



Registrar

# National Electric Power Regulatory Authority

## Islamic Republic of Pakistan

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No. NEPRA/SA(M&E)/LAD-01/ 9375

June 23, 2025

Chief Executive Officer  
K-Electric Limited (KE),  
House No. 39-B, Sunset Boulevard,  
Phase-II, Defense Housing Authority  
Karachi

**Subject: - SHOW CAUSE NOTICE TO K-ELECTRIC UNDER REGULATION (8) AND (9) OF THE NEPRA (FINES) REGULATIONS, 2021 ON ACCOUNT OF NON-COMPLIANCE OF AUTHORITY DIRECTIVES..**

**WHEREAS**, the National Electric Power Regulatory Authority (hereinafter referred to as the "Authority") established under Section 3 of the Regulation of Generation, Transmission, and Distribution of Electric Power Act, 1997 (hereinafter referred to as "the NEPRA Act") is mandated to regulate the provisions of electric power services in Pakistan; and

2. **WHEREAS**, pursuant to Section 21 of the NEPRA Act, the Authority has granted a Distribution License (No. DL/09/2024, dated 19/05/2024) to K-Electric Limited (hereinafter referred to as "K-Electric" or "Licensee") for providing Distribution Services in its Service Territory as stipulated in its said Distribution License; and

3. **WHEREAS**, the Authority in terms of section 23E of the NEPRA Act, the Authority has also granted an Electric Power Supply Licence No. SOLR/09/2024 dated 19.01.2024 to KE for the purpose of supplying electric power to the consumers in its service territory specified in the said licence; and

4. **WHEREAS**, as per Article 02 of the Electric Power Supply Licence, the Licensee is bound to follow the Applicable Law which constitutes the NEPRA Act and applicable documents meaning thereby, the Licensee has to follow the NEPRA Act, rules & regulations made thereunder, terms and conditions of its Licence(s), registration, authorization, determination, any codes, manuals, directions, guidelines, orders, notifications, agreements and documents issued or approved under the Act; and

5. **WHEREAS**, as per Article 09 of the Electric Power Supply Licence, the Licensee is obligated to supply electric power on a nondiscriminatory basis to all the consumers who meet the Consumer Eligibility Criteria and in accordance with the Act and relevant provisions of the Applicable Documents in a prudent and efficient manner; and

6. **WHEREAS**, Rule 4(f) of NEPRA Performance Standards (Distribution) Rules, 2005, states below:

- (i) A distribution company shall have plans and schedules available to shed up to 30% of its connected load at any time upon instruction from NTDC. This 30% load must be made up from separate blocks of switchable load, which can be disconnected in turn at the instruction from NTDC. A distribution company shall provide copies of these plans to NTDC.
- (ii) Wherever possible NTDC shall give distribution companies advance warning of impending need for load shedding to maintain system voltage and/or frequency in accordance with the Grid Code.

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- (iii) As per the provisions of the Grid Code, NTDC shall maintain an overview and as required instruct each distribution company the quantum of load to be disconnected and the time of such disconnection. This instruction shall be given in clear, unambiguous terms and related to prepared plans.
- (iv) When instructed by NTDC, the distribution companies shall shed the load in the following order, namely: —
- (a) Supply to consumers in rural areas; and residential consumers in urban areas where separate feeders exist.
  - (b) Supply to consumers, other than industrial, in urban areas.
  - (c) Supply to agriculture consumers where there is a dedicated power supply.
  - (d) Supply to industrial consumers.
  - (e) Supply to schools and hospitals.
  - (f) Supply to defense and strategic installations.
- (v) A distribution company shall prepare schedules of load disconnection, which demonstrate this priority order and which rotate load disconnections within the above groups in a non-discriminatory manner. The principle of proportionality shall be kept in mind so as not to excessively burden a particular consumer class. The Authority issued an Explanation to the Licensee under Regulation 4(1) and 4(2) of NEPRA (Fine) Regulation, 2021 on January 08, 2025, on account of non-compliance of Authority's orders.

7. **WHEREAS**, the Authority issued an Explanation to the Licensee under Regulation 4(1) and 4(2) of NEPRA (Fine) Regulation, 2021 on January 08, 2025, on account of non-compliance of Authority's orders.

7. **WHEREAS**, *contrary to above, the Licensee is carrying out AT&C based load shedding which is in violation of NEPRA Act & Performance Standards (Distribution) Rules 2005. In this regard, a feeder containing commercial losses (theft of electricity and non-payment of dues by some consumers) is completely switched off for some hours in a day despite of the fact that some consumers on the same feeders are regular paying consumers. This establishes that compliant consumers are unnecessarily being punished due to some defaulters. The Authority had taken notice of such situation and initiated & concluded the proceedings by imposing a penalty of Rs. 50 Million upon the Licensee; and*
8. **WHEREAS**, *the Authority is continuously emphasizing that the Licensee should carry out load shedding at Pole Mounted Transformer (PMT) level whenever it would be necessary, meaning thereby, the licensee can only carry out load shed upon instruction of system operator in case of generation shortage or transmission constraints; and*
9. **WHEREAS**, *meanwhile the Licensee started a project of installation of AMI/AMR meters at distribution transformer level with a cost of Rs. 600 Million. The primary purpose of this project is to identify specific energy loss at transformer level in terms of theft and non-payment along with other commercial benefits. Secondly, the Licensee itself stated that it could remotely connect & disconnect the supply at transformer level through the AMI/AMR meters. The project was completed in Dec 2021 and test run was performed up to June, 2022; and*
10. **WHEREAS**, *the Authority had gone through the record, reports, and submissions of the Licensee regarding the project of installation of AMI/AMR meters at each PMT. The Authority further observed that the Licensee is achieving all commercial benefits through the said project, however, it is not ready to give relief to the people of Karachi by carrying out load shedding at PMT level if necessary, in light of applicable documents; and*

