



Registrar

**National Electric Power Regulatory Authority
Islamic Republic of Pakistan**

NEPRA Tower, Attaturk Avenue (East), G-5/1, Islamabad.
Tel: +92-51-9206500, Fax: +92-51-2600026
Web: www.nepra.org.pk, E-mail: registrar@nepra.org.pk

No. NEPRA/DG(M&E))/LAD-07/ 10420

July 05, 2024

Chief Executive Officer,
Peshawar Electric Supply Company (PESCO),
WAPDA House, Shamsi Road,
Sakhi Chashma, Peshawar

Subject: **ORDER OF THE AUTHORITY IN THE MATTER OF SHOW CAUSE NOTICE
ISSUED TO PESCO ON ACCOUNT OF FATAL ACCIDENTS OCCURRED
DURING FY 2022-23**

Please find enclosed herewith, the Order of the Authority (total 24 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 SHOW CAUSE NOTICE ISSUED TO PESCO ON ACCOUNT OF FATAL ACCIDENTS OCCURRED DURING FY 2022-23

1. Peshawar Electric Supply Company Limited (PESCO) (the "Licensee") was granted a Distribution License (No. DL/07/2023 dated 09.05.2023) by the National Electric Power Regulatory Authority (the "Authority") 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").

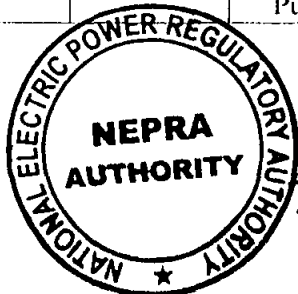
Background:

2. As per Rule 7 of NEPRA Performance Standards (Distribution) Rules, 2005 (PSDR-2005), all Distribution Companies (DISCOs) are bound to submit an Annual Performance Report to the Authority every year. Further, Form 9 of PSDR 2005 states that DISCOs shall report each and every individual incident on an immediate basis. Accordingly, the DISCOs submitted the data/information to NEPRA regarding electrical incidents resulting in death/permanent disability/serious injury to members of staff or the general public that occurred in FY 2022-23.
3. During the review of data submitted by the Licensee for FY 2022-23, it was revealed that a total number of forty-one (41) fatalities (12 Employees and 29 Public Persons) occurred within the service territory of the Licensee. This figure illustrates a concerning picture regarding efforts taken by the Licensee to inculcate a safety culture in its service territory.

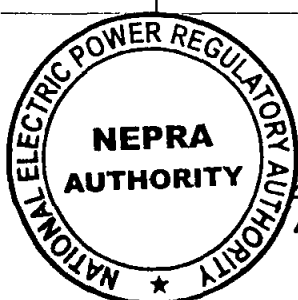
Summary of Inquiry Reports:

4. It is relevant to mention that after getting information pertaining to each individual case, NEPRA carried out a thorough evaluation of all relevant records including the internal inquiry reports submitted by the Licensee itself against the forty-one (41) fatalities that occurred during FY 2022-23. The summary of the same is as under:

Sr. No.	Name of Victim(s)	Date of Incident	Category	Incident Description	Responsibility / Reasons
1	Ms. Dua	28.07.2022	General Public	The victim, a child, was electrocuted on July 28, 2022, due to contact with the Mirza Dher Feeder passing over her house.	Others
2	Mr. Alaf Zar	28.11.2022	General Public	The victim, a shepherd, suffered a fatal accident	PESCO

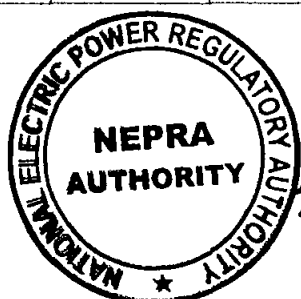


				when an HT conductor slipped from an insulator and got touched with a steel cross arm., which caused the current in the HT Structure. When the victim somehow touched the HT Structure, he suffered electric shock and died.	<ul style="list-style-type: none"> • Deteriorated Distribution System • Improper Protection System
3	Unknown man and woman	10.12.2022	General Public	A man and a woman were electrocuted on December 10, 2022, inside their house while working on electric appliances, caused by a broken 11kV conductor.	<p>PESCO</p> <ul style="list-style-type: none"> • Deteriorated Distribution System • Improper Protection System
4	Ms. Salwa	27.12.2022	General Public	The victim, a child, was electrocuted on December 27, 2022, while touching an 11 kV line on the rooftop.	Others
5	Mr. Gul Muhammad (LM-II)	03.01.2023	Employee	Gul Muhammad had a non-fatal accident on January 3, 2023, when a damaged LT PC Pole fell along with him. Later, after shifting to hospital, he succumbed to his injuries and died.	<p>PESCO</p> <ul style="list-style-type: none"> • Lack of Safety Measures /Culture
6	Mr. Ismail	06.02.2023	General Public	The victim met with a fatal accident on February 6, 2023, falling from a 50kVA transformer while illegally working on the PESCO distribution network.	Others
7	Mr. Awais	02.03.2023	General Public	The victim suffered a fatal accident on March 2, 2023, due to electrocution while trying to retrieve his ball with an iron rod that touched an 11kV line.	Others
8	Mr. Ishaq	04.03.2023	General Public	Ishaq climbed illegally on a PESCO distribution system on March 4, 2023, and died after touching an 11 kV line.	Others
9	Mr. Muhammad Hammad	23.03.2023	General Public	The victim was fatally electrocuted on March 23, 2023, due to a short-circuited LT tubular pole.	<p>PESCO</p> <ul style="list-style-type: none"> • Lack of Earthing/ Leakage of Current



