



Registrar

National Electric Power Regulatory Authority Islamic Republic of Pakistan

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No. NEPRA/R/TRF-362/K-Electric-2016/4542-46

March 30, 2022

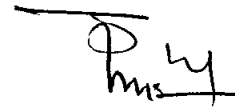
Chief Executive Officer
K-Electric Limited (KEL)
KE House, Punjab Chowrangi,
39 – B, Sunset Boulevard, Phase-II
Defence Housing Authority, Karachi.

Subject: **Decision of the Authority in the matter of Monthly Fuel Charges Adjustments of K-Electric Limited for the month of January 2022 and Notification (S.R.O. 469(I)/2022 dated 30.03.2022) Thereof**

Enclosed please find herewith a copy of decision of the Authority (10 Pages) in the matter of fuel charges adjustment for the month of January 2022 in respect of K-Electric Limited, along with Notification (S.R.O. 469(I)/2022 dated 30.03.2022) thereof. This is for information and further necessary action.

2. While reflecting 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: As above (Decision along Notification is also available on NEPRA's website)


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(Syed Safeer Hussain)

CC:

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

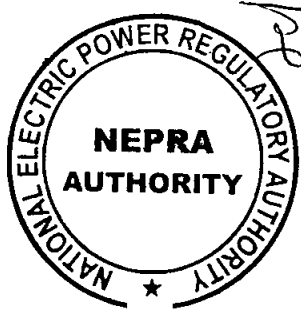
**DECISION OF THE AUTHORITY IN THE MATTER OF MONTHLY FUEL CHARGES
ADJUSTMENTS OF K-ELECTRIC LIMITED FOR THE MONTH OF JANUARY 2022**

1. Pursuant to the provisions of Section 31(7) of the Regulation of Generation, Transmission and Distribution of Electric Power Act 1997, and as per the mechanism for monthly, quarterly and annual adjustments provided in the tariff determination of K-Electric Limited (herein referred to as "K-Electric or KE") dated July 05, 2018, duly notified in the official Gazette vide SRO No. 576(I)/2019 dated May 22, 2019, the Authority has to review and revise the approved tariff on monthly, quarterly and annual adjustments.
2. As per the mechanism provided in the determination, 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.
3. However, the impact of monthly variations in million rupees in K-Electric's own generation's fuel cost component as well power purchase price to the extent of targeted T&D losses, not taken into account in the monthly FCAs, shall be adjusted on quarterly basis.
4. Pursuant to notification of the determined MYT, K-Electric filed its monthly FCA request for January 2022 as under;

Monthly FCA		
Month	Mln Rs.	Rs./kWh
Jan-22	3,727	3.406

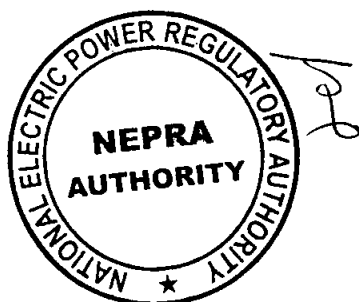
Hearing

5. Since the impact of any adjustments has to be made part of the consumer end tariff, therefore, the Authority, in order to provide an opportunity of hearing to all the concerned and meet the ends of natural justice, decided to conduct a hearing in the matter.
6. The Authority scheduled hearing in the matter of FCAs of K-Electric for the month of January 2022 on 01.03.2022 through ZOOM. Notices in this regard were published in the newspaper on February 22, 2022 and also uploaded on NEPRA's website along-with adjustment requests filed by K-Electric.



