



National Electric Power Regulatory Authority Islamic Republic of Pakistan

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Registrar

No. NEPRA/DG(M&E)/LAD-10/ 38461

December 14, 2023

Chief Executive Officer
Tribal Areas Electricity Supply Company Limited (TESCO)
Room No. 213, 1st Floor, WAPDA House,
Shami Road, Sakhi Chashma, Peshawar

Subject: **ORDER OF THE AUTHORITY IN THE MATTER OF EXPLANATION ISSUED TO TESCO UNDER REGULATIONS 4(1) AND 4(2) OF NEPRA (FINE) REGULATIONS, 2021, ON ACCOUNT OF FAILURE TO EXECUTE EARTHING/GROUNDING OF HT/LT POLES/STRUCTURES IN ITS SERVICE TERRITORY.**

Please find enclosed herewith, Order of the Authority dated 14th December 2023 (total 07 pages) in the subject matter for information and compliance.

Enclosure: Order of the Authority

(Engr. Mazhar Iqbal Ranjha)



National Electric Power Regulatory Authority

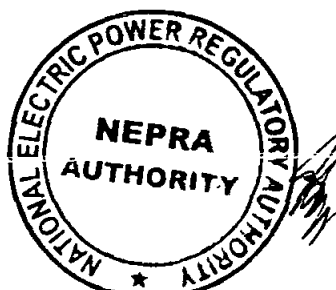
ORDER

IN THE MATTER OF EXPLANATION ISSUED TO TESCO UNDER REGULATION 4(1) AND 4(2) OF NEPRA (FINE) REGULATIONS, 2021, ON ACCOUNT OF FAILURE TO EXECUTE EARTHING/GROUNDING OF HT/LT POLES/STRUCTURES IN ITS SERVICE TERRITORY.

1. Tribal Areas Electric Supply Company Limited (TESCO) (the "Licensee") was granted a Distribution License (22/DL/2013) by the National Electric Power Regulatory Authority (the "Authority") on 12.08.2013, for providing Distribution Services in its Service Territory as stipulated in its Distribution License, pursuant to section 21 of the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997 ("NEPRA Act").

Background:

2. During the investigation conducted by NEPRA with respect to Fatal Accidents in DISCOs, it was observed that the distribution facilities of DISCOs such as poles/structures lack earthing/grounding which is one of the major causes of the occurrence of fatal accidents. The Authority while taking notice of such serious safety hazards directed the Licensee vide letter dated June 07, 2022, to submit the data pertaining to the total number of poles/structures, number of poles/structures already earthed/grounded, and number of poles/structures to be earthed/grounded. Accordingly, the Licensee submitted the required information vide its letter dated June 24, 2022 and email dated August 17, 2022.
3. The Authority after carefully examining the data submitted by the Licensee called CEO of the Licensee vide letter dated September 26, 2022, for a meeting/hearing via Zoom at NEPRA Head Quarter with the direction to come up with a comprehensive plan along with specific timelines pertaining to execution of earthing/grounding of HT/LT poles/structures in its service territory, in order to avoid fatal accidents in future. The Authority also directed that the Licensee shall submit the response to specific queries/questions including, SOP of the Licensee pertaining to earthing/grounding of the poles/structures, scope of earthing in the contracts at the time of their installation, checking of poles/structures grounding at the time of handing over of the system from construction to operation departments, tackling these hazards in the absence of proper earthing/grounding, and time required to execute the earthing/grounding of 100% of the remaining poles/structures.
4. In response, the Licensee vide its letter dated September 30, 2022, submitted its response against the aforementioned directions & queries of the Authority. The Licensee submitted that total time required to execute earthing/grounding of poles/structures will be 03 years subject to law & order situation of the area and availability of funds & materials. Moreover, the Licensee also submitted that more than



45% of its distribution network is self-extended by the general public in FATA, which is not properly earthed.