10	Mr. Muhammad Noman (ALM)	28.04.2023	Employee	The victim died on April 28, 2023, after falling from a transformer pole while working on Transformer LT bushes.	PESCO • Lack of Safety Measures /Culture
11	Mr. Abdul Rashid (LM-II)	21.05.2023	Employee	The victim succumbed to head injuries on May 21, 2023, after falling from a T/F pole while working on T/F jumpers.	PESCO • Lack of Safety Measures /Culture
12	Two Women and One Child	25.05.2023	General Public	Two women and one child died on May 25, 2023, after a conductor fell on LT lines and resulted in electric shocks while trying to save appliances.	PESCO • Deteriorated Distribution System • Improper Protection System
13	Mr. Shamal Khan	15.06.2023	General Public	The victim was electrocuted while excavating land for a commercial market due to a detached electric pole touching a live line. The stay of the electric pole was detached with excavating force and then got touched with a live line resulting in the electrocution of the victim.	Others
14	Unknown	20.06.2023	General Public	A private person met with a fatal accident in June 2023 while working on a 50kVA transformer, as reported by SDO Gadoon.	Others
15	Mr. Suleman (LM-II)	21.06.2023	Employee	The victim died after falling from a pole while giving a conductor to a lineman for jumper connection. Permit was taken for all the existing 19 Nos 11KV feeders while the site was properly earthed at the time of the accident. Lineman's death occurred due to fall from the HT pole.	PESCO • Lack of Safety Measures /Culture
16	Mr. Iftikhar Hussain Shah (LM-I)	23.06.2023	Employee	The victim died on duty due to a fault on the Sajikot feeder, caused by backfeeding from an unidentified source. The PTW was taken on 11 kV Sajikot feeder energizing	PESCO • Lack of Safety Measures /Culture

23/

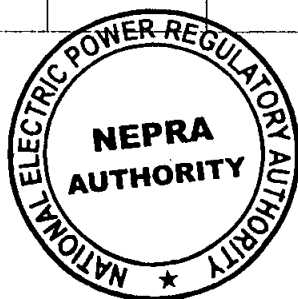


				from 132 KV Kholoan Bala at 15:40 pm, death occurred due to induction/ back feeding source from somewhere not detected.	
17	Guard (Forest Department)	23.06.2023	General Public	The damaged SY-II unit of a 100kva transformer at Gopalam Khall caused high voltage complaints. After replacing it, an official from the forest department was electrocuted due to unsatisfactory wiring in his room nearby.	Others
18	Mr. Kifayat Ur Rehman (LM-I/Acting LS)	26.06.2023	Employee	Kifayat Ur Rehman, while addressing a fault during heavy rain, fell from a pole, suffered severe head injuries, and died during treatment at the hospital.	PESCO • Lack of Safety Measures /Culture
19	Mr. Aqleem Khan (LM-I)	15.12.2022	Employee	The victim received an electric shock while descending from a pole on December 15, 2022, succumbed to his injuries on December 21, 2022, and died in hospital.	PESCO • Lack of Safety Measures /Culture
20	Mr. Abdur Rahim	20.09.2022	General Public	Abdur Rahim public man got electrocuted due to touching with stay wire of the energized 11KV line. The stay wire was used for crossing the river as a shortcut (which was made by the locals for easy access/shortcut to cross the river for illegal mining).	Others
21	Mr. Zakir	30.12.2022	General Public	The victim, an electrician of Nayatel met with non-fatal accident due to touching with the conductor of 11 kV Ring Road Feeder while installation of Nayatel cable at near Mehran Motors. He was rescued by the 1122 and shifted to Hospital and later on died on 31.12.2022.	Others
22	Mr. Jawad Alam (ALM)	09.08.2022	Employee	The victim died in a fatal accident on August 9, 2022, while working on an LT line	PESCO