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11. **WHEREAS,** moreover, it is on record that during public hearings in the matter of monthly Fuel Cost Adjustment (FCA), the people of Karachi largely complained about the excessive load shedding; and
12. **WHEREAS,** therefore, the Authority vide its letter # 15280 dated 16.08.2022 directed the Licensee to start load shedding at PMT level instead of feeder level through remote disconnection/ reconnection of power supply in light of applicable laws if necessary to conduct; and
13. **WHEREAS,** in response, the Licensee vide its letter dated 06.09.2022 repeated its earlier stance and mentioned the same challenges and technical limitations. The Licensee further submitted that it has started a pilot project of remote disconnection at DT level by designing and developing an external control circuit with motorized breaker. 72 DTs have been installed with such type of devices; however, challenges are still being faced through vandalizing and theft by area dwellers and manual interference. The Licensee also submitted that it is continuously making efforts to enable remote disconnection/reconnection at DT level for which it has invested both its efforts and capital; and
14. **WHEREAS,** the Authority considered the submissions of the Licensee and held meetings with the Licensee. The Authority while considering the submissions of the Licensee observed that the Licensee has repeated its earlier stance and no new point/ground has been provided. Neither the Licensee has implemented the Authority's direction to remotely disconnect the power supply at PMT level whenever it would be necessary in light of applicable law, nor it has submitted any justified reason for non-compliance of the Authority's directions. Therefore, the Authority vide its letter dated 08.08.2023 granted a final opportunity to the Licensee to comply with the Authority's directions and start load shedding at PMT level instead of feeder level if necessary through remote disconnection/reconnection of power supply with the help of AMI/AMR meters installed by the Licensee at each PMT in its service territory; and
15. **WHEREAS,** in response the Licensee vide its letter dated 18.08.2023 submitted that it is exploring possible options to implement the directions of the Authority. The Licensee further requested the Authority to extend the timeline for submission of its response by October 31, 2023. The Authority acceded to the request of the Licensee and granted extension till Sep 30, 2023 and the same was communicated to the Licensee vide NEPRA letter dated 14.09.2023; and
16. **WHEREAS,** the Licensee vide its letter dated 27.09.2023 submitted its response and took stance that it is engaged with the vendors and meter manufacturers and exploring ways of enabling load shed at DT level. The Licensee further submitted that it has planned to initiate another pilot project with some technical/administrative changes based on the lessons learnt from prior experience; and
17. **WHEREAS,** the Authority considered the submissions of the Licensee and observed that the Licensee has submitted generic statements rather concrete plan despite repeated correspondence and clear directions by NEPRA since last one year. Additionally, the Licensee has not shared specific timelines for pilot project which it intends to initiate in medium loss areas. Therefore, the Authority vide its letter dated 03.11.2023 directed the Licensee to submit complete feasibility report along with roll out plan regarding execution of PMT level load shedding whenever it would be necessary in light of applicable law, failing which, legal proceedings shall be initiated against the Licensee under relevant NEPRA Laws; and
18. **WHEREAS,** in response the Licensee vide its letter dated Nov 21, 2023 submitted the details of another pilot project. Initially the Licensee selected 10 medium loss feeders out of total 185 and committed to execute the same by May 2024 including performance evaluation during summer season. The Licensee further submitted that based upon the results of this pilot, it will execute the remaining 175 feeders by March, 2026; and