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7. Following issues were framed for discussion during the hearing;
- i. Whether the requested Fuel Price Variation is justified?
 - ii. Whether K-Electric has followed the merit order while giving dispatch to its power plants as well as power purchases from external sources?
8. The hearing was attended by CFO K-Electric along-with its financial and technical team. Representatives from Media and General Public also attended the hearing. K-Electric during the hearing submitted that at the time of submission of its FCA request, the Authority's approved Fuel rate of XWDISCOs for the month of January 2022 was not available, thereof, K-Electric used the CPPA-G's requested fuel cost for the month of January 2022. Thus, the amount claimed on account of energy purchased from CPPA-G is subject to adjustment based on the FCA decision of the Authority in the matter of XWDISCOs for January 2022.
9. The Authority noted that the Power purchase agreement was signed between NTDCL and K-Electric on January 26, 2010 for five years for sale/purchase of 650MW on basket rates. Subsequently, a decision was made by the Council of Common Interest (CCI) in its meeting held on November 08, 2012 with respect to the modalities for withdrawal of electric power from NTDCL by the Petitioner, wherein it was decided to reduce the supply of energy by 300MW from NTDCL to K-Electric. However, the aforementioned decision of the CCI has been impugned by way of suits /petitions by K-Electric in the Honorable High Court of Sindh at Karachi. No new agreement has been signed between K-Electric and NTDCL till date, and K-Electric is continuing to draw energy from the National Grid, which at present is around 1100 MW.
10. Mr. Tanvir Bari representing KCCI submitted KE should be penalized for underutilization of plants. The Authority informed Mr. Bari that KE is penalized for the underutilization every month.
11. Mr. Anil Mumtaz submitted that KE should add Net Metering information as part of their request and the Authority directed KE to make this information part of their future requests.
12. Mr. Arif Bilwani submitted that KE has a huge reliance on CPPA-G for energy which makes them dependent on their rate while working out their own FCA for the month. He further inquired whether BQPS-III has an alternate fuel option incase RLNG is not available. KE responded that the backup fuel is diesel in case it is required.



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13. K-Electric, in its adjustment requests, has certified that it despatches as per Economic Merit Order from its own generation units (with the available fuel resources) and import from external sources. It also certified that the cost of fuel and power purchase claims do not include any amount of late payment surcharge/mark-up/interest.

14. K-Electric provided the plant wise generation statistics sheet, signed by K-Electric employees. The plant wise statistic sheets provide information in terms of Plant Capacity, Actual Units Generated, Actual Auxiliary consumption, Net Generation and Bus Bar sent outs, Actual Heat Rates, fuel consumption & cost of Fuel and Generation cost per unit. In addition K-Electric also provided copies of invoices raised by Fuel Suppliers and copies of invoices raised by IPPs.

15. The Authority based on the information, data and record provided by K-Electric, has analyzed the FCA claim of K-Electric and issue wise discussion is given hereunder;

Issue: Whether the requested Fuel price variations are justified?

K-Electric Own Generation

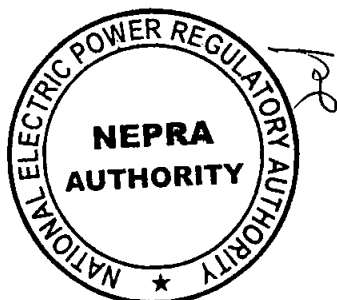
16. In order to verify the generation numbers reported by K-Electric, the Authority analyzed the plant wise generation statistics sheet, provided by K-Electric. The sheet provided information in terms of plant capacity, actual units generated, actual auxiliary consumption, net generation and bus bar sent outs, actual heat rates, fuel consumption & cost of fuel and generation cost per unit. While going through the data / information provided by K-Electric regarding fuel cost of energy from its own power plants, the Authority's observations are as under;

17. K-Electric, as required under the MYT, carried out heat rate test of KCCPP. Pursuant thereto, the Authority, in its decision dated 02.09.2020 decided as under;

"i. For the period from July 2016 to May 2019, the heat rate i.e. 8,250.06 Btu/kWh - net HHV, corresponding to 41.36% efficiency is approved with no further adjustment for degradation and partial loading allowed.

ii. For the period from June 2019 to June 2023, the heat rate i.e. 8,377.032 Btu/kWh - net HHV, corresponding to 40.732% efficiency is approved. This heat rate will be applicable for the control period on flat basis, without any additional adjustment for other parameters.

iii. KE is required to conduct maintenance including Major Overhaul of its plants / units as per prudent utility practices and recommendations of OEM.



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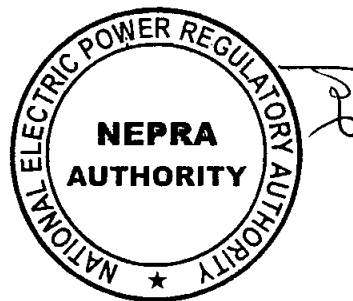
iv. In case of non-requirement of Gas compressors - the relevant capacity and Heat rates would be adjusted. For such a scenario, relevant capacity and heat rates calculated during the present tests would be used."

