | | | | |
| inelli Distor | 調整 | | | | | | | | | | | | | | |
| | | 1 | - | - | | 5 | 0 | 0 | - | त्न | - | 1 | 2 | | |
| 10101 (101) | 語語語 | 9 | G | 9 | 9 | ю I | <u>ں</u> | 0 | 9 | 9 | 9 | 9 | 9 | | |
| | | | | | | | | | | | | | | | |
| | | 5 | 3 | ញ | 3 | 4 | 4 | 24 | 4 | 24 | 4 | 4 | 24 | | |
| noion Mointi | |)-Sep-2 | 1-Oct-2 | -NoN-C | I-Dec- | 1-Jan-2 | -Feb-2 | -Mar- | 2-Apr-2 | -May- | 2-unf-0 | 1-Jul-2 | L-Aug- | | |
| | | m | ŝ | 30 | m | i mi | 5 | 5 | ы М | 33 | Ē | m | m. | | |
| | | | | | | | | | | | | | | | |
| | 0.00 | Jul-23 | Aug-23 | Sep-23 | Oct-23 | Vov-23 | Jec-23 | Jan-24 | -eb-24 | Mar-24 | Apr-24 | Aay-24 | Jun-24 | | |
| | | 31- | 31-/ | Ř | 31-1 | - Second | 31- | 31- | 29-1 | 31-1 | -0£ | 31-1 | ļ | | |
| | | _ | | | | | | | | | | | | | |
| (line) | | -23 | 53 | ក្រុ | -23 | -24 | -24 | -24 | -24 | -24 | -24 | 24 | -24 | | |
| | | Sep | Ö | Nov Nov | Dec | Jan | Feb | Mar | Apr | May | un | 13 | Aug | | |
| | | | | | | 6 | 10 | | | | | - | | | |
| ni ni | | 1.964 | 2,645 | 1,90 | 2.342 | (1,985 | (2,415 | 2,456 | 2,623 | 3,935 | 1,486 | 1.053 | 3,996 | 19,997 | |
| A MAN | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | Surger Sector | | | | | | | | | | | | | |
| | | - | | | - | + | | | | | | | 1 | | |
| | | | | | | | | | | | ļ | 1 | | | |
| | | ALCONO TO | | | | : | - | | | 1 | | - | | | |
| NOTE NO | | distriction of | . m | 1 | ~ | | |) | 4 | 4 | | 4 | 4 | | |
| | | -1-1-1 | Aue-2 | Sen-2 | 0-1-0 | Nov-2 | Dec-2 | lan-2 | Feh-7 | Mar-2 | Anr-2 | C-VeW | | Tota | • |
| NOI | | | • | ļ | 1 1 | ! | | | | | • | | | | |
| | | 110110 | | | | 1 | | 1 | | | 1 | 1 | | | |
| | | CONSTRUCTION OF | | | 1 | | | | - | 1 | | | | | |
| | | ASN'S | 1 | | - | | | | i | : | - | ļ | 1 | | |

....

*after considering 30 days already taken in working capital

Note: FCA amount and billing months given are to be replaced with actual FCA and billing month determined by NEPRA.



e

¢



Supply Tariff - FY 2024 to FY 2030 Working Capital adjustment for Unrecovered Cost and Quarterly variation K-Electric Limited

| | _ | | | | | | |
|---|--------|----------------|-----------|-----------|-----------|-----------|---------|
| Werkins spiriture unens Seferentiatione enterval | PKR Mn | e = a /365 x d | (068) | 226 | 648 | (539) | (555) |
| STORED A | No. | d = b - c | 60 | 60 | 60 | 60 | |
| | No. | U | 30 | 30 | 30 | 90 | |
| | No. | q | 06 | 06 | 06 | 90 | |
| | PKR Mn | e | (5,417) | 1,377 | 3,945 | (3,282) | (3,377) |
| 1) Unrecovered cost | | | Quarter 1 | Quarter 2 | Quarter 3 | Quarter 4 | Total |

*Considering unrecovered cost incurred during 3 months of a quarter is recovered in the subsequent 3 months, accordingly, average of 90 days have been assumed.

| 2) Quarterly variation | | | | | | |
|--|------------------------------|-----------|---------------|---|---------|-----------------------------------|
| | Application (Application) | Deserving | Net Sector | laryonarina bayonarina ahouaaoayo | | Mattingentials Unattingentials |
| and a second | | | No. | No. | PKR Mn | PKR Mn |
| | n | þ | c=b-a | d = c - 30 | 20 | h = d x g / 365 |
| | Jul-23 | | r | • | | |
| April to June 2023** | Aug-23 | | • | - | • | - |
| | Sep-23 | | • | • | | |
| | Oct-23 | Feb-24 | 121 | 91 | 503 | 125 |
| July to Sep 2023 | Nov-23 | Feb-24 | 16 | 61 | (881) | (147) |
| | Dec-23 | Feb-24 | 60 | 30 | 1,755 | 144 |
| | Jan-24 | May-24 | 121 | 91 | 1,506 | 376 |
| Oct to Dec 2023 | Feb-24 | May-24 | 92 | 62 | 1,132 | 192 |
| | Mar-24 | May-24 | 61 | 31 | . 1,307 | 111 |
| | Apr-24 | Aug-24 | 123 | 93 | (1,324) | (337) |
| Jan to March 2024 | May-24 | Aug-24 | 92 | 62 | (1,247) | (212) |
| | Jun-24 | Aug-24 | 62 | 32 | (711) | (62) |
| Total | | | | | 2,040 | 190 |
| | | | | | | |

Note: Quarterly amounts and billing months given are to be replaced with actual quarterly adjustment amounts and billing month determined by NEPRA. *If number of days are less than zero, then, they are considered as zero. **Since this quarter pertains to the current MYT, therefore details are not included. From FY 2025 onwards, details of 12 months will be included.

Form 2.1.2



K-Electric Limited Form Supply Tariff - FY 2024 to FY 2030 Annual Capacity Payable days working for computation of working capital

| | CRP(PKRMID) | | Weightigen | Daysfor |
|---------------------------------------|-------------|------|--------------------|------------|
| Planz/APPName | IN 2024- | PEVE | OPP - | Working ** |
| | AGUEL | | | CEDICEL S |
| · · · · · · · · · · · · · · · · · · · | a | b | c = a / Total of a | d=bxc |
| BQPS II | 16,734 | - | 8.52% | |
| BQPS III UNIT I | 13,175 | - | 6.71% | |
| BQPS III UNIT II | 13,806 | _ | 7.03% | |
| КССР | 8,363 | - | 4.26% | - |
| KTGEPS | 1,954 | _ | 1.00% | - |
| SGTPS | 2,267 | - | 1.15% | |
| BQPS 1 CPP | 7,951 | - | 4.05% | |
| Gul Ahmed | 12 | 25 | 0.01% | 0.00 |
| Tapal Energy | 55 | 25 | 0.03% | 0.01 |
| ISL/IIL | 9 | 27 | 0.00% | . 0.00 |
| CPPA-G | 119,461 | 30 | 60.85% | 18.25 |
| Nooriabad IPP-Phase1 | 1,655 | 9 | 0.84% | 0.08 |
| Nooriabad IPP-Phase2 | 1,655 | 9 | 0.84% | 0.08 |
| Fauji IPP | 1,594 | 15 | 0.81% | 0.12 |
| Oursun Solar | 1,930 | 30 | 0.98% | 0.29 |
| Gharo Solar Project | 2,191 | 30 | 1.12% | 0.33 |
| Lotte | 10 | 25 | 0.01% | 0.00 |
| Lucky | 1 | 30 | 0.00% | 0.00 |
| Net Metering | 3,502 | 30 | 1.78% | 0.54 |
| | 196,326 | | 100% | 19.70 |



Page 8 of 11

Form 2.1.3

K-Electric timited Suppiy Tariff - FY 2024 to FY 2030 Annual Retail Margin and Recovery ioss allowance adjustment

-

| | | | 沒是我 了 这次在1921 | 676023% | |
|---|-------------------|------------------------|----------------------|------------------|---|
| Actual | | | | | |
| Retail Margin % Units Billed | % No. | с с | 1.50% 14,876 | 1.50% 16,810 | Actual for FY 24 and onward years revised projected. |
| Actual revenue requirements | | | | | |
| i Retail Margin Cost of nouvor (Ganosotion and 100c) | DKP MA | | 050 887 | 527 873 | EV 20724 architeliceed |
| Transmission Charges | PKR Mn | | 54,374 | 59,811 | FY 2024 actualised |
| Distribution Charges | PKR Mn | | 57,900 | 63,690 | FY 2024 actualised |
| Supply O&M | PKR Min | | 6,758 | 2,098 | FY 2024 actualised |
| Total | | U | 607,962 | 668,423 | |
| Retail Margin Actual Retail Margin | РКR Мп РКR/КWh | d=cxa e=d/b | 9,119 0.6130 | 10,026 0.5964 | |
| Retail margin included in reference revenue requirement | PKR Mn | ۴ | 665'6 | | |
| Under/ (Over) Recovery of Retall Margin | PKR Mn | g = d - f | (280) | | |
| ll Recovery loss allowance | | | | | |
| Amount billed with taxes | PKR Mn | h = d + c | 617,081 | 678,449 | FY 2024 actualised |
| Recovery Gap % | % | | 8.29% | 6.80% | FY 24 adjusted with sales mix |
| CAP | % | i a | 1.50% | | CAP equals to retail margin determined |
| Floor | , | k = a | 1.50% | | Floor equals to retail margin determined |
| Recovery Gap % - Actual | % | _ | 12.09% | | Actual recovery Gap |
| Recovery Gap % with adjustment for CAP / floor | % | ε | 9.79% | | Calculated with respect to adjustment for CAP and Floor accordingly |
| Exposure beyand CAP & Flaor | % | m - ! = n | 2.30% | | Exposure / benefit based on actual passed on to consumers |
| Applicable recovery Gap % | * | 0=n+l | 10,59% | 6.80% | |
| Recovery Gap requirement Recovery Gap per unit | PKR Mn PKR/kWh | p = o x h q = p / b | 65,328 4.3914 | 46,125 2.7439 | |
| Recovery Gap Included in reference revenue requirement | PKR Mn | L | . 46,065 | · | |
| Under/ (Over) Recovery of Recovery GAP | PKR Mn | r-q=s | 19,263 | | |

Form 2.2

•

والمحاصفة فجامعهم معقد معقد

• • • • · · · ·

Page 9 of 11

:



| ctric Limîted | stment of Recovery Loss due to change in consumer mix | ne year FY 2024 |
|----------------|---|-----------------|
| C-Electric Lip | Adjustment | or the year |

| | | | oun allee Shoun | Recovered | | |
|---------------------------------|---------|--------|-----------------|-----------|------------|--|
| | : | | | ii Ii | i = ii / i | |
| Allowed recovery loss | | | | | | |
| Ordinary | ອ | PKR mn | 406,300 | 354,502 | 87.25% | cinted recents on allowed recovery |
| Industry | q | PKR mn | 259,532 | 259,532 | 100.00% | ujected revertice of allowed recovery Loss target |
| PSC | υ | PKR mn | 49,338 | 49,338 | 100.00% | 1033 tai Ber |
| Total | d=a+b+c | PKR mn | 715,170 | 663,372 | 7.24% | |
| Allowed recovery loss - updated | | | | | | - |
| Ordinary | Ð | PKR mn | 492,645 | 429,839 | 87.25% | and managed particular as a managed for the |
| Industry | f | PKR mn | 189,479 | 189,479 | 100.00% | udai revenue di anowed recovery ross taraat |
| PSC | 50 | PKR mn | 75,792 | 75,792 | 100.00% | |
| Total | h=e+f+g | PKR mn | 757,916 | 695,110 | 8.29% | |
| | | | | | | |







1.2 4.1

| ectric Limited | ply Tariff - FY 2024 to FY 2030 | ual Units billed adjustment |
|----------------|---------------------------------|-----------------------------|
| K-Electi | Supply | Annual |

| For the year | Year 1 - FY 2024 | | | | | | |
|--|------------------|---------|--|--------|--------|--------|--------|
| | | | | | | | |
| Units Billed - Excluding wheeling Bulk Power Consumers | | | la de la companya da managente a del companya de la companya da companya da companya da companya da companya d | | | | |
| O&M | PKR / KWh | | 0.42 | 0.42 | 0.42 | 0.42 | |
| Retail Margin | PKR / kWh | | 0.59 | 0.59 | 0.59 | 0.59 | |
| Recovery Loss | PKR / kWh | | 2.88 | 2.88 | 2.88 | 2.88 | |
| Working capital | PKR / kWh | | 2.07 | 2.03 | 2.01 | 1.99 | |
| Indexed Supply Tariff rate | PKR / kWh | , D | 5.96 | 5.92 | 5.90 | 5.88 | |
| Projected units billed for the year | GWh | а | 4,377 | 3,969 | 3,186 | 4,474 | 16,004 |
| O&M | PKR Mn | | 1,848 | 1,676 | 1,345 | 1,889 | 6,758 |
| Retail Margin | PKR Mn | | 2,570 | 2,331 | 1,871 | 2,627 | 9,399 |
| Recovery Loss | PKR Mn | | 12,597 | 11,423 | 9,169 | 12,877 | 46,065 |
| Working capital | PKR Mn | | 9,057 | 8,048 | 6,395 | 8,892 | 32,392 |
| Revenue requirement | PKR Min | c ⊧a *b | 26,072 | 23,477 | 18,780 | 26,285 | 94,615 |
| Actual units billed | GWh | σ' | 4,458 | 3,470 | 2,631 | 4,318 | 14,876 |
| Revenue recovered on actual | PKR Mn | e | 26,555 | 20,527 | 15,509 | 25,372 | 87,963 |
| Variation (Excess) / under | GWh | f=c-e | | | | | 6,652 |
| Minimum billing recovered from consumers during the year | PKR Mn | σo | | | | | 500 |

Form 2.3

Page 11 of 11

6,152

h=f-g

PKR Mn

Net annual units billed adjustment

TRIC

*

U

K-Electric Limited - Supply Tariff Petition

Annexure J - Monthly / Quarterly tariff variation mechanism and illustration

A. Mechanism for Fuel Cost Adjustment due to Variation in Fuel Costs - Monthly

. .

- 1. The variation in Fuel Cost due to changes in fuel prices, energy mix and volume, as against reference Fuel Cost Component shall be calculated based on below formula and shall be passed on to the consumers directly in their monthly bills in the form of Fuel Charges Adjustment ("FCA"). Following steps shall be followed to calculate these variations:
 - i. The actual fuel cost of each power plant / unit in KE's own generation system as well as external power purchase, based on respective tariffs determined / approved by NEPRA, shall be summed up to arrive at monthly total fuel cost of all power stations.

TCoF = CoF1 + CoF2...... CoFn + CoF(imbalance)

| TCoF | = | Total Cost of Fuel in Million Rupees of all generation sources (including KE's own plants and external sources) |
|-----------------|---|--|
| CoF1 | = | Cost of Fuel in Million Rupees of 1 st power plant/unit |
| CoF2 | - | Cost of Fuel in Million Rupees of 2 nd power plant/unit |
| CoFn | = | Cost of Fuel in Million Rupees of Nth power plant/unit |
| CoF (imbalance) | = | Cost of Fuel (positive / negative) for energy imbalance as per CTBCM or any mechanism defined by NEPRA |

ii. The weighted average fuel cost shall be worked out by dividing the total fuel cost with the total units served (units transferred from Transmission to Distribution – including both KE's own generation plants and external power purchase, excluding units of open market BPC consumers at allowed loss level in that month

WAFC = TCoF / TUS

| WAFC | = | Weighted Average Fuel cost of all fuel sources in Rs/kWh |
|------|---|--|
| TCoF | = | Total Cost of Fuel in Million Rupees of all external generation sources |
| TUS | = | Total Units Served in GWh for regulated consumers i.e. Units received from Transmission network to Distribution less Units of BPCs generators for delivery at 11 kV & above net off allowed Transmission loss |

iii. The computed monthly weighted average fuel cost shall be compared with the reference weighted average fuel cost to compute the FCA. The formula is produced below:



FCA = [WAFC (CM) - WAFC (RM)]

| FCA | 2 | The required increase / (decrease) in Fuel Cost Component for the current month over the reference month to be reflected in the monthly bills of consumers as part of Fuel Charges Adjustment. |
|-----------|---|---|
| WAFC (CM) | Π | Weighted Average Fuel cost component of the Current Month |
| WAFC (RM) | = | Weighted Average Fuel cost component of the Reference Month |

- iv. For the purpose of above adjustment, the Current Month would mean the month for which adjustment is required.
- v. Weighted Average Fuel cost for Reference Month would mean the Fuel cost per unit served component for the corresponding month projected for the purpose of supply tariff as per **Annexure M** of the Supply petition. The references will be updated and filed for the next year as per the timeline given in the petition. However, till the date of determination, the references of previous year shall prevail.
- vi. KE requests that in case of imposition of any stamp duty/taxes on purchase of Power / Furnace oil / Gas / RLNG / HSD etc. payable to Federal or Provincial Government, which is not of a pass through nature like input sales tax or claimable nature like withholding income tax, shall also be considered as pass through in tariff to enable KE recovery of prudent cost. Accordingly, stamp duty/taxes shall be considered as part of the power purchase/ fuel cost (furnace oil / Gas/ RLNG / HSD cost).
- vii. K-Electric shall file the FCA request in the succeeding month.
- viii. The approved monthly FCA shall be notified by the Authority and shall be charged in the month intimated by the Authority in the respective monthly decision. The determined FCA shall be charged on the basis of units billed to each consumer in the month for which FCA is calculated.

Please refer:

Annexure J1 – Monthly Fuel Cost Adjustment – Summary

Annexure J2 – Cost of Fuel for sample forms with sample data for the mechanism

Annexure J3 – Cost of Transmission, Distribution and Supply



B. <u>Mechanism for Quarterly adjustment</u>

Quarterly Adjustments shall include the below:

1. Unrecovered cost due to change in Costs other than fuel during the quarter

The monthly variations in PKR million in the Variable O&M, Capacity costs and other costs of Generation Sources, Cost of Transmission, Cost of Distribution and Cost of Supply, as allowed by the Authority shall be adjusted on quarterly basis.

and a second second second

مرائب البحاد بالحادة والمخرعينية بالمعهور يرزما المحا

The impact of these variations shall be worked out by comparing the Actual effective indexed tariff rates of each month as allowed by the Authority against the Reference tariff rates of the corresponding month (projected for the purpose of Supply Tariff as given in Annexure \mathbf{M}) and shall be passed on to the consumers on quarterly basis as per Annexure J4.

The formula for computation of quarterly adjustment is produced below:

$URQC = (ATR - RTR) \times Actual UB$

| URQC | = | Unrecovered Quarterly Cost to be claimed |
|-----------|---|--|
| ATR | Ŧ | Actual effective indexed Tariff rates applicable for the quarter |
| RTR | = | Reference Tariff rates on reference macroeconomic factors |
| Actual UB | = | Actual units billed for the quarter |

2. <u>Unrecovered cost of FCA due to Distribution loss</u>

The impact of monthly variations in Million Rupees in fuel cost component to the extent of Distribution losses, not taken into account in the monthly FCAs, shall be adjusted on quarterly basis.

The impact of these variations shall be worked out based on below formula which shall be passed on to the consumers in the next quarter.

URFCA = FCA Amount (Units billed) less FCA Amount (Units served)

| URFCA | = | Unrecovered Fuel Cost Adjustment amount to be included in quarterly Tariff variation |
|------------------------------|---|--|
| FCA Amount (Units billed) | = | FCA Amount based on FCA calculated on Units Billed basis and multiplied by Actual Units billed |
| FCA Amount (Units Served) | = | FCA Amount based on FCA calculated on Units Served basis (as allowed in monthly variation) and multiplied by Actual Units billed |

Further, at the end of each financial year, the impact of difference between allowed distribution losses and actual distribution losses shall be adjusted as explained in under heading "Impact of variation between allowed and adjusted T&D losses".



3. Cost of Open access and Cross subsidy recovered from BPCs

Any amounts recovered from Bulk Power Consumers on account of Network Charges, Cost of Open Access and Cross Subsidy shall be included in the Unrecovered Cost as negative amounts.

4. Impact of FCA not passed on to certain categories

As per the directive of the Authority, in case FCA is not allowed to be passed on to certain tariff categories, the adjustment shall be made part of the quarterly adjustments.

5. Other Adjustments and Pass-through items

The actual payments in respect of Corporate tax / WWF / WPPF or any other pass through items, allowed in respective Tariff Determinations of KE's Generation, Transmission, Distribution, Supply or External Power purchase, shall be considered as pass through and included in unrecovered cost in the quarter in which the payment is made.

6. Impact of variation between allowed and adjusted T&D losses

- i. Considering seasonal variation in actual vs allowed Transmission and Distribution losses as explained in **section 7.6.3** of petition, it is requested that calculation of impact of allowed vs actual Transmission and Distribution losses shall be done annually.
- ii. In case of variation in actual Transmission & Distribution losses against the allowed Transmission & Distribution losses benchmarks (after adjustment for sales mix), at the end of each year, the net impact for the same will be computed to be passed on to the consumers in the first quarterly variation of the next year.

Sample calculation is given in Annexure J6

7. Unrecovered Annual Adjustments

Annual Adjustments pertaining to Transmission, Distribution & Supply as per their respective petitions will also form part of adjustments to be requested in Q1 of each financial year.

Submission and approval

- i. K-Electric shall submit the quarterly adjustment request in the month succeeding the quarter to which the adjustment pertains.
- ii. For the purpose of above adjustment, the Current Quarter would mean the quarter for which adjustment is required and the Reference Quarter would mean the same corresponding quarter for which the projections have been submitted.

Please refer:

Annexure J4 - Quarterly Adjustment

Annexure J5 - Cost of Power - Total

Annexure J6 – Annual T&D loss Adjustment



C. Mechanism for Energy Imbalance for Wheeling consumers

Imbalance of wheeling consumers at Transmission network shall be calculated as follows:

EI (Transmission) = Units Received from Generator <u>less</u> Units Required to be received from Generator

| EI (Transmission) | = | Energy Imbalance for wheeling consumers at Transmission network |
|--|--------------|--|
| Units Received from Generator | = | Actual Units received from Generator |
| Units Required to be received from Generator | = | Units delivered to BPC grossed up with allowed level of Transmission loss |
| EI (Distribution) = | Unit to b | s Received from Generator <u>less</u> Units Required e received from Generator |
| EI (Distribution) | = | Energy Imbalance for wheeling consumers at 11 KV network |
| Units Received from Generator | = | Actual Units received from Generator |
| Units Required to be received from Generator | = | Units delivered to BPC grossed up with allowed level of Transmission and 11 kV loss |

Energy Imbalance units can be positive or negative and shall be included in total cost of Fuel for Monthly / Quarterly adjustments at allowed cost (Marginal cost or any other mechanism allowed by the Authority).

EI Amount = EI Total x Allowed cost per kWh

| EI Amount | = | Energy Imbalance amount |
|------------|---|---------------------------------------|
| EI (Total) | = | EI (Transmission) + EI (Distribution) |

Please refer Annexure J3 – Cost of Transmission, Distribution and Supply

<u>Note</u>

- Calculations shown in Annexure J are based on sample data and are for illustration purposes.



K-Electric Limited Monthly Fuel Cost Adjustment Mechanism

| • |
|----|
| 7 |
| ġ, |
| 3 |
| × |
| æ |
| Ξ |
| ₹ |
| |

| | | | 233(551)[223] | AUGREEK | Sep:23% | (OGE23 | NOV/261-31 | DECREMENT | 11112212-1123 | 2005242005 | Mares 4 alex | WIRKING W | MEVPSALE | 1017245 |
|--|-----------|-----------------|---------------|---------|---------|--------|------------|--------------|---------------|------------|--------------|-----------|---------------------------|------------|
| References as per Annexure M | | | | | | | | | | | | | | |
| Cast of fuel | PKR mn | ច | 34,207 | 28,692 | 29,741 | 30,503 | 25,563 | 15,548 | 11,230 | 14,428 | 21,573 | 22,629 | 28,048 | 30,819 |
| Units served | GWh | q | 1,891 | 1,679 | 1,660 | 1,696 | 1,410 | 1,198 | 1,045 | 1,164 | 1,508 | 1,558 | 1,891 | 1,960 |
| Cost per unit Served | PKR / kWh | c≓a/b | 18.09 | 17.09 | 17.92 | 17.99 | 18.13 | 12.98 | 10.75 | 12.40 | 14.31 | 14.52 | 14.83 | 15.72 |
| Actual | | | | | | | • | ÷., | - | | | | And a state of the second | 1942 |
| Cost of fuel | PKR mn | d = Annexure J2 | 37,258 | 34,578 | 30,659 | 29,375 | 22,288 | 9,972 | 11,610 | 14,903 | 22,263 | 24,266 | 28,846 | 33,701 |
| Units served - excl. BPC consumers shifted to open markets | GWh | e = Annexure J3 | 1,951 | 1,868 | 1,605 | 1,503 | 1,339 | 955 | 852 | 066 | 1,281 | 1,569 | 1,874 | 1,890 |
| Cost per unit Served | PKR / kWh | f=d/e | 19.10 | 18.51 | 19.10 | 19.55 | 16.64 | 10.45 | 13.63 | 15.05 | 17.38 | 15.47 | 15.40 | 17.84 |
| Fuel Cost Adjustment Computation | | • | | | | | | - | • | | | | | 勝 行 |
| Fuel cost adjustment | PKR / kWh | g=f-c | 1.007 | 1.416 | 1.186 | 1.559 | (1.486) | (2.530) | 2.883 | 2.649 | 3.070 | 0.948 | 0.562 | 2.115 |
| Fuel cost adjustment amount | PKR mn | h=exg | 1,964 | 2,645 | 1,903 | 2,342 | (1,989) | (2,415) ' | 2,456 | 2,623 | 3,933 | 1,486 | 1,053 | 3,996 |
| | | | | | | | | | | | | | - | • |

This form represents fuel cost adjustment mechanism and will be filed after each month for the relevant month.

.

.

.....

÷.,

decire res

and a second

.....

ı.

۰.