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19. **WHEREAS,** the Authority vide its letter dated 26.01.2024 again directed the Licensee to take immediate measures to implement NEPRA's directives within a three-month timeframe. Failure to comply, will result in the initiation of appropriate legal proceedings against the Licensee in accordance with applicable laws; and
20. **WHEREAS,** in response the Licensee vide its letter dated Nov 21, 2023 submitted the details of another pilot project. Initially the Licensee selected 10 medium loss feeders out of total 185 and committed to execute the same by May 2024 including performance evaluation during summer season. The Licensee further submitted that based upon the results of this pilot, it will execute the remaining 175 feeders by March, 2026; and
21. **WHEREAS,** the Authority vide its letter dated 26.01.2024 again directed the Licensee to take immediate measures to implement NEPRA's directives within a three-month timeframe. Failure to comply, will result in the initiation of appropriate legal proceedings against the Licensee in accordance with applicable laws; and
22. **WHEREAS,** in response the Licensee vide its letter dated 15.02.2024 submitted that currently the pilot project is in the monitoring phase for a period of six (06) months, which shall be completed by May, 2024. The Licensee further submitted that after completion of this monitoring phase, it shall share the detailed observations and results with the Authority along with a firm roll out plan for the remaining medium loss feeders. The licensee also requested the Authority to allow conduct field trail and close monitoring of the pilot project till May, 2024 to enable KE to formulate a concrete and sustainable roll-out plan including the required investment: and implementation, it faced multifaceted challenges such as bypassing of DC/RC devices, resistance from area residents, theft of earthing particularly in the areas of Malir and Orangi-II. The Licensee further submitted that certain trends in adjacent transformers which corresponds to shifting of hook connection from high loss PMT to low loss PMT on the same feeders. The Licensee also submitted that the results of 48 DTs have so far been inconclusive and KE feels that operational performance of such devices is evaluated in peak summer season. Therefore, it is requested to extend the pilot phase till Sep, 2024; and
23. **WHEREAS,** the Authority vide its letter dated 02.04.2024 while considering the request of the Licensee directed that a firm roll out plan be submitted not latter than 15<sup>th</sup> June, 2024 along with observations and results of pilot project; and
24. **WHEREAS,** in response the Licensee vide its letter dated 20.06.2024 submitted that during the pilot implementation, it faced multifaceted challenges such as bypassing of DC/RC devices, resistance from area residents, theft of earthing particularly in the area of Malir and Orangi-ii. The Licensee further submitted that certain trends in adjacent transformers which corresponds to shifting of hook connection from high loss PMT to low loss PMT on the same feeders. The licensee also submitted that the results of 48 DTs have so far been inconclusive and KE feels that operational performance of such devices is evaluated in peak summer season. Therefore, it is requested to extend the pilot phase till sep, 2024; and
25. **WHEREAS,** in order to get a final take of the Licensee a meeting was conducted with the Licensee's team on Nov 26, 2024. During meeting, the Licensee repeated its earlier stance and emphasized that overall AT&C loss has been increased by 2.9% and subsequent loss of Rs. 106 Million has been occurred within the period of 09 months. The submissions of KE were considered and observed that the policy and design with respect to pilot project is flawed. Selection of areas & subsequent feeders and installation of DC/RC devices only on high loss PMTs seems not appropriate. Further, continuation of 06 hours load shedding even after the reduction of losses from 30% to 9% is the major cause of failure to achieve the desired results. It is reiterated that the Licensee can only carry out load shed upon instruction of system operator in case of generation shortage and transmission constraints as provided in applicable documents; and

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26. **WHEREAS**, the Authority concludes with a serious note of non-compliance of its directives contained in the letters dated 16.08.2022, 08.08.2023, 03.11.2023, 26.01.2024, and 02.04.2024 by the Licensee which has led to undue suffering of good paying consumers and faced discriminatory behavior in terms of receiving electric power supply which their basic right; and

8. **WHEREAS**, the Licensee submitted its response vide its letter dated January 27, 2025, against the Explanation served, the Authority after detailed deliberations concluded that the Licensee has failed to provide any satisfactory reply to the Explanation served to it and an order dated **23.06.2025** is attached herewith, mentioning the reason of rejection; and.

9. **WHEREAS**, the Licensee submitted its response vide its letter dated November 05, 2024, against the Explanation served, the Authority after detailed deliberations concluded that the Licensee has failed to provide any satisfactory reply to the Explanation served to it and an order dated is attached herewith, mentioning the reason of rejection; and

10. **NOW, THEREFORE**, in view of the above, the Licensee is hereby served with a Show Cause Notice and directed to submit reply within fifteen (15) days of receipt of this Show Cause Notice as to why not a penalty up to maximum of Rs. 200,000,000/- (Two hundred Million) plus a further penalty up to Rs.100,000/- for each day of default should be imposed upon you.

Enclosure: As Above

  
(Wasim Anwar Bhinder)  
Registrar



# National Electric Power Regulatory Authority

## ORDER

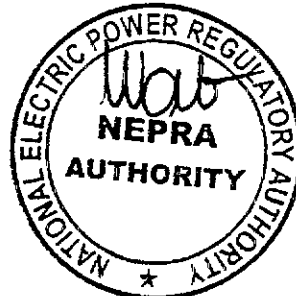
### IN THE MATTER OF EXPLANATION ISSUED TO K-ELECTRIC UNDER NEPRA FINE REGULATION 4 (1) AND 4 (2) ON ACCOUNT OF NON-COMPLIANCE WITH THE DIRECTION OF THE AUTHORITY

1. Karachi Electric Company Limited (KE) (the "Licensee") was granted a Distribution License (No. DL/09/2024) by the National Electric Power Regulatory Authority (the "Authority") on May 19, 2024, for providing Distribution Services in its Service Territory as stipulated in its Distribution License, pursuant to section 20 and 21 of the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997 ("NEPRA Act").

#### Background:

2. According to the Rule 4(f) of NEPRA Performance Standards (Distribution) Rules, 2005, states below:
  - (i) A distribution company shall have plans and schedules available to shed up to 30% of its connected load at any time upon instruction from NTDC. This 30% load must be made up from separate blocks of switchable load, which can be disconnected in turn at the instruction from NTDC. A distribution company shall provide copies of these plans to NTDC.
  - (ii) Wherever possible NTDC shall give distribution companies advance warning of impending need for load shedding to maintain system voltage and/or frequency in accordance with the Grid Code.
  - (iii) As per the provisions of the Grid Code, NTDC shall maintain an overview and as required instruct each distribution company the quantum of load to be disconnected and the time of such disconnection. This instruction shall be given in clear, unambiguous terms and related to prepared plans.
  - (iv) When instructed by NTDC, the distribution companies shall shed the load in the following order, namely: —
    - (a) Supply to consumers in rural areas; and residential consumers in urban areas where separate feeders exist.
    - (b) Supply to consumers, other than industrial, in urban areas.
    - (c) Supply to agriculture consumers where there is a dedicated power supply.
    - (d) Supply to industrial consumers.