18. K-Electric, although has filed a motion for leave for review against the Authority's decision dated 02.09.2020, however, the same has not yet been decided by the Authority. Therefore, for the purpose of instant adjustment K-Electric has used the heat rate of 8,377 BTU/kWh, as allowed in the decision dated 02.09.2020.

19. The Authority has also allowed K-Electric to operate its KCCPP on backup fuel i.e. HSD. The Authority vide letter dated 29.06.2021, addressed to K-Electric, approved the provisional cost of generation of KCCPP on HSD at actual up till the summer month of August 2021 or approval of heat rate test result by the Authority, whichever is earlier. In general power generation on costlier fuel needs to be avoided, therefore, power generation through HSD, if any shall be justified by K-Electric.

20. The Authority observed that K-Electric has requested an amount of Rs.37.996 million for operation of KCCPP on HSD during January 2022. The Authority for the purpose of instant adjustment has provisionally considered the same amount i.e. Rs.37.996 million as requested by K-Electric, based on heat rate of 7,950.183 btu/kWh (at 100% as given in Heat Rate report by IE), with same CV of HSD and auxiliaries as reported by KE. Any adjustment, once the Authority approves the heat rate of KCCPP on HSD / Auxiliaries, and on account of CV would be adjusted subsequently along-with cost allowed previously.

21. For KGTPS and SGTPS plants, pursuant to the heat rate tests conducted by K-Electric, the Authority approved the following Heat Rates for these plants vide decisions dated 18.01.2021, against the already allowed Heat Rates of 8,738 for KGTPS and 8,746 for SGTPS in the MYT;



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*Decision of the Authority in the matter of Monthly Fuel Charges Adjustments
of K-Electric for January 2022*

Heat Rate for July 2016 ~ June 2019

Requested by KE:

Plant	Net HHV Heat Rate (Btu/kWh) at RSC	Corresponding Efficiency
KGTPS	9276 ¹	36.78%

1. Average of 7 year Heat Rate (FY 2017-23) corresponding to 50% loading (2 sections in CC mode)

Allowed:

Plant	Net HHV Heat Rate (Btu/kWh) at RSC		Corresponding Efficiency
KGTPS	100% loading	9041.66	37.74%
	75% loading	9092.66	37.527%

Heat Rate for July 2019 ~ June 2023

Requested by KE:

Plant	Net HHV Heat Rate (Btu/kWh) at RSC	Corresponding Efficiency
KGTPS	9276 ¹	36.78%

1. Average of 7 year Heat Rate (FY 2017-23) corresponding to 50% loading (2 sections in CC mode)

Allowed:

Plant	Net HHV Heat Rate (Btu/kWh) at RSC		Corresponding Efficiency
KGTPS	100% loading	9048.22	37.71%
	75% loading	9099.212	37.499%

Heat Rate for July 2016 ~ June 2019

Requested by KE:

Plant	Net HHV Heat Rate (Btu/kWh) at RSC	Corresponding Efficiency
SGTPS	9264 ¹	36.83%

1. Average of 7 year Heat Rate (FY 2017-23) corresponding to 50% loading (2 sections in CC mode)

Allowed:

Plant	Net HHV Heat Rate (Btu/kWh) at RSC		Corresponding Efficiency
SGTPS	100% loading	9045.93	37.72%
	75% loading	9064.794	37.642%

Heat Rate for July 2019 ~ June 2023

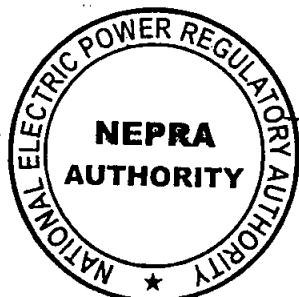
Requested by KE:

Plant	Net HHV Heat Rate (Btu/kWh) at RSC	Corresponding Efficiency
SGTPS	9264 ¹	36.83%

1. Average of 7 year Heat Rate (FY 2017-23) corresponding to 50% loading (2 sections in CC mode)

Allowed:

Plant	Net HHV Heat Rate (Btu/kWh) at RSC		Corresponding Efficiency
SGTPS	100% loading	9077	37.59%
	75% loading	9095.92	37.512%



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22. K-Electric filed review motions against the above decisions for both KGTPS and SGTPS. The Authority vide decision dated 05.11.2021 dismissed the review Motion in the matter of KGTPS. For SGTPS, since the Review Motion has not yet been decided, therefore, heat rates / Auxiliaries as allowed in the MYT determination have been used being on the lower side. Here it is pertinent to mention that in case of any subsequent revision in the heat rates of SGTPS, on the basis of Review motion filed by K-Electric, the impact of the same would be adjusted in the subsequent tariff adjustments of K-Electric.