Page 1 of 15
| 1 Units Genorated / Purchased - Net CWh a Plant 1 CWh b Plant 2 CWh c Plant 3 CWh c Plant 3 CWh c Plant 4 CWh c Plant 5 CWh c Plant 6 CWh c Plant 7 CWh c Plant 7 CWh c Plant 9 CWh c Plant 10 CWh c Plant 11 CWh f Plant 11 CWh f Plant 11 CWh f Plant 12 CWH f Plant 13 CWH f Plant 14 CWH f Plant 13 CWH f Plant 13 CWH f Plant 13 CWH f Plant 14 CWH f Plant 13 CWH f Plant 14 CWH f Plant 3 FWH f Plant 4 </th <th>2.562 2.562 37,233 37,233</th> <th>11111111111111111111111111111111111111</th> <th>11,622 1,622 -</th> <th><u> 1,526</u></th> <th><u>1,360</u></th> <th></th> <th>11122113[55] 859</th> <th></th> <th>Milikani 1 303</th> <th></th> <th><u> </u></th> <th></th> <th></th> | 2.562 2.562 37,233 37,233 | 11111111111111111111111111111111111111 | 11,622 1,622 - | <u> 1,526</u> | <u>1,360</u> | | 11122113[55] 859 | | Milikani 1 303 | | <u> </u> | | |
|--|--|--|----------------------|---------------|--------------|---------|---------------------|---|-------------------|---------|----------|---------|-----------|
| 1 Units Generated / Purchased - Net att 1 a Plant 1 att 1 b Plant 2 att 1 c Plant 3 att 1 d Plant 4 att 1 d Plant 5 att 1 d Plant 5 att 1 d Plant 6 att 1 e Plant 7 att 1 e Plant 7 att 1 f Plant 1 att 1 f Plant 2 att 1 f Plant 3 att 1 f Plant 3 att 1 f Plant 4 for 1 f Plant 3 for 1 f Plant 4 for 1 </th <th>1,977 </th> <th>1,891 </th> <th>1,622 - - -</th> <th>1,526</th> <th>1,360</th> <th>120</th> <th>859</th> <th>000</th> <th>1 293</th> <th>502 5</th> <th>1,903</th> <th></th> <th></th> | 1,977 | 1,891 | 1,622 - - - | 1,526 | 1,360 | 120 | 859 | 000 | 1 293 | 502 5 | 1,903 | | |
| a Plant 1 b Plant 2 c Plant 2 c Plant 4 c Plant 4 d Plant 4 e Plant 5 e Plant 6 e Plant 6 e Plant 6 e Plant 6 f Plant 6 i Plant 10 i Plant 10 i Plant 11 i Plant 11 i Plant 12 m Plant 12 m Plant 13 i Plant 14 i Plant 2 i Plant 3 i Plant 4 i Plant 4 <th>4,979 </th> <th>т. с. т. /th> <th>v · · · ·</th> <th>0764</th> <th>nnc't</th> <th></th> <th></th> <th>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</th> <th></th> <th>127</th> <th></th> <th></th> <th>17,915</th> | 4,979 | т. с. т. | v · · · · | 0764 | nnc't | | | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | | 127 | | | 17,915 |
| c Plant c Plant c Plant c Plant c Plant c Plant c Plant c Plant 10 Plant 11 Plant 11 Plant 11 Plant 12 m Plant 12 m Plant 12 m Plant 13 cwh cwh cwh cwh cwh cwh cwh cwh cwh cwh | 2.562 2.562 37,233 | 2.562 1.893 | | • | | 1/2 | ;. | | | | • | | 1 |
| d Plant 4 CWh e Plant 5 CWh e Plant 6 CWh g Plant 6 CWh g Plant 6 CWh h Plant 10 CWh i Plant 10 CWh i Plant 11 CWh i Plant 12 CWh i Plant 13 CWH i Plant 2 Plant 3 i Plant 4 Plant 4 i Plant 4 Plant 4 | | 2.562 | | | • | | | • | , | | | • | • |
| e Plant 5 F Plant 6 R Plant 7 h Plant 7 i Plant 7 i Plant 10 i Plant 10 i Plant 10 i Plant 11 m Plant 13 m Plant 14 m Plant 13 m Plant 14 m Plant 13 m Plant 14 m Plant 14 | | 2.562 1.893 | • | | • | , | • | • | • | | • | • | , |
| f Plant 6 6Wh h Plant 7 6Wh h Plant 9 6Wh i Plant 10 6Wh j Plant 11 6Wh i Plant 11 6Wh i Plant 11 6Wh i Plant 12 6Wh i Plant 11 6Wh m Plant 13 6Wh n Energy Imbolance - wheeling consumers 6Wh 2 Cost of Fuel 6Wh b Plant 2 Plant 3 b Plant 2 Plant 4 c Plant 4 Plant 4 | | | | | • | | • | • | • | | | | • |
| g Plant 7 GWh i Plant 10 GWh j Plant 10 GWh j Plant 11 GWh j Plant 12 GWh i Erergy Imbolance - wheeling consumers GWh i First First i Plant 2 Plant 3 i Plant 4 Plant 4 i Plant 4 Plant 4 | | | | • | • | • | • | • | • | | • | | • |
| h Plant 8 Gwh j Plant 11 Gwh j Plant 11 Gwh i Plant 12 Gwh m Plant 12 Gwh m Plant 12 Gwh m Funt 12 Gwh m Funt 12 Gwh m Funt 13 Gwh m TOTAL Gwh a Plant 2 Fwh b Plant 2 Fwh c Plant 3 Fwh c Plant 4 Fwh c Plant 4 Fwh | | | • | | • | • | , | • | • | • | • | • • | • |
| i Plant 10 6Wh i Plant 11 6Wh i Plant 12 6Wh m Plant 13 6Wh n Energy (mbalance - wheeling consumers 6Wh TOTAL Cost of Fuel 7Kh a Plant 2 7Kh b Plant 4 7Kh c Plant 4 7Kh | 2.562 2.562 1. <u>979</u> 37,233 | 2,562 1.893 | • | | • | • | • | | • | | • • | | |
| j Prant. Lu 600 m Plant. 11 600 m Plant. 13 600 m Plant. 13 600 m Plant. 13 600 TOTAL 600 600 | 2.562 2.562 1,979 37,233 | 2,562 1,893 | • | | • | • | | • • | | | | | |
| I Prant 11 GWh m Plant 13 GWh m Plant 14 GWh n Energy Imbalance - wheeling consumers GWh TOTAL GWh GWh a Plant 1 Pktren b Plant 2 Pktren c Plant 3 Pktren d Plant 4 Pktren | - - 2.562 1,979 37,233 37,233 | - - 2.562 1.893 | | | | | • • | | | | | | |
| In Plant 12 In Plant 12 TOTAL TOTAL Guilding consumers Guilding to the field of the Guilding to the | 2.562 2.562 1,979 37,233 | - 2.562 1.893 | | | | | | | | | • | ı | • |
| n Energy Imbalance - wheeling consumers Gwh 2 TOTAL Gwh Gwh Gwh TOTAL 5 2 Cost of Fuel 8 b Plant 2 b Plant 4 c Plant 6 c Plant 7 c Plant 7 c Plant 8 c Plant | 2.562 <u>1,979</u> 37,233 | 2.562 1,893 | | | | • | • | • | • | | | | ۰, |
| TOTAL GWh 2 Cost of Fuel a Plant 1 b Plant 2 b Plant 3 c Plant 4 c Plant 4 e Plant 4 | 1,979 37,233 - | 1,893 | 2,562 | (4.270) | (4.270) | (4.270) | 4.270 | 4.270 | 4.270 | (4.270) | (4.270) | (4.270) | (2) |
| 2 <u>Cost of Fue</u> a Plant 1 b Plant 2 c Plant 3 c Plant 4 PKRmn e Plant 4 PKRmn e Plant 5 | 37,233 - | | 1,625 | 1,522 | 1,356 | 967 | 863 | 1,004 | 1,298 | 1,588 | 1,899 | 1,915 | 17,910 |
| 2 <u>CostofFue</u> a Plant 1 b Plant 2 kKtmn c Plant 4 PKRmn e Plant 4 PKRmn e Plant 5 | 37,233 | | | | | | | | | | | | |
| a Plant I | | 613 46 | | | | 10.010 | 11 567 | 14 000 | חרר רר | OUE VE | 000 00 | AAT CC | 022 006 |
| b Plant 2 Plant 3 d Plant 4 e Plant 4 e Plant 5 | | 540,45 | 20,033 | 57,418 | 72,550 | CTU/UL | /0C'TT | 74'000 | 72,220 | onc'+7 | | | |
| d Plant 4 PKR mn e Plant 4 PKR mn | • | | | | | | | | | | | . 1 | |
| e Plant 5 | | • | | | | | | , | | | , | | • |
| | | | | | • | , | | | | • | | | • |
| f Plant 6 Plant 6 | • | • | | | | • | • | • | • | • | • | | • |
| E Plant 7 | • | • | • | • | • | • | • | • | • | | • | | • |
| h Plant 8 PKR mn : pi-ro | | | • | • | • | • | | • • | | | • • | | |
| i plant 10 PKB mp | | • | | | • | • | , | 1 | | | | | • |
| i Plant 11 PXR min | | , | , | | | | • | 1 | , | • | • | • | • |
| I Plant 12 | • | , | | • | • | | | • | • | ı | | | • |
| m Plant 13 PKR mn | . 1 | . " | . 1 | , ! | | | . ' | , : | , ; | | | - | - |
| n Energy Imbalance - wheeling consumers | 26 | 56 | 26 | (43) | (43) | (43) | 43 | 43 | 43 | (43) | (51) | (54) | (Tc) |
| TOTAL PKR mn 3 | 37,258 | 34,578 | 30,659 | 29,375 | 22,288 | 9,972 | 11,610 | 14,903 | 22,263 | 24,266 | 28,846 | 33,701 | 299,719 |
| 3 Cost of Fuel / unit (2 / 3) | | | | | | | | | | | | | |
| a Plant 1 PKR/kWh | 18.84 | 18.27 | 18.88 | 19.28 | 16.41 | 10.31 | 13.47 | 14.87 | 17.18 | 15.26 | 15.18 | 17.58 | 16.73 |
| b Plant 2 PKR/KWh | • | , | • | • | | • | | , | • | • | • | | • |
| | , | • | • | | • | • | | • | • | | • | • | |
| | • | • | | • | | • | - | • | | | | | |
| f Plant 6 Prant 6 | | | | | | | | | •• | • | | | |
| R Plant 7 PKR/kWh | | | | | | | • | • | • | | • | • | |
| h Plant 8 Plant 8 | • | | • | • | • | | | • | , | • | • | • | ÷. |
| i Plant 9 PKR/kWh | • | • | • | • | • | • | • | • | | ٠ | • | • | |
| j Plant 10 PKR/kWh | ٠ | | • | | | • | | | • | • | • | • | |
| Plant 11 PKR/KWh | ı | • | | | • | | • | • | • | | • | • | |
| PRI/ TAVI PRI/ TAVI PRI/ TAVI PRI/ TAVI PRI/ TAVI PRI/ PRI/ PRI/ PRI/ PRI/ PRI/ PRI/ PRI | | • • | | • | • • | , , | • • | • • | | | • • | | |
| n Energy Imbalance - wheeling consumers | 10.00 | 10.00 | 10.00 | 10,00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10,00 | 10.00 | 100,00 |
| | 18.87 | 18.26 | 18.87 | 14 3D | 16.43 | 10.31 | 13.45 | 14.85 | 17.16 | 15.78 | 15.19 | 17.60 | 16.74 |
| | 70.04 | 10140 | 10101 | neier | | 10,01 | 10.07 | 20144 | 07.17 | 17177 | | | - Handred |

4

TRIC

EL C

| ופכונוב רונטונהמ | st of Transmission, Distribution and Supply |
|------------------|---|
| noara-n | Cost of |

•

| 121 |
|-------|
| 12 |
| |
| 1251 |
| 551 |
| ESI |
| 24 |
| 2.1 |
| 1351 |
| 22 |
| 131 |
| 120 |
| 501 |
| 14 C |
| 12.41 |
| 122 |
| 1221 |
| 20 |
| |
| |
| 52 |
| 1.3 |
| H1 |
| _ |

н

| | | | | NEW ALTERNAL | | and the provides | NT THE FREE STREET | | | | MTERDON INST | ATTRACTOR STATE | STATES STATES | | ATOTAL SAN |
|---|-----------------|------------|-------|--------------|-------|------------------|--------------------|--------|-------|-------|--------------|-----------------|---------------|---------------|------------|
| 1 Transmisison charges | | | | | | | | | | | | | | | |
| Unlts served - Relevent for quarterly adjustmen | ant a | GWh | 1,973 | 1,890 | 1,627 | 1,524 | 1,361 | 976 | 873 | 1,012 | 1,303 | 1,590 | 1,895 | 1,911 | 17,937 |
| Less; Units of wheeling consumers who have si to open markets | hilted b | GWh | (22) | (22) | (22) | (22) | (22) | (22) | (22) | (22) | (22) | (22) | (22) | (22) | (261) |
| Net units - Relevent for monthly FCA | +8-3 | p GWh | 1,951 | 1,868 | 1,605 | 1,503 | 1,339 | 955 | 852 | 066 | 1,281 | 1,569 | 1,874 | 1,890 | 17,675 |
| Transmisssion tariff - indexed Tariff | P | PKR / KWh | 2.99 | 2.99 | 2.99 | 3.02 | 3.02 | 3.02 | 3.05 | 3.05 | 3.05 | 3.08 | 3.08 | 3.08 | 3.08 |
| Total cost* | X == 0 | d PKR mn | 5,892 | 5,646 | 4,859 | 4,599 | 4,106 | 2,946 | 2,662 | 3,084 | 3,970 | 4,894 | 5,833 | 5,883 | 54,374 |
| 2 Distribution charges | | | | | | | | | | | | | · | | |
| Units billed | | GWh | 1,529 | 1,605 | 1,324 | 1,252 | 1,282 | 935 | 305 | 814 | 1,012 | 1,250 | 1,532 | 1,537 | 14,876 |
| Less: Units wheeling consumers who have shift open markets | ted to g | GWh | (0) | (o) | (o) | (o) | (0) | (0) | (a) | (0) | (0) | (0) | (0) | (0) | (o) |
| Net units - Relevant for Monthly FCA | h=1+1 | i GWh | 1,529 | 1,605 | 1,324 | 1,252 | 1,282 | 935 | 805 | 814 | 1,012 | 1,250 | 1,532 | 1,537 | 14,876 |
| Distribution tariff - Indexed Tariff | - | PKR / KWh | 3.84 | 3.84 | 3,84 | 3.87 | 3.87 | 3.87 | 3.91 | 3.91 | 3.91 | 3.95 | 3.95 | 3.95 | 3,89 |
| Total cost* | - = | PKRmn | 5,866 | 6,155 | 5,077 | 4,850 | 4,968 | 3,624 | 3,148 | 3,183 | 3,962 | 4,939 | 6,055 | 6,072 | 57,900 |
| 3 <u>Supply</u> | | | | | | | | | | | | | | | |
| Units received from Distribution | * | GWh | 1,529 | 1,605 | 1,324 | 1,252 | 1,282 | 935 | 805 | 814 | 1,012 | 1,250 | 1,532 | 1,537 | 14,876 |
| Supply tariff - indexed Tariff | - | PKR / KWI | 5.96 | 5.957 | 5,957 | 5.720 | 5.720 | 5.720 | 5.700 | 5.700 | 5.700 | 5.679 | 5.679 | 5.679 | 5.776 |
| Cost of Supply network | m=k* | l PKR mn | 9,110 | 6,560 | 7,885 | 7,162 | 7,336 | 5,351 | 4,586 | 4,637 | 2'771 | 7,098 | 8,702 | 8,727 | 85,923 |
| 4 Units of wheeling consumers | | | | - | | | | | | | | | | ••• | |
| Wheeling at 132 kV - Units delivered | c | GWh | 62.5 | 62.5 | 62.5 | 62.5 | 62.5 | 62.5 | 62.5 | 62.5 | 62.5 | 62.5 | 62,5 | 62.5 | 750 |
| Allowed Transmission losses | a | * | 1.30% | 1.30% | 1.30% | 1.30% | 1.30% | 1.30% | 1.30% | 1.30% | 1.30% | 1.30% | 1.30% | 1.30% | 1.30% |
| · Units required from Generator | p=n/(1. | o) GWh | 63.3 | 63.3 | 63.3 | 63.3 | 63.3 | 63.3 | 63.3 | 63.3 | 63.3 | 63.3 | 63.3 | 63.3 | 759,9 |
| Units received from Generator | в | GWh | 65.2 | 65.2 | 65.2 | 60.2 | 60.2 | 60.2 | 66.5 | 66.5 | 66.5 | 60.2 | 60.2 | 60.2 | 756.1 |
| Imbalance - Purchase from Generator / (Sale t Generator) | to r=q-p | GWh | 0.1 | 1.9 | 1.9 | (3.2) | (3.2) | (3.2) | 3.2 | 3.2 | 3.2 | (3.2) | (3.2) | (3.2) | (3.8) |
| Wheeling at 11 kV - Units delivered | | GWh | 20.83 | 20.83 | 20.83 | 20.83 | 20.83 | 20.83 | 20.83 | 20,83 | 20.83 | 58 UC | 50 G | 20.83 | 250 |
| Allowed Transmission Incers | - | 8 | 20F 1 | 1 30% | 1 30% | 1 30% | 1 30% | 260 E | 1 30% | 1 30% | 1 30% | 76UE 1 | 76UE 1 | 1 20% | 769E V |
| Allowed Distribution losses | 3 | 8 | 4.36% | 4.36% | 4.36% | 4.36% | 4.36% | 4.36% | 4.36% | 4.36% | 4.36% | 4.36% | 4.36% | 4.36% | 1.30% |
| Units required from Generator at Transmission | ı level v≈s/(1· | u) GWh | 21.8 | 21.8 | 21.8 | 21.8 | 21.8 | 21.8 | 21.8 | 21.8 | 21.8 | 21.8 | 21.8 | 21.8 | 261 |
| Units required from Generator at Plant level | {)/^=W | () GWh | 22.1 | 22.1 | 22.1 | 22.1 | 22.1 | 22.1 | 22.1 | 22.1 | 22.1 | 22.1 | 22.1 | 22.1 | 265 |
| Units received from Generator | × | GWb | 22.7 | 22.7 | 22.7 | 21.0 | 21.0 | 21.0 | 23.2 | 23.2 | 23.2 | 21.0 | 21.0 | 21.0 | 263.5 |
| Imbalance - Purchase from Generator / (Sale t Generator) | ν-×=γ | GWh | 0.7 | 0.7 | 0.7 | (1-1) | (1-1) | (1.1) | 1,1 | 11 | 1 | (FTF) | (1.1) | ی کرد (۲۰۱ | (13) |
| Line - Purchase from Generator / (5 | Sale z=r+y | GWh | 2.6 | 2.6 7 | 2.6 | (4.3) | (4.3) | (4.3) | 4.3 | 4.3 | 4.3 | (4.3) | (4.3) | (F.A) | (; ;) |
| Warginalfrost / cost as per CTBCM or any methianisti approved | P | PKR / KWII | 10.0 | 10.0 | 10.0 | 10,0 | 10,0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | |
| Amplat | ab=2xa | a PKR.mn | 25.6 | 25.6 | 25.6 | (42.7) | (42.7) | (42.7) | 42.7 | 42.7 | 42.7 | (42.7) | (42.7) | (42.7) | (51.2) |
| The plot year cost pertaining to these will be senotriely included in the total cost at year end | | | | | | | | | | | | | | | |

~

Page 3 of 15

STE

ì

| K-EI | e¢ | tric | L | Imi | ted | |
|------|----|------|---|-----|-----|--|
| - | | | | | - | |

8. C. . .

· · • · • -

.

Annexure J4

| arteriy Adjustment | | | | | | |
|---|---------------------------|-----------------|-------|----------------------|----------------|----------|
| | | | | | | |
| | | | | | | 1452 |
| | | | | CALL AND SERVICE AND | | anif 200 |
| eferences as per Annexure M | 1 | | 1 | | | |
| Projected Units billed | GWh | а | 1,51 | 9 1,463 | 1,395 | |
| osts of Generation, Transmission and Distribution | | | | | | |
| O&M Cost, capacity cost and other costs | PKR / kWh | ь | 10.2 | 1 12.44 | 11.94 | |
| Transmission | PKR/kWh | c | 3.7 | 2 3.43 | 3.55 | |
| Distribution network | PKR/kWh | d | 3.8 | 4 3.84 | 3.84 | |
| Supply | PXR/kWh | e | 5.9 | 5 5.96 | 5.96 | |
| · Total | PKR / kWh | f≃b+c+d+e | 23.7 | 2 25.66 | 25.29 | |
| osts of Generation, Transmission and Distribution | ļ | | | • | | |
| O&M Cost, capacity cost and other costs | PKR mn | g=b*a | 15,51 | 2 18,195 | 16,661 | |
| Transmission | PKR mn | h=c*a | 5,64 | 8 5,014 | 4,958 | |
| Distribution network | PKR mn | i=d*a | 5,82 | 5 5,611 | 5,350 | |
| Supply | PKR mn | j=e*a | 9,04 | 2 8,715 | 8,310 | |
| Total | PKR mn | k=g+h+l+j | 36,02 | 7 37,535 | 35,279 | |
| ctual (1997) - the definition of the end of the | - | | 1 | 49. t | | |
| Jnits billed | GWh | 1 | 1,52 | 9 1,605 | 1,324 | |
| osts of Generation, Transmission and Distribution | ſ | | | | | |
| O&M Cost, capacity cost and other costs | PXR / kWb | m=r/1 | 9.16 | 0 10.230 | 11.359 | |
| Transmission | PKR / kWh | n=s/1 | 3.85 | 3 3.518 | 3.671 | |
| Distribution network | PKR / kWh | o=t/1 | 3.83 | 5 3.836 | 3.836 | |
| Supply | PKR / kWb | 0=u/1 | 5.95 | 7 5.957 | 5.957 | |
| Total | PKR / kV/h | q=m+n+o+p | 22,80 | 7 23.541 | 24.823 | |
| osts of Generation. Transmission and Distribution | | | | | | |
| O&M Cost, capacity cost and other costs | PKR mn | r = Annexure J5 | 14.00 | 8 16.416 | 15.034 | |
| Fransmission | PKR ma | s = Annexure J3 | 5.89 | 2 5,646 | 4,859 | |
| Distribution network | PKB mn | t = Annexure 13 | 5.86 | 6 6.155 | 5.077 | |
| Supply | PKR mo | u = Annexure I3 | 911 | 0 9,560 | 7,885 | |
| Total | PXR mn | v=r+s+t+u | 34,87 | 5 37,777 | 32,855 | |
| ariation | | | 1 | an an ma | $t = t + \tau$ | |
| osts of Generation, Transmission and Distribution | | | | | | |
| O&M Cost, capacity cost and other costs | PKR mn | w = (m - b) * I | (1.61 | 0) (3.543) | (775) | |
| Transmission | PKR mn | x = (n - c) * l | 20 | 6 145 | 154 | |
| Distribution network | PKR mn | y = (o - d) + 1 | | (0) | - 1 | |
| Supply | PKR mn | z=(p-e)*(| 1 1 | 6 | 0 | |
| Total | PKR mn | aa=w+x+y+z | (1,39 | 8) (3,398) | (621) |] |
| | | | | | | |
| mount calculated for a quarter will be applied in the months as de | termined by Authority and | | | | | |
| assed onto consumers / taken up by GoP as per the decision by Go |)P. | | 1 | | | |
| | | } | 1 | | | |
| | | 1 | 1 | | | |

t

1.1



an a contractive first contraction of the state of the second s

.....

æ

Annexure J4

5

,

K-Electric Limited Quarterly Adjustme

| Second Second | eny Aujusunem Association and a second se | anter states and the second | 1 | ATTERANTICE STAT | DOTES TO THE REAL PROPERTY OF | STASS THE PARTY | and the second | 3113-514-12-29 |
|-------------------|--|-----------------------------|--------------------|------------------|-------------------------------|-------------------|--|----------------|
| | | | | | | nended Septem | 行大学的神经 | |
| | | 美和市场 社会 | | | | | | |
| ADIO | STMENT IN TARIEF DUE TO UNRECOVERED COST | | | 全地历史和社 | | | | QU: 4 |
| | | | | ļ | | | | |
| a. Ui | recovered Cost of FCA due to non adjustment of D. losses | | | | | | | |
| 11. | hits Sanrad | GWh | əh ≓ Anneyura I1 | | 1 951 | 1 868 | 1.605 | |
| | | GUIL | | | 1,531 | 1,605 | 1,005 | |
| U | its blied for FCA | Givn | ac = Athexure 15 | | 1,525 | 1,005 | 1,324 | |
| | Fuel east | firit ma | ad - Annovuro 11 | | 37 359 | 34 579 | 20.659 | |
| | | F 65 010 | an - Willievole II | | 31,230 | 34,378 | 20,000 | |
| I | Monthly variation in Fuel Cost (FCA) - Based on Units served | | | | | | | |
| | Cost per unit | PKR / kWb | ae = ad / ab | | 19.10 | 18.51 | 19.10 | |
| | Cost ner unit Reference | PKR / kWh | af = Annexure 11 | | 18.09 | 17.09 | 17.92 | |
| | Variation | 2XR / kWh | ag = ae - af | | 1.01 | 1.42 | 1.19 | |
| | Variation | PKP / Mo | | 1 | 1 539 | 7 772 | 1.570 | 5 381 |
| | | 1001 440 | all~26 pc | | 2,555 | 2,272 | 2,270 | 0,001 |
| n | Monthly variation in Fuel Cost (FCA) - Based on Units billed | | | | | | | |
| | Cost per unit Actual | PKR / kWh | ai = ad / ac | 1 | 24.364 | 21.548 | 23.164 | |
| | Reference Fuel Cost | PKR mn | ai = Annexure J1 | | 34,207 | 28,692 | 29,741 | |
| | Cost per unit Reference | PKR / kwh | ak = ai / a | | 22,523 | 19.613 | 21.322 | |
| | | DYD / WWH | | | 1 947 | 1 934 | 1 847 | |
| | | - NA / KILO | | ł | 1.042 | 7.104 | 2.042 | 0 250 |
| | variation amount | PKK/ MIN | am = al * ac | | 2,810 | 3,104 | 2,430 | 0,500 |
| | Hanney and Cost of FCA due to page adjustment of D. Jacob | | 20 - 200 - 2h | | 1 376 9 | 837 / | 267.9 | 7 977 |
| | Unrecovered cost of PCA due to non adjustment of D. losses | Phay was | an - an - an | = | 1,270.0 | | | |
| ь с | act of open access and cross subsidy | | | | | | | |
| 0 | Linite of BBCs wheeled - Transmission network | | | | | | | |
| | Linits of BPCs wheeled - Transmission network | GWh | ao = Annexure 13 | 1 | 63 | 63 | 63 | 188 |
| | Transmission Network Charges | PKR / kWh | | | | | | |
| | Transmission Network Charges amount | PKR mp | ag = ap " ao | | | | | |
| | Cost of open access and stranded cost per unit | PKR / kWh | ar ar | | As per the unifor | m rates to be det | ermined by | |
| | Cross subsidy per unit | PKR / kWh | as | | | NEPRA | | |
| | Cost of open access amount | PKR mn | at | | | | | |
| | Cross subsidy charged - amount | PX8 mp | au | ļ | | | | ļ |
| | Total | PKR ma | av = aq + at + au | - | | | | |
| | | | | | | | | |
| | Units of BPCs wheeled - Distribution Network | | | | | | | |
| | Units of BPCs wheeled - Distribution Network | GWh | aw = Annexure J3 | | 21 | 21 | 21 | 63 |
| | Note the set was a set of the set | 6K0 / 10/16 | | | | | | • |
| | Distribution network charges - 11kv rate at respective voltage level loss | PKA (\$114 | dy | | | | | |
| | Distribution network charges amount | PXR mo | əz = əw * ay | | As par the unifer | n mtas ta ha dat | arminad by | |
| | Cost of open access per unit | PKR / kWh | ba | | As per the unitor | NEPRA | enninea by | |
| | Cross subsidy per unit | PKR / kWh | bb | | | | | |
| | Cost of open access amount | PXR mn | bc | | | | | |
| | Cross subsidy charged - amount | PXR mn | bd | - | | | | |
| | Total | PKR mn | be = az + bc + bd | | - | - | • | - |
| | Total fact of succession and succession whether | 8 46 — - | | · - | · | | | |
| | Total Cost of open access and cross subsidy | PKR mn | br = av + be | - | | | - | |
| Sum | many of lintecovered cost for the quarter | | 1 | | | | | |
| <u>30111</u> a | Ouarterly Adjustment | PKR ma | be = aa | | | | | (5,417) |
| ь | . Unrecovered Cost of FCA due to non adjustment of D losses | PKR mn | bh = an | | | | | 2,977 |
| c | Cost of open access and cross subsidy charge | PKR mn | bì = bf | | | | | - |
| đ | Impact of FCA not passed on to certain categories | PKR mn | bj | ļ | | | l | - |
| e | Other Adjustments and Pass through items Concentrations | 6 | | 1 | | | | |
| | - Corporate tax - WODE / WDDE | PKR mp | DK N | | | | | - |
| f | Annual adjustment for T&D losses | PXR mn | bm = Apperture 15 | | | | | 1.697 |
| g | Annual adjustment of unrecovered costs | | | | | | | 1,021 |
| B | - Transmission | PKR mn | bn | | | | | 3,711 |
| | - Distribution | PKR mn | bo | | | | | 5,610 |
| | - Supply | PKR mn | bp | | | | L | 26,085 |
| т | otal Unrecovered cost for the quarter | PKR mn | bg = sum (bg:bp) | | | | | 34,665 |
| | · ···· · · | | | 1 | | | | |

This form represents quarterly adjustment mechanism and will be filed at each quarter for the relevant quarter.



K-Electric Limited Quarterly Adjustment

6

¢

Annexure J4

.