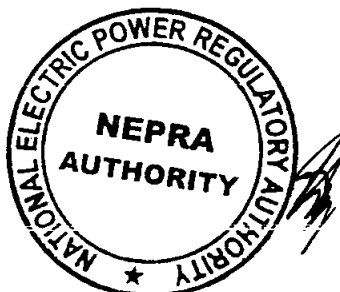
5. In addition to above, NEPRA Regional Office, Peshawar, also reported and affirmed that in past contracts, the scope of earthing/grounding was only included in Steel Structures. However, in the latest contracts, the scope of earthing/grounding was included in both the Steel Structures and PCC poles and the same is present in the field too. The Regional Office further highlighted that Steel Structures installed in the past had earthing/grounding, however, the same has become ineffective due to deterioration and change of moisture contents at the sites over the passage of time.
6. Accordingly, the aforementioned meeting/hearing was held on October 04, 2022, wherein, the Authority directed the Licensee to submit complete details of PCC poles and steel structures with and without earthing/grounding. The Authority further directed the Licensee to submit a comprehensive plan of the execution of earthing/grounding of poles & structures along with concrete timelines. Moreover, the Authority also desired that the Licensee should provide a mechanism on how they will efficiently perform the execution task within the minimum possible time. A letter dated October 28, 2022 containing all above directions was also sent to the Licensee. However, the Licensee did not submit anything in this regard. However, the earlier submitted details of the Licensee are following:

Total Number of HT/LT Poles/ Structures	Details of HT Poles/Structures			Details of LT Poles/Structures			Total Number of HT/LT Poles/ Structures have Earthing	Total Number of HT/LT Poles/ Structures to be Earthed
	Total Number of HT Poles/ Structures	HT Poles/ Structures have Earthing	HT Poles/ Structures to be Earthed	Total Number of LT Poles/ Structures	LT Poles/ Structures have Earthing	LT Poles/ Structures to be Earthed		
207,895	103,065	45,011	58,054	104,830	48,432	56,398	93,443	114,452

7. Keeping in view the aforementioned submissions of the Licensee, it was observed that whether the Licensee owns the 45% extended distribution network, if yes, then it is the responsibility of the Licensee to ensure its proper earthing/grounding. Moreover, in order to execute earthing/grounding of 114,452 No. of poles/structures, a period of three years is huge time, which means that there will be a danger of occurrence of fatalities exists for these years, which is unjustified. Moreover, non-submission of the response, even after a lapse of six months clearly indicates the seriousness of the Licensee towards inculcating a safety culture in its service territory.
8. Therefore, the Authority decided to initiate legal proceedings against the Licensee under NEPRA Fine Regulations, 2021.

Explanation:

9. In view thereof, an Explanation was served to the Licensee under Regulation 4(1) and 4(2) of NEPRA (Fine) Regulation, 2021, vide NEPRA's letter dated April 27, 2023, on account of violation of Performance Standards, Distribution Code, Power Safety Code, and other applicable documents. The salient points of the Explanation are as under:



2. **WHEREAS**, pursuant to section 21(2)(f) of the NEPRA Act, the Licensee is required to follow the performance standards laid down by the Authority for the distribution and transmission of electric power, including safety; and

3. **WHEREAS**, pursuant to Rule 4(g)(ii), Overall Standards 7-Safety of NEPRA Performance Standards (Distribution) Rules:

"A distribution company shall ensure that its distribution facilities do not cause any leakage of electrical current or step potential beyond a level that can cause harm to human life, as laid down in the relevant IEEE/IEC Standards; prevent accessibility of live conductors or equipment; and prevent development of a situation due to breakdown of equipment which results in voltage or leakage current that can cause harm to human life, property and general public including without limitation, employees and property of the distribution company."

4. **WHEREAS**, according to clause SR 4 Safety Management Criteria of Distribution Code:

"A distribution company shall ensure that its distribution facilities do not cause any leakage of Electrical Current or Step Potential beyond a level that can cause harm to human life, as laid down in the relevant IEEE/IEC Standards; prevent accessibility of live conductors or equipment; and prevent development of a situation due to breakdown of equipment which results in voltage or leakage current that can cause harm to human life, property and general public including without limitation, employees and property of the distribution company."