23. For BQPS-I, K-Electric has also conducted the heat rate test, for which decision of the Authority is under process. Therefore, for the purpose of instant adjustments, heat rates of BQPS-I, as allowed in the MYT determination have been considered.

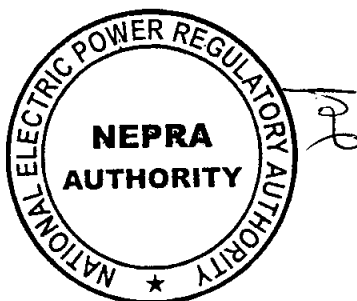
24. Regarding GIDC, K-Electric submitted that installment of GIDC arrears amounting to Rs.762 million per month in being billed by SSGC as per Supreme Court order dated 02.11.2020. However, NEPRA in its FCA decision for the month of June 2021 considering the fact that K-Electric has obtained stay order from the honorable SHC in the matter, decided not to allow any amount on account of GIDC till final decision by the honorable SHC in the matter. K-Electric accordingly stated that GIDC for the month of January 2022 will be claimed as per the final decision of the honorable SHC in the matter.

25. The generation reported by K-Electric in its adjustment requests have been checked from the plant wise generation statistics sheet; the units sent out have been worked out based on the Authority's allowed Auxiliaries. The units sent out so worked out are in agreement with the sent outs claimed by K-Electric in its adjustment requests.

26. KE had claimed RLNG rate of Rs. 2,529.47 /MMBTU for its own power plants, whereas the Authority verified Rs.2,192.32 /MMBTU from the RLNG Bills provided by KE. KE during the hearing requested that SSGC has raised bill adjustment, as rate for January 2022 was not available with SSGC at the time of initial billing. KE further provided OGRA notification for RLNG for January 2022. Based on initial SSGC bill & SSGC bill adjustment the Authority has considered Rs.2529.47/MMBTU as notified by OGRA.

Power Purchase Price- Fuel Cost

27. While going through the data / information provided by K-Electric regarding fuel cost of energy purchased from external sources, the Authority's observations are as under;



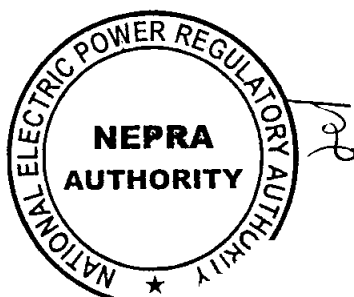
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28. The Authority observed that K-Electric has been asked to provide CV test reports for both Tapal and Gul Ahmed for each month from their fuel suppliers, third party and also from their own labs. KE has submitted certain reports in this regard which are under review and adjustment if any will be considered in the subsequent months. In view thereof, for the purpose of FCA for January 2022, the highest CVs reported by both Tapal and Gul Ahmed, as per the submitted test reports for January 2022, have been considered for the entire fuel consumed during the month to work out their fuel costs for January 2022. This has resulted in provisional negative adjustment of Rs.8.99 million and Rs.1.69 million for Tapal and Gul Ahmed respectively.

29. Regarding cost of energy purchased from CPPA-G during the month of January 2022, K-Electric has used the rate of Rs.12.6184/kWh, however, the Authority's approved Fuel cost component in the matter of XWDISCOs for the month of January 2022 is Rs.12.4614/kWh. In view thereof, while working out the instant FCA of K-Electric, rate approved by the Authority for XWDISCOs for January 2022 has been incorporated for the energy purchased by K-Electric from CPPA-G during January 2022. This has resulted in decrease in total fuel cost by around Rs.109 million.