.

| | | | | | | G. San |
|--|----------------------|--------------------------|------------|--|----------------|--|
| | | | | CARLES AND | | |
| <u>an an a</u> | 10022500200700570 | UNITABLE DI COLEMANNE IN | IS SECTION | | Not-2313143162 | Deczaw ministra |
| References as per Annexure M | 1 | 1 | | | | |
| Projected Units billed | GWh | а | | 1,438 | 1,355 | _1,176 |
| Costs of Generation, Transmission and Distribution | | | | | | |
| - O&M Cost, capacity cost and other costs | PKR / kWh | b | | 12.31 | 12.54 | 14.79 |
| - Iransmission | PKH / KVVh | ç | | 3.52 | 3.11 | 3.04 |
| - Oscibballon network | DYP / SWG | 0 | | 5.04 | 5.05 | 5.95 |
| - Supply | PKR / KWb | f=b+c+d+e | | 25.62 | 25.44 | 27.63 |
| - 1014 | | 1-0+0+0+0 | | | | |
| Costs of Generation, Transmission and Distribution | | | | | | |
| - O&M Cost, capacity cost and other costs | PKR mn | g=b*a | | 17,695 | 16,999 | 17,384 |
| - Iransmission | PKR mn | h=c⁼a | | 5,065 | 4,212 | 3,5/9 |
| Uistribution network | PKR mn | 1=d * a | | 5,515 | 5,198 | 4,509 |
| - Supply | PXR mn | j=e*a | | 8,566 | 8,073 | 7,003 |
| - 10tai | PKK mn | $\kappa = g + n + i + j$ | | 36,840 | 54,485 [| 52,475 |
| Actual | 1 | | 14. | | | |
| Units billed | GWh | I | | 1,252 | 1,282 | 935 |
| Costs of Generation, Transmission and Distribution | | | | | | |
| O&M Cost, capacity cost and other costs | PKR / kWh | m=r/1 | | 12,756 | 11.962 | 16.759 |
| - Transmission | PKR / kWh | n=s/l | | 3.674 | 3.202 | 3.149 |
| - Distribution network | PXR / kWh | o=t/1 | | 3.874 | 3.874 | 3.874 |
| - Supply | PKR / kWh | p=u/1 | | 5,720 | 5.720 | 5.720 |
| - Total | PXR / kWh | q = m + n + o + p | | 26.024 | 24.758 | 29.503 |
| Costs of Generation Transmission and Distribution | | | | | | |
| • ORM Cost canacity cost and other costs | PKR mn | r = Annexure IS | | 15 971 | 15,340 | 15.676 |
| - Transmission | PKR mn | s = Annexure 13 | | 4,599 | 4.106 | 2,946 |
| - Distribution network | PKR mn | t = Annexure J3 | | 4,850 | 4,968 | 3,624 |
| - Supply | PKR mn | u = Annexure I3 | | 7,162 | 7,336 | 5,351 |
| - Total | PKR mn | v = r + s + t + u | | 32,582 | 31,750 | 27,597 |
| Variation | | | | | | |
| Costs of Connection Transmission and Distribution | | | | | | |
| - ORM Cost capacity cost and other costs | PKS ma | w = (m - b) * i | | 563 | (746) | 1.844 |
| - Juni cost, capacity cost and other costs | PKR ma | x=(n-c) • 1 | | 189 | 120 | 98 |
| - Distribution network | PKR mn | v = (o - d) * 1 | | 48 | 49 | 36 |
| - Supply | PKR mn | z = (p - e) • l | | (297) | (304) | (222) |
| - Total | PKR ma | aa=w+x+y+z | | 503 | (881) | 1,755 |
| An and a based for a model of the second state | | | | | | |
| Amount calculated for a quarter will be applied in the months as determine | neo by Authority and | | | | | |
| passed onto consumers / taken up by GoP as per the decision by GoP. | i | 1 | | | | |
| | | l | | | | |
| | | • | | | | |

i



-

| K-El Oua | ectric Limited rterly Adjustment | | | | | | | Annexure J4 |
|-------------|--|------------------|--------------------------------------|-----------|-------------------------|-------------------|------------|-------------|
| | | | | | | | | |
| | | | | | | | | |
| ADI | USIMENGINGARIBEDU ETOLUNIRECOVIETED COEFEMAN SAMUENA BANKA | NARE LEVEL | <u> 1999 - Den de la composition</u> | E A COLOR | <u> Zeologia</u> terzeg | | | |
| a. l | Inrecovered Cost of FCA due to non adjustment of D. losses | | | | | | | |
| ı | Inits Served | GWb | ab = Annexure J1 | | 1,503 | 1,339 | 955 | |
| ĩ | Jnits billed for FCA | GWh | ac = Annexure J3 | | 1,252 | 1,282 | 935 | |
| | | | · | | | | | |
| | Fuel cost | PKR mn | ad = Annexure J1 | | 29,375 | 22,288 | 9,972 | |
| i | Monthly variation in Fuel Cost (FCA) - Based on Units served | | | | | | | |
| | Cost per unit | PKR / kWh | ae = ad / ab | 1 | 19.55 | 16.64 | 10.45 | |
| | Cost per unit Reference | PKR/kWh | af = Annexure J1 | | 17.99 | 18.13 | 12.98 | |
| | Variation | PKR / kWh | ag = ae - af | | 1.56 | (1.49) | (2.53) | |
| | Variation amount | PKR / Ma | ah = ag * ac | | 1,951 | (1,905) | (2,367) | (2,320) |
| , | t - Be-ablumpiato to find fact freet. Deep doe think billed | | | | | | | |
| ' | Cost per unit Actual | PKR / KWb | ai=ad/ac | 1 | 23 467 | 17 379 | 10.661 | |
| | Polaronca Fuel Cost | 979 mo | | | 20.503 | 25 563 | 15 548 | |
| | Relei ence rueit Deference | | ak a si / a | | 21,205 | 10 963 | 12 227 | |
| | Lost per unit Reference | PRAZ KYM | ak=aj/a | | 21.214 | 10.005 | 13.227 | |
| | Variation | PKX / XWN | al = al - ax | | 2.248 | (1.484) | (2.560) | 14 400 |
| | Variation amount | PKR / Ma | am = al * ac | | 2,815 | {1,903} | (2,400) | (1,489) |
| i | ii Unrecovered Cost of FCA due to non adjustment of D. losses | PKR / Mo | an = am - ah | | 863.3 | 1.9 | (33.6) | 831.7 |
| | | | | | | | | |
| b. (| Cost of open access and cross subsidy | | | | | | | |
| | Units of BPCs wheeled - Transmission network | ፍለው | ao = Annerure I3 | | 63 | 63 | 63 | 188 |
| | Transmission Network Charges | PKR / kWh | an | | 05 | 05 | | |
| | | PKR mo | ag = ap = ao | | | | | |
| | Cost of open access and stranded cost per unit | PKR / kWh | ar | | As per the unifor | m rates to be det | ermined by | |
| | Cross subsidy per unit | PXR / kWh | as | | • · · · · | NEPRA | • | |
| | Cost of open access amount | PKR mn | at | | | | | |
| | Cross subsidy charged - amount | PKR mn | au | 1 | | | | |
| | Total | PKR mn | av = əq + at + au | | - | - | - | • |
| | Linite of BOCs when and - Distribution Notwork | | | | | | | |
| | Units of BPCs wheeled - Distribution Network | GVh | aw = Annexure 13 | | 21 | 21 | 21 | 63 |
| | Distribution potwork charges - 11/4/ rate 35 respective voltage level loss | BER / LWL | au au | | | | | |
| | Distribution network charges - 11kV rate at respective voltage lever loss | | ay | | | | | |
| | Cost of oppo proces per unit | | az ⇒ aw - ay | | As per the unifor | m rates to be det | ermined by | |
| | Cross subsidy per unit | PER / NWS | bb | | | NEPRA | | |
| | Cost of open access amount | PKR ma | bc | | | | | |
| | Cross subsidy charged - amount | PKR mn | bd | | | | | |
| | Total | PKR mn | be = az + bc + bd | · | • | • | • | - |
| | | | | | | | | |
| | Total Cost of open access and cross subsidy | PKR mn | bf = av + be | 1 | - | • | - | - |
| Sun | nmary of Unrecovered cost for the quarter | | | Į | | | _ | |
| | a. Quarterly Adjustment | PKR ma | bg = aa | | | | [` | 1,377 |
| | b. Unrecovered Cost of FCA due to non adjustment of D losses | PKR mn | bh = an | | | | | 832 |
| | Cost of open access and cross subsidy charge Impact of ECA not passed on to certain categories | PKR mn PKR mn | 01 = Dt | | | | 1 | • |
| | e. Other Adjustments and Pass through items | . 48 000 | , vj | 1 | | | | - |
| | - Corporate tax | PKR mn | bk | l | | | | |
| | - WPPF / WPPF | PKR mn | ы | 1 | | | 1 | |
| | f. Annual adjustment for T&D losses | FKS mn | bm = Annexure 16 | | | | | |
| | g. Annual adjustment of unrecovered costs | A | · . | | | | | • |
| | - Distribution | PKR mo | bo bo | | | | | |
| | -Supply | PKR mn | bp | | | | | |
| | The full flow operation and the state of the | . | | 1 | | | | |
| | Jorai Oliveroveled Cost for the quarter | r KR min | oq = sum { bg:bp } | | | | _ | 2,209 |

- -

.

This form represents quarterly adjustment mechanism and will be filed at each quarter for the relevant quarter.



Annexure J4

2

¢

بالمتحجيني فالمحاج

K-Electric Limited Quarteriy Adjustment

-

-

Annexure J4

| | | | | | erende uverel | | |
|---|------------------------|--|--------------------|-------------|---------------|--------------|------------------|
| | | | 和基本的可能的。 第二次的研究 | | | | |
| Deference as new Annexuse M | | ASSAGE AND | | TRACTOR SEA | | Mit 22 Xiała | NATOR CONTRACTOR |
| Keletences as per Alliexute in | 1 | | I | | | | |
| Projected Units billed | G\Vh | а | | 992 | 974 | 1,220 | |
| Costs of Generation, Transmission and Distribution | | | _ | | | | |
| - O&M Cost, capacity cost and other costs | PXR / kWh | b | | 17.05 | 16.95 | 14.39 | |
| - Iransmission | PKR / kWh | c . | | 3.15 | 3.57 | 3.69 | |
| - Distribution network | PKR / kWh | d | | 3.84 | 3.84 | 3.84 | |
| - Suppiy - Total | PKR / kWh PKR / kWh | e f=b+c+d+e | - | 29.99 | 30.31 | 27.87 | |
| Caste of Constraint Teoremission and Distribution | | | | | | | |
| - O&M Cost canacity cost and other costs | Pre me | a - b = a | | 16 006 | 16 514 | 17 5 49 | |
| - Transmission | PKR mo | b=c*a | | 2 121 | 3 476 | 4 503 | |
| - Distribution network | PKR mn | i-d*a | | 3,001 | 3 727 | 4,505 | |
| - Supply | PKB mo | i=e*a | | 5 907 | 5 803 | 7,266 | |
| - Total | PKR mn | k=g+h+l+j | | 29,739 | 29,530 | 33,997 | |
| Actual | |] | 1 | | | | ÷ • |
| Units billed | GWh | I | | 805 | 814 | 1,012 | |
| Contra & Commuting Transmission and Distribution | | | | | | | |
| Costs of Generation, Fransmission and Distribution | DVD (1111) | mun fl | | 10.041 | 10 200 1 | 15.530 | |
| Transmission | PAR / KWA | m=r/1 | | 18.941 | 18.300 | 15.630 | |
| - Industrials activity | PAR / KWO | n=s/1 | 1 1 | 3.308 | 3./91 | 3.921 | |
| - Supply | PAR / KWD | | | 5.913 | 5.915 | 5.915 | |
| - Josef | PAR/ KYO | p=u/1 | l - | 3,700 | 5.700 | 30.102 | |
| - totai | PAR / KWA | q=10+0+0+p | [L | 31.802 | 51.704 | 29.105 | |
| Costs of Generation, Transmission and Distribution | | | _ | | | | |
| - O&M Cost, capacity cost and other costs | PKR mn | r = Annexure J5 | | 15,240 | 14,889 | 15,825 | |
| - Transmission | - PKR mn | s = Annexure J3 | l | 2,662 | 3,084 | 3,970 | |
| - Distribution network | PXR mn | t = Annexure J3 | | 3,148 | 3,183 | 3,962 | |
| - Supply | PKR mn | u = Annexure J3 | | 4,586 | 4,637 | 5,771 | |
| - Total | PKR mo | v=r+s+t+u | ļ L | 25,636 | 25,794 | 29,527 | |
| Variation | | • I | r . | | • • | | |
| Costs of Generation, Transmission and Distribution | | | | | | | |
| O&M Cost, capacity cost and other costs | PKR mn | w = (m - b) * l | | 1,523 | 1,097 | 1,258 | |
| - Transmission | PKR mo | x = (n - c) * l | | 129 | 181 | 232 | |
| - Distribution network | PKR mn | γ≈(o-d)*l | | 62 | 63 | 78 | |
| - Supply | PKR mn | z = (p - e) * I | 1 L | (207) | (210) | (261) | |
| - Total | PKR mn | aa=w+x+y+z | . L | 1,506 | 1,132 | 1,307 | 3,945 |
| Amount calculated for a quarter will be applied in the months as determined | hed by Authority and | | | | | | |

ł

Amount calculated for a quarter will be applied in the months as determ passed onto consumers / taken up by GoP as per the decision by GoP. d by Authority a



.

K-Electric Limited Quarterly Adjustment

Units Served

Units billed for FCA

Fuel cost

Cost per unit

Variation

Cost per unit Reference

Variation amount

Cost per unit Actual

a. Unrecovered Cost of FCA due to non adjustment of D. losses

I Monthly variation in Fuel Cost (FCA) - Based on Units served

ii Monthly variation in Fuel Cost (FCA) - Based on Units billed

ADIUSTIMENTINATALIJE DU SUD UNIECOVERIDI COST ab = Annexure J1 GWh 852 990 1.281 GWh ac = Annexure J3 805 814 1,012 PKR mp ad = Annexure J1 11,610 14,903 22,263 FKR/kWh ae = ad / ab 13.63 15.05 17.38 PXA / kWh af = Annexure J1 10.75 12.40 14.31 PXR / kWh ag = ae - af 2.88 2.65 · 3.07 PKR / Mn ah = ag * ac 2,320 2,155 7,583 3,109 PXR / kWh ai = ad / ac 14.429 18.318 21.989 PKR mn ai = Annexure J1 11.230 14 478 21,573 687 302 356 9,708 440 2,124 63 188 bγ

.....

*

. Cart Martin State States and a

. .

Sec. 2 Sec. Sec.

.

Annexure J4

-

63

--

3,945 2,124

-

-

-.

.

6,069

5

| | Reference Fuel Cost | PKR mn | aj = Annexure J1 | 11,230 | 14,428 | 21,573 |
|---|---|--|---|------------------|-------------------|-------------|
| | Cost per unit Reference | PXR / kWh | ak = aj/a | 11.325 | 14.810 | 17.687 |
| | Variation | PXR / kWh | al = ai - ak | 3.104 | 3.508 | 4.302 |
| | Variation amount | PKR / Mn | am = al * ac | 2,498 | 2,854 | 4,356 |
| ili | Unrecovered Cost of FCA due to non adjustment of D. losses | PKR / Mn | an = am - ah | 177.587 | 699.200 | 1,247.440 |
| b. Co: | st of open access and cross subsidy | | | х. | | |
| | Units of 8PCs wheeled - Transmission network | | | | | |
| | Units of BPCs wheeled - Transmission network | GWh | ao = Annexure J3 | 63 | 63 | 63 |
| | Transmission Network Charges | PKR/kWh | 30 | | | |
| | Transmission Network Charges amount | PKR mn | ag = ag * ag | | | |
| | Cost of open access and stranded cost per unit | PKR/kWh | ar | As ner the unifo | rm rates to be de | termined hy |
| | Cross subsidy per unit | PKR/kWh | as | no per die dimo | NEPRA | |
| | Cost of open access amount | PKR mn | at | | | |
| | Cross subsidy charged - amount | PKR ma | au | | | |
| | Total | PXR mn | av = aq + at + au | - | - | - |
| | linits of BDCs wheeled - Distribution Natura | | | | | |
| | Units of BPCs wheeled - Distribution Network | GWh | aw = Annexure J3 | 21 | 21 | 21 |
| | Distribution network charges - 11kV rate at respective voltage level loss | PXR / kWh | ay | | | |
| | Distribution network charges amount | PKR ma | az = aw * av | | | |
| | Cost of open access per unit | PKR / kwh | ba | As per the unifo | rm rates to be de | termined by |
| | Cross subsidy per unit | PKR/kWh | bb | | NEPRA | |
| | Cost of open access amount | PKR mn | bc | | | |
| | Cross subsidy charged - amount | PKR mn | hd | | | |
| | Tatal | PXP mp | ha = ar + hr + hr | | | |
| | 10(3) | | 100082700700 | | • | - |
| | Total Cost of open access and cross subsidy | PKR mp | bf = av + be | - | - | - |
| Summ | Total Cost of open access and cross subsidy | PKR mo | bf=av+be | - | - | - |
| Summ a. | Total Cost of open access and cross subsidy <u>arv of Unrecovered cost for the quarter</u> Quarterly Adjustment | PKR ma | bf = av + be | | - | - |
| <u>Summ</u> a. b. | Total Cost of open access and cross subsidy <u>arv of Unrecovered cost for the quarter</u> Quarterly Adjustment Unrecovered Cost of FCA due to non adjustment of D losses | PKR mn PKR mn PKR mn | bf = av + be bf = aa bb = aa bh = an | | - | - |
| <u>Summ</u> a. b. c. | Total Cost of open access and cross subsidy ary of Unrecovered cost for the guarter Quarterly Adjustment Unrecovered Cost of FCA due to non adjustment of D losses Cost of open access and cross subsidy charge | PKR mn PKR mn PKR mn PKR mn | bf = av + be bf = aa bf = aa bh = an bi = bf | - | - | - |
| <u>Summ</u> a. b. c. d. | Total Cost of open access and cross subsidy ary of Unrecovered cost for the quarter Quarterly Adjustment Unrecovered Cost of FCA due to non adjustment of D losses Cost of open access and cross subsidy charge Impact of FCA not passed on to certain categories | PKR mn PKR mn PKR mn PKR mn PKR mn | bf = av + be bf = av + be bh = an bi = bf bj | - | - | - |
| <u>Summ</u> a. b. c. d. e. | Total Cost of open access and cross subsidy ary of Unrecovered cost for the quarter Quarterly Adjustment Unrecovered Cost of FCA due to non adjustment of D losses Cost of open access and cross subsidy charge Impact of FCA not passed on to certain categories Other Adjustments and Pass through items | PKR mn PKR mn PKR mn PKR mn PKR mn | bf = av + be bf = av + be bf = aa bh = an bi = bf bj | - | - | - |
| <u>Summ</u> a. b. c. d. e. | Total Cost of open access and cross subsidy arry of Unrecovered cost for the quarter Quarterly Adjustment Unrecovered Cost of FCA due to non adjustment of D losses Cost of open access and cross subsidy charge Impact of FCA not passed on to certain categories Other Adjustments and Pass through items - Corporate tax | PXR mn PXR mn PKR mn PKR mn PKR mn | bf = av + be bf = av + be bh = an bi = bf bj bk | - | - | - |
| <u>Summ</u> a. b. c. d. e. | Total Cost of open access and cross subsidy arry of Unrecovered cost for the quarter Quarterly Adjustment Unrecovered Cost of FCA due to non adjustment of D losses Cost of open access and cross subsidy charge Impact of FCA not passed on to certain categories Other Adjustments and Pass through Items - Corporate tax - WPPF / WPPF Annual adjustment for T&D losses | PXR mn PXR mn PKR mn PKR mn PKR mn PKR mn | bf = av + be bf = av + be bh = an bi = bf bj bk bi | - | - | - |
| <u>Summ</u> a. b. c. d. e. f. | Total Cost of open access and cross subsidy arry of Unrecovered cost for the quarter Quarterly Adjustment Unrecovered Cost of FCA due to non adjustment of D losses Cost of open access and cross subsidy charge Impact of FCA not passed on to certain categories Other Adjustments and Pass through Items - Corporate tax - WPPF / WPPF Annual adjustment of Unrecovered costs | PKR mn PKR mn PKR mn PKR mn PKR mn PKR mn PKR mn PKR mn | bf = av + be bf = av + be bh = an bi = bf bj bk bl bm = Annexure J6 | - | - | - |
| <u>Summ</u> a. b. c. d. e. f. g. | Total Cost of open access and cross subsidy ary of Unrecovered cost for the quarter Quarterly Adjustment Unrecovered Cost of FCA due to non adjustment of D losses Cost of open access and cross subsidy charge Impact of FCA not passed on to certain categories Other Adjustments and Pass through items - Corporate tax - WPPF / WPPF Annual adjustment for T&D losses Annual adjustment of unrecovered costs - Transmission | PKR mn PKR mn PKR mn PKR mn PKR mn PKR mn FKR mn FKR mn | bf = av + ba bf = av + ba bg = aa bh = an bi = bf bj bk bl bm = Annexure J6 | - | - | - |
| <u>Summ</u> a. b. c. d. e. f. g. | Total Cost of open access and cross subsidy ary of Unrecovered cost for the quarter Quarterly Adjustment Unrecovered Cost of FCA due to non adjustment of D losses Cost of open access and cross subsidy charge Impact of FCA not passed on to certain categories Other Adjustments and Pass through items - Corporate tax - WPPF / WPPF Annual adjustment for T&D losses Annual adjustment of unrecovered costs - Transmission - Distribution | PKR mn PKR mn PKR mn PKR mn PKR mn PKR mn PKR mn PKR mn | bf = ar + be bf = av + be bg = aa bh = an bi = bf bj bk bl bm = Annexure J6 bn bo | - | - | - |
| <u>Summ</u> a. b. c. d. e. f. g. | Total Cost of open access and cross subsidy arry of Unrecovered cost for the quarter Quarterly Adjustment Unrecovered Cost of FCA due to non adjustment of D losses Cost of open access and cross subsidy charge Impact of FCA not passed on to certain categories Other Adjustments and Pass through items - Corporate tax - WPPF / WPPF Annual adjustment for T&D losses Annual adjustment of unrecovered costs - Transmission - Distribution - Supply | PKR mn PKR mn PKR mn PKR mn PKR mn PKR mn PKR mn PKR mn PKR mn PKR mn | bf = ar + be bf = av + be bh = an bi = bf bj bk bi bm = Annexure 16 bn bo bp | - | - | - |

This form represents quarterly adjustment mechanism and will be filed at each quarter for the relevant quarter.



| K-Electric Limited |
|----------------------|
| Quarterly Adjustment |
| |

.

4

4

Annexure J4

| | | | | | ne energine | | |
|--|------------------------|-------------------|----------------|-----------|---------------|--------------|-----------------|
| | | | | | | | |
| References as per Annexure M | | · <u> </u> | WHAT MET 240 M | | MervZ4sisi2si | NDTE Z SKIRA | <u>enour</u> ee |
| Projected Units billed | GWb | а | | 1 270 | 1 577 | 1 627 | |
| | | _ | | | | -, | |
| Costs of Generation, Transmission and Distribution | Ava (1.00) | L | , | 42.75 | 12 22 | 11.04 | |
| - Development of the second other costs | PKK/ KWA | 6 | | 13./5 | 2 5 2 | 3 60 | |
| Distribution network | PKR / kWh | d | | 3.84 | 3.55 | 3.84 | |
| - Supply | PKR / KWh | e | | 5.96 | 5.96 | 5.96 | |
| - Total | PKR / kWh | f = b + c + d + e | 1 | 27.21 | 25.70 | 25.33 | |
| Costs of Generation, Transmission and Distribution | | | | | | | |
| - O&M Cost, capacity cost and other costs | PKR mn | g=b⁼a | | 17.462 | 19.431 | 19.421 | |
| - Transmission | PKR ma | h=c*a | | 4,654 | 5,648 | 5.856 | |
| - Distribution network | PKR ma | i=d*a | | 4.871 | 6,049 | 6,241 | |
| -Supply | PKR mn | j=e*a | 1 | 7,565 | 9,395 | 9,692 | |
| - Total | PKR mn | k=g+h+l+j |] [| 34,552 | 40,523 | 41,210 | |
| Actual and a second sec | | | 1 | | | ; | - p |
| Units billed | GWh | I | | 1,250 | 1,532 | 1,537 | |
| Costs of Generation. Transmission and Distribution | | | Į | | | | |
| - O&M Cost, capacity cost and other costs | PKR / kWh | m=r∕i | | 12,603 | 11.444 | 11,407 | |
| - Transmission | PKR / KWh | n=s/l | | 3.916 | 3.807 | 3.828 | |
| - Distribution network | PKR / kWh | o=t/1 | | 3.952 | 3.952 | 3.952 | |
| - Supply | PKR/kWh | p=u/l |] | 5.679 | 5.679 | 5.679 | |
| - Total | PKR / kWh | q≖m+n+o+p | | 26.151 | 24.882 | 24.867 | |
| Costs of Generation, Transmission and Distribution | | | | | | | |
| O&M Cost, capacity cost and other costs | PXR mn | r = Annexure JS | } | 15,750 | 17,533 | 17,528 | |
| Transmission | FKR mn | s = Annexure J3 | | 4,894 | 5,833 | 5,883 | |
| - Distribution network | PKR mn | t = Annexure J3 | | 4,939 | 6,055 [| 6,072 | |
| - Supply | PKR ma | u = Annexure J3 | 1 | 7,098 | 8,702 | 8,727 | |
| - 10(2) | PKR mn | v=r+s+t+u | 1 | 32,681 | 38,123 | 38,210] | |
| Variation | | 1 | , , | | | | |
| Costs of Generation, Transmission and Distribution | | | | | | | |
| O&M Cost, capacity cost and other costs | PKR mn | w = (m - b) * i | | (1,435) | (1,345) | (814) | |
| - Transmission | PKR mn | x = (n - c) = l | ļi | 313 | 346 | 352 | |
| - Distribution network | PXR mn | y = (o - d) * i | 1 | 145 | 178 | 179 | |
| - Supply | PKR mn | z = (p - e) | | (347) | (426) | (427) | (7.503) |
| - 10(4) | PXX mn | aa=w+x+y+z | ļ | [(1,324)] | (1,247) | [/11] | (3,282) |
| Amount calculated for a guarter will be applied in the marths of deter- | alaad bu Authority | | 1 | | | | |
| notice the sense of the sense o | nineo oy Authority and | | 1 | | | | |
| passed once consumers / taken up by Gor as per the decision by Gor. | | | 1 | | | | |
| | | |] | | | | |



| Quar | terly Adjustment | | | | | | | |
|---------|--|-----------|---------------------|---|---|----------------------|--------------|---------|
| | Omerican STMENTIN FAMILIEOUE TO UNITE COVERED COST (1) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2 | | | | G G G G G G G G G G G G G G G G G G G | ni zentedun May20 | | 1000 F |
| a. U | nrecovered Cost of FCA due to non adjustment of D. losses | | | | | | | |
| U | nits Served | GWh | ah = Appeyure I1 | | 1 569 | 1 874 | 1 800 | |
| U | nits billed for FCA | GWh | ac = Annexure J3 | | 1,353 | 1,532 | 1,537 | |
| | Fuel cost | PKR mn | ad = Annexure J1 | | 24,266 | 28.846 | 33.701 | |
| 1 | Monthly variation in Fuel Cost (FCA) - Bacad on Units second | | | | - , | | | |
| • | Cost per unit | PKR / kWh | ae = ad / ab | | 15.47 | 15.40 | 17.84 | |
| | Cost per unit Reference | PKR / kWh | af = Annexure J1 | | 14.52 | 14.83 | 15.77 | |
| | Variation | PKR / kWh | ar = ae - af | | 0.95 | 0.56 | 2.11 | |
| | Variation amount | PKR / Mo | $ah = ag^*ac$ | | 1.184 | 851 | 3,749 | 5,295 |
| | | | | | -, | | -, | 0,000 |
| ii | Monthly variation in Fuel Cost (FCA) - Based on Units billed | | | | | | | |
| | Cost per unit Actual | PKR / kWh | ai = ad / ac | | 19.417 | 18.828 | 21.933 | |
| | Reference Fuel Cost | PKR mn | aj = Annexure J1 | | 22,629 | 28,048 | 30,819 | |
| | Cost per unit Reference | PKR / kWh | ak = aj / a | | 17.821 | 17.785 | 18.943 | |
| | Variation | PKR / kWh | al = ai - ak | | 1.596 | 1.042 | 2.990 | |
| | Variation amount | PKR / Ma | am = al * ac | | 1,994 | 1,597 | 4,594 | 8,185 |
| n | Unrecovered Cost of FCA due to non adjustment of D. losses | PKR / Mn | an = am + ah | - | 809.869 | 735.356 | 1,345.036 | 2,890 |
| b. C | ost of open access and cross subsidy Units of BPCs wheeled - Transmission network Units of BPCs wheeled - Transmission network | GWh | ao = Annexure J3 | | 63 | 63 | 63 | 188 |
| | Transmission Network Charges | PKR / kWh | ap | | | | | |
| | Transmission Network Charges amount | PKR mn | aq = ap = ao | | | | | |
| | Cost of open access and stranded cost per unit | PKR/kWh | ar | | As per the unifo | rm rates to be de | etermined by | |
| | Cross subsidy per unit | PKR/kWh | as | | | NEPRA | | |
| | Cost of open access amount | PKR mn | at | | | | | |
| | Cross subsidy charged - amount | PXR mn | au | - | | | | |
| | | PKR mo | av = aq + at + au | | - | - | - ' | - |
| | Units of BPCs wheeled - Distribution Network | | | | | | | |
| | Units of BPCs wheeled - Distribution Network | GWh | aw = Annexure J3 | | 21 | 21 | 21 | 63 |
| | Distribution network charges - 11kV rate at respective voltage level loss | PKR / kWh | ау | | | | | |
| | Distribution network charges amount | PKR mn | az = aw * ay | | A | | | |
| | Cost of open access per unit | PKR/ky/h | ba | | As per the unito | IM Pates to be de | stermined by | |
| | Cross subsidy per unit | PKR / kWh | bb | | | 1121105 | | |
| | Cost of open access amount | PKR mn | bc | | | | | |
| | Cross subsidy charged - amount | PKR mn | bd barery bry by | - | | | | |
| | | PANJUL | 5e= az + 6c + 6a | | • | - | - | - |
| | Total Cost of open access and cross subsidy | PKR mn | bf = av + be | | - | • | - | - |
| Sum | mary of Unrecovered cost for the quarter | | | | | | | |
| a | Quarterly Adjustment | PKR mn | bg ≃ aa | | | | Г | (3,282) |
| b | . Unrecovered Cost of FCA due to non adjustment of D losses | PKR mit | bh = an | | | | | 2,890 |
| с. d | Impact of ECA not nassed on to certain categories | PKR ma | bi≃bf ⊾: | | | | | - |
| e | Other Adjustments and Pass through items | F 56 /711 | 0) | | | | | - |
| | - Corporate tax | PKR mn | bk | | | | | - |
| | - WPPF / WPPF | PKR mn | ы | • | | | | - |
| f. | Annual adjustment for T&D losses | PKR ma | bm = Annexure J6 | 1 | | | | |
| g | Annual adjustment of unrecovered costs Transmission | 0KD | h- | | | | | |
| | - Distribution | PKR mo | bn | | | | | - |
| | - Supply | PKR me | bp | 4 | | | | |
| τ | otal Unrecovered cost for the quarter | PKR mn | ba = sum (ba:ba) | | | | - | (2011 |
| | - 1 | | | | | | - | [231] |

- -

_

This form represents quarterly adjustment mechanism and will be filed at each quarter for the relevant quarter.



