National Electric Power Regulatory Authority Islamic Republic of Pakistan



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No. NEPRA/ADG(Tariff)/TRF-362/K-Electric-2016/18550-54

December 02, 2024

Chief Executive Officer, K-Electric Limited (KEL), KE House, Punjab Chowrangi, 39 – B, Sunset Boulevard, Phase-II Defence Housing Authority, Karachi.

Subject: <u>Decision of the Authority in the matter of Provisional Monthly Fuel Charges</u> Adjustments requested by K-Electric Limited for September 2024

Enclosed please find herewith a copy of the Decision of the Authority in the matter of fuel charges adjustment for the month of **September 2024** (total 07 pages) in respect of K-Electric Limited and Notification (S.R.O. 1969 (I)/2024 dated 02.12.2024) thereof. This is for information and further necessary action.

2. While effecting the Fuel Adjustment Charges, K-Electric Ltd. shall keep in view and strictly comply with the orders of the court(s), if any, notwithstanding this order.

Enclosure: [Decision along with Notification is also available on NEPRA's website]

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(Wasim Anwar Bhinder)

Copy to:

- 1. Secretary, Ministry of Energy, Power Division, 'A' Block, Pak Secretariat, Islamabad
- 2. Secretary, Cabinet Division, Cabinet Secretariat, Islamabad
- 3. Secretary, Ministry of Finance, 'Q' Block, Pak Secretariat, Islamabad
- 4. Secretary, Privatization Commission, 4th Floor, Kohsar Block, Constitution Avenue, New Secretariat, Islamabad

DECISION OF THE AUTHORITY IN THE MATTER OF PROVISONAL MONTHLY FUEL CHARGES ADJUSTMENTS REQUESTED BY K-ELECTRIC LIMITED FOR SEPTEMBER 2024.

- 1. The Authority determined a Multi-Year Tariff ("MYT") for K-Electric Limited (herein referred to as "K-Electric" or "KE") for a period of seven (07) years, from July 2016 to June 2023, which expired on June 30, 2023. The MYT provided a mechanism wherein the Authority has to review and revise the approved tariff through monthly, quarterly and annual adjustments. As per the mechanism, impact of change in KE's own generation fuel cost component due to variation in fuel prices, generation mix & volume shall be passed on to the consumers directly in their monthly bills in the form of Fuel Charges Adjustment (FCA). Similarly, impact of change in the fuel component of Power Purchase Price (PPP) due to variation in fuel prices & energy mix shall also be passed on to consumers through monthly FCA.
- 2. Pursuant to the expiry of its MYT, K-Electric filed petitions for determination of a new MYT for the period from July 2023 to June 2030 for its Generation, Transmission, Distribution and Supply business separately. The Authority while admitting these petitions, granted K-Electric an interim tariff. The interim tariff was determined on the basis of allowed quarterly adjustments for the quarter ending in March 2023 and the same is subject to adjustment once the final MYT of KE for the control period FY 2024-30 is determined.
- 3. In view thereof, K-Electric filed its provisional monthly FCA request for the month of September 2024 vide its letter dated 14.10.2024. Summary of KE's FCA request for September 2024 is tabulated as hereunder,

Month	Variation	
	Mln Rs.	Rs. /kWh
September 2024	(247)	(0.16)

- 4. K-Electric in its instant request submitted that:
 - ✓ provisional FCA request for September 2024 is with regard to NEPRA's decisions regarding provisional FCAs for the period from July 2023 to June 2024, whereby provisional FCAs have been allowed based on parameters defined in MYT 2017-2023.
 - ✓ provisional FCAs are subject to adjustment once MYT 2024-2030 is determined.
 - ✓ provisional monthly FCA for September 2024 is being requested based on March 2023 as interim reference tariff.
 - ✓ for calculation of FCA of September 2024, CPPA-G's fuel cost for September 2024 is based on CPPA-G's requested FCC for September 2024 and is subject to actualization based on NEPRA's decision.
 - ✓ it dispatches as per Economic Merit Order from its own generating units (with the available resources) and import from external resources.