30. The Authority vide decision dated 04.06.2021, based on the Heat Rate tests conducted for SNPC and SNPC-II, revised their net capacities and Heat Rates. The Authority revised the net capacity and Heat Rate of SNPC-I as 51.154 MW and 8194.25 Btu/kWh - net HHV equivalent to 41.90% efficiency. Similarly, net capacity and Heat Rate of SNPC-II have been revised as 51.526 MW and 8143.699 Btu/kWh - net HHV equivalent to 41.64% efficiency. The Authority afterwards vide decision dated 21.09.2021, granted interim relief to SNPC and SNPC-II, in relevant tariff components i.e. Fuel Cost components and Capacity charge components of generation tariff, on account of revision in heat rates and net capacities. As per the decision dated 21.09.2021, FCC of both SNPC and SNPC-II have been revised as Rs.4.0971/kWh and Rs.4.0718/kWh respectively, based on the revised heat rates and reference gas price of Rs.500/MMBTU.

31. Here it is also pertinent to mention that the Authority determines the FCC of SNPC and SNPC-II, as & when required, owing to change in gas prices. However, no revised FCC has yet been determined by the Authority based on revised heat rates with latest gas price of Rs.857/MMBTU. The Authority approved FCCs of Rs.6.6994/kWh vide decision dated 20.11.2020, both for SNPC and SNPC-II, based on gas price of Rs.857/MMBTU but with old heat rates i.e. heat rates prior to heat rate tests. Accordingly, for working out the FCA of January 2022, the Authority has used FCC of Rs.6.6994/kWh for both SNPC and SNPC-II, as



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approved vide decision dated 20.11.2020. Any adjustment in this regard would be made subsequently, once the Authority approves the revised FCC of both SNPC and SNPC-II based on revised heat rates and revised gas prices.

32. Here it is pertinent to mention that the impact of monthly FCA not passed on to the consumers would be accounted for in the quarterly adjustments.

Issue: Whether K-electric has followed the merit order while giving dispatch to its power plants as well as power purchases from external sources?

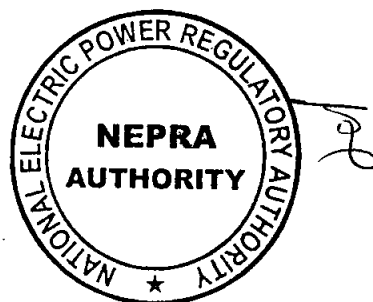
33. The Authority, during the hearing observed that prima facie, certain efficient power plants were not fully utilized and instead energy from inefficient sources was generated. The Authority observed that both KGTPS and SGTPS were not operated by K-Electric to their full capacities, and also less energy was drawn from NTDC during certain hours, without reducing generation from expensive plants connected to its network. Similarly KCCPP was also operated on HSD.

34. The Authority carried out an in-house analysis of the data provided by K-Electric for the month of January 2022, to work out the financial impact due to deviation from EMO. The instances and events were shared with K-Electric for provision of clarification/ justifications, and K-Electric was asked for the reasons in this regard.

35. During the analysis, the main reason for EMO violation was observed to be “Less Drawl from NTDC/Simultaneous Operation of Expensive Plants”. It was observed that KE had operated its Units of BQPS-I at a minimum loading limit of 110 MW, however, during the recent visit of BQPS-I by M&E professionals, it was observed that the Units of the plant could operate at a minimum load of 90 MW. Moreover, M&E is in communication with the Plant’s OEM and preparing a report on the minimum loading limit of KE’s plants, wherein, the issue of merit order violation due to technical limits of KE’s plants has been discussed elaborately. Accordingly, the financial impact due to the EMO violation events w.r.t to lesser drawl from NTDC and out of merit generation of power plants, for which KE has been directed to submit details along with supporting document, amounts to Rs.21 million.

36. Regarding the financial impact due to underutilization of efficient plants on account of lower gas pressure, a letter was issued to KE on September 16, 2021, whereby, it was directed to resolve its gas pressure/lower gas quantity issues within thirty (30) days.

37. In response, KE has informed that it is in the process of resolving the lower gas pressure issue, however, there are certain meetings with stakeholders that will take place in due course of time. Subsequently, K-Electric has shared details of communication with SSGC and Ministry of



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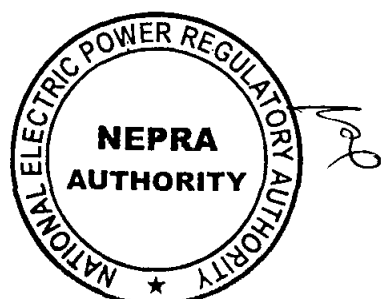
Energy (Petroleum Division) regarding the finalization of GSA. However, during the FCA meeting, K-Electric’s representatives submitted that the draft GSA between KE and SSGC does not guarantee the Gas Pressure or Quantity and the Gas/RLNG will be available with KE on “As and When” available basis even after the GSA is signed.