				without informing the area lineman.	<ul style="list-style-type: none"> Lack of Safety Measures /Culture
23	Mr. Akhwan	10.08.2022	General Public	The victim died due to damage. Pin Insulator HT Structure, due to which the conductor fell on Steel X-Arm. The feeder could not be tripped due to which HT Structure short-circuited. The child of the area while passing on the road met with a Fatal accident due to touching with HT Structure	<p>PESCO</p> <ul style="list-style-type: none"> Lack of earthing/Leakage of current
24	Mr. Shoaib Ahmad (ALM)	24.08.2022	Employee	The victim got electrocuted and died while attending to a consumer complaint, regarding the consumption. To verify the actual consumption the deceased official was installing the check meter unfortunately met with a fatal accident and passed away.	<p>PESCO</p> <ul style="list-style-type: none"> Lack of Safety Measures /Culture
25	Mr. Said Nabi (ALM)	25.08.2022	Employee	The victim died on August 25, 2022, attempting to retrieve a fallen link from a pole. The victim climbed on the pole to bring it down but he didn't reach the link and fell down/ slipped from the pole. He was rushed to the MMC Hospital where he was declared dead due to head injury.	<p>PESCO</p> <ul style="list-style-type: none"> Lack of Safety Measures /Culture
26	Mr. Sana Ullah	02.09.2022	General Public	It has come to SDO's knowledge through press cutting that one general public namely Sana Ullah died due to a conductor fallen on him.	<p>PESCO</p> <ul style="list-style-type: none"> Deteriorated Distribution System Improper Protection System
27	Mr. Aman Ullah (LM-I)	04.09.2022	Employee	The victim met with a fatal accident on September 4, 2022, while installing a cantilever in an LT line. While working the victim fell down on the ground and received head injury. He was shifted to Qazi Hussain Ahmad Hospital and then	<p>PESCO</p> <ul style="list-style-type: none"> Lack of Safety Measures /Culture

[Handwritten signature]

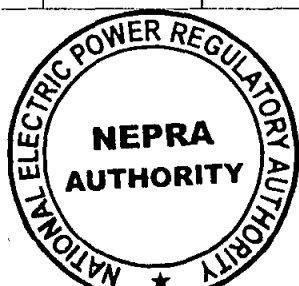


[Handwritten signature]

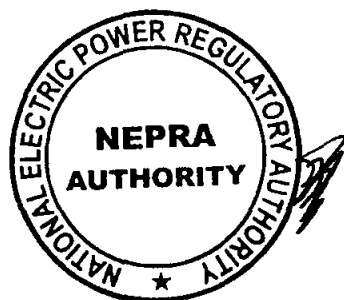
				referred to LRH Peshawar where he was declared dead by the doctors on duty.	
28	Mr. Noor Islam	18.09.2022	General Public	The victim, a private electrician, was electrocuted on September 18, 2022, while working on an HT line (illegally) in connivance with PESCO Officials.	PESCO • Lack of Safety Measures /Culture
29	Mr. Muhammad Talha	19.09.2022	General Public	The victim died on September 19, 2022, while attempting to retrieve his kite from a live HT line.	Others
30	Mr. Mehran	08.07.2022	General Public	A man namely Fazli fastened the cow with the stay of the LT pole. During the rain, the cow tried to get shelter from the rain and started struggling due to which the stay wire got touched with the LT Phase and the cow was electrocuted. In the meanwhile a child namely Mehran s/o Haroon got touched the cow and he also received electric shock and died. The SDO Shergarh reported the matter to SHO Shergarh to lodge FIR against the culprit (Fazal Nabi).	Others
31	Mr. Jalil	13.08.2022	General Public	The TV Cable operator namely Jalil s/o Manzar Khan received electric shock and died on the spot while set righting booster of the OK cable Network at inside Police Station Nowshehra Kalan. The deceased was rescued by the 1122 team and shifted to Hospital.	Others
32	Unknown (Woman)	15.08.2022	General Public	On dated 15.08.2022 at about 07:00 am public girl got electrocuted and died on the spot due to touching with LT Structure during heavy rain and storm	PESCO • Lack of earthing/ Leakage of Current



33	Unknown	19.08.2022	General Public	While set righting the TV Cable his hand got touched with LT line of 11kv MES feeder, received electric shock and died on the spot.	Others
34	Syed Ghaffad	22.09.2022	General Public	On dated 22.09.2022 at about 12:00 pm a private person namely Syed Ghaffad s/o Gul Rehman died due fall from pole while taking illegal/ direct connection from LT line.	Others
35	Unknown	07.10.2022	General Public	During investigation it was revealed that during recent heavy flood in Lower Dir District heavy damages occurred to PESCO Installations 33 KV Samarbagh Feeder and 11 KV Hajiabad Feeder was damaged crossing river Punchcore and the area fed by these two feeders was in dark. During rehabilitation work, the said both feeders were shifted to new location where H. Poles were erected on both the sides of the river with a long span of almost 400 meters, with poor workmanship resultantly a fatal accident occurred to a private boy due to extremely dangerous less clearance of both 33 KV Samarbagh and 11 KV Hajiabad Feeders passing through over same H-Poles.	PESCO • Design Fault
36	Mr. Muhammad Gulzar	26.10.2022	General Public	The public man namely Muhammad Gulzar of resident village & Post office Behali Teh & Dist Mansehra met with fatal accident on dated 26.10.2022 at about 02:35 pm due to touching with 11kv Cable of Qalandar Abad Feeder.	Others
37	Mr. Shadab Khan	27.10.2022	General Public	The public man namely Shadab Khan s/o Shah Jehan was shifting 24 Ft steel pipe	Others