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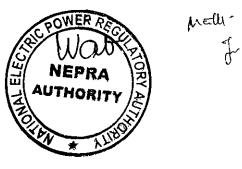


- ✓ it is certified that cost of fuel and power purchase claim does not include any amount of late payment surcharge/markup/interest.
- 5. In order to arrive at an informed decision, the Authority decided to conduct a public hearing in the matter. An advertisement in this regard was published in newspapers on 24.10.2024, and also uploaded on NEPRA website, whereby hearing was scheduled on 31.10.2024. Further, individual notices were also served to the stakeholders for participation in the hearing. The following issues were framed for the hearing;
 - i. Whether the requested Fuel Price variation is justified?
 - ii. Whether KE has followed the merit order while giving dispatch to its power plants as well as power purchases from external sources?
- 6. The hearing was held as per the schedule on 31.10.2024 at NEPRA Tower and through ZOOM. The hearing was attended by CFO K-Electric with his financial and technical team, KE consumers, media representatives, other stakeholders and general public.
- 7. During the hearing commentators made various submissions on the request of KE. A summary of comments by the commentators and response of KE thereof is as follows:
 - Mr. Imran Shahid, Mr. Ashar and Mr. Ashfaq Mughal submitted that requested FCA of September 2024 for CPPA-G is negative Rs.0.71/ kWh whereas for KE, it is negative Rs. 0.16/kWh. Mr. Tanvir Barry and Mr. Ahmed Azeem Alvi also inquired regarding higher negative FCAs of XWDISCOs as compared to KE.
 - ii. KE in response submitted that FCAs for KE and CPPA-G are based on per unit fuel cost of reference month. In case of KE FCAs, the interim reference of March 2023 is currently being used whereas for CPPA-G, the updated monthly references are being used. KE further, explained that in previous years, the FCAs of KE have remained on lower side in comparison to FCAs of CPPA-G. In FY 2024, the weighted average FCA of XWDISCOs was around Rs.2.92/kWh whereas for KE consumers, it was around Rs.1.37/kWh. Hence, KE FCAs remained Rs.1.55/kWh lower in FY 2024. Further, in FY 2023, the weighted average FCA of XW DISCOs was around Rs.0.92/kWh whereas for KE consumers, it was approximately negative Rs.2/kWh. Hence, KE FCAs remained Rs.2.92/kWh. Hence, KE FCAs remained Rs.2.92/kWh lower in FY 2023 as well.
 - iii. It also submitted that cost of electricity in KE system when compared with CPPA-G is higher because unlike CPPA-G, KE does not have availability of nuclear or Hydro based power plants in its fleet, nor does KE is provided sufficient supply of indigenous / low btu gas to operate its own plants. However, it is worth mentioning here that had indigenous gas was provided to KE as committed, KE's fuel cost would have been significantly lower. KE is actively working to rationalize its energy cost for which KE has issued 640 MW of renewable RFPs out of which competitive bidding process for 150 MW Winder Bela Solar Projects, and 220 MW Site Neutral Hybrid (Wind & Solar) Project have been concluded and the bid evaluation reports for these projects have been submitted to NEPRA. The competitive



bidding process for Deh Metha Ghar Project is also completed. Further, the interconnection capacity with national grid will be enhanced as 500 kV KKI grid has been commissioned and 220 kV Dhabeji grid is in finalization stage and is expected to be commissioned within this year. Additionally, KE is also working to offtake power from Jamshoro Coal Power project after its conversion to Local Coal.