38. In view of the above, it is recommended that Rs.21 million may be deducted from the FCA claim of KE for the month of January 2022. With regards to the financial impact due to Gas Pressure/Quantity Shortage at KE’s plants, the case was presented before the Authority vide the pre-hearing briefing, however, no clear instructions have been given by the Authority regarding deduction of the same or otherwise, therefore, the same may be confirmed from the Authority. In case any changes are required to the current financial impact due to out of merit generation by KE, the same will be communicated to Tariff Department at the time of subsequent FCAs.

39. Regarding other technical issues, *inter alia*, System Operating Procedures, Generation capacity kept on standby mode by K-Electric and heat rates & auxiliaries etc., the Authority has decided that these issues would be dealt separately.

40. In view of the aforementioned discussion and after incorporating the above adjustments, the Authority has decided to allow the following Positive FCA for the month of January 2022, to be passed on to the consumers in their monthly bills of April 2022;

Description		Unit	Reference	Revised
			Dec-21	Jan-22
Fuel Cost	Own Generation	Rs. Mln	5,675	5,642
	External Purchases	Rs. Mln	8,455	11,154
	Deviation from EMO		(9)	(21)
	Total	Rs. Mln	14,121	16,775
Total Units	Own Generation	GWh	301	241
	External Purchases	GWh	871	853
	Total	GWh	1,171	1,094
Fuel Cost Component (FCC)	Own Generation	Rs./kWh	4.8451	5.1569
	External Purchases	Rs./kWh	7.2184	10.1960
	Deviation from EMO	Rs./kWh	(0.0078)	(0.0192)
	Total	Rs./kWh	12.0557	15.3337
Fuel Charges Adjustment (FCA)	Own Generation	Rs./kWh		0.3118
	External Purchases	Rs./kWh		2.9776
	Deviation from EMO	Rs./kWh		(0.0114)
	Total	Rs./kWh		3.2780
Variation in Fuel Cost	Total	Rs. Mln		3,586



Water

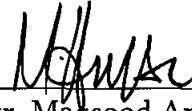
41. In the light of above, the Authority hereby directs K-Electric that the Positive FCA of January 2022 as worked out above;

- a. Shall be applicable to all the consumer categories except lifeline consumers.
- 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. K-Electric shall reflect the fuel charges adjustment in respect of January 2022, in the billing month of April 2022.
- d. While effecting the Fuel Adjustment Charges, K-Electric shall keep in view and strictly comply with the orders of the courts notwithstanding this order.

AUTHORITY



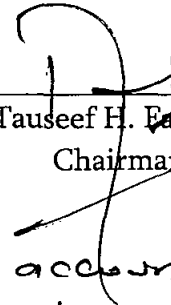
Rehmatullah Baloch
Member



Engr. Maqsood Anwar Khan
Member



Rafique Ahmed Shaikh
Member



Tauseef H. Farooqi
Chairman

⊙ Consumers should not suffer on account of fuel (Gas) supply issues because of disputes between power producer and fuel supplier.



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To Be Published in
Official Gazette of Pakistan Part-II

National Electric Power Regulatory Authority



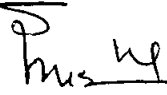
NOTIFICATION

Islamabad, the 30th day of March 2022

S.R.O. 469 (I)/2022.- Pursuant to Section 31(7) of the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997 as amended through Regulation of Generation, Transmission and Distribution of Electric Power (Amendment) Act 2011 and as per the mechanism for monthly, quarterly and annual adjustments provided in the Tariff Determination of K-Electric Ltd. 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 January 2022 in respect of K-Electric Limited:

FCA to be calculated on the basis of billing for the Month of	Rs./kWh	Charged in Consumer Bills to be issued in the Month of
January 2022	3.2780	April 2022

2. The positive FCA of January 2022:
- Shall be applicable to all the consumer categories except lifeline consumers.
 - 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.
 - K-Electric shall reflect the fuel charges adjustment in respect of January 2022 in the billing month of April 2022.
4. While effecting the Fuel Adjustment Charges, K-Electric Ltd. shall keep in view and strictly comply with the orders of the courts notwithstanding this order.


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(Syed Safeer Hussain)
Registrar