				from a shop to Suzuki van over a wall and got touched with 11kv Sahi Khel feeder and electrocuted. The public on spot shifted the victim to nearby Hospital where the doctors on duty declared him dead.	
38	Mr. Muhammad Sohail (LM-II)	09.11.2022	Employee	While working on LT line the official namely Muhammad Sohail LM-II of Karak sub-division fell down on the ground and met with non-Fatal Accident due to slipping his foot. He was shifted to LRH Peshawar for further treatment. However, he died later.	PESCO <ul style="list-style-type: none"> Lack of Safety Measures /Culture
1	Ms. Dua	28.07.2022	General Public	The victim, a child, was electrocuted on July 28, 2022, due to contact with the Mirza Dher Feeder passing over her house.	Others
2	Mr. Alaf Zar	28.11.2022	General Public	The victim, a shepherd, suffered a fatal accident when an HT conductor slipped from an insulator and got touched with a steel cross arm., which caused the current in the HT Structure. When the victim somehow touched the HT Structure, he suffered electric shock and died.	PESCO <ul style="list-style-type: none"> Deteriorated Distribution System Improper Protection System
3	Unknown man and woman	10.12.2022	General Public	A man and a woman were electrocuted on December 10, 2022, inside their house while working on electric appliances, caused by a broken 11kV conductor.	PESCO <ul style="list-style-type: none"> Deteriorated Distribution System Improper Protection System
4	Ms. Salwa	27.12.2022	General Public	The victim, a child, was electrocuted on December 27, 2022, while touching an 11 kV line on the rooftop.	Others



5	Mr. Gul Muhammad (LM-II)	03.01.2023	Employee	Gul Muhammad had a non-fatal accident on January 3, 2023, when a damaged LT PC Pole fell along with him. Later, after shifting to hospital, he scummed to his injuries and died.	PESCO • Lack of Safety Measures /Culture
---	--------------------------	------------	----------	--	---

Based on the aforementioned summary, the following is the final outcome:

Description	Number of Fatalities	Responsibility	
		PESCO	Others
Employees	12	12	00
Public	29	12	17
Total	41	24	17

5. Moreover, according to Rule 4(g) of PSDR-2005, the Licesnee should establish and enforce appropriate rules, regulations, and operational procedures as outlined in its Distribution Code or relevant documents to ensure the safety of both its employees and the general public, however, it has failed to do so.

Show Cause Notice:

6. The Authority took notice of the aforementioned fatal accidents and decided to initiate legal proceedings against the Licensee under NEPRA Fine Regulations, 2021. Accordingly, NEPRA vide its letter dated August 30, 2023, served a Show Cause Notice (SCN) to the Licensee on account of forty-one (41) fatalities (12 Employees and 29 Public Persons) that occurred during FY 2022-23 for violating Performance Standards, Distribution Code, Power Safety Code, and other applicable documents. The salient points of the said SCN are as follows
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), of Performance Standards (Distribution) Rules, 2005, and clause SR 4 of Distribution Code, 2005:*
 - i. *All distribution facilities of a distribution company shall be constructed, operated, controlled and maintained in a manner consistent with the Distribution Code, Power Safety Code, Consumer Service Manual, and other applicable documents.*
 - ii. *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.

- iii. A distribution company shall implement suitable, necessary, and appropriate rules, regulations and working practices, as outlined in its Distribution Code or applicable documents, to ensure the safety of its staff and members of the public. This shall also include suitable training for familiarity and understanding of the rules, regulations, practices, and training to use any special equipment that may be required for such purposes including without limitation basic first aid training.

4. **WHEREAS**, pursuant to Clauses PSC-1, PSC-2, & PSC-6.3 of Power Safety Code:

PSC-1 Purpose:

The purpose of this safety code is to ensure that the licensee's networks are planned, developed, operated, and maintained in an efficient & safe way without compromising on safety of any kind related to the systems, personnel & others.

PSC-2 General Instructions of Power Safety:

The licensee shall abide by the safety requirements as set out in Power Safety Code, Distribution Code, Power Safety Manual, Performance Standards (Distribution) Rules 2005, Grid Code & other applicable documents.

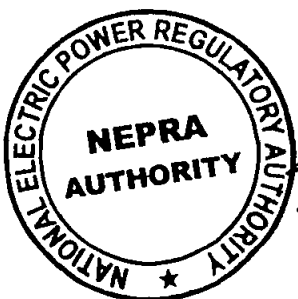
The licensee shall promote a healthy & safe culture and provide all employees, contractors, and the people concerned and the public with a safe & healthy place to work. The Licensee shall ensure that safe working is integrated into every aspect and area of business. Moreover, safety culture shall be based on personal leadership, collaboration, and involvement.

The licensee shall adhere to the highest standards in all work practices so as to ensure protection of employees and any other affected by what licensee do. Each licensee shall ensure in day to day work that facilities/support programmers are provided to safeguard the health, welfare & well-being of their staff.