Annexure J4

٠

3

K-Electric Limited

.

| ~ | 5 |
|-----|-----------|
| H | н. |
| = | |
| Ξ | <u>ب</u> |
| 느 | 2 |
| - | 5 |
| υ | 2 |
| τ | <u>n</u> |
| 75 | ۳. |
| ē | |
| ΠŤ. | 5 |
| 77 | • |
| ~ | () |

Total

4

Annexure J5

| <u>inits Generated / Purchased - Net</u> | | | | | | | į | | | | | | | |
|--|------------|--------|--------|--------|---------|---------|----------|--------|------------|--------|----------|----------|----------|---------|
| Plant 1 | GWh | 1,977 | 1,891 | 1,622 | 1,526 | 1,360 | 176 | 859 | 666 | 1,293 | 1,593 | 1,903 | 1,920 | 516/1 |
| Plant 2 | CAN | | • | • | • | • | | • | • | • | • | • | • | |
| Plant 3 | uno | • | • | | • | • | | • | | • • | • | • • | | |
| Plant 4 | | • | • | • | | | | | | | | | | |
| c 10614 3 to 10 | uno UND | | | • • | • | • | • | | | | | | | • |
| C the C | GWh | | | • | | | | | <u> </u> | • | • | • | | |
| Plant 8 | פאגיי | • | • | • | | • | | • | • | • | • | • | | • |
| Plant 9 | GWh | • | • | • | • | • | • | • | • | • | , | • | • | • |
| Plant 10 | GWh | • | • | • | | • | | | • | • | • | • | | ۰ |
| Plant 11 | GWh | • | • | | | • | • | • | | | | • | • | |
| Plant 12 | GWh | • | | • | • | • | • | | | | | • | • | • |
| Plant 13 | ewp | , , | . : | . : | | | 1025 61 | . 170 | - 170 | | | - 1020 | 102.6 11 | . 9 |
| Energy Imbalance - wheeling consumers | GWD | 295.2 | 7957 | 795.2 | (4.270) | (n/7*+) | (11/2-6) | 0/7.4 | 1/2.4 | 0/7.4 | for 7.41 | (n/7·1-) | 101711 | ì |
| TOTAL | 11 | 1,979 | 1,893 | 1,625 | 1,522 | 1,356 | 967 | 863 | 1,004 | 1,298 | 1,588 | 1,895 | 1,915 | 016,71 |
| | | | | | | | | | | • | | | | |
| icateur | PKR mn | 37.233 | 34.553 | 30.633 | 29,418 | 025,23 | 10,015 | 11.567 | 14,860 | 22,220 | 24,308 | 28,889 | 33,744 | 299,770 |
| Plant 2 | PKRmn | . | | | | • | | • | • | | • | • | . • | • |
| Plant 3 | PKR mn | | , | | | | | | • | | • | • | | • |
| Plant 4 | PKR ma | • | • | • | • | • | • | • | | • | • | • | • | • |
| Plant S | PKR.mn | | • | • | • | • | • | • | | • | • | | • | • |
| Plant 6 | PKR con | • | • | • | • | • | | | | • | • | • | • | • |
| Plant 7 | PKR ma | • | | • | • | • | • | • | • | | • | • | • | • |
| Plant 8 | PKR ma | • | • | • | • | • | • | • | • | | • | • | • • | • • |
| Plant 9 | PKK MI | • | • | • | • | | • • | | | | | | | |
| Plant 10 21 | | • | • • | • • | | | | | | | | • | | • |
| 11 July 1 J | PKR min | | • | • | • | | | | | | | | | |
| Plant 13 | PKR mn | | | | | • | • | • | | • | • | | | |
| Energy Imbalance - wheeling consumers | PKR mn | 26 | 26 | 26 | (43) | (67) | (43) | 43 | 6 4 | 43 | (43) | (EÞ) | (43) | (23) |
| TOTAL | PKR ma | 37,258 | 34,578 | 30,659 | 29,375 | 22,288 | 272,8 | 11,610 | 14,903 | 22,263 | 24,266 | 28,846 | 33,701 | 299,719 |
| st of Eucl / unlit (2 / 1) | | | | | | | | | | | | | | |
| Plant 1 | PKR / WW | 18.84 | 18.27 | 18.88 | 19.28 | 16.41 | 10.31 | 13.47 | 14.87 | 17.18 | 15.26 | 15.18 | 17.58 | 16.73 |
| Plant 2 | PKR / XW/h | • | | • | • | • | | • | • | • | • | | • | • |
| Plant 3 | PKR / KWh | • | • | • | | • | • | | | | • | | • | • |
| Plant 4 | PKR / W/h. | • | • | • | • | • | | • | | | | | | • |
| Plant S | PKH / KVIh | • | • | • | • | • | • | | • | • | • | | • • | • • |
| rient o Diat 2 | DER / FUIL | • • | | | • • | • • | | | | | | | | |
| plant A | PKR / WVh | • | • | • | • | • | | | , | | , | , | | |
| Plant 9 | PKR / KWh | | | | | | | | | • | | | , | |
| Plant 10 | PKR / kWh | • | | | • | | • | • | • | • | | • | • | • |
| Plant 11 | MWA / RMH | • | , | , | | | | | • | • | • | • | , | ı |
| Plant 12 | PKR / KWh | • | • | • | • | | | | | | | • | | • |
| Plant 13 | PKR / WWh | , . | | | | • • | | | | | | | | |
| Energy imbalance • witeeling consumers | PRIST AVIT | nn'nr | 00.01 | nn:nr | nnnr | 00.01 | nnr | 10.01 | 00.01 | 00.01 | 00.01 | nnint | | 1000 |
| TOTAL | PKR/KWh | 18.82 | 18.26 | 18.87 | 19.30 | 16,43 | 10.31 | 13.45 | 14.85 | 17.16 | 15.28 | 15,19 | 17.60 | 16.74 |
| <u>jable O&M</u> | | | | | | | | | | | | | | |
| Plant 1 | PKR mn | 806 | 211 | 756 | 860 | 782 | 165 | 468 | 498 | 580 | 658 | 859 | 928 | 8,660 |
| Plant 2 | PKR mn | • | • | | | • | | | | | • | • | • | • |
| Plant 3 | PKR mn | • | • | • | | • | • | • | • | • | • | • | | • |
| Plant 4 Diant E | | • | • • | • | • • | | | • • | | • • | • • | | | |
| Plant 6 | PKR.mn | • | • | • | • | | | | • | | | ٠ | | |
| Plant 7 | PKR can | | | | | | | | | | | | | , |
| Plant 8 | PKR ma | • | • | | • | • | • | | | | • | | | • |
| Plant 9 | PKR ma | | • | | • | • | • | | | • | • | | | • |
| Plant 10 | PKR mn | • | • | | • | | | • | | • | • | | • | |
| Plant 11 | PKR mn | • | • | • | • | • | | | • | • | • | • | • | |
| Plant 12 Disc 12 | PKH MG | • | | • • | • | • • | | • • | | | • • | | | |
| EL Marrie en la concerte en la concerte de la conce | DKR mn | | | , , | , , | | | | | | | | | ! ! |
| פומנות אייים א | | | | , | | | | • | , | | • | | | F |

متهريجة متناد بالمحجج



8,660

928

829

658

280

498

468

201

782

860

772 756

PKR.mn 908

j Plant 11 1 Plant 12 m Plant 13 n Energy imbalance - wiseeling consumurs TOTAL

| actric Limited | of Power - Total |
|----------------|------------------|
| ö | 5 |
| 8 | ** |
| ÷ | ö |

| 这种主要是这些法律是在有些人。19月1日,自己的自己的是我们在这些人的是是是是是不能能能够的。 | | 2012742424D | Street de la comp | 14-14-19-14 | - HAR FILM | VOID FEATURE | 411122220 | PLAY COMPANY | 11111111111111111111111111111111111111 | 111272246 | 7401676164 <u>7</u> | Prevezence | | 1984 TT 178 P |
|--|------------------------|-------------|-------------------|-------------|------------|--------------|-----------|--------------|--|-----------|---------------------|------------|--------|---------------|
| | | | | | | | | | | | | | | • • • |
| 6 Variable O&M per unit (5 / 1) | PKR / W/h | 0.459 | 0.408 | 0.466 | 0.563 | 0.575 | 0,609 | 0.545 | 0.498 | 0.448 | 0.413 | 0.451 | 0,484 | 0.483 |
| b Plant 2 | PKR / KWh | | | | | • | • | • | • | • | • | • | • | |
| c Plant 3 | PKR / KWh | | • | | • | • | • | • | | | • | | • | • |
| d Plant 4 | РКВ / КУЛ | • | | • | • | • | • | • | • | • | • | • | • | • |
| e Plant5 | PKR/ KWh ere / With | • | • • | • • | | | | • • | | | | | | |
| | PKR / WWh | | | | | • • | • | • | | , | | | | • |
| B Flant ? h plant B | PKRY KWh | • • | ••• | | | • | • | • | | • | • | | | |
| i Plant 9 | PKR / KV/h | | | • | • | • | • | | | | | | | • |
| j Plant 10 | PKR / KWh | • | • | | • | • | • | • | | • | • | • | | • |
| J Plant 11 | PKR / WVh | • | • | • | • | • | • | | • | • | • • | • | • • | • • |
| Plant 12 | PKR / KV/h | • | • | • • | | | | | • • | | | | | |
| n Energy (mbalance - wheeling consumers | PKR / KWh | | | | | | | • | • | | | • | | • |
| | | | | | | | | | | | | | | |
| TOTAL | PKR / KWh | 0,459 | 0.408 | 0.465 | 0.565 | 0.576 | 0.612 | 0.542 | 0.496 | 0.447 | 0.414 | 0.452 | 0.485 | 0,484 |
| 7 Capacity Purchase Price, (CPP) | | | | | | | | | | | | | | |
| a Plant 1 | PXR ctin | 13,100 | 15,644 | 14,278 | 15,111 | 14,558 | 15,085 | 14,773 | 14,391 | 15,245 | 15,092 | 16,674 | 16,599 | 180,551 |
| b Plant 2 c Plant 3 | PKR mn | | | ••• | | | | | | | ••• | ••• | | • |
| d Plant 4 | PKR.mn | | , | • | | | • | • | | • | • | • | • | • |
| e Plant S | PKR mn | • | | • | | • | • | | • | • | • | • | • | • |
| F Plant 6 | PKR.mn | • • | | | | | | | | | | | | |
| g runt / h Plant 8 | PXB mn | | | | ••• | | • | • | • | • | • | • | • | , |
| i Plant9 | PKR mn | | • | | | • | • | • | • | • | • | | | ۰ |
| j Plant 10 | PKR mn | • | • | • | • | • | • | | • | | • | • | • | • |
| | PKR mn | | • | | • | | • | • | • | • | • | • | • | • • |
| Plant 12 m. plant 13 | PKR con | | | | | | | | | | | • • | | • • |
| n Energy Imbalance - wheeling consumers | PXR.mn | • | • | | • | | • | • | | | | | | • |
| | I | | | | | | | | | | 10.000 | | | 100 001 |
| TOTAL | PK4 mu | 13,100 | 15,644 | 14,278 | 111,21 | 14,558 | 11,085 | 14,1/3 | 145,91 | ch2'CT | 750,61 | 10'01 | FEC'QT | Tecingr |
| B CPP pgrunit (7/1) | | | | | | | | | : | | | | - | |
| a Plant1 | PKR/KWh DVD 0400405 | 6.627 | 8.273 | 8.801 | 9.903 | 10.701 | 15.532 | 17.202 | 14.401 | 11.786 | 9.477 | 8.760 | 8.647 | 10,078 |
| D Plant 2 F Plant 3 | PKRVKVN | | | | | | | | | | | | | |
| d Plant 4 | PKR/KWh | | | • | | | , | , | | | | | | |
| e Plant S | PKR/AWh | • | | | • | • | • | • | | | | | • | • |
| f Plant 6 | PXR/KWh | • | | | • | | • | • | • | • | • | • | • | • |
| 2 Junity 2 Struck of A | PKRAWh | | | | | | | | | | | | | |
| l Plant 9 | PKR/kV/h | • | | • | | ٠ | | • | | | | • | | • |
| j Plant 10 | PKR/AV/h | • | • | | • | | • | • | | • | • | • | • | • |
| Francis Plant 12 | PKR/XWh | | | | | | | • • | | • • | • • | •• | | · '• |
| m Plant 13 | PKR/KV/h | | • | • | • | • | • | • | | | | | • | • |
| n Energy Imbalance - wheeling consumers | PRHYAVID | • | • | | | • | | • | • | • | • | • | • | • |
| TOTAL | PKn/kwh | 6,619 | 8.262 | 8.787 | 9.931 | 10.735 | 15.600 | 17.117 | 14.340 | 11.748 | 9.502 | 8,780 | 8,666 | 10.081 |
| 10 Pass through Items (WPPF/WWF/Start up cost otc) | | | | | | | | | | | | | • | ۰. |
| a Plant1 | PKR mn | • | • | • | • | | | , | | | • | • | | • |
| D Hant 2 C Plant 3 | PKR min | | | | | | | | | | •• | | | . . |
| d Plant4 | PXR mn | | | | • | • | | • | • | • | | | • | • 23 1 |
| e Plant5 | PXR mn | • | • | • | • | • | • | • | | • | | | | 4 |
| f Plant 6 | PKR min | • | | | • | • | | • | • . | • | • | • | • | • |
| b Plant 8 | PKR mn | | | | | | | • • | | | | | ••• | |
| I Plant 9 | PKR mn | • | | | • | • | • | • | • | | • | , | • | |
| Plant 10 | PKR mn | • | • | • | | , | • | • | • | • | • | • | • | |
| j Plant 11 Bisni 23 | PKR mn | | | • | • • | | | | • • | | | | • • | • 1 |
| m Plant 13 | Picking | | | | | | | | | | | | | |
| n Energy (mbalance - wheeling consumers | אצו מנוח | m | en | m | (4) | (4) | (4) | 4 | 4 | 4 | (4) | (4) | (4) | (5) |



PKR mn

TOTAL

Annoxure J5 Stepson Press

K-Electric Limited Cost of Power - Total

488,925 488,982 189,211 27.295 189,206 (56) Ξ 51,272 . . . 17,528 17,523 51,225 26,709 17,533 € 17,529 46,422 . (47) 24.390 46,375 15,750 2 15,746 40,012 40,059 . (42) 25.154 ٠ 15,829 15,825 38,045 47 38,092 29.414 29,796 14,893 47 29.770 14,889 29,749 26,808 31.215 15,240 26,855 6 Ξ 25,691 (42) 15,672 25,644 26.452 15,676 € . (47) 15,336 37,671 37,624 15,340 27.689 15,966 . (47) 5 45,388 145,341 29.745 179,21 45,667 15,037 - 28 45,695 28.148 15,034 20,997 16,416 m 16,419 50,969 38 26.955 51,241 PKR.mn 14,011 28 51,269 25.923 14,008 PKR / kWh PKR / XWh PKR / XWh PKR / KWh PKR / WWh PKR / KWh PKR mn PXR mn PXR mn PXR mn PXR mn PKR ma PKR mn PKR mn PKR mn PKR mn PKR mn PKR ma PKR ma PKH mn PXR.mp PKR mn PKR m PXR mn 11 Total Variable O&M, Capacity and other costs (5 + 7 + 10) Plant 13 Energy Imbalance - wheeling consumers Energy Imbalance - wheeling consumer 12 Cost of Powers total (10+7+5+2) er - total / unit (12 / 1) 2 Plant 13 Plant 10 Plant 12 TOTAL TOTAL 13 Cost E ε

5



005.75

29.690 29.353 25.192 24.420 26.744

31.115 11.000

11.000

, 000.11

11.000

11.000 11.000

11.000

11.000 26.520

11.000 29.798 27.742

11.000

11.000

11.000

11.000

AWA / RWh

Energy Imbalance - wheeling consumer

TOTAL

28.121

PKR / XWh 25,904 26,933

Annexure J5

K-Electric Limited Annual T&D Loss Adjustment For the year FY 2024

.

۰.

154 4614

Annexure J6

.....

, e - e

| | | 10.01 | Allotycol/2 Allotycol/2 | | oalivitisats <mark>U</mark> u | | |
|---|----------------------------------|--|----------------------------|--------|-------------------------------|---------------|--|
| عا مع معرف المعالم المعالية المعالمة المحالية المحالية المحالية المحالية المحالية المحالية المحالية المحالية ال | | ntes) in 2000 E des poster des recentes de | 1 | | iii | iv = ii - iii | |
| <u>Units for Transmission loss adjustment</u> | | | | | | | |
| Sentout | ចា | GWh | | 18,166 | 18,166 | | - |
| Transmission Loss | q | 8 | - | 1.26% | 1.30% | | |
| Units Served including BPC | c = a*(1-b) | GWh | , 18,660 | 17,937 | 17,930 | 6.88 | Units served (lost) / excess supplied due to variation in Allowed Targets |
| Allowed Distribution Loss | σ | 8 | | | | 16.04% | Allowed D.loss target adjusted with impact of Sales mix |
| Loss Adjusted units served | e = c*(1-d) | GWh | | | | 5.78 | Units (lost) / excess supplied after impact of allowed D.loss (Transmission Business) |
| Units for Distribution loss adjustment | | | | | | | |
| Actual Units served | f=c | GWh | | 17,937 | 17,937 | | |
| Distribution Loss | 8 = d | 8 | 16.04% | 15.87% | 16.04% | | Allowed D.loss target adjusted with impact of Sales mix |
| Units billed | h = c*(1-g) ; f*(1-g) | GWħ | 15,667 | 15,090 | 15,060 | 29.77 | Units (lost) / excess supplied after impact of allowed D.loss (Distribution Business) |
| <u>Amount of Adjustment required</u> | | | | | | | |
| Revenue requirement excluding T&D loss over under adjustment | i = Annexure J1 & Annexure J4 | PKR Mn | 747,977 | | | | |
| Total Tariff | j=1/h | PKR / Kwh | 47.74 | | | | |
| Transmission loss adjustment | k = j(i)*e(iv) | PKR Mn | | | | 276 | |
| Distribution loss adjustment | l = j(i)*h(iv) | PKR Mn | | | | 1,421 | |
| Total | m = k + l | PKR Mn | | | | 1,697 | |

\$

×

MITEC

73

し

K-Electric Limited Distribution Supply Tariff - FY 2024 to FY 2030 Historic trend of quarterly T&D losses

ł

e

Annexure K

| | | | | Unit | s in GWh |
|----------------|-------|-------|-------|-------|------------|
| Description | Oi | 02 | 063 | 00 | IOF |
| | | | | | |
| FY 2017 | | | | | |
| Units Sent out | 4,655 | 3,808 | 3,211 | 4,906 | 16,580 |
| Units billed | 3,458 | 3,169 | 2,590 | 3,764 | 12,981 |
| T&D losses | 25.7% | 16.8% | 19.3% | 23.3% | 21.71% |
| FY 2018 | | | | | |
| Units Sent out | 4.843 | 3.844 | 3.502 | 5.230 | 17.419 |
| Units billed | 3.784 | 3.322 | 2.815 | 3,939 | 13,860 |
| T&D losses . | 21.9% | 13.6% | 19.6% | 24.7% | 20.43% |
| FY 2019 | | | | | |
| Units Sent out | 5.005 | 4.113 | 3.217 | 5.361 | 17.697 |
| Units billed | 3,940 | 3.579 | 2.688 | 4.111 | 14.318 |
| T&D losses | 21.3% | 13.0% | 16.5% | 23.3% | 19.09% |
| FY 2020 | | | | | |
| Units Sent out | 5,341 | 4,019 | 3,251 | 5,171 | 17,781 |
| Units billed | 4,235 | 3,674 | 2,783 | 3,584 | 14,277 |
| T&D losses | 20.7% | 8.6% | 14.4% | 30.7% | 19.71% |
| FY 2021 | | | | | |
| Units Sent out | 5,730 | 4,077 | 3,715 | 5,965 | 19,487 |
| Units billed | 4,531 | 3,813 | 3,008 | 4,717 | 16,069 |
| T&D losses | 20.9% | 6.5% | 19.0% | 20.9% | 17.5% |
| FY 2022 | | | | | |
| Units Sent out | 5,692 | 4,350 | 3,859 | 5,901 | 19,802 |
| Units billed | 4,677 | 4,055 | 3,152 | 4,879 | 16,763 |
| T&D losses | 17.8% | 6.8% | 18.3% | 17.3% | 15.35% |
| FY 2023 | | | | | |
| Units Sent out | 5,183 | 4,288 | 3,616 | 5,269 | 18,357 |
| Units billed | 4,364 | 3,912 | 3,060 | 4,218 | 15,554 |
| T&D losses | 15.8% | 8.8% | 15.4% | 19.9% | 15.27% · |

.

a ye

المراجعين بعوري فالانا والعالج



- - •

Annexure L

Category wise rates based on Cost of Service

1. Objective

Objective of this calculation is to arrive at category wise rates for each consumer category considering the cost of service to serve that category.

2. Methodology

KE has carried out the calculation for the projected revenue of FY 2024, based on below sections / steps:

- **Revenue Requirement:** Revenue requirement is based on petitions of Generation, Transmission, Distribution and Supply being submitted to NEPRA, as also accounted for in Supply petition to calculate overall revenue requirement.
- **Cost Classification:** Bifurcation of total revenue in Energy based, Demand based, and Customer based costs using commonly used methodologies.
- **Cost Allocation factors:** Identification and calculation of cost allocation factors to allocate the Energy based, Demand based and Customer based cost to different consumer categories based on those factors.
- Cost of Service results with current fixed charges and current levels of cross-subsidy: Cost of Service results have been re-adjusted based on current fixed charges and estimated cross-subsidy being charged to consumers. Further, comparison of Cost of Service results (re-adjusted) with latest category wise determined tariff rates is also included.

Each section has been discussed below to provide details and methodology of calculation.

3. Revenue Requirement

Revenue requirement is based on tariff petitions of Generation (already submitted earlier), Transmission, Distribution and Supply being submitted to NEPRA, as also accounted for in Supply tariff petition to calculate overall revenue requirement.

Summary of revenue requirement is given below:



Page 1 of 11

| Description | Amounts in PKR Million |
|---------------------------|------------------------|
| Generation | |
| Energy Purchase Price | 192,720 |
| Capacity Purchase Price | 90,041 |
| Sub-total – Generation | 282,760 |
| Transmission | 55,735 |
| Distribution | 61,388 |
| Supply | |
| Power Purchase EPP | 109,377 |
| Power Purchase CPP | 110,571 |
| Customer Based Costs | 95,343 |
| Sub-total – Supply | 315,292 |
| Total Revenue Requirement | 715,176 |
| Units billed (kWh) | 16,004 |
| Cost Per kWh | 44.69 |

4. Cost classification

Generally, cost incurred by a utility to provide service to the customer class is dependent on the service levels required by the specific customer class. For instance, generation capacities are designed to meet the average energy requirement as well as to cater peak demand of certain customer classes at a particular interval of time. Therefore, costs associated with capacity installed to cater demand shall be borne by the customer class in accordance with the consumption/demand patterns.

The total costs of Generation, Transmission, Distribution and Supply for the year FY 2024 has been bifurcated in the following categories:

4.1. Energy based costs

Energy related cost vary with the amount of energy or kWh that is supplied to customers. Energy Purchase price (KE Own Generation and Power Purchase) are generally classified as energy based cost.

4.2. Demand based costs

Demand related cost vary with KE's customers electricity needs at particular point of time and electricity usage pattern. It includes expenses incurred by KE to maintain its Generation, Transmission, Distribution & Supply system to serve the customer capacity needs at any given point of time during the day.

Demand based costs are further bifurcated into two categories:

- 1. Average Demand based costs: This cost is the portion of the demand based cost, that, is incurred to serve the average energy requirement (average demand served on feeders during the year) of the consumers.
- 2. Excess Demand based costs: This cost is the portion of the demand based cost, that, is incurred to serve the energy requirement of the consumers that is above the average demand (excess demand served on feeders during the year). In other words, it is the cost that is incurred due to "excess" demand of the customer.



Page 2 of 11

4.3. Customer based costs

14 S - 4

These are costs related to customer service and are linked with related cost drivers, for example number of consumers, units billed, load energized, etc.

The segment wise cost classification methodology is explained below:

4.4.1. Generation

Generation costs are classified into demand and energy related costs. Fixed costs that vary with investments made by KE in power generation plant for capacity to serve customers' maximum demand at any given point of time are classified as demand related cost. On the other hand, variable costs that vary with amount of energy produced from existing generation capacity and delivered to customers are considered as energy related costs.

Generation costs are generally bifurcated in:

- Energy Purchase Price which comprises of Fuel costs and Variable O&M and is variable in nature. This has been allocated to Energy based costs.
- Capacity Purchase Price which comprises of Fixed O&M, working capital costs, RoRB, Depreciation etc. and is generally fixed in nature.

This has been considered as **Demand based cost** and has been further bifurcated as **Average Demand based** and **Excess Demand Based Cost** using a commonly known method i.e. Average and Excess method. KE has used supply levels being measured at the feeders considering appropriate point to analyze load. There are around 2,093 no. of feeders (including EHT grid consumers) as of FY 2023. Feeder is a power line at 11KV network which transmits electricity from grid station to distribution transformers to onward distribution (metering) points. An AMR meter is installed on feeder to measure the demand readings. Further, demand of 132 kV/220 kV consumers (Grid consumers) that are directly served through grid stations has also been considered. Accordingly, reference to feeder in this document includes Grid consumers. Under this method, demand has been analyzed with following two types:

- Average demand of the feeder during the year denotes the utilization / units sent out to that feeder
- **Peak demand** Average of monthly peak demands recorded at a feeder/ Grid Consumers during a year.

Proportion of cost corresponding to proportion of average demand and peak demand has been classified as **Average Demand based cost** whereas differential cost, corresponding to difference of peak demand and average demand, referring to "Excess" is linked as **Excess Demand based cost**, considering that this cost arises on the basis of demand going above the average utilization.

Based on the above method, **59.23%** of the cost of Generation (Capacity Cost) is bifurcated as Average Demand based cost, and **40.77%** has been bifurcated as Excess Demand based cost.



Page 3 of 11

| Sum of feeder wise | | | | |
|--------------------|--------------|--|--|--|
| monthly Non-Co | wise Average | Difference (Excess) | based revenue | based revenue |
| Demands | Demands | | requirement | requirement . |
| KW | KW | KW | 19.5 | |
| A DAY A | Base | $\mathbf{C} = \mathbf{A} - \mathbf{B}$ | $\mathbf{A} = \mathbf{C} / \mathbf{A}$ | $\mathbb{C}^{\infty} = \mathbf{E} = \mathbf{I} - \mathbf{D} + \mathbf{C} + \mathbf{C}$ |
| 3,586,626 | 2,124,398 | 1,462,227 | 40.77% | 59.23% |

4.4.2. Transmission

Transmission cost refer to the charges for using transmission network (220 kV to 66 kV) and mainly comprise of Fixed O&M, RoRB, Depreciation, Amortization of deferred revenue, and working capital and is generally fixed in nature.

This Cost has been considered as **Demand based cost** as transmission costs are generally fixed costs that do not vary with the quantity of energy transmitted. Further, these have been further bifurcated as **Average Demand based** and **Excess Demand Based Costs** using the methodology explained above in Generation.

4.4.3. Distribution

Distribution cost refer to the charges for using distribution network (11 kV and below) and mainly comprise of Fixed O&M, RoRB, Depreciation, Amortization of deferred revenue, and working capital and is generally Fixed in nature.

Distribution costs vary according to the need of the customer and it could be bifurcated in costs for (i) average demand and (ii) above the average demand (excess demand). Accordingly, costs corresponding to proportion of average demand is classified as **Average Demand based costs** reflecting cost serving the average demand requirement of customer. Remaining cost corresponding to the portion (i.e "Excess") above the average demand is classified as **Excess Demand Based Costs**.

Based on the method explained in Generation above, **59.23%** of the cost of Distribution has been bifurcated as Average Demand based cost, and **40.77%** of the costs has been bifurcated as Excess Demand based cost.

4.4.4. Supply

Supply costs comprise of:

Cost of Power Purchase from External sources

- Energy Purchase Price which comprises of Fuel costs pertaining to energy purchased from IPP's & CPPA-G and Variable O&M. These costs are Variable in Nature and has been allocated to Energy based costs.
- Capacity Purchase Price which comprises of O&M, Capacity costs payable to IPPs & CPPA-G. These costs are fixed in nature and has been allocated as Average Demand Based and Excess Demand Based Cost using the methodology explained above in Generation.

Tariff components for Supply business

O&M costs of supply business, Recovery loss allowance, Retail Margin and Working Capital costs of KE's Supply business. These costs have been allocated as Customer based costs based on applicable cost drivers.

Summary of allocation factors for all costs is given in Annexure L2.



Page 4 of 11

5. Cost Allocation Factors

The next phase is allocation of above costs to customer classes based on allocation factors.

Customer classes:

Customer classes are established based on the nature of services provided and related characteristics. The basic objective is to allocate classified cost (Energy, Demand and Customer based costs) to customer classes in order to establish the cost incurred by KE to serve each customer class.

Currently, there are **15 customer classes** for the purpose of Tariff. These are further bifurcated into different Customer categories based on currently notified tariff categories.



Page 5 of 11

| S.no. | Customer Class | Customer category 3 (1994) States |
|--------------------------------|--|---|
| | | Up to 50 units - Life Line |
| | | 51 - 100 units - Life Line |
| 1 | Residential - Below 5 kW - Protected | 001 - 100 units |
| | | 101 - 200 units |
| | | Temporary Service - Residential Supply |
| | | 001 - 100 units |
| : | | 101 - 200 units |
| | : | 201 - 300 units |
| | Pesidential - Below - kW - Unprotected | 301 - 400 units |
| 2 | Residential - Below 5 kw - Onprotected | 401 - 500 units |
| | | 501 - 600 units |
| | 1 | 601 - 700 units |
| | | Above 700 units |
| 3 | Residential - Above 5 kW – ToU | Residential- A1(b) - ToU |
| 4 | Commercial - Less than 5 kW | Commercial-A2 (a): For Sanctioned load less than 5 kw |
| | | Commercial- A2(b): For Sanctioned load 5 kw & above |
| 5 Commercial - Above than 5 kW | | Commercial-A2(c) - ToU |
| | | Temporary Service - Commercial Supply |
| 6 | General service | General Services |
| | | Upto 25 kw (at 400/230 Volts) |
| 7 | Industrial B1 | Industrial-B1(b) - ToU |
| | | Temporary service - Industrial Supply |
| 8 | Industrial B2 | 25-500 kw (at 400 volts) |
| | | Industrial-B2(b) - ToU |
| 0 | Industrial Ba | For all loads upto 5000 kw (at 11,33 kv) |
| | | Industrial-B3(b) - ToU |
| | | For all loads upto 5000 kw (at 66,132 kv) |
| 10 | Industrial B4 & Industrial B5 | Industrial-B4(b) - ToU |
| | l | Industrial-B5 - ToU |
| | 1 | Sanctioned load 5 kw & upto 500 kw |
| 11 | Bulk supply C1 (b) | Bulk Supply-C1(c) - ToU |
| | | Temporary Service - (a) at 400 v |
| | | For Supply at 11,33 kv upto and including 5000kw |
| 12 | Bulk Supply C2 | Bulk Supply-C2(b) - ToU |
| | | Temporary Service - (b) at 11 kv |
| 10 | Bulk Supply Ca | For supply at 132 and above, upto and including 5000 kw |
| 13 | Parconholt c2 | Bulk Supply-C3(b) – ToU |
| 4.4 | Arriculture | D-1 For all loads |
| 14 | ABROULUIC | D-2 – ToU |
| 15 | Public lighting | Street Lighting |

۰,

ę



Page 6 of 11

For allocation of the above determined costs to each customer category, Energy Allocating Factors, Average Demand Allocating Factors, Excess Demand Allocating Factors & Customer Allocating Factors have been determined.

5.1. Energy Allocating Factors

Energy allocating factors are determined to allocate energy related costs (Generation and cost of power purchase).

Units Sent out (kWh) projections have been used for FY 2024 for each customer class to calculate this allocating factor. To identify allocation percentages for each customer category, factored Units billed (kWh) for each category have been grossed up with transmission and distribution losses to calculate actual system level sent out for each category.

Energy allocating factor for each customer class are calculated based on each customer category energy units contribution to the total system sent out units.

5.2. Demand Allocating Factors

Demand allocating factors are determined to allocate demand related costs of Generation, Transmission, Distribution and Supply to each customer class.

There are two types of Demand based costs i.e. Average Demand based costs and Excess Demand based costs. Considering that Average and Excess method uses the difference between Peak and Average demand to determine the Average Demand based costs & Excess Demand Based Costs (as explained in Generation section in detail), feeder wise average demand and feeder wise difference of average & peak demand (referred as feeder wise excess demand), has been used to determine the Demand Allocating factors for these costs.