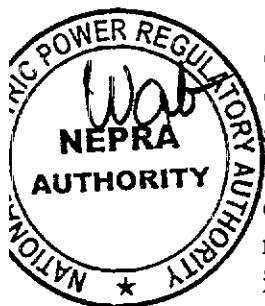
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- (e) Supply to schools and hospitals.
- (f) Supply to defense and strategic installations.
- (v) A distribution company shall prepare schedules of load disconnection, which demonstrate this priority order and which rotate load disconnections within the above groups in a non-discriminatory manner. The principle of proportionality shall be kept in mind so as not to excessively burden a particular consumer class.

Contrary to above, the Licensee is carrying out AT&C based load shedding which is in violation of NEPRA Act & Performance Standards (Distribution) Rules 2005. In this regard, a feeder containing commercial losses (theft of electricity and non-payment of dues by some consumers) is completely switched off for hours in a day despite of the fact that some consumers on the same feeders are regular paying consumers. This establishes that compliant consumers are unnecessarily being punished due to some defaulters. The Authority had taken notice of such situation and initiated & concluded the proceedings by imposing a penalty of Rs. 50 Million upon Licensee.

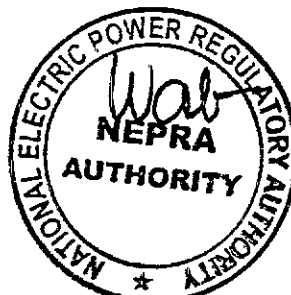
3. In addition to the above, the Authority continues to emphasize that the Licensee shall carry out load shedding strictly at the Pole Mounted Transformer (PMT) level, and only when deemed necessary. This means that Licensee is permitted to implement load shedding solely upon the instruction of the System Operator, and only in the event of generation shortages or transmission constraints. In this regard, the Licensee undertook a project for the installation of AMI/AMR meters at the distribution transformer level, at a cost of Rs. 600 million. The primary objective of this project, as acknowledged by the Licensee, is to enable identification of specific energy losses at the transformer level arising from theft and non-payment, in addition to realizing other commercial benefits. Furthermore, Licensee has claimed that the AMI/AMR meters provide the capability to remotely connect and disconnect the electricity supply at the transformer level. The project was completed in December 2021, and a test run was conducted up to June 2022.
4. The Authority thoroughly examined the records, reports, and submissions provided by Licensee concerning the project for installation of AMI/AMR meters at each PMT. The Authority noted that while Licensee is deriving all intended commercial benefits from the said project, it has not extended corresponding relief to the residents of Karachi by implementing load shedding at the PMT level—an operational feature integral to the scope of the project. Furthermore, it is a matter of record that during public hearings conducted in the context of monthly Fuel Cost Adjustment (FCA), a significant number of complaints were received from the citizens of Karachi regarding excessive load shedding. Taking cognizance of these concerns, the Authority, through its letter dated 16.08.2022, directed the Licensee to implement load shedding at the PMT level instead of the feeder level. This directive included the use of remote disconnection and reconnection capabilities, in accordance with applicable laws, where such load shedding is deemed necessary.
5. In response, the Licensee, vide its letter dated 06.09.2022 reiterated its previously stated position and cited the same challenges and technical limitations. The Licensee further



submitted that it had initiated a pilot project for remote disconnection at the Distribution Transformer (DT) level by designing and developing an external control circuit equipped with a motorized breaker. The Authority noted that, as per the Licensee submission, 72 DTs were installed with such devices; however, the project encountered setbacks due to vandalism, theft by area residents, and manual interference. Licensee also stated that it is continuing its efforts to operationalize remote disconnection and reconnection at the DT level, for which it has committed both financial and technical resources.

6. The Authority considered the submissions made by the Licensee and observed that the Licensee has merely reiterated its earlier stance without presenting any new grounds or substantive justification. It is further noted that Licensee has neither implemented the Authority's directive to remotely disconnect power supply at the PMT level when necessary in accordance with applicable law, nor has it provided any valid reason for its non-compliance. In view of the foregoing, the Authority, vide its letter dated 08.08.2023 granted a final opportunity to Licensee to comply with its directions and commence load shedding at the PMT level instead of the feeder level, wherever necessary. The Authority also made it explicitly clear that failure to do so would result in the initiation of appropriate legal proceedings.
7. In response, the Licensee, vide its letter dated 18.08.2023 submitted that it is in the process of exploring viable options to implement the Authority's directions. The Licensee further requested an extension of the timeline for submission of its detailed response until October 31, 2023. The Authority, while considering the Licensee request, granted an extension until September 30, 2023, and the same was communicated to the Licensee through NEPRA letter dated 14.09.2023. Subsequently, Licensee, vide its letter dated 27.09.2023, submitted its response wherein it stated that it is engaged with vendors and meter manufacturers and is actively exploring mechanisms to enable load shedding at the Distribution Transformer (DT) level. The Licensee further submitted that, based on insights gained from its previous efforts, it intends to initiate a new pilot project incorporating certain technical and administrative modifications.
8. The Authority considered the submissions made by the Licensee and observed that, despite repeated correspondence and explicit directions issued by NEPRA over the past year, Licensee has continued to provide generic statements rather than a concrete, actionable plan. Furthermore, the Licensee has failed to provide specific timelines for the pilot project it proposes to initiate in medium loss areas. In view of the above, the Authority, vide its letter dated 03.11.2023 directed Licensee to submit a comprehensive feasibility report along with a detailed rollout plan for the execution of PMT-level load shedding, as and when necessary, in accordance with applicable laws. The Authority further conveyed that failure to comply with this directive would result in the initiation of legal proceedings against Licensee under the relevant NEPRA laws.
9. In response, the Licensee, vide its letter dated 21.11.2023 submitted details of a new pilot project. As per the Licensee submission, it has initially selected 10 medium loss feeders out of a total of 185, with a commitment to execute the pilot by May 2024, including performance evaluation during the summer season. The Licensee further submitted that,