PSC-6.3 General Provisions of Safety:

The general provisions of safety shall be provided by each licensee covering the following:-

- The provisions for workers/operators to object to doing work on safety grounds
- The use & wearing of safety equipment & protective clothing

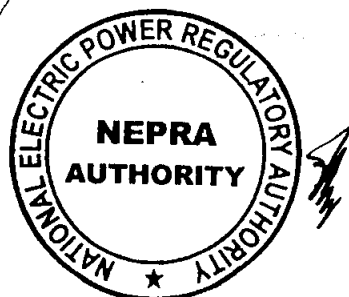


- *Physical fitness & personal conduct of the worker before and during on job*
- *Arrangement and procedure of job briefing before the work is started*
- *Requirements to safe guard the public and property when work in progress*
- *Requirements for housekeeping in a safe working conditions*
- *Arrangements and requirements of fire protection*
- *Requirements, arrangements and use of proper tools and plants for the proper and safe storage lifting and carrying of different types of material*
- *Procedure and reporting requirements of patrolling of lines*
- *Procedure for tree trimming*
- *List of common protective devices and equipment used for the safety purposes.*

5. **WHEREAS**, according to Performance Standards (Distribution) Rules, 2005, the Licensee is obligated to submit the details of fatal accidents for employees as well as the general public that occurred in its service territory. Accordingly, in FY 2022-23, the Licensee has reported a total number of six (06) fatalities (3 Employees & 3 Public Persons); and
 6. **WHEREAS**, according to Performance Standards (Distribution) Rules, 2005, the Licensee is obligated to submit the details of fatal accidents for employees as well as the general public that occurred in its service territory. Accordingly, in FY 2022-23, the Licensee has reported a total number of forty-one (41) fatalities (12 Employees & 29 Public Persons); and
 7. **WHEREAS**, the Authority has taken serious notice of such casualties and is of the view that the Licensee has failed to operate and maintain its distribution facilities in a safe and reliable manner. 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, Clauses PSC-1, PSC-2, & PSC-6.3 of Power Safety Code and other applicable documents; and
7. The Licensee submitted its response vide its letter dated September 22, 2023, against the SCN served. The summarized points of the Licensee's response are narrated below:

"PESCOs management is fully aware of the importance of safety for DISCOs as a moral and legal obligation, and it is totally committed to improve its safety performance. There are several challenges facing PESCO, at the moment. Shortage of skilled manpower is on the top which is directly affecting the safety performance, but how so ever, the company is still maintaining Safety as its key priority areas. To achieve this vision, PESCO is focusing on transforming its Safety Culture from "Reactive Safety Culture" to a "Proactive Safety Culture". This is being done by adopting a modern Safety Management System (SMS) based on industry best practices.

Di / *2*



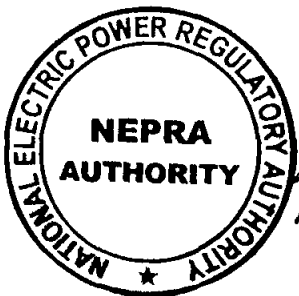
Para wise Reply:

Para 4. In pursuance to Rule 4 (g), of Performance Standards (Distribution) Rules, 2005, and clause SR 4 of Distribution .Code, 2005 it is submitted that:

1. Distribution facilities are being constructed, operated, controlled and maintained in a manner consistent with the Distribution Code, Power Safety Code, Consumer Service Manual and other applicable documents. These instructions are being implemented through our HSE manual which was approved by the Authority in August 2022. In addition to instructions given in the Safety Manual, certain SOPs and specific safety procedures have been prepared and are being reinforced by Safety Instructions, issued from time to time.
2. For prevention of harm to human life due to leakage current/step potential or due to breakdown of equipment, a project for earthing of 431226 number of HT/LT poles worth PKR 86.28 million is approved by the BoD of PESCO for a spell of 89 Days. Mardan and Swabi Circles have started working on it. This will add significantly to stoppage of public accidents. In addition to this, Risk Assessment of critical areas where breakdown of equipment (poles, cross arms, conductors etc.) can harm human life or property is also being done on regular basis and hazards are promptly mitigated. In order to prevent harm to company assets e.g., from fire, awareness trainings on Safety Trainings on Fire Preventions and firefighting are being provided to all employees during their safety trainings at Regional Training Centers PESCO.
3. In order to comprehensively address the challenge of regulatory compliance, a legal register of all HSE Laws applicable on PESCO is being prepared with the help of a consultant. This will ensure that record of 100% compliance of HSE Laws and Regulations is available at one place and can be monitored effectively. This legal register will become a part of syllabus of safety trainings along with, First Aid Training and Leaders Training Syllabus for PESCO employees. 33 Master Trainers in Safety have been trained to provide further training in their respective departments which has further enhanced the pace of training infield.

Para 5. For compliance of clauses PSC-1, PSC-2 & PSC-6.3 of Power Safety Code, the emphasis is on implementation in the field e.g., PESCO has established Directorate of Health, Safety and Environment only in February 2022 with requisite human resource to be placed at its disposal and its administrative control has been placed under the CEO in place of Director Operations.

As you would notice that majority of our line staff succumbed to head injuries after falling from height while at work. In this respect, Fourteen numbers Insulated Bucket Mounted Vehicles were purchased to protect our



line staff falling from height and electrocution. But 190 bucket mounted vehicles are required for each subdivision which is under consideration of World Bank Loan IBRD-9318-PK for Electricity Efficiency Improvement Project RFB reference No. PK-PESCO-Safety Equipment-Good-ICB-01. Morning safety talks are now being made a mandatory requirement before start of work to ensure work is planned keeping safety in mind. Regular checks are being carried out to ensure care, use and maintenance of PPE in the field. Tree trimming is being done regularly as a part of Preventive Maintenance Program.