- iv. Mr. Imran Shahid and Mr. Ahmed Azeem Alvi also inquired regarding status of KE's Gas Supply Agreement with SSGC.
- v. In response KE submitted that the Gas Supply Agreement (GSA) between KE and SSGC is still under process and despite KE's repeated requests, GSA remains unexecuted as SSGC is not willing to confirm quantity.
- vi. Mr. Imran Shahid further submitted that KE is continuing load shed after 12 AM as well, to which KE explained that load shedding is being carried out till 2 AM on specific feeders as per load-shed policy.
- vii. Mr. Arif Bilvani raised concerns regarding use of compressors in BQPS-II despite PLL RLNG supply from a high-pressure pipe line. It was highlighted that for consumption of RLNG in BQPS-III, no compressors are required on both the gas turbines whereas for consumption of the same RLNG, from the same source, in BQPS-II compressors are required/used for both gas turbines resulting in increase in auxiliary consumption of the plant culminating into increased cost of generation.
- viii. Mr. Arif shared the following generation on RLNG from PLL:
 - ✓ Bin Qasim II -560 MW with no compressor (PLL) GWh 3.2
 - ✓ Bin Qasim II -560 MW with one compressor (PLL) GWh 3.28
 - ✓ Bin Qasim II 560 MW with two compressors (PLL) GWh 57.46.
 - ✓ BQPS III Unit 1 GWh 250.22
 - ✓ BQPS III Unit 2 GWh 215.14
 - ix. It was also highlighted that BQPS-III does not need compressors whereas supply to BQPS-II needs compressors even though supply is from the same source. If the high-pressure line can feed the RLNG to unit BQPS III then why can't it feed BQPS II, as both units are in the same premises.
 - x. KE while responding to the concerns of Mr. Bilvani submitted that BQPS-II currently operates utilizing both SSGC pipeline gas (low pressure) and PLL RLNG pipeline gas (high pressure). Due to the pressure limitations of SSGC gas, the plant requires compressor operation to boost gas pressure to the minimum level required by the GTs technical specifications. One compressor is required for single GT operation while both compressors are required for both GT's to operate. In contrast, PLL gas meets the pressure requirements of the plant without the need for compressor operation. Further, SSGC also provides gas which includes local gas and RLNG. Accordingly, when SSGC gas is higher on the merit order, despite use of compressor, due to inclusion of local gas in mix, it is dispatched to the



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maximum available limit and remaining is used through PLL based on availability. For the month of September 2024, the fuel cost per unit on commingled rate for BQPS-II (RLNG + Local Gas from SSGC) was around Rs.26.9/kWh whereas the fuel cost per unit on BQPS-II at PLL was Rs.27.5/kWh. Accordingly, KE employs a mixed-fuel strategy at BQPS-II, considering factors such as EMO compliance and the availability/mix of SSGC and availability of PLL gas. Furthermore, based on the query of the Authority, KE has already briefed the Authority in detail regarding the usage of compressors at BQPS-II and diversion of Gas from PLL to BQPS-II during the FCA hearing for the month of September 2022, emphasizing that such diversion is strictly made in accordance with EMO.

- xi. The Authority on the issue observed that the matter of requirement of compressors for BQPS-II operations in case of utilization of (i) PLL-RLNG and (ii) PLL+SSGC RLNG was exhaustively deliberated and decided by Authority in July 2023, wherein the heat rate report of BQPS-II, and correspondence of IE-NESPAK on the matter was also considered. The Authority further, noted that RLNG from PLL is a high-pressure resource and does not require compressors, whereas the supply from SSGC need compressors. Further, BQPS-II plant comprises of three GTs and that two compressors are required if all 3 GTs are in operation on SSGC resource. Similarly, the plant needs two compressors if 2 GTs that are operating on SSGC resource, whereas if 1 GT is on SSGC then only 1 compressor is required. In short, the compressor arrangement is relevant/required if SSGC-RLNG is being utilized in the plant (whether completely or partially/in dual mode along with PLL) and compressor is not required/relevant for supply from PLL.
- xii. On the point of operation of low efficiency of BQPS-I Unit 2 (21.12%) translating to per unit fuel cost of Rs.58/kWh as pointed out by Mr. Bilvani, KE explained that actual efficiency of the plant may vary on monthly basis subject to part load operations as per EMO, ambient conditions, and startups. However, it is to be noted that the fuel cost claimed by KE is based on NEPRA allowed Heat Rate and hence any variation in the efficiency of plants from the allowed limit is not passed on to consumers.
- xiii. Mr. Tanveer Barry and Mr. Junaid Naqi submitted that quarterly adjustments are being charged uniformly across Pakistan, whereas FCAs are different for the consumers of KE and XWDISCOs.
- xiv. KE responded that application of uniform FCA is prerogative of Government of Pakistan and NEPRA.
- xv. On the point of reduction in demand raised by Mr. Ashfaq Mughal, KE submitted that demand for September 2024, witnessed a decline of 6% compared to September 2023, due to reduction in industrial demand owing to prevailing economic conditions. However, with the decrease in borrowing rates and upcoming incremental consumption package, it is expected that the economic activity will get a boost in coming months.
- xvi. Regarding operation of RFO based Gul Ahmed Energy Limited (GAEL) highlighted by Mr. Ashar, KE submitted that it dispatches as per Economic Merit Order (EMO) from its own



generating units and import from external sources. KE generates electricity from lower fuel cost plant prior to engaging expensive fuel sources and accordingly, GAEL was operated as per EMO in view of peak demand of 2700 MW, to avoid the load shed at night hours and excessive generation on HSD.