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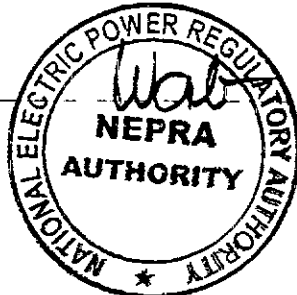




based on the outcomes of this pilot, it plans to implement the remaining 175 feeders in a phased manner, with full execution targeted by March 2026.

10. The Authority, vide its letter dated 26.01.2024, once again directed Licensee to take immediate measures to implement NEPRA directives within a stipulated timeframe of three months. The Authority emphasized that failure to comply would compel it to initiate appropriate legal proceedings against the Licensee in accordance with applicable laws. In response, the Licensee, vide its letter dated 15.02.2024, submitted that the pilot project is currently in the monitoring phase, which is scheduled to last six (06) months and is expected to conclude by May 2024. The Licensee further submitted that upon completion of the monitoring phase, it will provide the Authority with detailed observations and results, along with a definitive rollout plan for the remaining medium loss feeders. The Licensee also requested that the Authority to allow the continuation of the field trial and close monitoring of the pilot project until May 2024 to enable Licensee to develop a concrete and sustainable rollout plan, including the necessary investments.
11. Keeping in view the submissions of the Licensee, the Authority, vide its letter dated 02.04.2024, while considering Licensee request, directed that a firm rollout plan, along with observations and results of the pilot project, be submitted no later than 15th June 2024. In response, the Licensee, vide its letter dated 20.06.2024, reported that during the pilot implementation, it encountered multifaceted challenges including bypassing of DC/RC devices, resistance from area residents, and theft of earthing, particularly in the Malir and Orangi-II areas. The Licensee further submitted that certain trends were observed in adjacent transformers indicating the shifting of hook connections from high-loss PMTs to low-loss PMTs within the same feeders. The Licensee also stated that results from 48 Distribution Transformers (DTs) remain inconclusive to date, and emphasized that the operational performance of such devices is best evaluated during the peak summer season. Consequently, Licensee requested an extension of the pilot phase until September 2024.
12. In order to obtain a final position from the Licensee, a meeting was conducted with the Licensee team on November 26, 2024. During the meeting, the Licensee reiterated its previous stance and highlighted that the overall AT&C losses has increased by 2.9%, resulting in a subsequent financial loss of Rs. 106 million over a period of nine months. The Authority considered the Licensee submissions and observed that the policy and design framework of the pilot project is fundamentally flawed. The selection of areas and feeders, along with the installation of DC/RC devices solely on high-loss PMTs, was deemed inappropriate. Additionally, the continuation of six hours of load shedding, despite a reduction in losses from 30% to 9%, was identified as a primary factor contributing to the failure in achieving the desired outcome.
13. The Authority, after detailed deliberation, concluded with grave concern over the Licensee persistent non-compliance with its directives as outlined in the letters dated 16.08.2022, 08.08.2023, 03.11.2023, 26.01.2024, and 02.04.2024. This non-compliance has resulted in undue hardship to good-paying consumers, who have been subjected to discriminatory treatment regarding access to electric power supply—a fundamental right.

*[Handwritten signature]*



Accordingly, the Authority directed the initiation of legal proceedings against the Licensee for failure to adhere to its directives.

**Explanation:**

14. In view thereof, an Explanation was served to the Licensee on January 08, 2025 under Regulation 4(1) and 4(2) of NEPRA (Fine) Regulation, 2021, on account of violation of Performance Standards, Distribution Code, Power Safety Code, and other applicable documents.
15. In response, KE vide letter dated 27.01.2025 replied to explanation, wherein, it has pledged as under;

**A. Preliminary Objection to the Maintainability**

*It is pertinent to submit that Rule 4(1) of the NEPRA (Fines) Regulations 2021 ('Fines Regulations') specifies that the Honorable NEPRA Authority shall within fifteen (15) days of discovering any breach or contravention of the NEPRA Act of 1997 ('the NEPRA Act'), or its accompanying rules and regulations, may request an explanation. However, in the present circumstances, explanation has been sought on January 08, 2025, vide the Said Letter i.e., after the expiry of 15 days limitation period. Therefore, it is most respectfully submitted that the Said Letter has been issued after the expiry of 15-day period as provided in the Fines Regulations, and hence not maintainable at law*

**B. KE's Response to the said letter**

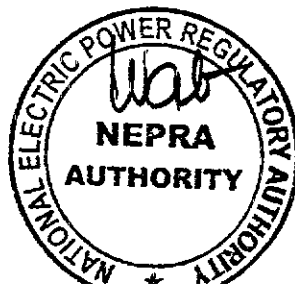
*KE is submitting this response in addition to the contents of earlier letters reference No.*