Para 6. During the financial year 2022-2023, there were 12 employee accidents and 29 public accidents in PESCOs. All of these accidents are reported to HSE NEPRA portal on time and PESCO is submitting monthly HSE report on regular basis to NEPRA. Efforts are in hand to bring accidents in PESCO to zero ASAP, Insha Allah. For this purpose, beside other initiatives, PESCO has acquired the services of a qualified Safety Professional who is helping it to move the safety process on fast track. He has completed his three deliverables/tasks so far (Preparation & submission of a comprehensive, viable and implementable structure and model of safety management system SMS/audit regime for PESCO in accordance with TORs.

Para 7. PESCO was placed in "POOR" category during its NEPRAs HSE Performance Audit for year 2020-2021, however after delivering concerted efforts for safety enhancement, PESCO is now placed as "GOOD" during its NEPRAs HSE Performance Audit for year 2021-2022. PESCO's service area is full of challenges. The situation is becoming even more critical day by day with decreasing number of skilled manpower vis-a-vis growing distribution network.

Para 8. PESCO duly acknowledges the applicability of the legal instruments such as the Distribution Licence, Performance Standards, Distribution Code and the PSC, however, given the efforts made in improving the safety culture in the company, it cannot be alleged that there is a willful neglect or absence of diligence on the part of PESCO. The above referred Show Cause Notice dated August 30, 2023 fails to establish a nexus between the fatal accidents and our inability to implement PSC and other applicable documents.

Para 9: For the reasons and circumstances explained above, it is, therefore, humbly requested that initiatives being taken by PESCO to mitigate the risks may be considered as a level of compliance notwithstanding the fatal accidents which we will strive to decrease and take enhanced measures for improving safety culture in the organization. It is further requested that any fine/penalty at this stage will be very demoralizing and counterproductive for the greater cause of achieving higher standards of safety in such an



adverse operating environment, so no fine may please be imposed on PESCO...”

Hearing:

8. The Authority considered the response of the Licensee and decided to provide an opportunity for a hearing to the Licensee under NEPRA (Fine) Regulations, 2021, before further proceeding in the matter. Accordingly, the said hearing was held on January 30, 2024, wherein, the CEO of the Licensee along with his team made the following submissions:
- (i) In FY 2022-23, forty-one (41) fatalities of the employees and general public occurred in PESCO’s service territory.
 - (ii) Out of forty-one (41), twelve fatalities of employees occurred on account of Safety violations and PESCO has taken action against the responsible officers/officials by imposing major penalties.
 - (iii) Twenty-nine (29) fatalities of the general public occurred, out of which 4-5 fatalities of cable operators happened.
 - (iv) PESCO has lodged FIRs against the consumers who were involved in direct hook connections etc.
 - (v) Afterward, CEO PESCO highlighted the details of major occurrences of fatal accidents. The same is also summarized in the following paras.

9. **Findings/Analysis:**

NEPRA Act and distribution license issued to all distribution companies impose a statutory obligation on the distribution licensees to follow safety standards laid down by the Authority. In this regard, reference is made to Section 21 of the NEPRA Act and Article 11 of the distribution license of the Licensee:

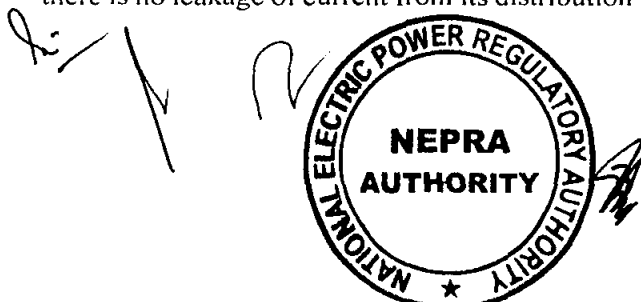
Section 21(2) (f) NEPRA Act

The Licensee shall follow the performance standards laid down by the Authority for distribution and transmission of electric power, including safety, health, and environmental protection instructions issued by the Authority or any Governmental agency;

Article 11 Distribution License - Compliance with Performance Standards

Compliance with Performance Standards – The Licensee shall conform to the relevant Performance Standards as may be prescribed by the Authority from time to time.

The Licensee is required to follow the design parameters of the distribution network and take all possible measures as laid down in the NEPRA Performance Standards Distribution Rules, Distribution Code, and Consumer Service Manual to ensure that there is no leakage of current from its distribution facilities to avoid any danger or harm



to human life and property. Based on the details of individual cases briefed at length in the preceding paragraphs, the major findings of the NEPRA are as follows:

9.1. DETERIORATED DISTRIBUTION SYSTEM / DESIGN FAULT/ IMPROPER PROTECTION SYSTEM:

At various sites, it has been observed that there is a deteriorated HT/LT system of the Licensee.

In the case of Mr. Alaf Zar, an HT conductor slipped from an insulator and touched with a steel cross arm, which caused the current in the HT Structure, when the victim somehow touched the HT Structure, he suffered electric shock and died.

In the case of a man and a woman got electrocuted and died inside the premises of their house at Pirpai while working on appliances, when an HT line got broken. A similar nature of incident occurred in Pezu, where two women and one child died inside the premises of their house when an HT conductor fell on the LT line. In the case of Mr. Sana Ullah, a conductor got broken and fell on the victim due to which he died.