To map the average demand to each customer class, average of Sanctioned Load & Connected Load of each feeder have been used as a basis to identify customer class on that feeder and average demand & excess demand relating to that feeder have been allocated to each class in proportion to the average of Sanctioned & Connected load of different categories on a feeder.

Once the total average demand & excess demand were allocated to each customer class, they have been used as the Average Demand Allocating Factor & Excess Demand Allocating factor for each Customer class.

Please refer Annexure L4 for calculation of these Demand Allocating Factors in detail.

5.3. Customer Allocating Factor

Customer allocating factors are determined to allocate customer related cost of Distribution and Supply O&M. Weighting factors are assigned to each customer class based on the costs incurred. We have used appropriate cost drivers such as units billed, load energized, etc. for determination of this Customer Allocating Factor.

Customer Allocating factors are bifurcated in two types:

i. Customer Related cost - Distribution Costs and Supply O&M

Allocated based on cost drivers for different types of costs for consumer classes.

ii. Customer Related cost - Specific costs

Recovery loss

Total Recovery loss for FY 2024 has been calculated as Revenue requirement (Excluding working capital) x 7.24% (i.e. proposed target for FY 2024).



Page 7 of **11**

Accordingly, recovery loss has been allocated to each customer class based on the category wise projected billing and recovery loss.

Retail Margin

Total Retail Margin for FY 2024 has been calculated as Revenue requirement (excluding Recovery Loss & Working Capital) x **1.5%** (retail margin %).

Accordingly, Retail margin for each class has been computed using class wise revenue based on cost of service.

Working capital

Working capital cost is mainly derived from revenue requirement, accordingly, total working capital requirement has been allocated to each category based on revenue of each consumer category.

A summary of the allocations explained in the previous paragraph is presented as below:

| Type of Cost | Amounts in PKR Mn |
|--|-------------------|
| Energy based Costs | 302,097 |
| Average Demand based Costs | 188,199 |
| Excess Demand based Costs | 129,537 |
| Customer based costs inclusive of specific costs | 95,343 |
| Total | 715,176 |

Please refer Annexure L1 for a detailed breakup of above classification.

5.4. Rate design considerations

Currently rates for Time of Use are bifurcated in Peak and Off Peak rates with below timings:

| Description | Time |
|-------------|---------------------|
| Peak | 6:30 pm to 10:30 pm |
| Off Peak | 10:30 pm to 6:30 pm |

Accordingly, EPP for the year FY 2023 has been analyzed as to how it varies between different hours of the day and based on the analysis, below is the result of EPP in Peak and Off Peak hours:

| Description | Cost / Kwh |
|-------------|------------|
| Peak | 18.64 |
| Off Peak | 18.40 |

Accordingly, Energy costs under each ToU category have been bifurcated in Peak and Off Peak rates using the above proportion of Peak and off Peak costs above.

Please refer the illustration below:



Page 8 of 11

| Description (Tariff category: Residential ToU) | Legend | Amounts |
|---|--|---------|
| Variable Costs | a | 29,536 |
| Units Billed – Peak | b | 234 |
| Units Billed - Off Peak | С | 1,211 |
| Total Units billed | $\mathbf{d} = \mathbf{b} + \mathbf{c}$ | 1,445 |
| Weighted Average Cost | e = a / d | 20.44 |
| Peak hour base rate based on FY-23 | f | 18.64 |
| Off Peak hour base rate based on FY-23 | g | 18.40 |
| Weighted avg. rate based on base rates of FY-23 | h = ((fxb) + (gxc)) / d | 18.44 |
| Rate difference from Weighted avg. Cost and FY-23 weighted avg. rate | I = e - h | 1.99 |
| Peak Hour rate | $\mathbf{j} = \mathbf{f} + \mathbf{i}$ | 20.63 |
| Off Peak Hour rate | $\mathbf{k} = \mathbf{g} + \mathbf{i}$ | 20.40 |

6. Cost of Service results – with current fixed charges and current levels of cross-subsidy

Please refer the Annexure L6 for output obtained from conducting the Cost of Service calculation.

The results determined above denotes the actual fixed cost (PKR / kW / month) that should be charged to each customer category based on the Load of each consumer. However, as per the currently applicable tariff structure by NEPRA,

- > fixed charges are not applicable on every customer category
- fixed charges are not applied on total load, rather applicable based on 50% of sanctioned load or Maximum Demand Indicator (MDI) of each customer, whichever is higher
- > Fixed charges per kW rates are quite low as compared to cost of service based calculated fixed charges.

In order to align the above determined customer category wise tariff to cater for currently applicable methodology of Fixed charges, variable rates have been adjusted while keeping Fixed charges as currently determined by NEPRA.

Please refer the illustration below for the demonstration of allocation of fixed charges into variable charge:

| Tariff Category | Total, Tixed Charge | Fix Charge Oper Junit (KE) | Var. charg e per unit (KE) | NEPRA applicabl e.Fix Charges per unit | Sanct & Connect ed Load | Higher - of 50% - of Sanct. load or MDI | Charges | Units Billed | Per unit impact tof Fix Charge | Applicabl levar Charge per unit |
|--------------------|---------------------------|--|--|--|-------------------------------|---|---|-----------------|--|--|
| | PKR | PKR/ kw/ month | PKR/ kWh | PKR/ KW/ 5 month | KW e | No | PKR Mn g = (b x c x 12) - (d x f x 12) | GWh | PKR/ .kWh; .l=g/. h | PKR/15 |
| A2(a) | 0 | 2,346 | 18 | - | 795,513 | 0 | 22,394 | 721 | 31 | 49.45 |



Page 9 of 11

Ę

The results after alignment of fixed charges methodology currently applicable by NEPRA along with comparison of fixed charges calculated are mentioned in **Annexure L6**.

Further, comparison of Cost of Service results after adjustment of fixed charges with latest category wise determined tariff rates¹ to identify the level of cross subsidy is included in Annexure L_7 .

For category wise schedule of tariff based on Cost of Service results before incorporation of cross subsidy and after incorporation of cross subsidy please refer the Annexure L8 & Annexure L9 respectively.



Page 10 of 11

¹ Rates used as notified under SRO 977/2023 dated July 27th, 2023.

List of Annexures

| Annexure | Description |
|----------|---|
| Lı | Cost Classification Summary |
| L2 | Cost Allocating Factors Summary |
| L3 | Energy Allocating Factor |
| L4 | Demand Allocating Factors |
| L4(a) | Peak Demand, Average Demand & Excess Demand |
| . L5 | Specific Cost Allocating Factors |
| L6 | Cost of Service results and results after re-adjustment of Fixed charges |
| L7 | Comparison of Cost of Service results before incorporation of Cross Subsidy with results after incorporation of Cross Subsidy |
| L8 | Schedule of Tariff based on Cost of Service results before incorporation of Cross Subsidy |
| L9 | Schedule of Tariff after incorporation of Cross Subsidy |



Page 11 of 11

K-Electric Limited Cost of Service FY 2024 Cost Classification Summary

192,719,550,075 90,040,937,600 61,388,307,239 109,377,407,597 110,571,380,108 6,758,126,861 9,399,332,990 46,065,474,205 715,176,206,437 55,735,326,941 33,120,362,821 95,343,296,877 9,399,332,990 46,065,474,205 33,120,362,821 6,758,126,861 22,722,671,926 129,537,408,141 36,708,687,242 25,027,329,022 45,078,719,952 1 . , . . ins make 33,012,655,015 36,360,978,217 188,198,543,747 53,332,250,358 65,492,660,156 . , . . • 302,096,957,672 192,719,550,075 109,377,407,597 . . • • . . . 100.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 100.00% 100.00% 100.00% 40.77% 0.00% 40.77% 40.77% 40.77% 0.00% % %0 8 % 0.00% 59.23% 8 %0 %0 % 0.00% 59.23% 59.23% 59.23% 100.00% 0.00% 0.00% 100.00% 0.00% % % %0 0.00% %0



Annexure L1

٠

¢

Annexure L2

K-Electric Limited Cost of Service FY 2024 Cost Allocating Factors Summary

| | | | | | | autoritzatinatzat autoritzati | | |
|--|---------|---------|---------|---------|---------|----------------------------------|---------|--|
| Residential Protected | 8.26% | 6.97% | 8.32% | 25.70% | 8.26% | 5.54% | 8.07% | |
| tesidential Unprotected | 32.29% | 28.71% | 33.98% | 39.19% | 32.36% | 82.48% | 35.75% | |
| tesidential ToU | 9.78% | 5.79% | 9.43% | %60.7 | 8.87% | 1.25% | . 8.36% | |
| commercial-A2 (a) : For Sanctioned load less than 5 kw | 4.39% | 5.16% | 5.12% | 10.27% | 4.87% | 6.59% | 4.99% | |
| commercial- A2(b) : For Sanctioned load 5 kw & above | 7.18% | 8.13% | 8.55% | 3.26% | 7.80% | 1.44% | 7.37% | |
| Seneral Services | 2.85% | 2.56% | 2.45% | 2.33% | 2.68% | 0.00% | 2.50% | |
| ndustrial-B1 - Upto 25 kw (at 400/230 Volts) | 1.69% | 2.65% | 1.89% | 0.78% | 1.96% | 0.00% | 1.83% | |
| ndustrial-B2(a) - 25-500 kw (at 400 volts) | 9.10% | 9.63% | 8.77% | 2.93% | 9.11% | 0.00% | 8.50% | |
| ndustrial-B3(a) - For all loads upto 5000 kw (at 11,33 kv) | 15.70% | 15.89% | 14.01% | 5.85% | 15,24% | 0.00% | 14.21% | |
| ndustrial- B4 & B5 | 5.19% | 10.63% | 4.35% | 0.18% | 5.33% | 0.00% | 4.97% | |
| tulk Supply-C1(b) - Sanctioned load 5 kw & upto 500 kw | 0.11% | 0.10% | 0.18% | 0.04% | 0.13% | 0.00% | 0.12% | |
| tulk Supply-C2(a) - For Supply at 11,33 kv upto and including 5000kw | 2.50% | 1.93% | 1.94% | 1.93% | 2.22% | 0.00% | 2.07% | |
| tulk Supply-C3(a) - For supply at 132 and above upto and including 5000 kw | 0.15% | 0.07% | 0.12% | 0.00% | 0.12% | 0.00% | 0.11% | |
| kgriculture D-1 - D-1 For all loads | 0.43% | 0.96% | 0.42% | 0.16% | 0.54% | 2.67% | 0.69% | |
| treet Lighting | 0.38% | 0.82% | 0.46% | 0.29% | 0.50% | 0.04% | 0.47% | |
| | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% | |

MITEO 2 × 7 <u>7</u>3

.....

.

Annexure L3

4

¢

K-Electric Limited Cost of Service FY 2024 Energy Allocating Factor

| | | | | | South States of | | |
|---|----------------|--------|---------------|---------|---|----------------|---------|
| | | | | | 0-04/04/04 | | |
| ossarednisterio restantes estas testes estas br>Residential Protected | 1,221,453,393 | 20.78% | 320,415,500 | 1.30% | 20,308,304 | 1,562,177,197 | 8.26% |
| Residential Unprotected | 4,773,154,152 | 20.78% | 1,252,108,829 | 1.30% | 79,360,100 | 6,104,623,081 | .32.29% |
| Residential ToU | 1,445,271,018 | 20.78% | 379,128,045 | 1.30% | 24,029,572 | 1,848,428,634 | 9.78% |
| Commercial-A2 (a) : For Sanctioned less than 5 kw | 721,050,449 | 11.96% | 568'62'6 | 1.30% | 10,787,028 | 829,771,371 | 4.39% |
| Commercial- A2(b) : For Sanctioned load S kw & above | 1,179,180,277 | 11.96% | 160,157,611 | 1.30% | 17,640,722 | 1,356,978,610 | 7.18% |
| General Services | 464,861,536 | 12.62% | 67,138,391 | 1.30% | 160'200'2 | 539,007,018 | 2.85% |
| Industrial-B1 - Upto 25 kw (at 400/230 Volts) | 255,590,819 | 19.00% | 59,942,656 | 1.30% | 4,155,963 | 319,689,437 | 1.69% |
| lndustrial-B2(a) - 25-500 kw (at 400 volts) | 1,553,596,425 | 8.46% | 143,581,230 | 1.30% | 22,353,910 | 1,719,531,565 | 9.10% |
| Industrial-B3(a) - For all loads upto 5000 kw (at 11,33 kv) | 2,801,147,028 | 4.36% | 127,724,551 | 1.30% | 38,576,829 | 2,967,448,408 | 15.70% |
| Industrial-B4&B5 | 968,172,413 | 0.00% | | 1.30% | 12,752,018 | 980,924,431 | 5.19% |
| Bulk Supply-C1(b) - Sanctioned load 5 kw & upto 500 kw | 18,734,934 | 11.61% | 2,460,828 | 1.30% | 279,174 | 21,474,937 | 0,11% |
| Bulk Supply-C2(a) - For Supply at 11,33 kv upto and including 5000kw | 446,070,891 | 4.36% | 20,339,598 | 1.30% | 6,143,198 | 472,553,687 | 2.50% |
| Bulk Supply-C3(a) - For supply at 132 and above, upto and including 5000 kw | 28,663,061 | 0.00% | • | . 1.30% | 377,528 | 29,040,588 | 0.15% |
| Agriculture D-1 - D-1 For all loads | 68,290,557 | 14.97% | 12,024,327 | 1.30% | 1,057,845 | 81,372,729 | 0.43% |
| Street Lighting | 58,364,561 | 18.62% | 13,353,995 | 1.30% | 944,621 | 72,663,178 | 0.38% |
| | 16,003,601,512 | - | 2,656,309,455 | | 245,773,903 | 18,905,684,871 | 100% |



.

-

.

K-Electric Limited Cost of Service FY 2024 Demand Allocating Factors

Contraction of the second

. . . .

- ---i

| nnexure L4 | |
|------------|--|
| 4 | |

.

| | | | | EN LA | No. of the second s | A STATE OF S | |
|--|-------------|--------|-----------|---|--|---|--|
| | | | | | | | |
| Residential Protected | Below 11 kV | 11.01% | 100,000 | 111,012 | 6.97% | 176,785 | 24-15 8 32% Each |
| Residential Unprotected | Below 11 kV | 11.01% | 411,770 | 457,115 | 28,71% | 721,932 | 3398% |
| Residential ToU | Below 11 kV | 11.01% | 83,080 | 92,229 | 5,79% | 200,395 | 1411 - 1412 - 14 |
| Commercial-A2 (a) : For Sanctioned load less than 5 kw | Below 11 kV | 11.01% | 74,053 | 82,208 | 5:16% | 108,679 | |
| Commercial- A2(b) : For Sanctioned load 5 kw & above | Below 11 kV | 11.01% | 116,577 | 129,415 | 8.13% | 181,534 | 855% 11 144 |
| General Services | Below 11 kV | 11.01% | 36,757 | 40,805 | 2,56% | 52,097 | 1441 2 45% 7 5 141 |
| Industrial-B1 - Upto 25 kw (at 400/230 Volts) | Below 11 kV | 11.01% | 37,976 | 42,158 | 2.65% | 40,257 | Jeth (167, 371, 114) 5, 11, 868, 11 5, 11, 18, 18, 18, 18, 18, 18, 18, 18, 18 |
| Industrial-B2(a) - 25-500 kw (at 400 volts) | Below 11 kV | 11.01% | 138,094 | 153,301 | 9,63% | 186,258 | 1967-1972 - 1967- 1967-1982 - 1967- 1967-1982 - 1967-1975-1975-1975-1975-1975-1975-1975-197 |
| Industrial-B3(a) - For all loads upto 5000 kw (at 11,33 kv) | 11 kV | 5.60% | 239,553 | 252,978 | 15,89% | 297,637 | 11, 24, 42, 14, 01% 14, 01% |
| lindustrial- 64 & 65 | Above 11 kV | 1.30% | 167,140 | 169,312 | 10.63% | 92,516 | 4.35% 5.5% |
| Bulk Supply-C1(b) - Sanctioned load 5 kw & upto 500 kw | Below 11 kV | 11.01% | 1,369 | 1,520 | 0.10% | 3,806 | 1.18% 1.18% |
| Bulk Supply-C2(a) - For Supply at 11,33 kv upto and including 5000kw | 11 KV | 5.60% | 29,139 | . 30,772 | 1%£6;T- | 41,304 | 19480 |
| Bulk Supply-C3(a) - For supply at 132 and above,upto and including 5000 kw | Above 11 kV | 1.30% | 1,146 | 1,161 | 0.07% | 2,553 | 0.12% (F2) |
| Agriculture D-1 - D-1 For all loads | Below 11 kV | 11,01% | 13,840 | 15,364 | 0.96% | 8,954 | N. 5 (1975) N. 10028 |
| Street Lighting | Below 11 kV | 11.01% | 11,734 | 13,027 | 0.82%5 | 169'6 | 10.000 (0.000) 11.000 (0.000) 11.000 (0.000) |
| | | | 1,462,227 | 1,592,376 | 100% | 2,124,398 | 100% |

â

K-Electric Limited Cost of Service FY 2024 Peak Demand, Average Demand & Excess Demand

-

۰.

.

c

| and a second | en de la companya de | Average Beneric | development Verees Demand |
|--|--|-----------------|------------------------------|
| | | | |
| Residential Protected | 276,785 | 176,785 | 100,000 |
| Residential Unprotected | 1,133,702 | 721,932 | 411,770 |
| Residential ToU | 283,475 | 200,395 | 83,080 |
| Commercial-A2 (a) : For Sanctioned load less than 5 kw | 182,732 | 108,679 | 74,053 |
| Commercial- A2(b) : For Sanctioned load 5 kw & above | 298,112 | 181,534 | 116,577 |
| General Services | 88,854 | 52,097 | 36,757 |
| Industrial-B1 - Upto 25 kw (at 400/230 Volts) | 78,233 | 40,257 | 37,976 |
| Industrial-B2(a)25-500 kw (at 400 volts) | 324,352 | 186,258 | 138,094 |
| Industrial-B3(a) - For all loads upto 5000 kw (at 11,33 kv) | 537,190 | 297,637 | 239,553 |
| Industrial- B4 & B5 | 259,656 | 92,516 | 167,140 |
| Bulk Supply-C1(b) - Sanctioned load 5 kw & upto 500 kw | 5,175 | 3,806 | 1,369 |
| Bulk Supply-C2(a) - For Supply at 11,33 kv upto and including 5000kw | 70,442 | 41,304 | 29,139 |
| Bulk Supply-C3(a) - For supply at 132 and above,upto and including 5000 kw | 3,699 | 2,553 | 1,146 |
| Agriculture D-1 - D-1 For all loads | 22,794 | 8,954 | 13,840 |
| Street Lighting | 21,425 | 9,691 | 11,734 |
| | 3,586,626 | 2,124,398 | 1,462,227 |

• 3

TIC LIPHTED

Annexure L4(a)



•

Annexure L5

•

-

K-Electric Limited Cost of Service FY 2024 Specific Cost Allocating Factors

| 9,398,865,546 | 100% No. 100% | 626,591,036,421 | 16,003,601,512 | |
|-------------------------------|-------------------------------|--|----------------|---|
| 46,963,320 | 0.50% | 3,130,888,024 | 58,364,561 | Street Lighting |
| 50,856,631 | 0.54% | 3,390,442,080 | 68,290,557 | Agriculture D-1 - D-1 For all loads |
| 10,841,960 | 0.12% | 722,797,346 | 28,663,061 | Bulk Suppiy-C3(a) - For suppiy at 132 and above, upto and including 5000 kw |
| 209,023,066 | 2.22% | 13,934,871,043 | 446,070,891 | Bulk Supply-C2(a) - For Supply at 11,33 kv upto and including 5000kw |
| 12,193,524 | 0.13% | 812,901,578 | 18,734,934 | Bulk Supply-C1(b) - Sanctioned load 5 kw & upto 500 kw |
| 501,169,166 | 5.33% | 33,411,277,752 | 968,172,413 | Industrial- B4 & B5 |
| 1,432,116,898 | 15:24% | 95,474,459,854 | 2,801,147,028 | Industrial-B3(a) - For all loads upto 5000 kw (at 11,33 kv) |
| 856,265,866 | 9.11% | 57,084,391,095 | 1,553,596,425 | Industrial-B2(a) - 25-500 kw (at 400 volts) |
| 184,028,745 | 1.96% | 12,268,582,981 | 255,590,819 | Industrial-B1 - Upto 25 kw (at 400/230 Volts) |
| 252,352,152 | 2.68% | 16,823,476,826 | 464,861,536 | General Services |
| 733,537,502 | ×, 7.80% | 48,902,500,166 | 1,179,180,277 | Commercial- A2(b) : For Sanctioned load 5 kw & above |
| 457,654,652 | 4.87% | 30,510,310,162 | 721,050,449 | Commercial-A2 (a) : For Sanctioned load less than 5 kw |
| 834,079,671 | 8,87% | 55,605,311,402 | 1,445,271,018 | Residential ToU |
| 3,041,648,297 | 32,36% | 202,776,553,146 | 4,773,154,152 | Residential Unprotected |
| 776,134,095 | 8.26% | 51,742,272,967 | 1,221,453,393 | Residential Protected |
| | | | | |
| | | | | |
| | Resultancin Alleration factor | saarseen arviteesie workinge Seesseen andersteringen av | | |
| 242 STATE INVERTIGATION STATE | | Revenuence of the link of a link | | |

K-Electric Limited Cost of Service FY 2024 Specific Cost Allocating Factors

| | Algebra Construction (Construction) Algebra Construction (Co | LE COMPER | | litravian lossa llost luzi i auto |
|---|--|-----------|----------------|---|
| | | | | |
| | | | | |
| <u>Report for the instant of /u> | 14,451,576,259 | 17.66% | 2,551,978,504 | 5554% |
| Residential Unprotected | 171,666,684,471 | 22.13% | 37,991,663,465 | 82,48% |
| Residential ToU | 60,343,984,112 | 0.95% | 575,651,553 | 125% |
| Commercial-A2 (a) : For Sanctioned load less than 5 kw | 38,191,813,128 | 7.94% | 3,033,551,372 | |
| Commercial-A2(b) : For Sanctioned Ioad 5 kw & above | 65,188,519,612 | 1.02% | 662,569,935 | 1.44% |
| General Services | 21,363,399,221 | 0.00% | | 0.00% |
| Industrial-B1 - Upto 25 kw (at 400/230 Volts) | 11,109,660,607 | 0.00% | • | 0.00% |
| Industrial-B2(a) - 25-500 kw (at 400 volts) | 72,927,914,955 | 0.00% | • | 0.00% (1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1. |
| Industrial-B3(a) - For all loads upto 5000 kw (at 11,33 kv) | 116,339,876,197 | 0.00% | | 0.00% |
| Industrial- B4 & B5 | 38,793,200,519 | 0.00% | • | 0.00% |
| Bulk Supply-C1(b) - Sanctioned load 5 kw & upto 500 kw | 870,497,024 | 0.00% | 1 | 0,00% |
| Bulk Supply-C2(a) - For Supply at 11,33 kv upto and including 5000kw | 19,301,328,485 | 0.00% | J | 0,00% |
| Bulk Supply-C3(a) - For supply at 132 and above, upto and including 5000 kw | 1,182,826,454 | 0.00% | J | 1.4.0.00% |
| Agriculture D-1 - D-1 For all loads | 1,806,849,370 | 68.12% | 1,230,854,937 | 2.67%) 15 No. 17 No. |
| Street Lighting | 2,451,771,554 | 0.70% | 17,124,831 | |
| | 635 989 901 967 | 7 24% | 46.063,394,598 | 100% A 100% A 100% A 100% |

. **2**,

Annexure L5

.

,



ŝ

K-Electric Limited Cost of Service FV 2024 Specific Cost Allocating Factors

| Residential Protected | 55,070,385,566 | 2,674,206,194 | 8.07% | 6,002,318,793 |
|---|-----------------|----------------|------------------------|----------------|
| Residential Unprotected | 243,809,864,909 | 11,839,355,114 | 35.75% | 52,872,666,877 |
| Residential ToU | 57,015,042,626 | 2,768,638,327 | 836% | 4,178,369,551 |
| Commercial-A2 (a) : For Sanctioned load less than 5 kw | 34,001,516,187 | 1,651,106,385 | 4,99% | 5,142,312,409 |
| Commercial- A2(b) : For Sanctioned load 5 kw & above | 50,298,607,603 | 2,442,489,673 | 7.37% | 3,838,597,110 |
| General Services | 17,075,828,978 | 829,198,618 | 2.50% | 1,081,550,771 |
| ndustrial-B1 - Upto 25 kw (at 400/230 Volts) | 12,452,611,726 | 604,696,173 | 1.83% | 788,724,918 |
| ndustrial-B2(a) - 25-500 kw (at 400 volts) | 57,940,656,961 | 2,813,585,962 | 8.50% | 3,669,851,829 |
| ndustrial-B3(a) - For all loads upto 5000 kw (at 11,33 kv) | 96,906,576,752 | 4,705,762,728 | 14,21% | 6,137,879,626 |
| ndustrial- B4 & B5 | 33,912,446,918 | 1,646,781,200 | 4.97% | 2,147,950,366 |
| 3ulk Supply-C1(b) - Sanctioned load 5 kw & upto 500 kw | 825,095,102 | 40,066,442 | 0.12% | 52,259,966 |
| sulk Supply-C2(a) - For Supply at 11,33 kv upto and including 5000kw | 14,143,894,109 | 686,824,486 | 2.07% | 895,847,551 |
| sulk Supply-C3(a) - For supply at 132 and above, upto and including 5000 kw | 733,639,306 | 35,625,368 | 0.11% | 46,467,329 |
| \griculture D-1 - D-1 For al! loads | 4,672,153,649 | 226,878,786 | 0.69% | 1,508,590,355 |
| itreet Lighting | 3,194,976,175 | 155,147,363 | 0.47% | 219,235,514 |
| | 682,053,296,566 | 33,120,362,821 | 100% PARTICIPALITY NO. | 88,582,622,965 |

Annexure L5

.

| - | 12.51 |
|----------|--|
| | 2.49% |
| = | HAXN N |
| u - | 122-265 |
| rt i | 15515 |
| | 12205 |
| = | 10000 |
| • | PA2 http:// |
| - | H 2 - 7 |
| = | 1.00 |
| | 7.940 |
| . | 853 |
| - | 101424 |
| • | Stratt |
| F | 1. 71 |
| - | H4 54 |
| × 1 | 1.00 |
| | - JAC |
| • | |
| | 11517 |
| | 101-44 |
| ė. | 1255 |
| <u> </u> | RODS |
| | 1562 |
| 5 | 12.835 |
| <u>ت</u> | 10.74 |
| = | 11.012 |
| ÷ | 1.171 |
| 99. | E-12-001 |
| | 1.1111 |
| - | 112133 |
| 23 | 112.31 |
| ຸ | 10.0346 |
| - | 1.2.2 |
| | |
| c | 1.52.111 |
| • | 1.1 |
| v1 | 0633 |
| - | 19/33 |
| 2 | 10:542 |
| N | 15.565 |
| 9 | 10.10 |
| <u> </u> | 050-23 |
| e | REAL |
| <u>u</u> | 014-02 |
| 2 | Line of |
| ÷. | 1.1 |
| 2 | 16.00 |
| | 12333 |
| = | 15.00 |
| • | 10.32 |
| | 122 |
| 2 | 122704 |
| L.) | - B (A (A (A |

| | | | | | ALC: NOT THE OWNER OF | 同時にないます | | | | | | | | |
|---|---------|-----------|---------------|--------|-----------------------|----------|--------|----------|-------|-------|-----|-------|----------|----------|
| | | | | | | | | | | | | | | 0 |
| | | | | | | | | | | | | | | in Value |
| or succession of the second | | 1,292,867 | 1,221,453,393 | 21.81% | 20.44 | 1,614.17 | 76.111 | 386.89 | 2,113 | 20.44 | • | 47.28 | (2,113) | 26.8 |
| sidential Unprotected | | 5,244,715 | 4,773,154,152 | 21.81% | 20.44 | 1,629.91 | 42.08 | 840.09 | 2,512 | 20.44 | | 53.56 | (2,512) | 33.1 |
| sidential ToU | | 1,651,267 | 1,445,271,018 | 21.81% | 20.44 | 1,291.43 | 24.17 | 210.87 | 1,526 | 20.44 | • | 41.37 | (1,526) | 20.9 |
| mmercial-A2 (a) : For Sanctioned load less than 5 kw | • | 795,513 | 721,050,449 | 13.10% | 18.39 | 1,734.45 | 72.69 | 538.68 | 2,346 | 18.39 | • | 49.45 | (2,346) | 31.0 |
| umercial-A2(b) : For Sanctioned Gard 5 kw & above | 606,139 | 1,406,685 | 1,179,180,277 | 13.10% | 18.39 | 1,599.45 | 13.03 | 227.40 | 1,840 | 18.39 | 200 | 41.64 | (a\$E'T) | 23.2 |
| ineral Services | • | 351,657 | 464,861,536 | 13.76% | 18.53 | 1,908.42 | 37.27 | 256.30 | 2,202 | 18.53 | • | 38.52 | (2,202) | 19.9 |
| dustrial-81 - Upro 25 kw (at 400/230 Volts) | | 867,962 | 255,590,819 | 20.05% | 19.99 | 1,975.65 | 14.64 | 219.24 | 2,210 | 19.99 | • | 60.12 | (012'2) | 31.1 |
| dustriai-82(a) - 25-500 kw (at 400 volts) | 609,847 | 956'866 | 1,553,596,425 | 9.65% | 17.69 | 2,453.40 | 16.54 | 306.15 | 2,776 | 17.69 | 200 | 36.75 | (2,276) | 0.01 |
| dustrial•B3[a]• For all loads upro 5000 kw (at 11,33 kv) | 822,777 | 1,624,456 | 2,801,147,028 | 5.60% | 16.93 | 2,445.03 | 20.27 | 314.87 | 2,780 | 16.93 | 460 | 34.65 | (2,320) | C21 |
| Vustrial- B4 & B5 | 308,956 | 769,150 | 968,172,413 | 1.30% | 61.91 | 1,920.37 | 1.33 | 21.262 | 2,154 | 16.19 | 438 | 35.05 | (1,716) | 18.5 |
| ilk Supply CL(b) - Sanctioned load S kw & upto 500 kw | 650'2 | 10,270 | 18,734,934 | 12.76% | 18.32 | 3,787.08 | 24.53 | 424.04 | 4,236 | 18.32 | 200 | 43.92 | (9EZ'Ė) | 25.6 |
| ilk Supply-CZ(a) - For Supply at 11,33 kv upto and Including 5000kvv | 126,801 | 156,357 | 446,070,891 | 5.60% | 16.93 | 3,332.85 | 69.54 | 477.46 | 3,680 | 16.93 | 460 | 31.90 | (3°420) | 14.9 |
| lk Supply-C3(a) - For supply at 132 and above, upto and including 5000 kw | 4,000 | 8,842 | 28,663,061 | %0E.1 | 61.91 | 2,437.67 | 0.92 | 437.93 | 2,877 | 16.19 | 440 | 26.10 | (2,437) | 6.6 |
| jsteulture D-1 - D-1 for al loads | O9E'EE | E70,E2 | 68,290,557 | 16.08% | 19.04 | 3,264.66 | 17.25 | 2,3GB.73 | 5,651 | 19.04 | 200 | 70.57 | (5,451) | 51.5 |
| reet Ughting | | 36,118 | 58.364.561 | 19,68% | 68.61 | 4 500.32 | 44.51 | 505.83 | 5,051 | 19.89 | • | 57.40 | (5,051) | 37.5 |



.