*KE/RA&GR/NEPRA/2022/617 dated 6 September 2022,  
KE/RA&GR/NEPRA/2023/526 dated 18 August 2023,  
KE/RA&GR/NEPRA/2023/606 dated 27 September 2023,  
KE/RA&GR/NEPRA/2023/77 dated 21 November 2023,  
KE/RA&GR/NEPRA/2024/168 dated 15 February 2024 and  
KE/RA&GR/NEPRA/2024/541 dated 20 June 2024*

- KE submitted as preliminary findings highlighting technical and operational challenges encountered, including design limitations and instances of vandalism and theft of DC/RC switches installed on PMTs.*
- Further, KE highlighted that certain trends were observed in adjacent transformers which suggested shifting of hook connection (kunda) from high loss PMTs (where DC/RC panels are installed) to low loss PMTs of the same feeder, thus resulting in adverse impact on AT&C losses at the feeder level.*

*Notwithstanding our preliminary objections and above submissions, KE humbly denies the allegations levied in the Said Letter and submits as para-wise response to the Said Letter, as under:*

*2. ✓*



i. Regarding a fine of PKR 50 Million imposed upon KE by the Honorable NEPRA Authority in para 7 of the Said Letter, it is humbly pointed out that the said fine was imposed by the Honorable NEPRA Authority vide Order dated April 03, 2024 and KE has impugned the said Order before the NEPRA Appellate Tribunal through Appeal No. 136/NT/2024. In this respect, it is humbly submitted that the NEPRA Appellate Tribunal was pleased to suspend the execution of the Order dated April 03, 2024 subject to submission of post-dated cheque with the office of the Registrar, NEPRA within 30 days of the passing of the Order. KE, in compliance of the ad-interim Order passed by the NEPRA Appellate Tribunal, duly submitted a post-dated cheque of PKR 50 Million.

To further address the analysis/findings shared by the Honorable NEPRA Authority in the Said Letter, it is submitted as follows for consideration of the Honorable NEPRA Authority:

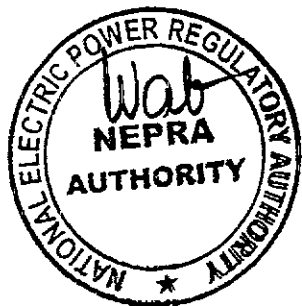
1. In accordance with directives issued by the Honorable NEPRA Authority earlier, KE implemented a pilot project involving the installation of DC/RC devices on fifty-four (54) Distribution Transformers (DM) across ten (10) Medium Loss Feeders with a capital expenditure of PKR 30 million and operational expense of around PKR 13 million.

2. The pilot project encountered various external challenges, including damage to panels, manual bypassing of DC/RC devices, resistance from area residents, and theft of earthing conductors, leading to equipment malfunctions. Consequently, six (6) DTs in IBC Malir and Orangi-II became non-operational and were subsequently excluded from the pilot evaluation.

3. Despite encountering challenges, KE proceeded with the pilot run on forty-eight (48) DTs across eight (8) Medium Loss Feeders located in IBC Johar-I, IBC Johar-2, and IBC Orangi-II. Following the installation of DC/RC devices and implementation of PMT-based load-shedding on these 48 DTs, the remaining eighty-one (81) DTs across these feeders were exempted from load-shedding effective January 2024.

4. Even during the monitoring phase, significant resistance from area residents was observed across the forty-eight (48) DTs. This resistance manifested in various forms, including the deliberate breaking of locks and hinges on DC/RC devices, manual bypassing of these devices, and repeated acts of vandalism and damage to KE infrastructure. These actions compromised the systems operational integrity and posed a substantial risk to the sustainability of an uninterrupted power supply.

5. Further, we also observed higher losses on the PMTs that were exempted. This indicates shifting of hook connections (kunda) from High Loss DTs (where DC/RC devices were installed) to Low Loss



DTs of the same feeder that were exempted/relieved from load-shed during the pilot phase. This behavior significantly increased during the summer months amid an exorbitant heatwave witnessed in the country (especially in the coastal belt of Karachi) in summer of 2024. To mitigate the challenges mentioned above, KE enhanced operational governance on these localities to curtail kunda shifting from High Loss DTs to neighboring Low Loss DTs and ensure pilot implementation of PMT based load shed on eight (8) feeders, which resulted in a substantial increase in resources and cost. These efforts underscore KE Commitment to fulfil the Honorable NEPRA Authority's directives in both letter and spirit.

A summary of the pilot project results of PMT-based load-shed is presented below for reference.

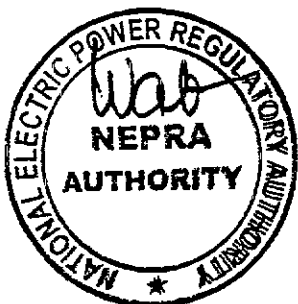
- During the pilot project, PMT-based load-shed was achieved for only 26% of the scheduled cycles due to frequent public interventions that compromised the functionality of DC/RC devices. Despite extensive engagement with local residents, law enforcement agencies, and enhanced governance efforts, these interventions proved to be a significant obstacle to the successful implementation of PMT-level load-shed.
- Whilst distribution Losses (DL) improved for 30 out of the 48 DTs equipped with DC/RC devices compared to the same period in the previous year, adjoining PMTs saw sharp deterioration. Conversely, DL deteriorated for 47 out of the remaining 81 Low Loss DTs on these feeders that were exempted from load shedding, thus confirming public intervention and kunda shifting.
- Moreover, AT&C Losses on the eight pilot feeders became adverse by 2.9% during the pilot period (32.1% in Jan-Sep 24 compared to 29.2% in the same period of the previous year). Consequently, an additional 17 DTs have been reclassified as 'High Loss'