In addition to the above, in the case of an unknown person at Timergira, Dir, the fatality of the victim occurred due to poor quality of work by the Licensee staff during the erection/re-routification of HT lines.

In the aforementioned incidents, the HT/LT line got broken due to its dilapidated/deteriorated conditions and the primary and secondary protection of the Licensee's distribution network did not operate which caused the fatalities of seven (07) public persons including the children. Similarly, poor quality of work by the Licensee staff led to the fatality of one (01) public person.

NEPRA laws and applicable documents particularly Performance Standard Distribution Rules, Distribution Code, and Consumer Service Manual require a distribution licensee to ensure that its distribution facilities do not cause any leakage current and that its protection devices are properly installed and coordinated to ensure isolation of faulty circuits. In this regard, reference is made to provisions of the relevant NEPRA laws:

NEPRA Performance Standards (Distribution) Rules
Rule 4(g), Overall Standards 7-Safety

- (i)
- (ii) *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.*



(iii)

Distribution Code

PR 1 Protection System Practices and System Co-ordination

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:

- a. Protection co-ordination of distribution system, sub-transmission system and system upto the metering point of the User (wherever applicable).*
- b. Intentions to protect the Licensees lines, sub-station facility and equipment against the effects of faults.*

SR 4 Safety Management Criteria

- a.*
- b. 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.*

DDC 3 DESIGN PRINCIPLES

3.1 Specification of Equipment, Overhead Lines and Underground Cables

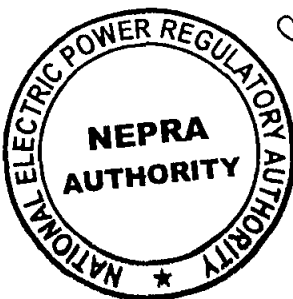
- a. The principles of design, manufacturing, testing and installation of Distribution Equipment, overhead lines and underground cables, including quality requirements, shall conform to applicable standards such as IEC, IEEE, Pakistan Standards or approved current practices of the Licensee.*
- b. The specifications of Equipment, overhead lines and cables shall be such as to permit the Operation of the Licensee Distribution System in the following manner;*
 - i. within the safety limits as included in the approved Safety Code of the Licensee or the relevant provisions of the Performance Standards (Distribution);*

Consumer Service Manual

Chapter 12 Safety and Security

12.2 Obligation of PESCO

PESCO shall monitor and implement the safety and security plan for consumers. The safety and security objectives can be achieved by adopting good engineering practice, including measures as described below



12.2.1 *Operation and maintenance of PESCO distribution system /Network shall be carried out only by the PESCO authorized and trained personnel.*

12.2.2 *PESCO system equipment, including overhead lines, poles/structures/towers underground cables, transformers, panels, cutouts, meters, service drops, etc. shall be installed and maintained in accordance with Grid Code, Distribution Code and other relevant documents.*

In view of the foregoing, the Licensee has failed to discharge its statutory obligation to maintain safety standards and ensure that its protection system operates on time to prevent leakage of current, therefore, the Licensee has contravened Section 21(2)(f) of the NEPRA Act, Article 11 of the Distribution Licence read with Rule 4(g) of the NEPRA Performance Standards (Distribution) Rules, 2005, Clause 4 of the Safety Requirements of Distribution Code, Clause PR 1 of Protection System Requirements of Distribution Code, Clause DDC 3 of Design Code of Distribution Code and Chapter 12 of Consumer Service Manual.

9.2. LACK OF EARTHING/LEAKAGE OF CURRENT:

It was observed that HT/LT structures/poles lacked earthing which became the primary reason for the fatalities.

In the cases of Mr. Muhammad Hammad, Mr. Akhwan, and an unknown woman at Ismaila, the structures/poles lacked the earthing. If there had been proper earthing/grounding of the structures/poles there would have been a chance to prevent the fatalities of **three (03) public persons**.

It is a statutory obligation of the Licensee to ensure that its distribution facilities do not cause any leakage of electrical current. Apparently, the Licensee is not following the principles and parameters set for prudent utility practices for the design of distribution networks as laid down in the NEPRA Performance Standards (Distribution) Rules, Distribution Code, and Consumer Service Manual. In this regard, reference is made to provisions of relevant NEPRA laws:

NEPRA Performance Standards (Distribution) Rules

Rule 4(g), Overall Standards 7-Safety

(iv)

(v) 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.

(vi)



Distribution Code

DDC 4, Design Code- Earthing

....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.

SR 4, Safety Management Criteria

- a.
- b. *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.*
- c.

PR 1 Protection System Practices and System Co-ordination

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.*
-

Consumer Service Manual

Chapter 12 Safety and Security

12.2 Obligation of PESCO

PESCO shall monitor and implement the safety and security plan for consumers. The safety and security objectives can be achieved by adopting good engineering practice, including measures as described below:

-
- 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 PESCO laid down procedures.

In view of the foregoing, the Licensee has failed to follow the principles and parameters set for prudent utility practices for the design of distribution network as laid down in the NEPRA Performance Standards (Distribution) Rules, Distribution Code, and Consumer Service Manual. Such conduct of the Licensee is, *prima facie*, in violation of 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 and Clause 1 of Protection Requirements of the Distribution Code and Clause 12.2 of Chapter 12 of the Consumer Service Manual.