5. **WHEREAS**, as per clause DDC 4, Design Code- Earthing of Distribution Code:

"...The earthing of a distribution transformer, the neutral, and body of the transformer should be connected to ground rods as per IEC and PSI Standards Design Specifications. Earthing of Consumer Service and its meter shall be as per design standards adopted by the Licensees; and consistent with IEC, and IEEE Standards. The earth resistance of the distribution transformers and HT/LT structures/poles shall not be more than 2.5Ω and 5Ω respectively."

6. **WHEREAS**, pursuant to clause PR 1 Protection System Practices and System Co-ordination of Distribution Code:

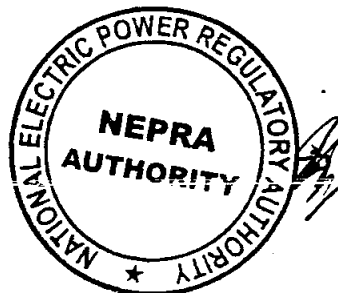
"The Licensee shall follow suitable and necessary provisions regarding protection system practices and co-ordination such as the following but not limited to achieve the aims of proper functioning of the distribution system of the Licensee at all times:

h. ...Provide protective earthing devices."

7. **WHEREAS**, as per clauses 12.2.4 and 12.2.5 of Chapter 12 of the Consumer Service Manual:

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“12.2.4. The earthing systems installed shall be dimensioned and regularly tested to ensure protection from shock hazards.

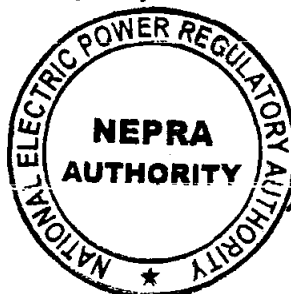
12.2.5. The steel structure installed on the public places shall be earthed at one point through steel/copper conductor, in accordance with the DISCO laid down procedures.”

8. **WHEREAS**, during the investigation conducted by NEPRA with respect to fatal accidents in DISCOs, it was observed that the distribution facilities of DISCOs particularly HT/LT poles/structures lack earthing/grounding which is one of the major causes of the occurrence of fatal accidents. The Authority took notice of such serious safety hazards and directed to obtain data from all the DISCOs including the Licensee, with respect to the total number of HT/LT poles/structures, the number of HT/LT poles/structures already earthed/grounded, and the number of HT/LT poles/structures to be earthed/grounded. The same was obtained vide the Licensee’s Email dated August 17, 2022, and the detail is as under:

Total Number of HT/LT Poles/ Structures	Details of HT Poles/Structures			Details of LT Poles/Structures			Total Number of HT/LT Poles/ Structures have Earthing	Total Number of HT/LT Poles/ Structures to be Earthed
	Total Number of HT Poles/ Structures	HT Poles/ Structures have Earthing	HT Poles/ Structures to be Earthed	Total Number of LT Poles/ Structures	LT Poles/ Structures have Earthing	LT Poles/ Structures to be Earthed		
207,895	103,065	45,011	58,054	104,830	48,432	56,398	93,443	114,452

9. **WHEREAS**, NEPRA vide letter dated September 26, 2022, while issuing the notice of hearing/meeting directed the Licensee to submit a comprehensive plan along with specific timelines for the execution of the earthing/grounding of the remaining structures along with certain queries of the Authority. In response, the Licensee vide its letter dated September 30, 2022, submitted that the total time required will be 03 years subject to law & order situation of the area and availability of funds & materials. Moreover, the Licensee also submitted that more than 45% of its distribution network is self-extended by the general public in FATA, which is not properly earthed. The submissions of the Licensee were considered and observed that whether the Licensee owns the 45% extended distribution network, if yes, then it is the responsibility of the Licensee to ensure its proper earthing/grounding. Moreover, in order to execute earthing/grounding of 114,452 No. of poles/structures, a period of three years is huge time, which means that there will be a danger of occurrence of fatalities exists for these years, which is unjustified; and