- xvii. Mr. Aneel Mumtaz submitted that instant FCA petition of KE is time barred as KE should have submitted the same within 7 days. He also highlighted that KE has underutilized 1,373 MW as compared to its total capacity. Further, as per the MYT Decision dated July 05, 2018, the FCA should be calculated based on variation in current month against reference month. The reference month should be the last month of the last quarter.
- xviii. KE clarified that timeline mentioned above is directory and not mandatory as per judgement of Supreme Court of Pakistan dated 02.05.2018. It was further explained that power generation by KE is aligned with its demand requirements, considering policy based segmented load shed. Hence, the above facts do not reflect underutilization but instead it was aligned with the respective demand in September 2024.
 - xix. On the point of reference month, KE submitted that MYT dated July 05, 2018 was applicable for the previous control period which ended on June 30, 2023. KE has filed Tariff Petitions for the control period FY 2024 to FY 2030, which are under determination of the Authority, therefore as an interim arrangement, reference of March 2023, has been used for the calculation of FCA for the month of September 2024.
 - xx. Mr. Ahmed Azeem Alvi submitted that total capacity of KE as per NEPRA's State of Industry report is around 4,600 MW but according to KE's website, it is around 3,500 MW. KE explained that its website shows enhanced capacity since 2009 whereas SOI reports the total capacity including BQPS-I, 100 MW of Solar and 100 MW of Net Metering.
 - xxi. Mr. Alvi also submitted that estimated power consumption at peak in summers is 3,000 MW whereas KE's total capacity is higher than that so there should not be any load shed in the city. Further, NEPRA Act does not allow power companies to do load shed on commercial basis. In response, KE submitted that power generation by KE is aligned with the demand requirements of KE consumers, keeping in view, policy based segmented load shed which is carried out on AT&C loss basis across the country including KE.
- xxii. Mr. Alvi further inquired regarding charging of FCA on imports from the national grid which also contains sources from renewables including hydro and solar. KE responded that according to the defined FCA mechanism, the imports / generation from national grid including renewables are included in the KE's total sent outs but there is no fuel cost incurred against units imported from renewable sources. Hence, the benefit of these units (hydro and solar) imported from the national grid is passed on to consumers.
- xxiii. While responding to the concerns of Mr. Alvi regarding generation of electricity from BQPS-I and use of FO despite being expensive, KE submitted that it dispatches as per EMO from its own generating units and import from external sources, wherein KE generates

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electricity on low fuel cost plant before going onto expensive fuel sources. Further, BQPS-I is being used to generate electricity as per EMO and to avoid the load shed at night hours and to avoid excessive generation on HSD.

- 8. The Authority has analyzed the request and data submitted by KE for FCA of September 2024.
- 9. The Authority observed that KE while working out fuel cost of energy of 3.278 GWhs from BQPS-II on RLNG from PLL, has used heat rate for generation with one compressor. However, as per the monthly generation statistics report of BQPS-II, the said energy has been generated without use of any compressor. The heat rate for generation with no compressor is lower as compared to generation using one compressor. Accordingly, the approved heat rate with no compressor has been used for energy of 3.278 GWhs from BQPS-II, while working out the FCA of September 2024. This has resulted in downward adjustment of Rs.1.479 million.
- 10. Regarding energy purchased from CPPA-G in September 2024, KE used fuel cost component of Rs.8.5739/kWh. However, the Authority's approved rate for energy supplied by CPPA-G to KE for September 2024 is Rs.8.5892/kWh. Accordingly, in order to work out the FCA for KE for September 2024, the Authority's approved fuel cost component of Rs.8.5892/kWh has been considered.
- 11. Further, for energy purchased from FPCL, KE has considered fuel cost component of Rs. 19.8983/kWh for September 2024. The Authority vide its decision dated November 07, 2024 has revised the fuel cost component of FPCL with effect from 15.08.2024 as Rs.18.7832/kWh. On the basis of revised fuel cost component, the KE's claimed fuel cost for FPCL for September 2024 has been adjusted downwards by Rs.39.045 million.
- 12. In view of the aforementioned discussion, the Authority has decided to allow a negative FCA of Rs.0.1758/kWh for September 2024, to be passed on to consumers in the billing month of December 2024 as under:

Generation	Unit	Mar. 23 (Reference)	Sep-24
Cost of KE's Own Plants	Mln Rs	13,748	17,098
Cost of Power Purchases	Mln Rs	10,135	7,747
Total Fuel Cost		23,638	24,845
KE's own Sent outs	GWh	520	720
External Purchases	GWh	958	851
Fuel Cost Component	<u> </u>	1,478	1,571
<u></u>	Rs./kWh	9,30	10.89
Own Generation	Rs./kWh	6.86	4.93
External Purchases	,	I	4.55
Deviation from EMO	Rs./kWh	(0.00)	-
Previous Adjustment	Rs./kWh	(0.16)	-
Fuel Cost Component	Rs./kWh	15.99	15.82
FCA	Rs./kWh		(0.1758)
Variation in Fuel Cost	Mln Rs		(276)



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- 13. The aforementioned FCA is being allowed on provisional basis subject to adjustment, once the Authority approves new MYT of KE for the period FY 2024-30. The difference in cost, if any based on the new approved MYT FY 2024-30 would be allowed in future adjustments, once the new MYT is notified.
- 14. In the light of above, the Authority hereby directs KE that the aforementioned negative adjustment;
 - a) Shall be applicable to all the consumer categories except lifeline consumers, domestic consumers consuming up-to 300 units, Electric Vehicle Charging Stations (EVCS), Prepaid electricity consumers of all categories who opted for pre-paid tariff and agriculture consumers. It is hereby clarified that negative adjustment on account of monthly FCA is also applicable to the domestic consumers having Time of Use (ToU) meters irrespective of their consumption level.
 - b) Shall be shown separately in the consumers' bills on the basis of units billed to the consumers, in the respective month to which the adjustment pertains.
 - c) KE shall reflect the fuel charges adjustment in respect of September 2024 in the billing month of December 2024.
 - d) While effecting the Fuel Adjustment Charges, KE shall keep in view and strictly comply with the orders of the courts notwithstanding this order.

AUTHORITY

Mathar Niaz Rana (nsc) Member

Engr. Maqsood Anwar Khan Member

Rafique Ahmed Shaikh Member

Amina Ahmed Member

Waseem Mukhtar Chairman



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National Electric Power Regulatory Authority





NOTIFICATION

Islamabad, the 2nd day of December, 2024

S.R.O. 1969 (I)/2024.- Pursuant to Section 31(7) of the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997 as amended from time to time and as per the mechanism for monthly, quarterly and annual adjustments provided in the Tariff Determination of K-Electric Limited dated July 05, 2018 duly notified in the official Gazette vide SRO No. 576(I)/2019 dated May 22, 2019, National Electric Power Regulatory Authority (NEPRA) makes and notifies the following adjustment in the approved tariff on account of variation in fuel charges for the month of **September 2024** in respect of K-Electric Limited:

FCA to be calculated on the basis of billing for the Month of	Rs./kWh	To be Charged in the Billing Month of
September 2024	(0.1758)	December 2024

- 2. The Negative FCA for the month of **September 2024**:
 - a. Shall be applicable to all the consumer categories except lifeline consumers, domestic consumers consuming up-to 300 units, Electric Vehicle Charging Stations (EVCS), Prepaid electricity consumers of all categories who opted for pre-paid tariff and agriculture consumers. It is hereby clarified that negative adjustment on account of monthly FCA is also applicable to the domestic consumers having Time of Use (ToU) meters irrespective of their consumption level.
 - b. Shall be shown separately in the consumers' bills on the basis of units billed to the consumers, in the respective month to which the adjustment pertains.
 - c. KE shall reflect the fuel charges adjustment in respect of September 2024 in the billing month of December 2024.
 - d. While effecting the Fuel Adjustment Charges, KE shall keep in view and strictly comply with the orders of the courts notwithstanding this order.

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(Wasim Anwar Bhinder) Registrar