Annexure 16

¢

.

Annexure L7

K-Electric Limited Cost of Service FY 2024 Comparison of Cost of Service results before incorporation of Cross Subsidy with results after incorporation of Cross Subsidy

| Residential Protected | . 47.28 | | 40.82 | • | (6.46) |
|---|-----------|-----|-------|---|---------|
| Residential Unprotected | - 53.56 | • | 43.83 | • | (9.73) |
| Residential ToU | - 41.37 | 4 | 44.47 | | 3.10 |
| Commercial-A2 (a) : For Sanctioned load less than 5 kw | - 49.45 | • | 44.72 | 1 | (4.73) |
| Commercial- A2(b) : For Sanctioned load 5 kw & above | 500 41.64 | 500 | 44.54 | | 2.90 |
| General Services | - 38.52 | • | 16.14 | 4 | 6.39 |
| Industrial-B1 - Upto 25 kw (at 400/230 Volts) | - 51.09 | | 44.80 | • | (6.29) |
| industriai-B2(a) - 25-500 kw (at 400 volts) | 500 36.75 | 500 | 44.16 | 1 | 7.41 |
| industrial-B3(a) - For all loads upto 5000 kw (at 11,33 kv) | 460 34,65 | 460 | 43.76 | • | 9.11 |
| Industrial- B4 & B5 | 438 35.05 | 438 | 43.51 | | 8.46 |
| Bulk Supply-C1(b) - Sanctioned load 5 kw & upto 500 kw | 500 43.92 | 200 | 44.22 | ſ | 0.30 |
| Bulk Supply-C2(a) - For Supply at 11,33 ky upto and including 5000kw | 460 31.90 | 460 | 43.86 | 1 | 11.97 |
| Bulk Supply-C3(a) - For supply at 132 and above, upto and including 5000 kw | 440 26.10 | 440 | 43.57 | • | 17.47 |
| Agriculture D-1 - D-1 For all loads | 200 70.57 | 200 | 42.99 | · | (27.58) |
| Street Lighting | - 57.40 | | 45.36 | T | (12.04) |



÷

3

Page 10 of 15

•


Page 11 of 15

,

Annexure L7

} . .

I

ţ

.

, ;

co/doitsuitary a start

.

İ

ł

-

K-Electric Limited Cost of Service FY 2024 Comparison of Cost of Service results before incorporation of Cross Subsidy with results

| Residential Protected | | 57,744,591,761 | • | 49,858,097,309 | | (7,886,494,452) |
|--|----------------|-----------------|----------------|-----------------|---|------------------|
| Residential Unprotected | J | 255,649,220,023 | • | 209,197,858,671 | | (46,451,361,352) |
| Residential ToU | ¢ | 59,783,680,953 | | 64,266,011,762 | • | 4,482,330,809 |
| Commercial-A2 (a) : For Sanctioned load less than 5 kw | 5 | 35,652,622,571 | | 32,244,593,800 | | (3,408,028,772) |
| Commercial· A2(b): For Sanctioned load 5 kw & above | 3,636,834,107 | 49,104,263,168 | 3,636,834,107 | 52,526,181,438 | • | 3,421,918,270 |
| General Services | 9 | 17,905,027,597 | £* | 20,876,427,241 | | 2,971,399,645 |
| Industrial-B1 - Upto 25 kw (at 400/230 Volts) | | 13,057,307,899 | | 11,449,454,165 | | (1,607,853,734) |
| Industrial-B2(a) - 25-500 kw (at 400 volts) | 3,659,081,098 | 57,095,161,825 | 3,659,081,098 | 68,610,448,398 | | 11,515,286,573 |
| Industrial-B3(a) - For all loads upto 5000 kw (at 11,33 kv) | 4,541,727,445 | 97,070,612,035 | 4,541,727,445 | 122,587,256,925 | • | 25,516,644,890 |
| Industrial- 84 & 65 | 1,625,289,859 | 33,933,938,258 | 1,625,289,859 | 42,122,342,521 | • | 8,188,404,263 |
| Bulk Supply-C1(b) - Sanctioned load 5 kw & upto 500 kw | 42,355,903 | 822,805,641 | 42,355,903 | 828,493,496 | | 5,687,854 |
| Bulk Supply-C2(a) - For Supply at 11,33 kv upto and including 5000kw | 601,409,506 | 14,229,309,088 | 601,409,506 | 19,566,832,113 | 4 | 5,337,523,025 |
| Bulk Supply-C3(a) - For supply at 132 and above,upto and including 5000 kw | 21,120,000 | 748,144,675 | 21,120,000 | 1,248,877,269 | • | 500,732,595 |
| Agriculture D-1 - D-1 For all loads | 80,063,433 | 4,818,969,002 | 80,063,433 | 2,935,549,740 | • | (1,883,419,262) |
| Street Lighting | • | 3,350,123,538 | • | 2,647,353,187 | • | (702,770,351) |
| | 14,207,881,351 | 700,965,778,035 | 14,207,881,351 | 700,965,778,035 | | (0) |

-

K-Electric Limited Cost of Service FY 2024 Schedule of Tariff based on Cost of Service results before incorporation of Cross Subsidy .

| | RESIDENTI | AL. | | | | efore incorporation of Gess Subsidy |
|------|---|--|--|--|---------------------------------------|--|
| | (in | | Lippen of MOLOP - 02 of Sanctioner Sector - Cond (NV) / Month - 644 | 1 CT CT | | |
| - | a) | For Sanctioned load less than 5 kw | 1 | | A A A A A A A A A A A A A A A A A A A | |
| 塘設 | | Up to 50 units - Life Line | | 5,228,203 | - | 47.28 |
| | n | 51 - 100 units - Life Line | | 33,851,208 | • | 47.28 |
| | 10 | 001 - 100 units | - | 923,887,695 | - | 47.28 |
| いたもの | ١V | 101 - 200 units | | 229,055,139 | - | 47.28 |
| | V VI VIII IX XI XI XI | 001 - 100 units 101 - 200 units 201 - 300 units 301 - 400 units 401 - 500 units 501 - 600 units 601 - 700 units Abave 700 units | | 163,391,756 875,412,453 1,369,587,418 803,436,619 474,686,189 321,333,293 223,631,622 541,624,803 | | 53.56 53.56 53.56 53.56 53.56 53.56 53.56 53.56 |
| | b} | For Sanctioned load 5 kw & above | | | | |
| | | Pask | | 774 749 749 | | 4156 |
| | | Olf-Peak | | 1,211,021,768 | · | 41.35 |

| COMMERCIAL | | TANK BALL BALL | | |
|---------------------------------------|--|--|----------------------------------|--------------------------------|
| | cHigher of MDI or 50 5 of Sanctioned (| STATISTICS IN THE REAL PROPERTY INTERNAL PROPERTY INTO THE REAL | | |
| | all a lond (KVII/Month Society) | | 22121/1PG-01:RS/KW/MD - 2-00-121 | REPERSION REAL WHEN STATISTICS |
| a) For Sanctioned load less than 5 kw | - | 721,050,449 | · · · · · · · · · | 49.45 |
| b) For Sanctioned load 5 kw & above | 12,456 | 14,933,412 | 500 | 41.64 |
| | | | | |
| c) Time Of Use | | | | |
| Peak | (| 209 436 838 | | 41.93 |
| | | 200,400,000 | | 41.05 |
| Off-Peak | | 923,606,573 | | 41.60 |
| d) Electric Vehicle Charging System | | | | 41.60 |

| GENERA | L SERVICES | | | | |
|--------|--|--|---------------|---|--|
| | | Hipherof MDFor 50% of Sanctoned Cex St. Algaal (KVIV Month) 2055 | | A pired Chargeso 27 / 2 A pired Chargeso 27 / 2 A pired Chargeso 27 / 2 | is survey Variable Charges to service Maximum Science (NVM) |
| | a) General Services | | 464,861,536 | | 38.52 |
| | RIAL SUPPLY | | | | |
| | | Higher of MDI on 50 % of Sanctioned | | A STATE OF A STATE OF A STATE OF A STATE OF A STATE OF A STATE OF A STATE OF A STATE OF A STATE OF A STATE OF A | Valida characteristic Alteristic Validation (Construction) |
| B1 | Upto 25 kw (at 400/230 Volts) | · · · | 6,371,341 | | 51.09 |
| 82(a) | 25-500 kw (at 400 volts) | 271 | 1,618,841 | 500 | 36.75 |
| B3(a) | For all loads up to 5000 kw (at 11,33 kv) | 4,127 | 13,446,498 | 460 | 34.65 |
| B4(a) | For all loads up to 5000 kw (at 66,132 kv) | 18,136 | 31,767,520 | 440 | 35.05 |
| | Time Of Use | | | | |
| B1(b) | Upto 25 kw (at 400/230 Volts) | | | | |
| 1 | Peak | | 38,304,330 | | 51.28 |
| I | Off-Peak | · · | 189,593,419 | | 51.05 |
| B2(b) | 25-500 kw (at 400 volts) | | | | |
| | Peak | | 242,618,001 | | 36.95 |
| 1 | Olf-Peak | 609,576 | 1,309,359,583 | 500 | 36.71 |
| 83(b) | For all loads up to 5000 kw (at 11,33 kv) | 1 | | | |
| | Peak | | 447,914,611 | | 34.85 |
| | Off-Peak | 818,650 | 2,339,785,919 | 460 | 34.62 |
| 84(b) | For all loads (at 66,132 ky & above) | | | | |
| | Peak | | 141,379,724 | | 35.25 |
| · . | Off-Peak | 265,831 | 775.376.408 | 440 | 35.01 |
| 85 | For all loads (at 220 kv & above) | | | | |
| 1 | Peak | 1 | 3,569,413 |) | 35.24 |
| | - Off-Peak | 24,989 | 16,079,348 | 420 | 35.01 |
| SINGLE | POINT SUPPLY / BULK SUPPLY | | | _ | |
| | | Higher of MDJ or 50 % of Sanctioned) In 21 C. Stoad (KVI)/ Month? State | | Martin Control Grantes State | Service Standale Charges and Service States |
| C-1 | For Supply at 400 / 230 Volts | - | | 1 | |
| 1 | a) For Sanctioned load less than 5 kw | l . | - | l i i i i i i i i i i i i i i i i i i i | 49.45 |

|] | b) Sanctioned load 5 kw & upto 500 kw | 1,236 | 4,313,030 | 500 | 43.92 |
|--------|--|---------|-------------|-----|-------|
| C-2(a) | For Supply at 11,33 kv upto and including S000kw | 5,724 | 28,343,770 | 460 | 31.90 |
| C-3(a) | For supply at 132 and above, up to and including 5000 kw | | - | 440 | 26.06 |
| | Time Of Use | | | | |
| C-1(c) | For Supply at 400/230 Volts Skw and upto 500kw | | | | |
| | Peak | | 2,281,669 | | 44.11 |
| | Off-Peak | 5,823 | 11,517,052 | 500 | 43.58 |
| C-2(b) | For Supply at 11,33 ky upto and including 5000kw | | | | |
| | Peak | | 74,143,666 | | 32.09 |
| | Off-Peak | 103,227 | 342,132,745 | 460 | 31.86 |
| C-3(b) | For Supply at 132kv upto and including 5000kw | | | | |
| | Peak | | 4,706,485 | | 26.30 |
| _ | Off-Peak | 4,000 | 23,956.575 | 440 | 26.06 |



-

2

Annexure L8

. : · 3

K-Electric Limited Cost of Service FY 2024

.

e

Schedule of Tariff based on Cost of Service results before incorporation of Cross Subsidy

•

. ·

•.

• .

.

| AGRICULTU | JRE TARIFF | | | | |
|------------|--|---|----------------|-------------------------------------|---|
| | | (Higher of MDI or S0.5 of Sanctioned) CH D= Load (KW) / Montus | | | Shi ti shi Vanalle Charles Shi shi Shi ta ka |
| D-1 | For all loads | 16,258 | 36,852,514 | 200 | 70.57 |
| | Time_Of Use | | | | |
| D-2 | For all loads | | | | |
| | Peak | | 5,997,690 | | 70.75 |
| | Off-Peak | 17,102 | 25,440,352 | | 70.52 |
| TEMPORA | RY SUPPLY | | | | |
| 的建設 | | First Vertical (KVI)/Montherers(A) | | 当日的国际和IEIKU/M目示组织92 | Edition Stend (while have block |
| E-1(1) | Residential Supply | | 29,431,147 | | 47.28 |
| E-1(2) | Commercial Supply | | 31,203,454 | - | 41.54 |
| E-2(1) | Industrial Supply | | 21,321,729 | · . | 51.09 |
| E-2(2) | Bulk Supply | | | | |
| | (a) at 400 v | | 623,183 | | 43.92 |
| 1 | (b) at 11 kv | - | 1,450,710 | | 31.90 |
| PUBLIC LIC | SHTING | | | | |
| | | Higher of MDI or 50 % of Sanctibueds | | | Contract of the second s |
| | Streat Lighting | | 58,364,561 | - | 57.40 |
| RESIDENT | IAL COLONIES ATTACHED TO INDUSTRIAL PREMISES | | | | |
| | | Olighener(Molenso, Xorsanciened) | | | |
| | Residential Colonies attached to industrial premises | l | ······ | ۱ <u></u> | 57.40 |
| | | | | With Fixed Chames (PKR Ministration | |
| Tatal | | Pln 102 C | 16 003 601 512 | 14 208 | 700 966 |

Note 1: Since there is no data in Categories C-1 (a), EV Charging System & Industrial Colonies attached to Industrial premises, we have aligned their rates with A-2 (a), A-2 (c) & Public Lightening respectively due to the fact that these categories are comparable being at same voltage level.

Note 2: In order to keep consistency in the rates between ToU and Non ToU customer categories after allocation of excess / (short) fixed charges, we have allocated the fixed charges based on weighted average data of both the ToU and Non ToU customer categories.



Annexure L8

.

K-Electric Limited Cost of Service FY 2024 Schedule of Tariff after incorporation of Cross Subsidy

| | | | | | nation of Cross Subsidy: 244-55 constant |
|-----|------------------------------------|--|--|-------|--|
| | | | | | |
| | a) | For Sanctioned load less than 5 kw | | | |
| | . 1 | Up to 50 units - Life Line | - 5,228, | - 203 | 4.00 |
| NG. | 11 | 51 - 100 units - Life Line | - 33,851, | - 108 | 40.56 |
| | 11 | 001 - 100 units | - 923,887. | | 40.56 |
| | ١٧ | 101 - 200 units | - 229,055, | | 42.15 |
| | V VII VIII IX XI XI | 001 - 100 units 101 - 200 units 201 - 300 units 301 - 400 units 401 - 500 units 501 - 600 units 501 - 700 units Above 700 units | - 163,391. - 875,412. - 1,369,587. - 803,436. - 474,686. - 321,383. - 223,631. - 541,624. | 756 | 40.56 42.15 43.36 44.41 44.41 44.41 44.41 46.76 |
| | b) | For Sanctioned load 5 kw & above | | | { |
| | | Peak | - 234,249; | 249 | 47.97 |
| | | Off-Peak | | 768 | 43.79 |

| COMMERCIAL | | | | |
|---------------------------------------|-------------------------------------|----------------------|---|--------------------------------|
| | Higher of MDI on 50 % of Sanctioned | States in the states | | and the Variation of the State |
| a) For Sanctioned load less than 5 km | SERVICE DECK DOWN DECK PROFESSION | 771 050 449 | ALTO ALTO ALTO ALTO ALTO ALTO ALTO ALTO | 44 77 |
| b) For Sanctioned load 5 kw & above | 12,455 | 14,933,412 | 500 | 43.95 |
| | | | h a | <u> </u> |
| c) Time Of Use | | | | |
| Peak | | 209,436,838 | | 47.96 |
| Off-Peak | 593,683 | 923,606,573 | 500 | 43.73 |
| d) Electric Vehicle Charging System | | | L | 43.73 |

| | d) Electric Vehicle Charging System | | | | 43.73 |
|--------|---|--|-------------------|-------------------------------|---|
| | | | | | |
| GENERA | L SERVICES | | | | |
| 15 M | A Second Standing of the second second second second second second second second second second second second s | Hinter of MDI or 50.% of Sanctioned | CUnitsky in State | | Stores Verable Grapes d'Associa |
| 19/112 | Discoversion of the second s | PROFESSION DED DOT PROCEEDING CONTRACTOR | A64 861 536 | Marsharstally Multisking Spin | 197477777777777777777777777777777777777 |
| | 0/102/1010 Services | · · · · · · · · · · · · · · · · · · · | 4040021550 | <u> </u> | 1 |
| NDUST | RIAL SUPPLY | _ | | | |
| | | Higher of MDI or 50.% of Sanctioned | | PAYS PROMINENT CONTRACTOR | of STAC and Nariable Charges (1994) |
| SE SE | | test fractional (KU) A Monthe Con St | | ALL SALES TO KWIME ALL SALES | HAR BERGER REAL WILL REAL PROVIDE |
| 1 | Upto 25 kw (at 400/230 Volts) | • | 6,371,341 | • | 44.96 |
| J2(a) | 25-500 kw (at 400 volts) | 271 | 1,618,841 | 500 | 44.11 |
| J3(a) | For all loads upto 5000 kw (at 11,33 kv) | 4,127 | 13,445,498 | 460 | 43.96 |
| 4(a) | For all loads up to 5000 kw (at 66,132 kv) | 18,135 | 31,767,520 | 440 | 43.46 |
| | | | | | ļ |
| | Time Of Use | | | | · · · · · · · · · · · · · · · · · · · |
| 11(5) | Upto 25 kw (at 400/230 Voits) | | 20 204 270 | 1 | |
| | Peax Off B-oli- | | 38,304,330 | | 47.96 |
| | Un-reak | | 189,593,413 | | 43.98 |
| 12(D) | 25-500 KW (31 400 VOIts) | | | | 1 47.00 |
| | Peak Off Baats | | 242,518,001 | | 47.96 |
| 2011-1 | Univeax | 603,576 | 1,303,339,385 | 500 | |
| 12(0) | For all toads upto South kw (at 11,35 kv) | | 447 01 4 611 | | 47.05 |
| | Peak Off Deale | | 447,514,011 | | 47.96 |
| | Op-Peak | 1 018/030 | 2,339,785,719 | 460 | 44.90 |
| ad Di | For all loads (at 66,132 kV & above) | | | | 47.05 |
| | rean Off Parts | | 141,379,724 | | 47.96 |
| | Unireax | 405.831 | //5,3/6,408 | 440 | 42./1 |
| 22 | Por an ibads (at 220 KV & 300VP) | | 3 555 413 | | 47.05 |
| | reak Off Bosts | - | 3,569,413 | | 47.96 |
| | | 77 HVA | | 4 41 | 41 UL |

| SINGLE | POINT SUPPLY / BULK SUPPLY | | | | |
|----------|---|---------------------------------------|-------------|---|--|
| | | Higher of MOL of S0 % of Sanctioned's | | First Charges 1 Arrist State Charges 1 Arrist State Charges 1 Arrists | Construction of the second secon |
| C-1 | For Supply at 400 / 230 Volts | | | | |
| | a) For Sanctioned load less than 5 kw | - | • | • | 44.96 |
| | b) Sanctioned load 5 kw & upto 500 kw | 1,236 | 4,313,030 | 500 | 43.96 |
| C-2(a) | For Supply at 11,33 kv upto and including 5000kw | 5,724 | 28,343,770 | 460 | 43.96 |
| C-3(a) | * For supply at 132 and above, upto and including 5000 kw | • | • | 440 | 43.46 |
| <u> </u> | Time Of Use | | | | |
| C-1(c) | For Supply at 400/230 Volts 5kw and upto 500kw | | | | Į I |
| 1 | Peak | - | 2,281,669 | | 47.95 |
| | Off-Peak | 5,823 | 11,517,052 | 500 | 43.46 |
| C-2(b) | For Supply at 11,33 kv upto and including SD00kw | | | | |
| | Peak | • | 74,143,666 | | 47.96 |
| | Off-Peak | 103,227 | 342,132,745 | 460 | 42.96 |
| C-3(b) | For Supply at 132ky upto and including 5000kw | | | | |
| 1 | Peak | - | 4,706,485 | | 47.96 |
| | Off-Peak | 4,000 | 23,956,575 | 440 | 42.71 |

Annexure L9

4

٤

ţ į,

3

.

¢

• ·

K-Electric Limited Cost of Service FY 2024 Schedule of Tariff after incorporation of Cross Subsidy

.

| CHARL | | Higherol Mol or 50 % of Strictioned (| | | |
|-------------|--|--|--|--|--|
| 现在注意 | | the address (www.monthe-address) | | asiyaa ku aa ku maa ku ahaa ku a | |
| D-1 | For all loads | 16,258 | 36,852,514 | 200 | 42.68 |
| | | - | - | <u> </u> | • |
| | <u>Time Of Use</u> | | | | |
| D-2 | For all loads | | | | |
| 1 | Peak | | 5,997,690 | | 47.96 |
| | Olt-Peak | 17,102 | 25,440,352 | 200 | 42.26 |
| TEMPORA | | | | | |
| KCHIERAS | | Higherol MDI of 50% of Shortoned | (Performent and a second second second | Research Changes and Changes | |
| | | Land (KWIV Months 1944) | | | |
| E-1(1) | Residential Supply | - | 29,431,147 | | 45.46 |
| E-1(2) | Commercial Supply | | 31,203,454 | | 46.06 |
| E-2(1) | Industrial Supply | - | 21.321.729 | • | 46.51 |
| E-2(2) | Bulk Supply | | | | |
| | (a) at 400 v | - | 623,183 | - | 46.46 |
| | (b) at 11 kv | l | 1,450,710 | | 46.44 |
| | | | | | |
| PUBLIC LI | SHTING UNIVERSITE AND AND AND AND AND AND AND AND AND AND | | | | |
| | Sector and Cherry Products of State | | Second Street Street | | |
| n olska | Constant Constant of the Constant of Const | I IZER BOSIONORODALIANDO DA BOSICIA | ER 264 E64 | ACCOUNTS AND A A A A A A A A A A A A A A A A A A | 10256721949392059735715106969699769697 |
| L | Tareet Dignung | - | 30.304.301 | · · · · · · | 43.30 |
| RESIDENT | TAL COLONIES ATTACHED TO INDUSTRIAL PREMISES | | | | |
| 543.00 | | Higher of MD (0r-50,55 of Sanctioned) | AR | NAME AND ADDRESS OF A DESCRIPTION OF A D | NUMBER OF THE OWNER OF THE |
| 開始 第 | | | | | |
| | Residential Colonies attached to industrial premises | • | | ······ | 45.46 |
| | | | | | |
| | | | | REPAIRS Fixed Charges (PKR Mn) # (1955) | kin Alexandria ble Changes (Plan Mini Sabita |
| Total | | 7 601 000 | 15 003 601 517 | 14 309 | 700.000 |

.



Page 15 of 15

.

Annexure M

Supply Tariff - FY 2024 to FY 2030 References for the year K-Electric Limited

| | | | | | | CONTRACT | | | When a | | | | |
|----------------------------------|--------|--------|--------|--------|--------|-----------------|--------|--------|--------|--------|--------|--------|--------------|
| Units Served (GWh) | 1,891 | 1,679 | 1,660 | 1,696 | 1,410 | 1,198 | 1,045 | 1,164 | 1,508 | 1,558 | 1,891 | 1,960 | 18,659 |
| Units Billed (GWh) | 1,519 | 1,463 | 1,395 | 1,438 | 1,355 | 1,176 | 992 | 974 | 1,220 | 1,270 | 1,577 | 1,627 | 16,004 |
| Per Unit - Based on Units Served | | | | , | | | | | | | | | Rs. / kWh |
| Fuel Cost Component | 18.09 | 17.09 | 17.92 | 17.99 | 18.13 | 12.98 | 10.75 | 12.40 | 14.31 | 14.52 | 14.83 | 15.72 | 15.70 |
| Variable O&M | 0.51 | 0.48 | 0.48 | 0.53 | 0.58 | 0.52 | 0.47 | 0.45 | 0.40 | 0.44 | 0.48 | 0.50 | 0.49 |
| Capacity | 7.70 | 10.36 | 9.56 | 05.6 | 11.47 | 13.99 | 15.71 | 13.74 | 11.24 | 10.76 | 9.80 | 9.41 | 10.75 |
| Transmission | 2.99 | 2.99 | 2.99 | 2.99 | 2.99 | 2.99 | 2.99 | 2.99 | 2.99 | 2.99 | 2.99 | 2.99 | 2.99 |
| Distribution | 3.08 | 3.34 | 3.22 | 3.25 | 3.69 | 3.76 | 3.64 | 3.21 | 3.10 | 3.13 | 3.20 | 3.18 | 3.29 |
| Supply | 4.78 | 5.19 | 5.01 | 5.05 | 5.72 | 5.84 | 5.65 | 4.99 | 4.82 | 4.85 | 4.97 | 4.94 | 5.11 |
| Total in Rs. / kWh | 37.15 | 39.45 | 39.17 | 39.72 | 42.58 | 40.08 | 39.21 | 37.77 | 36.86 | 36.70 | 36.26 | 36.74 | 38.33 |
| Per Unit - Based on Units Billed | | | | | | | | | | | | | Rs. / kWh |
| Fuel Cost Component | 22.52 | 19.61 | 21.32 | 21.21 | 18.86 | 13.23 | 11.33 | 14.81 | 17.69 | 17.82 | 17.79 | 18.94 | 18.31 |
| Variable O&M | 0.63 | 0.56 | 0.57 | 0.63 | 0.61 | 0.53 | 0.50 | 0.54 | 0.50 | 0.55 | 0.57 | 0.60 | 0.57 |
| Capacity | 9.58 | 11.88 | 11.37 | 11.68 | 11.94 | 14.26 | 16.55 | 16.41 | 13.89 | 13.21 | 11.75 | 11.34 | 12.53 |
| Transmission | 3.72 | 3,43 | 3.55 | 3.52 | 3.11 | 3.04 | 3.15 | 3.57 | 3.69 | 3.67 | 3.58 | 3.60 | 3.48 |
| Distribution | 3.84 | 3.84 | 3.84 | 3.84 | 3.84 | 3.84 | 3.84 | 3.84 | 3.84 | 3.84 | 3.84 | 3.84 | 3.84 |
| Supply | 5.95 | 5.96 | 5.96 | 5.96 | 5.96 | 5.96 | 5.96 | 5.96 | 5.96 | 5.96 | 5.96 | 5.96 | 5.96 |
| Total in Rs. / kWh | 46.24 | 45.27 | 46.61 | 46.84 | 44.31 | 40.85 | 41.31 | 45.12 | 45.56 | 45.03 | 43.48 | 44.27 | 44.69 |
| | | | | | | | | | | | | Н | R In Million |
| Fuel Cost Component | 34,207 | 28,692 | 29,741 | 30,503 | 25,563 | 15,548 | 11,230 | 14,428 | 21,573 | 22,629 | 28,048 | 30,819 | 292,981 |
| Variable O&M | 926 | 813 | 796 | 905 | 823 | 623 | 492 | 524 | 610 | 693 | 904 | 577 | 9,116 |
| Capacity | 14,556 | 17,382 | 15,865 | 16,790 | 16,176 | 16,761 | 16,414 | 15,990 | 16,939 | 16,769 | 18,527 | 18,444 | 200,612 |
| Transmission | 5,648 | 5,014 | 4,958 | 5,065 | 4,212 | 3,579 | 3,121 | 3,476 | 4,503 | 4,654 | 5,648 | 5,856 | 55,735 |
| Distribution | 5,826 | 5,611 | 5,350 | 5,515 | 5,198 | 4,509 | 3,804 | 3,737 | 4,679 | 4,871 | 6,049 | 6,241 | 61,388 |
| Supply | 9,042 | 8,715 | 8,310 | 8,566 | 8,073 | 7,003 | 5,907 | 5,803 | 7,266 | 7,565 | 9,395 | 9,692 | 95,337 |
| Total in Million | 70,233 | 66,227 | 65,019 | 67,343 | 60,046 | 48,023 | 40,969 | 43,958 | 55,570 | 57,181 | 68,570 | 72,029 | 715,170 |



÷

3

<u>Annexure N</u>

<u>Tariff Terms and Conditions of Tariff (for supply of power to each consumer</u> category)

GENERAL DEFINITIONS

The Company, for the purposes of these terms and conditions, means K-Electric (KE) engaged in the business of distribution of electricity within the territory mentioned in the license granted to it for this purpose.