**C. Prayer:**

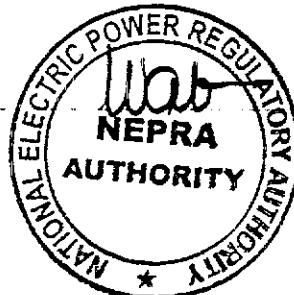
However, in case of further proceedings, KE would like to request and avail the opportunity of personal hearing in the matter as permitted under NEPRA Fine Regulations.

16. Keeping in the view of above, a hearing was scheduled on 13.03.2025 under Regulation (4)5 of NEPRA Fine Regulations. During hearing, following submissions were made by representatives of the Licensee:

- i. KE stated that when we initiated the pilot project, KE had certain assumptions and specifically focused on medium-loss feeders. Approximately 08 11kV feeders were selected, with around 50 PMTs chosen from these feeders. These PMTs had high losses, which contributed to their feeders being categorized under load shedding;



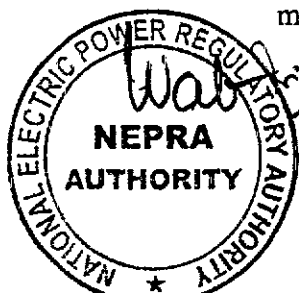
- ii. *From a technical perspective, the AMI/AMR meters used were not designed for DC/RC operations of this nature. KE imported and installed specialized panels for a specific purpose on these PMTs. The process was initiated around October 2023, and by January 2024, the pilot project was formally launched;*
- iii. *KE actively monitored the pilot project and encountered numerous challenges. By the end of September 2024, KE had visibility into the data and noticed three key issues. First, regarding load-shedding cycles, if a feeder had 08 PMTs, DC/RC devices were installed on two PMTs with high losses, while the remaining PMTs were considered load-shed-free. However, KE observed that overall feeder losses were increasing, despite improvement in losses on the selected PMTs. Upon deliberation, it was determined that the public was shifting their loads to adjacent PMTs that were exempt from load shedding;*
- iv. *The second challenge KE faced was the manual bypassing of DC/RC devices. Since these devices operate remotely, they also have a manual switch for control. The public quickly identified this and manually operated the devices. KE responded by installing locks on these devices, but people broke the locks and manually bypassed the devices. In some instances, they even destroyed the devices, and in one specific case, a device was set on fire. Pictorial evidence of these incidents has been shared in KE's response;*
- v. *Every time such an intervention occurred, KE had to dispatch a team to restore the device to its automatic mode of operation, leading to a significant manpower requirement. Compared to load shedding at the feeder level, which can be managed from a central location, this approach required extensive fieldwork, making the process highly inefficient;*
- vi. *Upon analyzing the AT&C losses of the 08 feeders included in the pilot, no significant improvements were observed. One feeder showed a marginal improvement of 0.2%, which was negligible, while the remaining feeders showed no improvement;*
- vii. *KE is exploring feeders with dynamics similar to Millat Colony—main roads, more developed areas rather than informal settlements, and better accessibility. At this point, KE humbly requests that a mass rollout of this project is not feasible due to manual interventions by the public, law and order concerns, and the manpower required for constant intervention;*
- viii. *Approximately 500 feeders exist, with an average of 08 PMTs per feeder where these DC/RC devices would need to be installed. This would require a vast workforce to manage, making the project financially and practically unfeasible. KE is requesting additional time to explore alternative feeders where deployment may be more effective;*



- ix. *KE has incurred approximately Rs. 136 million in losses due to this pilot project. This includes Rs. 30 million invested in DC/RC devices and Rs. 106 million in technical losses, excluding additional administrative expenses for mobilizing teams;*
- x. *Load shedding at the feeder level remains more manageable than at the PMT level. KE lacks the workforce to implement and manage PMT-level interventions around the clock. KE, therefore, requests the Authority's approval to install DC/RC devices only on PMTs identified as having better and more manageable dynamics. Additionally, KE proposes conducting another six-month pilot study for a better system assessment;*
- xi. *To address security concerns, KE has developed an enhanced locking system with two key modifications. First, if an attempt is made to open the lock, an alarm will be triggered, allowing for quick team mobilization. Second, if someone successfully opens the device, the particular PMT will trip. This development is still in progress, and KE believes it will aid in the implementation of PMT-based load shedding;*