10. **WHEREAS**, a hearing/meeting on the matter was also held on October 04, 2022, wherein the representatives from all DISCOs including CEO TESCO participated. During hearing/meeting, the Authority directed all DISCOs along with the Licensee to submit complete details of PCC Poles and steel structures with and without earthing/grounding. The Authority further directed the Licensee to submit a comprehensive plan of the execution of earthing/grounding of poles/structures along with concrete timelines. The Authority also desired that DISCOs should provide a mechanism on how they

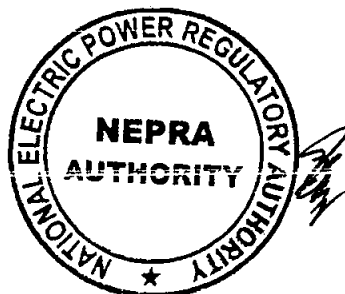


will efficiently perform the execution task within the minimum possible time. However, the Licensee did not submit anything in this regard; and

11. **WHEREAS**, *vide NEPRA's letter dated October 28, 2022, the Licensee was again directed to submit the said information in the light of observations highlighted by NEPRA. However, despite the lapse of a considerable time period, the response from the Licensee has not yet been received. Non-submission of the response, even after a lapse of six months clearly indicates the seriousness of the Licensee towards inculcating a safety culture in its service territory. The Licensee should have realized that operation of poles/structures without earthing/grounding in the field is highly dangerous and can lead to the occurrence of fatal accidents at any time; and*
12. **WHEREAS**, *it is a matter of record that despite repeated and continuous correspondence, the Licensee has failed to produce any concrete plan indicating specific timelines for executing the earthing/grounding of HT/LT poles/structures on a war footing basis. The Licensee has also failed to submit so far progress being achieved by the Licensee in this regard. Hence, it can be said that the Licensee has, prima facie, violated Section 21(2)(f) of the NEPRA Act, Article 11 of the Distribution License read with Rule 4(g) of the NEPRA Performance Standards (Distribution) Rules, Clause 4 of Safety Requirements, Clause 4 of Design Code & Clause 1 of Protection Requirements of the Distribution Code and Clause 12.2 of Chapter 12 of the Consumer Service Manual; and*
10. Vide the above Explanation, the Licensee was directed to respond within fifteen (15) days of receipt of the letter, however, the Licensee did not submit the same despite several reminders.

Hearing:

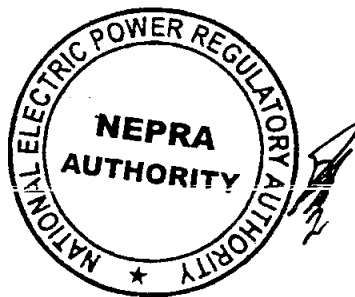
11. Furthermore, in order to satisfy the requirement of law, the Authority decided to provide an opportunity of a hearing to the Licensee in light of Regulation 4 (5) of NEPRA (Fine) Regulations, 2021, before further proceeding in the matter. Accordingly, the said public hearing was held on August 17, 2023, wherein, CEO of the Licensee alongwith his team made following submissions:
 - (i) TESCO submitted that it conducted the survey through local linemen and then the information was compiled. The same is as under:
 - a. Total Number of Consumers: 444,000
 - b. Total Grids: 35
 - i. TESCO Owned Grids: 20
 - ii. Shared Grids: 15
 - c. Number of Feeders: 321
 - d. HT/LT Poles/Structures: 207,000
 - i. HT Poles Structures: 103,000
 - ii. LT Poles Structures: 104,000