- 1. "Month or Billing Period", unless otherwise defined for any particular tariff category, means a billing month of maximum of 31 days from the date of last meter reading and provided further that the billing for a financial year does not exceed 365 days.
- 2. " Minimum Charge". means a charge to recover the costs for providing customer service to consumers even if no energy is consumed during the month.
- 3. "Fixed Charge" means the part of sale rate in a two-part tariff to be recovered on the basis of 'Billing Demand' in kilowatt on monthly basis.
- 4. "Billing Demand" means the means the 50% of the sanctioned load or Actual maximum demand recorded in a month, whichever is higher, except in the case of agriculture tariff D2 where 'Billing Demand" shall mean the sanctioned load.
- 5. "Variable Charge" means the sale rate per kilowatt-hour (kWh) as a single rate or part of a two-part tariff applicable to the actual kWh consumed by the consumer during a billing period.
- 6. "Maximum Demand" where applicable, means the maximum of the demand obtained in any month measured over successive periods each of 30 minutes' duration except in the case of consumption related to Arc Furnaces, where ·'Maximum Demand " shall mean the maximum or the demand obtained in any month measured over successive periods each of 15 minutes duration.
- 7. "Sanctioned Load" where applicable means the load in kilowatt as applied for by the consumer and allowed /authorized by the Company for usage by the consumer.
- 8. "Power Factor" means the ratio of kWh to kVAh recorded during the month or the ratio of kWh 10.the square root of sum of square of kWh and kVARh,
- 9. Point of supply means a metering point where electricity is delivered to the consumer.



| | * <u>PEAK</u> <u>TIMING</u> | OFF- PEAK TIMING |
|---------------------------------|--------------------------------|-------------------------------|
| April to October (inclusive) | 6.30 PM to 10.30 PM | Remaining 20 hours of the day |
| November to March | 6.00 PM to | -do- |
| *To be duly adjusted in cas | se of daylight time Saving | l |

- 11. "Supply", means the supply for single- phase/three-phase appliances inclusive of both general and motive loads subject to the conditions that in case of connected or sanctioned load of 5kW and above supply shall be given at three-phase.
- 12. "Consumer' means a person of his successor-in-interest as defined under Section 2(iv)
 of the Regulation of Generation, Transmission and Distribution of Electric Power Act (XL of 1 997).
- 13. "Charitable institution" means an institution, which works for the general welfare of the public on no profit basis and is registered with the Federal or Provincial Government as such and has been issued tax exemption certificate by Federal Board of Revenue (FBR).
- 14. NTDCL means the National Transmission and Dispatch Company Limited.
- 15. CPPA (G) means Central Power Purchasing Agency Guarantee Limited (CPPA)(G).
- 16. The "Authority" means "The National Electric Power Regulatory Authority (NEPRA)" constituted under the Regulation of Generation. Transmission and Distribution of Electric Power Act (XL of 1997).

GENERAL CONDITIONS

- 1. "The Company shall render bills to the consumers on a monthly basis or less on the specific request of a consumer for payment by the due date.
- 2. The Company shall ensure that bills are delivered to consumers at least seven days before the due date. If any bill is not paid by the consumer in full within the due date, a Late Payment Charge of 10% (ten percent) shall be levied on the amount billed excluding Govt. tax and duties etc. In case bill is not served at least seven days before the due date then a late payment surcharge will be levied after 7th day from the date of delivery of bill.
- 3. The supply provided to the consumers shall not be available for resale.
- 4. In the case of two-part tariffs, the average Power Factor of a consumer at the point of supply shall not be less than 90%. In the event of the said Power factor falling below 90%, the consumer shall pay a penalty of two percent increase in the fixed charges determined with reference to maximum demand during the month corresponding

Page 2 of 12



to one percent decrease in the power factor below 90 %.

- 5. If, for any reason, the meter reading date of a consumer is altered and the acceleration/ retardation in the date is up to 4 days, no notice shall be taken of this acceleration or retardation. But if the date is accelerated or retarded by more than 4 days, the fixed charges (where applicable) shall be assessed on a proportionate basis for the actual number of days between the date of the old reading and the new reading.
- 6. Minimum charges shall be applicable for new connections if the billing period is more than 15 days. In such cases, 50% of minimum charges shall be applicable. In case of billing period less than 15 Days of new connection, minimum charges shall not be applicable.

PART- II

(Definitions and Conditions for supply of power specific to each consumer category)

A-1 RESIDENTIAL

Definition

"Lifeline Consumer" means those residential consumers having single phase electric connection with a sanctioned load to 1 kW.

The lifeline consumers to include residential Non-Time of Use (Non-ToU) consumers having maximum of last twelve months and current month's consumption \leq 100 units; two rates for \leq 50 and \leq 100 units will continue.

"Protected consumers" mean Non-ToU residential consumers consuming \leq 200 kWh per month consistently for the past 6 months.

Residential non-ToU consumers not falling under the protected category would be categorized under "Un-protected consumer category".

- 1. This Tariff is applicable for supplyto:
- i) Residences,
- ii) Places of worship,
- 2. Consumers having sanctioned load less than 5 kW shall be billed on single-part kWh rate i.e.A-1(a) tariff.
- 3. All new consumers having sanctioned load 5 kW and above shall be provided T.O.U metering. arrangement and shall be billed on the basis of tariff A-l(b) as set out in the Schedule of Tariff.
- 4. All existing consumers having sanctioned load 5 kW and above shall be provided T.O.U metering arrangement and converted to A- I (b) Tariff by the Company.



Page 3 of 12

A-2 COMMERCIAL

- i. This tariff is applicable for supply to commercial offices and commercial establishments such as:
 - 1. Shops / Flower Nurseries / Cold Storage/RO Plants in Shops/Water Hydrants
 - 2. Hotels, Hostels and Restaurants,
 - 3. Petrol Pumps and Service Stations,
 - 4. Compressed Natural Gas fillingstations,
 - 5. Private Hospitals/Clinics/Dispensaries,
 - 6. Places or Entertainment, Cinemas, Theaters, Clubs.
 - 7. Guest Houses/Rent Houses.

8. Office of Lawyers, Solicitors. Law Associates and Consultants, All Private Offices etc.

- 9. Electric Vehicle Charging Stations (EVCS)
- 2. Electric Vehicle Charging Stations shall be billed under A-2(d) tariff i.e. Rs./kWh for peak and off-peak hours. For the time being, the tariff design is with zero fixed charges, however, in future the Authority after considering the ground situation may design its tariff structure on two part basis i.e. fixed charges and variable charges.
- 3. The Electric Vehicle Charging Station shall provide a "charging service" to Electric Vehicles as per the applicable tariff for EVCS plus Rs. 24.44/kWh as margin for EVCS. The EVCS shall be billed by KE under A-2(d) tariff. However, monthly FCAs either positive or negative shall not be applicable on EVCS.
- 4. Consumers under tariff A-2 having sanctioned load of less than 5 kW shall be billed under a Single-Part kWh rate A-2(a).
- 5. All existing consumers under tariff A-2 having sanctioned load 5 kW and above shall be billed on A-2(b) tariff till such time that they are provided T.O.U metering arrangement; thereafter such consumers shall be billed on T.O.U tariffA-2(c).
- 6. The existing and prospective consumers having load requirement 5 kW and above shall be provided T.O.U meters and shall be billed under tariff A-2(c).

A-3 GENERAL SERVICES

- 1. This tariff is applicable to.
- i. Approved religious and charitable institutions.
- ii. Government and Semi -Government offices and Institutions
- iii. Government Hospitals and dispensaries
- iv. Educational institutions

v. Water Supply schemes including water pumps and tube wells other than those meant for the irrigation or reclamation of Agriculture land.

2. Consumers under General Services (A-3) shall be billed on single-part kWh rate 1.e. A3(a) tariff.



Page 4 of 12

B INDUSTRIAL SUPPLY

Definitions

- 1. "Industrial supply" means the supply for bona fide industrial purposes in factories including the supply required for the offices and for normal working of the industry.
- 2. For the purposes of application of this tarif an "Industry" means a bona fide undertaking or establishment engaged in manufacturing, value addition and/or processing of goods.
- 3. This Tariff shall also be available for consumers having single-metering arrangement such as:
- i) Poultry farms
- ii) Fish Hatcheries, Fish Farms, Fish Nurseries & Breeding Farms and
- iii) Software houses
- iv) Ice Factories
- v) Water Treatment/Purification Plants operated by Water & Sewerage Agencies/Boards

Conditions

An industrial consumer shall have the option, to switch over to seasonal Tariff-F, provided his connection is seasonal in nature as defined under Tariff-F, and he undertakes to abide by the terms and conditions of Tariff-F and pays the difference of security deposit rates previously deposited and those applicable to Tariff-F at the time of acceptance of option for seasonal tariff. Seasonal tariff will be applicable from the date of commencement of the season, as specified by the customer s at the time of submitting the option of Tariff-F. Tariff-F consumers will have the option to convert to corresponding Regular Industrial Tariff category and vice versa. This option can be exercised at the time of obtaining a new connection or at the beginning of the season. Once exercised, the option will remain in force for at least one year.

B- 1 SUPPLY AT 400 VOLTS THREEPHASE AND/OR 230 VOLTS SINGLE PHASE

- 1. This tariff is applicable for supply to Industries having sanctioned loads up-to 25 kW.
- 2. Consumers having sanctioned loads up to 25 k W shall be billed at a single-part kWh rate.
- 3. Consumers under tariff B-1 having sanctioned load of less than 5 kW shall be billed under a Non TOU kWh tariff. However, B-1 consumers having sanctioned load of less than 5 kW may opt for TOU meter.
- 4. The existing and prospective consumers having sanctioned load of 5 kW and above shall be provided TOU metering arrangement and shall be billed under tariff B1(b).

B-2 SUPPLY AT 400 VOLTS

- 1. This tariff is applicable for supply to Industries having sanctioned loads of more than 25 kW up to and including 500 kW.
- 2. All existing consumers under tariff B-2 shall be provided with a T.O.U metering arrangement by the Company and converted to B-2(b) Tariff.
- 3. All existing consumers under tariff B-2 shall be billed on B-2(a) tariff till such time that they are provided T.O.U metering arrangement; thereafter such consumers



shall be billed on T.O.U tariff B-2(b).

4. All new applicants, i.e. prospective consumers applying for service to the Company shall be provided with a T.O.U metering arrangement and charged according to the applicable T.O.U tariff.

B-3 SUPPLY AT 11 kV AND 33 kV

- 1. This tariff is applicable or supply to Industries having sanctioned load of more than 500 kW up to and including 5000 kW and also for Industries having sanctioned load of 500 kW or below who opt for receiving supply at 11 kV or 33 kV.
- 2. If, for any reason, the meter reading date of a consumer is altered and the acceleration/ retardation in the date is up to 4 days, no notice shall be taken of this acceleration or retardation. But if the date is accelerated or retarded by more than 4 days, the fixed charges shall be assessed on a proportionate basis for the actual number of days between the date of the old reading and the new reading.
- 3. The supply under this Tariff shall not be available to a prospective consumer unless he provides, to the satisfaction and approval of the Company, his own Transformer, Circuit Breakers and other necessary equipment as part of the dedicated distribution system for receiving and controlling the supply, or alternatively pays to the Company for all apparatus and equipment if so provided and installed by the Company. The recovery of the cost or service connection shall be regulated by the NEPRA eligibility criteria.
- 4. All existing consumers under tariff B-3 shall be provided with a T.O.U metering arrangement by the Company and converted to B-3(b) Tariff.
- 5. All existing consumers under tariff B-3 shall be billed on B-3(a) tariff till such time that they are provided T.O.U metering arrangement: thereafter such consumers shall be billed on T.O.U tariff B-3(b).
- 6. All new applicants, i.e. prospective consumers applying for service to the Company shall be provided with a T.O.U metering arrangement and charged according to the applicable T.O.U tariff.

B-4 SUPPLY AT 66 kV and 132 kV.

- 1. This tariff is applicable for supply to Industries for all loads of more than 5000 kW receiving supply at 66 kV and 132 kV and also for Industries having load of 5000 kW or below who opt to receive supply at 66 kV or 132 kV.
- 2. If the Grid Station required for provision or supply falls within the purview of the dedicated system under the NEPRA Eligibility Criteria, the supply under this Tariff shall not be available to such a prospective consumer unless he provides, to the satisfaction and Approval of the Company, an independent grid station of his own including Land, Building, Transformer, Circuit Breakers and other necessary equipment and apparatus as part of the dedicated distribution system for receiving and controlling the supply, or, alternatively, pays the Company for all such Land, Building, Transformers, Circuit Breakers and other necessary equipment and apparatus if so provided and installed by the Company. The recovery of cost-of-service connection shall be regulated by NEPRA Eligibility) Criteria.
- 3. All existing consumers under tariff B-4 shall be provided with a T.O.U metering arrangement by the Company and converted to B-4(b) Tariff.

THE CLIMENTER

Page 6 of 12

- 4. All existing consumer un de r tariff B-4 shall be billed on B-4(a) tariff till such time that they are provided T.O.U metering arrangement; thereafter such consumers shall be billed on T.O.U tariff B-4(b).
- 5. All new applicants, i.e. prospective consumers applying for service to the Company shall be provided with a T.O.U metering arrangement and charged according to the applicable T.O.U tariff.

B-5 SUPPLY AT 220 kV AND ABOVE

- 1. This tariff is applicable for supply to Industries for all loads of more than 5000 kW receiving supply at 220 kV and above and for Industries having load of 5000 kW or below whom opt to receive supply at 220 kV.
- 2. If the Grid Station required for provision or supply falls within the purview of the dedicated system under the NEPRA Eligibility Criteria, the supply under this Tariff shall not be available to such a prospective consumer unless he provides, to the satisfaction and approval of the Company, an independent grid station of his own including Land, Building, Transformers, Circuit Breaker s and other necessary equipment and apparatus as part of the dedicated distribution system for receiving and controlling the supply, or, alternatively, pays to the Company for all such Land, Building, Transformers, Circuit Breakers and other necessary equipment and apparatus if so provided and installed by the Company. The recovery of cost of connection shall be regulated by NEPRA Eligibility Criteria.
- 3. All the new industrial consumers shall be billed on the basis of ToU tariff B-5 given in the Schedule of Tariff.

C BULK SUPPLY

"Bulk Supply" for the purpose of this Tariff means the supply given at one point for self -consumption to mix load consumer not selling to any other consumer such as residential, commercial, tube-well and others.

C-1 SUPPLY AT 400/230 VOLTS

- 1. This Tariff is applicable to a consumer having a metering arrangement at 400/230 volts, having sanctioned load or up to and including 500 kW.
- 2. Consumers having sanctioned load less than 5 kW shall be billed on single-part kWh rate i.e. C-1(a) tariff.
- 3. All new consumers having sanctioned load 5 kW and above shall be provided with a T.O.U metering arrangement and shall be billed on the basis of Time-of-Use (T.O.U) tariff C-1 (c) given in the schedule of Tariff.
- 4. All the existing consumers governed by this tariff having sanctioned load 5 kW and above shall be provided with T.O.U metering arrangements.
- 5. All existing consumers under tariff C-1 having sanctioned load 5 kW and above shall be billed on C-1 (b) tariff till such time that they are provided T.O.U metering arrangement; thereafter such consumers shall be billed on T.O.U tariff C-1 (c).



Page 7 of 12

C-2 SUPPLY AT 11 kV AND 33 kV.

- 1. This tariff is applicable to consumer receiving supply at 11 kV or 33 kV at one-point metering arrangement and having sanctioned load of up to and including 5000 kW.
- 2. The supply under this Tariff shall not be available to a prospective consumer unless he provides, to the satisfaction and approval of the Company, his own Transformer, Circuit Breakers and other necessary equipment as part of the dedicated distribution system for receiving and controlling the supply, or, alternatively pays to the Company for all apparatus and equipment if so provided and installed by the Company. The recovery of the cost-of-service connection shall be regulated by the NEPRA eligibility criteria.
- 3. All new consumers shall be provided with the TOU metering arrangement and shall be billed on the basis of tariff C-2(b) as set out in the Schedule of Tariff.
- 4. Existing consumers governed by this tariff shall be provided with T.O. U metering arrangement and converted to C-2(b).
- 5. All existing consumers under tariff C-2 shall be billed on C-2(a) tariff till such time that they are provided T.O.U metering arrangement: there after such consumers shall be billed on T.O.U tariff C'-2 (b).

C-3 SUPPLY AT 66 kV, 132 kV AND ABOVE

- 1. This tariff is applicable to consumers having sanctioned load of more than 5000 kW receiving supply at 66 k V, 132kV and above.
- 2. If the Grid Station required for provision or supply falls within the purview of the dedicated system under the NEPRA Eligibility Criteria, the supply under this Tariff shall not be available to such a prospective consumer unless he provides, to the satisfaction and approval of the Company, an independent grid station of his own including Land, Building, Transformer, Circuit Breakers and other necessary equipment and apparatus as part of the dedicated distribution system for receiving and controlling the supply, or, alternatively, pays to the Company for all such Land, Building, Transformers, Circuit Breakers and other necessary equipment and apparatus if so provided and installed by the Company. The recovery of cost-of-service connection shall be regulated by NEPRA Eligibility Criteria.
- 3. Existing consumers governed by this tariff shall be provided with T.O.U metering arrangement and converted to C-3(b).
- 4. All existing consumers under tariff C-3 shall be billed on C-3(a) tariff till such time that they are provided T.O.U metering arrangement; thereafter such consumers shall be billed on T.O.U tariff C-3(b).
- 5. All new consumers shall be provided with a T.O.U metering arrangement and shall be billed on the basis of tariff C-3(b) as set out in the schedule of Tariff.



Page 8 of 12

D - AGRICULTURAL SUPPLY

"Agricultural Supply" means the supply for Lift irrigation Pumps and/or pumps installed on Tube-well intended solely for irrigation or reclamation of agricultural land or forests and include supply for lighting of the tube-well chamber.

Special Conditions of Supply

- 1. This tariff shall apply to:
- i) Bonafide forests, agriculture tube-well and lift irrigation pumps for irrigation of agricultural land.
- ii) Tube-Wells meant for aqua-culture, viz. fish farms, fish hatcheries and fish nurseries.
- iii) Tube-wells installed in a dairy farm meant for cultivating crops as fodder and for the upkeep of cattle.
- 2. The lamps and fans consumptions in the residential quarters, if any, attached to the tubewell shall be charged entirely under Tariff A-I for which separate metering arrangements should be installed.
- 3. The supply under this Tariff shall not be available to consumers using pumps for the irrigation of parks, meadows, gardens, orchards, attached to and forming part of the residential area. commercial or industrial premises in which case the corresponding Tariff A-1, A-2 or Industrial Tariff B-1, B-2 shall be respectively applicable.
- 4. Reclamation and Drainage operation under salinity control and reclamation projects (SCARP)

D-1 For all loads

D-2 Time of Use for all loads.

- 1. Consumers having sanctioned load less than 5kW shall be billed on single-part kWh rate. i.e., D-1 tariff given in the schedule of Tariff.
- 2. All new consumers having sanctioned load 5 kW and above shall be provided with a TOU metering arrangement and shall be charged on the basis of Time-of-Use (T.O.U) tariff D- 2 given in the Schedule of Tariff.
- 3. All the existing consumers having sanctioned load S kW and above shall be provided T.O.U metering arrangements and shall be governed by D-1 till that time.

E-1 TEMPORARY RESIDENTIAL/ COMMERCIAL SUPPLY

Temporary Residential/Commercial Supply means a supply given to persons temporarily. on special occasions such as ceremonial, religious gatherings, festivals, fairs, exhibitions, political gathering, marriages and other civil or military functions. This also includes supply to touring cinemas and persons engaged in construction of house/buildings/plazas of single-phase loads. A temporary electric power supply connection for the construction shall be provided by Distribution company initially for a period of six months which is further extendable on three-month basis up to completion of the specific job/project for which the temporary connection was obtained. However, there is no minimum time period for provision of temporary connection. The temporary connection for illumination, lighting, weddings, festivals, functions, exhibitions, political gatherings or national and religious ceremonies, civil or military functions etc., testing of industrial equipment or any other emergent requirement of temporary nature, can be provided for specific time period not exceeding two weeks.

Page 9 of 12



Special Conditions of Supply

- 1. This tariff shall apply to Residential and Commercial consumers for temporary supply.
- 2. Ordinarily the supply under this Tariff shall not be given by the Company without first obtaining security equal to the anticipated supply charges and other miscellaneous charges for the period of temporary supply.

E-2 TEMPORARY INDUSTRIAL SUPPLY

"Temporary Industrial supply" means the supply given to an Industry for the bona fide purposes mentioned under the respective definitions of "Industrial Supply", during the construction phase prior to the commercial operation of the Industrial concern.

SPECIAL CONDITIONS OF SUPPLY

- 1. Ordinarily the supply under this Tariff shall not be given by the Company without first obtaining security equal to the anticipated supply charges and other miscellaneous charges for the period of temporary supply.
- 2. Normally, temporary connections shall be allowed for a period of 3 months, which may be extended on three months basis up to completion of the specific job/project and subject to clearance of outstanding dues.

F. SEASONAL INDUSTRIAL SUPPLY

" Seasonal Industry." for the purpose of application of this Tariff, means an industry which. works only for part of the year to meet demand for goods or services a rising during a particular season of the year. However, any seasonal industry runs in combination with one or more seasonal industries, against one connection, in a manner that the former work, in one seasonal while the latter work in the other season (thus running throughout the year) will not be classified as a seasonal industry for the purpose of the application of this Tariff.

Definitions

- 1. "Year" means any period comprising twelve consecutive months.
- 2. All "Definitions" and "Special Conditions of Supply" as laid down under the corresponding Industrial Tariffs shall also form part of this Tariff so far as they may be relevant.

Special Conditions of Supply

- 1. This tariff is applicable to seasonal industry.
- 2. Fixed Charges per kilowatt per month under this tariff shall be levied at the rate of 125% of the corresponding regular Industrial Supply Tariff Rates and shall be recovered only for the period that the seasonal industry runs subject to minimum period of six consecutive month during any twelve consecutive months. The condition for recovery of Fixed Charges for a minimum period of six months shall not, however, apply to the seasonal industries, which are connected to the Company's Supply System for the first time during the course of a season.
- 3. The consumer falling within the purview of this Tariff shall have the option to change over to the corresponding industrial Supply Tariff, provided they undertake to abide by all the conditions and restrictions, which may, from time to time, be prescribed as an integral part of those Tariffs. The consumers under this

Page 10 of 12

4



Tariff will have the option to convert to Regular Tariff and vice versa. This option can be exercised at the time of obtaining a new connection or at the beginning of the season. Once exercised, the option will remain in force for at least one year.

- 4. All seasonal loads shall be disconnected from the Company's Supply System at the end of the season, specified by the consumer at the time of getting connection, for which the supply is given. In this case, however, a consumer requires running the non- seasonal part of his load (e.g., lights, fans. tube-wells, etc.) throughout the year, he shall have to bring out separate circuit s for such load so as to enable installation of separate meters for each type of load and charging the same at the relevant Tariff.
- 5. Where a "Seasonal Supply", consumer does not come forward to have his seasonal industry re-connected with the Company's Supply System in any ensuing season, the service line and equipment belonging to the Comp any and installed at his premises shall be removed after expiry of 60 days of the date or commencement of season previously specified by the consumer at the time of his obtaining new connection / reconnection . However, at least ten clear days of notice in writing under registered post shall be necessary to be given to the consumer before removal of the service line and equipment from his premises as aforesaid, to enable him to decide about the retention of connection or otherwise ,No Supply Charges , shall be recovered from a disconnected seasonal consumer for any season during which he does not come forward to have his seasonal industry reconnected with the Company's Supply System.

G. PUBLIC LIGHTING SUPPLY "

"Public lighting" supply means the supply for the purpose of illuminating public lamps used in public playgrounds and public parks The supply under this tariff shall also be applicable for lamps.

Definitions

"Month" means a calendar month or a part therefore more than 15 days.

Special Conditions of Supply

The supply under this Tariff shall be used exclusively for public lighting installed on roads or premises used by General Public.

H. RESIDENTAL COLONIES ATTACHED TO INDUSTRIES

This tariff is applicable for one-point supply to residential colonies attached to the industrial supply consumers having their own distribution facilities.

Definitions

"One Point Supply" for the purpose of this Tariff, means the supply given by one point to Industrial supply Consumers for general and domestic consumption in the residential colonies attached to their factory premises for a load of 5 Kilowatts and above. The purpose is further distribution to various persons residing in the attached residential colonies and for perimeter lighting in the attached residential colonies.

"General and Domestic Consumption" for the purpose of this Tariff, means consumption for lamps, fans, domestic applications, including heated, cookers, radiators, air-conditioners, refrigerators, and domestic tube- wells.

Page 11 of 12



"Residential Colony" attached to the industrial Supply Consumer, means a group of houses annexed with the factory premises constructed solely for residential purpose of the bona fide employees or the factory the establishment or the factory owners or partners, etc.

Special Conditions of Supply

The supply under this Tariff shall not be available to persons who meet a part of their requirements from a separate source of supply at their premises.



Page 12 of 12

Annexure P

O&M Break up as of FY 2023

| Expense Head | Distribution (PKR million) | Supply (PKR million) | |
|--|-------------------------------|-------------------------|--|
| Salary, Wages & Other Benefits | 8,740 | 1,784 | |
| Third Party Services | 4,014 | 1,487 | |
| Internal Energy Consumption | 174 | 20 | |
| Stores & Spares | 660 | 13 | |
| Transport Cost & Others | 2,817 | 433 | |
| Expenses related to IFRS 16 (Rental premises) | 44 | 10 | |
| Other (income) / expense | (0.4) | (0.1) | |
| Allocated support including other (income) / expense | 4,449 | 1,013 | |
| Total O&M – Net | 20,898 | 4,760 | |

Head wise brief of O&M cost

Salary Wages & Other Benefits

This head comprises of Salaries and other Benefits including retirement benefits, Medical Allowances, Gratuity & Provident Fund Expenses etc.

The Salary Wages and Other benefits of distribution segment covers around **PKR 8,740** million, while supply segment covers **PKR 1,784** million. The basis of the bifurcation of distribution and supply is centered at cost allocation of business segments directly associated with either distribution or supply. The Salaries and Wages and other benefits head is bifurcated on headcount associated with distribution & supply respectively.

Third Party Services

This head comprises of expenses such as rental for hired vehicles, OSP manpower and services such as bills printing and distribution, janitorial & security services etc.

| Expense Head | Distribution (PKR Mn) | Supply (PKR Mn) |
|---|--------------------------|--------------------|
| Rental for Hired Vehicles | 1,180 | 49 |
| OSP Manpower | 1,674 | 148 |
| Distribution services (Bills printing & distribution, Recovery agents, collection agencies, etc.) | 371 | 1,126 |
| Janitorial & Security | 376 | 77 |
| Others | 412 | 88 |
| Total | 4,014 | 1,487 |

The basis of the bifurcation of expenses including bill printing & distribution, janitorial & security and recovery services into distribution and supply is centered at cost allocation of business



Page 1 of 3

segments directly associated with either distribution or supply. Details of remaining expense headers is explained below separately.

Rental for hired vehicles Expenses

For the Base Year MYT working, the distribution segment rental for hired vehicles expenses contributes around **PKR 1,180 million** for the distribution segment whereas **PKR 49 million** for the supply segment. The basis of the bifurcation of distribution and supply is centered at cost allocation of business segments directly associated with either distribution or supply.

OSP Manpower

This head pertains to OSP Manpower cost pertaining to supply and distribution.

For the Base Year MYT working, the distribution segment of OSP Manpower contributes **PKR 1,674 million** to KE O&M whereas supply segment contributes **PKR 148 million**. The basis of the bifurcation of distribution and supply is centered at cost allocation of business segments directly associated with either distribution or supply. The OSP Manpower head is bifurcated on headcount associated with distribution & supply respectively.

Others

This head mainly comprises of expense related to daily wages hired labor cost, customer services, IBC on wheels, customer facilitation centers and collection booths. The basis of the bifurcation of distribution and supply is centered at cost allocation of business segments directly associated with either distribution or supply.

Internal Energy Consumption

This head pertains to expense concerning energy utilization within company. The basis of the bifurcation of distribution and supply is centered at cost allocation of business segments directly associated with either distribution or supply.

Stores and Spares

This head pertains to stores and spares consumed mainly contributed by personal protective equipment (PPEs), tools and uniforms for field staff. The basis of the bifurcation of distribution and supply is centered at cost allocation of business segments directly associated with either distribution or supply.

Transport Cost & Others

This head comprises of transport (fuel) and other expenses including auditors remuneration, professional charges, legal fees, bank collection charges, rent / rates and other similar items etc.

For the Base Year MYT working, distribution segment of transport & other expenses contributes **PKR 2,817 million** whereas supply segment contributes to **PKR 433 million** respectively. The basis of the bifurcation of distribution and supply is centered at cost allocation of business segments directly associated with either distribution or supply.



Page 2 of 3

| Expense Head | Distribution . (PKR Mn) | Supply (PKR.Mn) |
|--|----------------------------|--------------------|
| Transport Cost (fuel) | 781 | 131 |
| Auditors Remuneration | 297 | 27 |
| Bank Collection Charges | - | 143 |
| Legal Fees | 26 | 3 |
| Professional Charges including technical studies | 434 | 17 |
| Rent, Rates & Taxes | 51 | 3 |
| Repairs & Maintenance | 383 | 10 |
| Public Relations & Corporate Communications | 22 | 19 |
| Provision against slow moving inventory | 153 | 14 |
| Others (office supplies, trainings, data connectivity, printing & postage etc) | 670 | 66 |
| Total | 2,817 | 433 |

Expenses related to IFRS 16 (Rental premises)

Lease contracts that meet the criteria of Finance Lease are recorded as 'Right of Use Asset' in KE's Balance sheet under 'Property, Plant and Equipment' based on treatment prescribed in IFRS – 16. These have carrying value of PKR 149 Mn at June 30, 2023 along with its corresponding lease liability. Considering the fact that these are actually rental premises that by nature are O&M expense, the 'Right of use assets' have not been included in RAB and accordingly expense during the year relating to these assets recorded in profit and loss account amounting to **PKR 54** million has been included in O&M expenses of Distribution & Supply functions.

Support Allocation

Support refers to distribution's proportion of expenses incurred by various shared services such as:

- > Procurement Department.
- ≻ Legal Department.
- ≻ IT Department.
- > Finance department
- ≻ HR department
- ≻ CHSEQ department
- \succ Administrative and other teams.