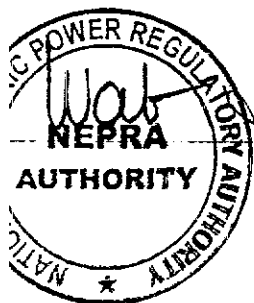
**Analysis/Findings:**

17. The Licensee has submitted that it actively monitored the pilot project and encountered numerous challenges. By the end of the project, the Licensee had visibility into the data and noticed three key issues. First, regarding load-shedding cycles, if a feeder had 08 PMTs, DC/RC devices were installed on two PMTs with high losses, while the remaining PMTs were considered load-shed-free. The Licensee has further submitted that upon analyzing the AT&C losses of 08 feeders included in the pilot, no significant improvements were observed. One feeder showed a marginal improvement of 0.2%, which was negligible, while the remaining feeders showed no improvement. In addition, the Licensee has also submitted that it observed that overall feeder losses were increasing, despite improvement on the selected PMTs. Upon deliberation, it was determined that the public was shifting their loads to adjacent PMTs that were exempt from load shedding.
18. While Considering the submissions made by Licensee, the Authority notes with concern that Licensee continued to apply the same load-shedding schedule throughout the duration of the pilot project, despite reported improvements in losses. During meetings with Licensee and subsequent site visits, the Licensee itself acknowledged that PMT-wise losses had improved within a two-month period (from 30% to less than 10%) after the installation of devices. However, duration of load shedding remained unchanged. Upon further inquiry, the Licensee submitted that revisions to the load-shedding cycle would only be made after the pilot project was completed. This response reflects Licensee inability to successfully carry out the pilot project. As a result, paying consumers continued to face unwarranted load shedding, despite the payment made by them on regular basis. The Authority further observes that if the Licensee had conducted monthly monitoring with due diligence and reflected the real-time impacts by reducing load-



shedding hours for improved areas, the pilot could have been significantly more effective. Instead, the selective implementation created systemic imbalances, encouraging consumers to shift their load to adjacent PMT ultimately neutralizing any potential gains from the installed devices. Had the Licensee adopted a more strategic and integrated approach such as applying control measures across all PMTs within a feeder, dynamically adjusting load-shedding schedules based on real-time data, and proactively engaging with the public, the results could have been different. The Authority concludes that the shortcomings of the pilot project are not attributable to external factors, but rather to Licensee own lack of planning, foresight, and effective execution. Therefore, Licensee submissions do not justify the deficiencies observed, instead, highlights its inability to effectively manage the project.

19. The Licensee has asserted that, the second challenge faced by Licensee was the manual bypassing of DC/RC devices. Since these devices operate remotely and they also have a manual switch for control. The public quickly identified this and manually operated the devices. The Licensee has further submitted that it responded by installing locks on these devices, but people broke the locks and manually bypassed the devices. In some instances, they even destroyed the devices, and in one specific case, a device was set on fire.
20. While examining the submissions of the Licensee, the Authority observes that the areas selected for the pilot were well known to Licensee, and it was evident that public intervention during installation and operation of the devices was highly likely possible. This reflects a critical flaw in Licensee planning and risk assessment. Given that these areas were specifically identified by the Licensee for their high losses and electricity theft, it was foreseeable that public intervention would occur. Licensee failure to anticipate this risk and to implement appropriate preventive measures prior to deployment indicates a lack of adequate preparation. Furthermore, the Licensee response of installing locks on the devices was a reactive and ultimately ineffective measure. The devices were still subjected to manual overrides, tampering, and vandalism including incidents of arson demonstrating the absence of a robust and comprehensive strategy to secure and sustain the operation of these systems. This underscores the Licensee inability to ensure operational resilience in high-risk environments.
21. The Licensee has further submitted that it is exploring feeders with dynamics similar to Millat Colony, main roads, more developed areas rather than informal settlements, and better accessibility. At this point, the Licensee humbly requested that a mass rollout of this project is not feasible due to manual interventions by the public, law and order concerns, and the manpower required for constant intervention.
22. After detailed deliberation on the Licensee submissions, the Authority observes that if KE now claims to have identified more suitable areas for the pilot project, such as main roads and more developed localities with better accessibility, it raises the question as to why such areas were not identified and selected at the outset. Had the Licensee undertaken proper due diligence during the planning phase, areas with comparable loss levels and more conducive operating conditions could have been selected initially, ensuring a more effective and reliable execution of the project. This oversight reflects a



serious lapse in project planning and raises concerns regarding the Licensee commitment in achieving the intended objectives. The Authority further notes that Licensee actions suggest a lack of genuine investment in executing the project successfully. The continued reliance on AT&C-based load shedding appears to serve Licensee operational convenience, allowing it to justify ongoing load shedding instead of adopting sustainable, data-driven measures aimed at reducing losses and improving recoveries.

23. In addition to the above, the Authority notes with concern that the Licensee continues to assess losses at the feeder level rather than at the PMT level. The Licensee was expected to evaluate PMT-level losses to appropriately categorize them into low, medium, and high-loss PMTs an essential step that Licensee failed to do. This inconsistency is particularly concerning, as the Licensee is conducting a pilot project at the PMT level, yet continues to rely on feeder-level parameters for analysis, reflecting a clear contradiction within Licensee own operational framework. This disconnect in approach significantly contributed to the failure of the pilot. The Authority is of the view that the Licensee actions indicate an unwillingness to genuinely implement PMT-level load shedding. Instead, Licensee appears to be resorting to deliberate delaying tactics, thereby undermining the project's intent and the Authority directives.

#### Decision

24. After due deliberations and taking into account the submissions of the Licensee and in light of the applicable NEPRA laws, the Authority is of the considered opinion that the Licensee has failed to provide any satisfactory reply to the Explanation served to it, therefore, the Authority hereby decides to issue a Show Cause Notice to the Licensee in terms of Regulations 4(8) & (9) of the NEPRA (Fine) Regulations, 2021.

#### AUTHORITY

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Member (Licensing)

Waseem Mukhtar  
Chairman



Dated 23rd June 2025