- (ii) Approximately, 51% of Poles/Structures are properly earthed and TESCO is committed to execute the earthing of remaining poles within two years.
- (iii) After 2018 (Fata Merger), 45,000 poles/structures were installed which have proper earthing/grounding.
12. Meanwhile, the Licensee submitted the response against the served Explanation vide its letter dated August 17, 2023. The summarized points of the same are as below:
- i. TESCO prepared a comprehensive roadmap along with a procurement plan regarding Earthing/Grounding of HT/LT Poles/Structures of TESCO Distribution System.
 - ii. The matter involves financial implication of 788.8 million, which was not included in the procurement plan approved for FY 2022-23 by the Board of Directors as well as Business plan/MYT approved by the Authority.
 - iii. The matter also involves strategic decision of ownership of 45% self-extended distribution system. Hence the management decided to take approval from the Board of Directors on points 4 & 5.
 - iv. Unfortunately, the Board of Directors of TESCO was under the reconstitution phase since November 2022 and was appointed by the Federal Government through a notification dated 06-07-2023.
 - v. The approval of points 4 & 5 are part of the agendas of the very 1st meeting of the Procurement & Technical Committee of the Board to be held on 18-08-2023.
 - vi. The plan will be submitted after the approval of the Board of Directors.
 - vii. As a whole, the matter was unintentional and undesirable on part of the management.

Analysis/Findings:

13. The Licensee has submitted its reply against the served Explanation by mentioning para-wise numbers, however, the content within the submitted response does not correlate with the corresponding paras of the served Explanation dated April 27, 2023. Further, it is evident that the Licensee's response contains generic submissions that do not give answers to the allegations leveled in the served Explanation which is intolerable and shows non-serious attitude on the Licensee's part.
14. Earlier, the Licensee vide its letter dated September 30, 2022, submitted its plan to execute earthing of 114,452 No. of its poles/structures in three years. In this regard, NEPRA vide various correspondences directed the Licensee to revisit its plan, however, the Licensee did not respond to any of the NEPRA's letters which shows the seriousness and will of the Licensee to eliminate such severe safety hazards from its territory. Although, during the hearing, the Licensee committed to execute the earthing of remaining poles/structures within two years. However, no firm timelines along with month-wise breakup in writing have still been submitted by the Licensee.



15. NEPRA has taken up this matter since June 2022 and repeatedly directed the Licensee to submit a concrete plan and subsequently provide monthly progress reports. However, no single progress report has yet been submitted by the Licensee which again shows that the Licensee has not earthed any single pole/structure despite the lapse of more than one year.
16. The Licensee has submitted a few reasons pertaining to its poor progress related to the execution of earthing i.e. non-inclusion of funds in the budget of FY 2022-23, and reconstitution of BoDs, etc. The Authority has considered the submissions of the Licensee and observes that the reasons given by the Licensee clearly indicate its inability and negligence as the Licensee was required to obtain timely approval of funds for the purpose of earthing, which it failed to do so. If the Licensee had fulfilled this obligation in a timely manner, the delay could have been avoided, and there would have been no need to wait for the reconstitution of the BoD and subsequent fund approval. The Licensee being a distribution licensee is mandated to follow prudent utility practices with respect to the operation and maintenance of its distribution system in order to provide a safe and reliable power supply to its consumers which it has failed to fulfill. Thus it is constrained to believe that the Licensee has failed to comply with NEPRA Performance Standards, Distribution Code, Power Safety Code, Consumer Service Manual and other applicable documents.
17. The submission made in response to the explanation is evasive and fails to recognize this imperative obligation.

Decision

After due deliberations and taking into account the submissions/arguments made by the Licensee during the hearing and in light of the NEPRA Act, NEPRA (Fine) Regulations, 2021, and other applicable documents, 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

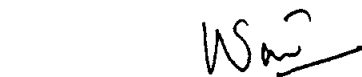
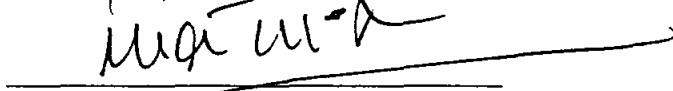
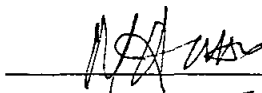
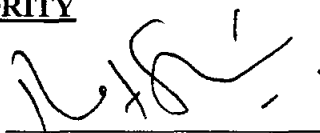
Rafique Ahmed Shaikh
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Dated 14/12/2023

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