Based on FY23 actual numbers, this head contributes PKR 1,013 million to Supply O&M expenses.





CERTIFIED TRUE COPY OF THE RESOLUTION PASSED AT THE MEETING OF BOARD OF DIRECTORS OF K-ELECTRIC LIMITED

HELD ON 22 DECEMBER 2023 IN KE BOARD ROOM 3RD FLOOR, KE HOUSE, 39-B SUNSET BOULEVARD, PHASE-II, DHA, KARACHI

AGENDA ITEM NO. 01 TO DISCUSS UPDATE ON INVESTMENT PLAN APPROVAL AND DISCUSS AND APPROVE UPDATED TARIFF PETITION FOR TRANSMISSION, DISTRIBUTION AND SUPPLY SEGMENTS

- 1.1 The Board was informed that, in view of earlier Board resolution approved through circulation dated November 29, 2022, KE filed separate tariff petitions for Generation, Transmission, Distribution and Supply segment on December 1, 2022. However, NEPRA admitted petition for Generation and vide letter dated January 26, 2023, returned the tariff petitions for Transmission, Distribution & Supply with a direction that first Investment Plan and Power Acquisition Plan be filed. Accordingly, KE filed Investment Plan on January 30, 2023 and Power Acquisition Plan (PAP) on March 20, 2023. After public hearing and multiple rounds of meeting, NEPRA intimated approval of investment plan vide email dated December 12, 2023.
- **1.2** Consequently, the company intends to file the revised tariff petitions for Transmission, Distribution and Supply segments and Board approval is requested for the same.

DECISION:

IT IS HEREBY RESOLVED THAT in continuation of the earlier resolution passed by the Board through circulation on November 29, 2022, the Board agrees to and confirms the revised main features and key assumptions forming the basis to develop revised Tariff Petitions as summarized below:

- Filing of separate revised petitions for each of Transmission, Distribution (Network) & Supply segments for a control period of 07 years till June 30, 2030, along with request for immediate application of the proposed tariff under NEPRA Rules till the final determination of the Authority.
- Salient features of each of the segment petition are as follows:

• Transmission:

- o Tariff for a period of 07 years applicable with effect from FY2024 till FY2030 is being requested.
- The structure is aligned as per the prevailing tariff structure i.e. based on RoRB (Return on Regulatory Asset Base), and Depreciation with USD RoE (Return on Equity) levels as allowed under previous MYT. However, instead of base rate adjustment, year on year investment allowance will be requested.
- Mechanism for quarterly indexation for cost of debt (local), cost of equity and working capital tariff components.
- o Mechanism for recovery of O&M costs including annual adjustment of CPI.
- o Mechanism for recovery of Other Expense / Income including annual adjustment
- o Mechanism for recovery of Working Capital Costs.

Page 1 of 3

K-Electric Limited 39-B, KE House, Sunset Boulevard, Phase II, DHA, Karachi, Pakistan Anternality submethy and anternality



ι

- Investment plan of PKR 238,345 million (on reference macroeconomic factors) and carryover of FY 2023 projects with appropriate indexation and revision mechanism on annual (Annual Investment Update) basis.
- Indexation mechanism to account for quarterly and annual variations in Pak CPI, US CPI, KIBOR & Exchange Rate.
- o Annual adjustment mechanism of Cost of Foreign debt along with currency depreciation coverage.
- Annual adjustments relating to under / over recovery on account of actualization of units served, working capital component, impact of updated RoE and cost of debt.
- Other asks to ensure continuity of operations and recovery of prudent costs as included in revised petition.
- Distribution:
 - o Tariff for a period of 07 years applicable with effect from FY2024 till FY2030 is being requested.
 - The structure is aligned as per the prevailing tariff structure i.e. based on RoRB (Return on Regulatory Asset Base), and Depreciation with USD RoE (Return on Equity) levels as allowed under previous MYT. However, instead of base rate adjustment, year on year investment allowance will be requested.
 - Mechanism for quarterly indexation for cost of debt (local), cost of equity and working capital tariff components.
 - o Mechanism for recovery of O&M costs including annual adjustment of CPI.
 - o Mechanism for recovery of Other Expense / Income including annual adjustment.
 - o Mechanism for recovery of Working Capital Costs.
 - Investment plan of PKR 136,765 million for Distribution, PKR 17,506 million for support functions (on reference macroeconomic factors) and carryover of FY 2023 projects along with appropriate indexation and revision mechanism on Annual (Annual Investment Update) basis.
 - Indexation mechanism to account for quarterly and annual variations in Pak CPI, US CPI, KIBOR & Exchange Rate.
 - Annual adjustment mechanism of Cost of Foreign debt along with currency depreciation coverage.
 - Annual adjustments relating to under / over recovery on account of actualization of units billed, adjustment of distribution losses due to sales mix impact, working capital component, impact of updated RoE and cost of debt.
 - o Other asks to ensure continuity of operations and recovery of prudent costs as included in revised petition.
- Supply:
 - Tariff for a period of 07 years applicable with effect from FY2024 till FY2030 is being requested.
 - Supply Tariff to include Pass through of Costs of Generation, Transmission, Distribution and external power purchase along with Supply Tariff components including O&M, Retail Margin, Recovery Loss Allowance & Working Capital Components.
 - Request of working capital on closing receivables of June 30, 2023 is being requested which will be actualized at each year end.

Page 2 of 3

K-Electric Limited

39-B, KE House, Sunset Boulevard, Phase II, DHA, Karachi, Pakistan



- Recovery loss for ordinary consumers being requested based on an improvement curve with adjustment for sales mix and floor and cap mechanism.
- Monthly & quarterly adjustments to account for changes in Costs of Power (including Power Purchase), Transmission & Distribution including any pass-through items allowed within respective tariffs.
- Quarterly adjustment for recovery of costs from BPC consumers under open market including open access cost and cross subsidy.
- o Annual adjustment mechanism for actualization of Supply Tariff components including working capital, Retail Margin and Recovery Losses requirement.
- o Annual adjustments relating to sales mix on T&D Losses and Recovery Loss Target Revision.
- Annual adjustments relating to under / over recovery on account of actualization of units billed.
- Other asks to ensure continuity of operations and recovery of prudent costs as included in revised petition.

IT IS HEREBY FURTHER RESOLVED THAT the authority given to the company/ CEO in respect of submission of tariff petitions vide resolution dated November 29, 2022, is still in place and remains valid without any modification.

RIZWAN PESNANI Chief Risk Officer & Company Secretary

Page 3 of 3



Certified True Copy (CTC) of Resolution dated 29 November 2022 Passed by K-Electric Board of Directors

Approval of Tariff Petitions to be filed with National Electric Power Regulatory Authority (NEPRA)

IT IS HEREBY RESOLVED THAT the Board agrees to and confirms the main features and key assumptions forming the basis to develop Tariff Petitions as summarized below:

- □ Filing of separate petitions for each of Transmission, Distribution (Network) & Supply segments for a control period of 7 years till June 30, 2030. Furthermore, Generation Tariff will include separate tariff table at the individual plant level till the end of plant's expected useful life.
- □ Salient features of each of the segment application are as follows:
 - Generation:
 - Tariff till the end of each plant life and O&M Costs to cover Revex and Capex nature expenses, is being requested similar to that allowed to other IPPs
 - Take or Pay tariff including Energy Purchase Price, Capacity Purchase Price and other pass through items
 - Capacity Payment & Return structure is aligned as per the existing tariff structure based on Fixed O&M, RoRB & Depreciation and Working Capital added in line with allowed to IPPs.
 - Indexation mechanism for adjustment of Fuel Cost Component with part load and degradation adjustments.
 - Indexation mechanism to account for quarterly variations in Pak CPI, US CPI, Exchange Rate, KIBOR, LIBOR
 - o Annual adjustment for Insurance Cost
 - Transmission:
 - Tariff for the next 7 years after the end of current tariff period in FY23 i.e. from FY24 till FY30 is being requested.
 - The structure is aligned as per the existing tariff structure i.e. based on RoRB (Return on Regulatory Asset Base), and Depreciation with RoE (Return on Equity) levels as allowed under current MYT. However, instead of base rate adjustment, year on year investment allowance will be requested.
 - o O&M costs to be requested based on per unit basis
 - o Mechanism for recovery of Working Capital Costs
 - Investment plan of PKR 281 billion (on reference macroeconomic factors) with appropriate indexation and revision mechanism on Annual (Annual Investment Update) & Biennial (Complete Investment Review) basis.
 - Indexation mechanism to account for quarterly variations in Pak CPI, US CPI, KIBOR, LIBOR & Exchange Rate.
 - Annual adjustments relating to Working Capital Balances, Transmission Losses, revision in Units Sent-Out (excluding O&M).

K-Electric Limited 39-B KE House Sunset Boulevard, DHA- Phase 2, Karachi, Pakistan



- Distribution:
 - Tariff for the next 7 years after the end of current tariff period in FY23 i.e. from FY24 till FY30 is being requested.
 - The structure is aligned as per the existing tariff structure i.e. based on RoRB (Return on Regulatory Asset Base), and Depreciation with RoE (Return on Equity) levels as allowed under current MYT. However, instead of base rate adjustment, year on year investment allowance will be requested.
 - o O&M costs to be requested based on per unit basis
 - o Mechanism for recovery of Working Capital Costs.
 - Investment plan of PKR 185 billion for Distribution, along with PKR 18.5 billion for support functions based on reference macro-economic factors with appropriate indexation and revision mechanism on both Annual (Annual Investment Update) & Biennial (Complete Investment Review) basis.
 - Indexation mechanism to account for quarterly variations in Pak CPI, US CPI, KIBOR, LIBOR & Exchange Rate.
 - Annual adjustments relating to Working Capital Balances, Distribution Losses, Revision in Units Served (excluding O&M)
- Supply:
 - Tariff for the next 7 years after the end of current tariff period in FY23 i.e. from FY24 till FY30 is being requested.
 - Supply Tariff to include Pass through of Costs of Generation, Transmission, Distribution and external power purchase along with Supply Tariff components including O&M, Retail Margin, Recovery Loss Allowance & Working Capital Components
 - Recovery loss for non-public sector consumers being requested based on an improvement curve
 - Monthly & Quarterly adjustments to account for changes in Costs of Power (including Power Purchase), Transmission & Distribution including any pass-through items allowed within respective tariffs.
 - Annual adjustment mechanism for Supply Tariff components including Working Capital, Retail Margin, T&D Lasses & Over/ Under Recovery of Units Billed.
 - Annual adjustments relating to opening of market i.e., Cost of Open Access, Cross Subsidization, Distribution Losses & Recovery Loss Target Revision and O&M under recovery

IT IS HEREBY FURTHER RESOLVED THAT K-Electric be and is authorized to file Tariff Petitions before the National Electric Power Regulatory Authority ("Authority") for its Generation, Transmission, Distribution and Supply businesses, and in relation thereto, enter into and execute any and all required documents, make all filings, perform any act and pay all applicable fees, whatever it may be in each case, of any nature whatsoever as may be required.

IT IS HEREBY FURTHER RESOLVED THAT in respect of Tariff Petitions and applications etc. to be submitted before the Authority, Chief Executive Officer (CEO), KE is duly authorized and empowered for and on behalf of the Company to:

K-Electric Limited 39-B KE House Sunset Boulevard, DHA- Phase 2, Karachi, Pakistan



- a. review, execute, submit and deliver the Tariff Petitions (including any modification to the Tariff Petitions) and related documentation required by the Authority, including any consents, documents, power of attorney, affidavit, statements, letters, forms, applications, deeds, guarantees, notices, certificates, request, statements and any other instruments of any nature whatsoever;
- b. sign and execute necessary documentation, pay necessary fees, filing request, for confidentiality, if required, with NEPRA for maintaining confidentiality of any price sensitive information, appear before the Authority as required, and do all acts necessary for the issuance of tariff;
- c. represent and respond on behalf of the Company, in public hearings and in writing, to all queries by the Authority, stakeholders etc. and to attend pre and post hearings and meetings; and
- d. do all such acts, matters and things as may be necessary for carrying out the purposes aforesaid and giving full effect to the aforementioned resolutions.

IT IS HEREBY FURTHER RESOLVED THAT Chief Executive Officer (CEO), KE be and is hereby authorized to delegate all or any of the above powers in respect of the foregoing to any other official of the Company.

Rizwan Pesnani Chief Risk Officer & Company Secretary

K-Electric Limited 39-B KE House Sunset Boulevard, DHA- Phase 2, Karachi, Pakistan



BEFORE THE NATIONAL ELECTRIC POWER REGULATORY AUTHORITY (NEPRA)

AFFIDAVIT of Mr. Syed Moonis Abdullah Alvi s/o Syed Riazuddin Alvi having CNIC No. 42201-6886191-3 Chief Executive Officer, K-Electric Limited (the "Company"), a company incorporated under the laws of the Islamic Republic of Pakistan, having its registered office at KE House, 39-B, Sunset Boulevard, Phase II, Defence Housing Authority, Karachi.

I, the above named deponent, being the duly authorized representative of the Company solemnly affirm and declare that the contents of Tariff Petition submitted vide Letter Ref No. KE/BPR/NEPRA/2023/322 dated December 27, 2023, including all supporting documents are true to the best of my knowledge and belief and that nothing has been concealed.

SYED MOONIS ABDULLAH ALVI



STAMP VENDOR'S SIGNATURE

BEFORE THE NATIONAL ELECTRIC POWER REGULATORY AUTHORITY (NEPRA)

AFFIDAVIT of Mr. Muhammad Aamir s/o Muhammad Anwar having CNIC No. 42301-1189331-3 Chief Financial Officer, K-Electric Limited (the "Company"), a company incorporated under the laws of the Islamic Republic of Pakistan, having its registered office at KE House, 39-B, Sunset Boulevard, Phase II, Defence Housing Authority, Karachi.

I, the above named deponent, being the duly authorized representative of the Company solemnly affirm and declare that the contents of Tariff Petition submitted vide Letter Ref No. KE/BPR/NEPRA/2023/322 dated December 27, 2023, including all supporting documents are true to the best of my knowledge and belief and that nothing has been concealed.

Намма US SAIN 52 ATH COMM Kare Pékistar

MUHAMMAD AANIR



BEFORE THE NATIONAL ELECTRIC POWER REGULATORY AUTHORITY (NEPRA)

AFFIDAVIT of Mr. Syed Fawad Ali Gilani s/o Syed Tahir Hussain having CNIC No. 35404-2362674-7 Chief Distribution Officer, K-Electric Limited (the "Company"), a company incorporated under the laws of the Islamic Republic of Pakistan, having its registered office at KE House, 39-B, Sunset Boulevard, Phase II, Defence Housing Authority, Karachi.

I, the above named deponent, being the duly authorized representative of the Company solemnly affirm and declare that the contents of Tariff Petition submitted vide Letter Ref No. KE/BPR/NEPRA/2023/322 dated December 27, 2023, including all supporting documents are true to the best of my knowledge and belief and that nothing has been concealed.



SYED FAWAD ALI GILANI

Karachi dated December 27, 2023



K-ELECTRIC LIMITED

POWER OF ATTORNEY

- 1. TO ALL WHOM PRESENT, by virtue of the powers conferred upon them by Article 77 of the Company's Articles of Association, the Board of Directors of the K-Electric Limited (referred to as the "Company" or "KE") have conferred upon me, Syed Moonis Abdullah Alvi s/o Syed Riazuddin Alvi, Muslim, adult, holder of CNIC No. 42201-6886191-3, the Chief Executive Officer of the Company, having its registered office at 3rd Floor, KE House, 39-B, Sunset Boulevard, DHA, Phase-II, Karachi, through a General Power of Attorney dated June 11, 2018, to act in the name and on behalf of the Company to exercise and perform certain powers and actions.
- 2. WHEREAS, pursuant to clause thirteen (13) of my General Power of Attorney, I am empowered to sign for and on behalf of the Company all agreements, contracts, assurances, deeds, matters or things in or about the business of the Company and pursuant to clause twenty six (26) of my General Power of Attorney, I am empowered to delegate any of my powers to any person deemed appropriate by me and to revoke the same at my discretion.





- a. Review, execute, submit and deliver the tariff petitions (including any modification to the tariff petitions) and related documentation required by the Authority, including any consents, documents, power of attorney, affidavit, statements, letters, forms, applications, deeds, guarantees, notices, certificates, request, statements and any other instruments of any nature whatsoever;
- b. Sign and execute necessary documentation, pay necessary fees, appear before the Authority as required, and do all acts necessary for the issuance of tariff;
- c. Represent and respond on behalf of the Company, in public hearings and in writing, to all queries by the Authority, stakeholders and to attend pre and post hearing and meetings; and
- d. Do all such acts, matters and things as may be necessary for carrying out the purposes aforesaid and giving full effect to the aforementioned resolutions.

The Board has further authorized me to delegate all or any of the powers in respect of the foregoing to any other official of the Company.

4. NOW THEREFORE, I hereby appoint and authorize (1) Muhammad Aamir s/o Muhammad Anwar having CNIC No. 42301-1189331-3, Chief Financial Officer, KE, and (2) Syed Fawad Ali Gilani s/o Syed Tahir Hussain, having CNIC No. 35404-2362674-7, Chief Distribution Officer, KE, as Attorney(s) to act for and on behalf of the Company and anyone of the above two(2) KE officers to singly take any or all necessary actions and execute all documents, instruments etc., incidental and related to the tariff petitions for Distribution & Supply businesses and applications, as properly described under clause 3(a), (b), (c) and (d) above.



STAMP VENDOR'S SIGNATURE.
 Stamp Paper is not valid for Divorce & Free Will Purpage
 This delegated Power of Attorney does not empower the said Mr. Muhammad Aamir and Mr. Syed Fawad Ali Gilani to enter, sign and/or execute, for and on behalf of the company, any other and all agreements/ documents, except for the documents referred above.

 This delegated Power of Attorney shall be valid till the execution of the above documents and completion of the said process unless earlier revoked.

IN WITNESS WHEREOF I have affixed my signature below on this 27 day of December 2023.

Syed Moonis Abdullah Alvi Chief Executive Officer

Attorneys:-

VALUE RSATTACHED......

Muhammad Aamir Chief Financial Officer

Syed Fawad Ali Gilani Chief Distribution Officer

WITNESSES:

1.

<u>AHMED</u> JAFFAR AYA2 42000-5311358-3 Annea (wignon 42000 2

mad Annir Giuzia Kullahifmancial Officer K.ELECTRIC LIMITED

n HUSSAIN ස **A** DATH COMMISSIONER Karachi Pakistan

ONDO Rupees STAMP OFFICE CITY COURT, RANGACHI issued to. CNIC/LEG No 72 02 Vide D.S.R. No. On behalf of Challan No. for the purpose of 02 Entry No._ Dł Ύ, **GENERAL POWER OF ATTORNEY** TO ALL TO WHOM these presents shall come, K-ELECTRIC LIMITED (KE), having its registered office at KE House, 39-B, Sunset Boulevard, Phase-II, DHA, Karachi (hereinafter called the "Company") send greetings. WHEREAS the Company was incorporated under the Companies Act 1882 as a company limited by shares and continues to operate as such under the Companies Act, 2017. AND WHEREAS by virtue of the powers conferred upon them by Article 77 of the Company's Articles of Association, the Board of Directors of the Company have passed the resolution dated 07 June 2018 and entrusted to and conferred upon Syed Moonis Abdullah Alvi, the Chief Executive Officer of the Company, the following powers which shall be exercisable by him from the date that a Power of Attorney enumerating the same is executed in his favor by any two (2) Directors of the Company. NOW THESE PRESENTS WITNESS THAT Syed Moonis Abdullah Alvi son of Syed Riazuddin Alvi CNIC #

NOW THESE PRESENTS WITNESS THAT Syed Moonis Abdullah Aivi son of Syed Riazuddin Aivi CNIC # 42201-6886191-3, the Chief Executive Officer of the Company, is hereby appointed Attorney of the Company to act in the name and on behalf of the Company to do and perform the following acts and things only:

- To purchase, sell, endorse, transfer, negotiate, encash, receive interest or otherwise deal in securities of all kinds including Government of Pakistan securities and securities of the Provincial Governments of Pakistan;
- 2) To sign all registers, reports and returns and others documents as may be required by law to be signed or filed with any Federal, Provincial or Local Governmental authority including but not limited to the Securities and Exchange Commission of Pakistan, Stock Exchanges, Registrar Joint Stock Companies, State Bank of Pakistan and Income Tax, Customs and other authorities; /

- To sign all acceptances and endorsements on bills of exchanges; hundles, securities and cheques drawn on behalf of the Company and to receive the amount of bills hundles; securities and cheques and to give receipts and discharge for the same and to sign all documents drawn on or by the Company to which the signature of the Company as agents is required;
- To sign for and on behalf of the Company all documents, assurances, deeds, and matters or things in or about the business of the Company as fully and effectively as the Company could do if personally present, to present such documents and deeds to the registering authority and sadmit execution thereof.
- To process certificates of shares of the Company and to sign all papers relating to the company and to sign all papers relating to the company and to sign all papers relating to the company set of the company and to sign all papers relating to the company and
- 6) To process Dividend Warrants and their revalidation;

4

:7)



- To authenticate and or cancel the registration of Debentures;
- 8) To signall correspondence that may be necessary in the ordinary course of the busced in the company.
 - 9) To sign all deeds of sale, purchase, lease, mortgage, redemption, re-conveyance and present synthem before the registering authority and admit execution thereof.
 - 10) To execute all bonds, deeds and documents and give such security as may be required now or at any future time by the Government of Pakistan or by any person, corporate body, company or a firm to enable the Company to carry on its business;
 - 11) To appoint and authorize any officer of the Company as his agent or agents to admit execution of deeds and documents of whatsoever nature before the registering authority and to revoke such appointment or appointments.
 - 12) To sign execute determine or terminate and negotiate terms and conditions thereto agreements/appointment for employment and training with employees and trainees in line with requirements of the companies Act 2017 and Code of Corporate Governance Regulations 2017 as applicable?
 - 13) To sign for and on behalf of the Company all documents: agreements, contracts assurances, deeds matters or things in or about the business of the Company as fully and effectively as the Company, could, do personally, and, to present such documents, agreements, contracts, assurances, deeds, matters or things to the registering authorities and appear before such authorities and admit execution, thereof and to do all such other things and acts that may be necessary for registration;
- 14) To imake vand sign applications to appropriate Federal. Provincial or Local Government is the departments authorities or other competent authority for all and any licenses. filing of any and all applications, betitions, with NEPRA which include Licensee Proposed Modifications: (LPMs) and others, permissions and consents required by any order, statutory instrument, regulation, byelaw, or otherwise in connection with the business, management and affairs of the Company.
 15) To obtain securities from any person, corporate body, company or firm for the due performance of any contract in respect of rendering any service or supplying any material to the Company and to accept the same on such terms as may be deemed proper or expedient by the Attorney;
- 16) To realize debts due to the Company and to receive any money due to the Company from any person, corporate body, company or firm and to grant receipts and discharges for the same:
 - 17) To make payments to any person, corporate body, company or firm for any service rendered to the Company and for such other purposes of the Company and for carrying on of the Company's business and to sign and deliver all receipts, charges and drafts on the bank and other accounts of the Company or on the customers of the Company and to endorse all bills and bills of

exchange rreceived by the Company which timay be necessary for expedient to endorsed or given for the purpose of carrying on of the Company sibusiness

18) To represent the Company before any Court of law Tederal Provincial or authority of any other authority in all matters concerning the business Company.

un and a second an

KOUN

19) To commence institute sprosecute and to defend, compound and abandon all compounds and abandon all compounds and abandon all compounds and abandon all compounds and actions suits, petitions appeals, claims and demands by or against the Company or the sign, verify, and present any document, pleading, complaint, write affidavit application or other instrument in writing and to appear and make statements on oath or otherwise increlation to the Affairs of the Company and to appear and make statements on oath or otherwise increlation to the affairs of the Company and to appear and make statements on oath or otherwise increlation to the affairs of the Company and to appoint and remunerate any barrister. Solicitor, advocate apleader, vakil mukhtar, or any legal practitiones or any revenue agent, accountants, valuers or surveyors for the said purpose and to obtain, legal advice on behalf of the Company on any matter, contentious or otherwise, affecting the Company.

20) To write off amounts as approved by the Board of Directors arising as a result of correction / cancellation / adjustment of electricity bills in the normal course of business of the Company To approve formula for write offs, adjustment and settlement of electricity bills based on prudent business practices / judgement and within the policy framework approved by the Board of Directors To sub-delegate such of the powers as he deems fit to the concerned executives / officers of the Company to fix authority limits, thereof, and to revoke the same achis discretion.

To obtain refund of stamp duty or repayment of court rees;

To appear and, act, in the offices of the District Registrar, and Sub-Registrar, of Deeds and Assurances for registration of documents and in any other office of the Federal's Provincial and local Government including without prejudice to the generality of the foregoing. City District Government ikarachi, any Union Council, District Council, Cantonment Board, Municipal Corporation, any Cooperative society. State Bank of Pakistar, Collector of Customs, Excise & Taxation: Offices, and the Chief Controller of Imports and Exports in all matters concerning the business on property of the Company.

(23) To file and receive back documents, to deposit and withdraw money and to grant receipts therefore.

24) To negotiate and to enter, into and, complete, contracts with any person, corporate body, company or firm for the lease or purchase of any lands and buildings and to alter, repair, add to and improve any building or structure and to let or sub-let any immovable property held by the new company and to submit plans of buildings relating to the Company's properties or lands on the company's behalt before any completent authority and to lob tain receipts therefor.

25) To use, sign and attest thename and style of the Company in any transaction, deed, document or muniment of title on all such occasions as may be necessary or expedient for conducting the business of the Company or for the due and proper management of the lands and buildings aleased or purchased or to be leased or purchased by the Company and to execute and sign all such deeds and documents as may be required or proper for or in relation to all or any of the matters or purposes aforesaid.

b) To delegate to any person such of the powers as he deems fit and revoke the same at the discretion.

27) Generally to do all other acts and things incidental to the exercise of the aforesaid powers

28). The Company hereby agrees tovratify and confirm all and whatever the said Attorney shall lawfully do or cause to be done by virtue of this Power of Attorney

Ise of the aforesaid powers: and a solution of the solution of

 M_{m}


The Power of Attorney executed in favor of Mr? Muhammad Tayyab Tareen pursuant to the Resolution of the Board of Directors passed on 27 November 2014 is hereby revoked. This Power of Attorney will be valid till the time Syed Moonis Abdullah Alvi holds the position of Chief Executive Officer of KE

IN WITNESS WHEREOF the Common Seal of the Company has been affixed hereto at Karachion this the 11 day of June 2018 by the undersigned Directors of the Company pursuant to the resolution dated 07 June 2018 passed by the Board of Directors of the Company

DULLANIMAIS ARIE

<u>41401-1568587-55</u>

signature of Syed Moonis Abdullah Alvi.

Amadinalistata

12201=739.8

THE COMMON SEAL of ()) the Company is hereunto () affixed in the presence of () () (

TNOCA otary Publ

CHINPAK

WITNE

Director

Attome

TTESTED AUAZ ALI ADVOCATE MA LEB Advocate & Notary Public Karachi

A CALL AND A CALL AND A CALL AND A CALL AND A CALL AND A CALL AND A CALL AND A CALL AND A CALL AND A CALL AND A

1-2 JUN 2018



CERTIFIED TRUE COPY (CTC) OF THE MINUTES OF 1233RD MEETING OF K-ELECTRIC LIMITED BOARD OF DIRECTORS (BOD) HELD ON THURSDAY, 11 AUGUST 2022 AT 10:30 HOURS (PST) IN KE BOARD ROOM 3RD FLOOR, KE HOUSE, 39-B SUNSET BOULEVARD, PHASE-II, DHA, KARACHI

RE-APPOINTMENT OF CHIEF EXECUTIVE OFFICER

RESOLVED THAT Syed Moonis Abdullah Alvi be and is hereby appointed as Chief Executive Officer of the Company for a term of three (3) years with effect from 30 July 2022.

nani

Chief Risk Officer & Company Secretary



Certified True Copy (CTC) of Resolution dated 31 July 2019 Passed by K-Electric Board of Directors

Election of Directors – Appointment of Chairman and Chief Executive Officer

e.

RESOLVED FURTHER THAT Syed Moonis Abdullah Alvi be and is hereby appointed as Chief Executive Officer of the Company for a three (3) year term effective from 30 July 2019. The terms & conditions of appointment of Syed Moonis Abdullah Alvi for the position of CEO, as already approved by the Board, shall remain unchanged.

cnar

Rizwan Pesnani **Company Secretary**

KE House, 39-B. Sunset Boulevard, Phase-II, Defence Housing Authority, Karachi
www.ke.com.pk
92-21-3263-7133, 92-21-3870-9132, UAN: 111-537-211



Certified True Copy (CTC) of Resolution(s) passed by K-Electric Board of Directors at its Meeting No. 1198 held on Thursday, 07 June 2018 at 11:00 hours in KE's Board Room, 3RD Floor, KE House, 39-B, Sunset Boulevard, Phase-II, DHA, Karachi

Re: Appointment of Chief Executive Officer (CEO)

RESOLVED THAT in exercise of powers vested through section 187 and 188 of Companies Act, 2017 and Article 76(ii) and (vi) of K-Electric (KE) Articles of Association, Syed Moonis Abdullah Alvi be and is hereby appointed as interim Chief Executive Officer of the Company in place of Mr. Muhammad Tayyab Tareen with effect from 07 June 2018.

RESOLVED THAT a General Power of Attorney as per draft set out in Appendix "A" be and is hereby given to Syed Moonis Abdullah Alvi, CEO, K-Electric and any two (2) Directors of the Company be and are hereby jointly authorized to sign, on behalf of the Board of Directors, the General Power of Attorney for Syed Moonis Abdullah Alvi and affix common seal of the Company on the instrument.

Muhammad Rizwan Dalia Company Secretary HUHAMMAD RIZWAN DALIA Company Secretary K-ELECTRIC LUMITED

K-Electric Limited, KE House, 39-B. Sunset Boulevard, DHA II, Karachi, Pakistan. Phone: 92-21-32637133, UAN: 111-537-211, Fax: 92-21-99205165, Website: www.ke.com.pk



Not Al anti-

• .

.

· ·

***** • • • • •