9.3. LACK OF SAFETY MEASURES/CULTURE:

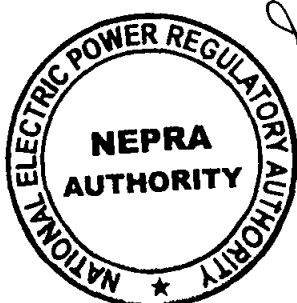
During review of the preliminary inquiry reports, it has been observed that twelve (12) fatalities of the Licensee employees occurred due to lack of safety measures/culture in the the Licensee's service territory. Further, details are following:

- i. Mr. Gul Muhammad (LM-II)
- ii. Mr. Muhammad Noman (ALM)
- iii. Mr. Abdul Rashid (LM-II)
- iv. Mr. Suleman (LM-II)
- v. Mr. Iftikhar Hussain Shah (LM-I)
- vi. Mr. Kifayat Ur Rehman (LM-I/Acting LS)
- vii. Mr. Aqleem Khan (LM-I)
- viii. Mr. Jawad Alam (ALM)
- ix. Mr. Shoaib Ahmad (ALM)
- x. Mr. Said Nabi (ALM)
- xi. Mr. Aman Ullah (LM-I)
- xii. Mr. Muhammad Sohail (LM-II)

In addition to the above, in the case of Mr. Noor ul Islam, a private electrician was electrocuted while working on HT lines illegally in connivance with the Licensee's Staff.

The root cause of the accidents was casual attitude, risky decisions, supervisory lapses, carelessness, unprofessional behavior, and non-compliance with safety-related operating procedures by the Licensee's staff. Failure to ensure the issuance of PTW, using improper PPE, and lack of supervision of work under safety precautions at the worksite are also contributing factors to this accident. Moreover, the execution of work in an unplanned and haphazard manner is also a reason for the fatal accident.

Pursuant to performance standards laid down for the distribution licensees, the Licensee is required to implement suitable, necessary, and appropriate rules, regulations, and working practices, as outlined in the Distribution Code or applicable documents, to ensure the safety of its staff and members of the public.



This shall also include suitable training for familiarity and understanding of the rules, regulations, practices, and training to use any special equipment that may be required to create awareness among employees and inculcate a safe environment.

NEPRA Performance Standard (Distribution) Rules

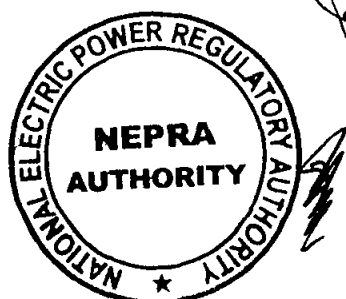
Rule 4(g) – Overall Standard (Safety)

- (i) All distribution facilities of a distribution company shall be constructed, operated, controlled and remained in a manner consistent with the applicable documents.*
- ii) 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.*
- iii) A distribution company shall implement suitable, necessary, and appropriate rules, regulations and working practices, as outlined in its Distribution Code or applicable documents, to ensure the safety of its staff and members of the public. This shall also include suitable training for familiarity and understanding of the rules, regulations, practices, and training to use any special equipment that may be required for such purposes including without limitation basic first aid training.*

Distribution Code

SR 4, Safety Management Criteria

- a. All distribution facilities of a distribution company shall be constructed, operated, controlled and remained in a manner consistent with the applicable documents.*
- b. 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.*
- c. A distribution company shall implement suitable, necessary, and appropriate rules, regulations and working practices, as outlined in its Distribution Code or applicable documents, to ensure the safety of its staff and members of the public. This shall also include suitable training for familiarity and understanding of the rules, regulations, practices, and training to use any special equipment that may be*



required for such purposes including without limitation basic first aid training.

Clause PSC-1, PSC-2, & PSC-6.3 of Power Safety Code:

PSC-1 Purpose:

The purpose of this safety code is to ensure that the licensee's networks are planned, developed, operated and maintained in an efficient & safe way without compromising on safety of any kind related to the systems, personnel & others.

PSC-2 General Instructions of Power Safety:

The licensee shall abide by the safety requirements as set out in Power Safety Code, Distribution Code, Power Safety Manual, Performance Standards (Distribution) Rules 2005, Grid Code & other applicable documents.

The licensee shall promote a healthy & safe culture and provide all employees, contractors, and the people concerned and the public with a safe & healthy place to work. The Licensee shall ensure that safe working is integrated into every aspect and area of business. Moreover, safety culture shall be based on personal leadership, collaboration and involvement.

The licensee shall adhere to the highest standards in all work practices so as to ensure protection of employees and any other affected by what licensee do. Each licensee shall ensure in day to day work that facilities/support programmers are provided to safe guard the health, welfare & wellbeing of their staff.

PSC-6.3 General Provisions of Safety:

The general provisions of safety shall be provided by each licensee covering the following:-

- The provisions for workers/operators to object to doing work on safety grounds*
- The use & wearing of safety equipment & protective clothing*
- Physical fitness & personal conduct of the worker before and during on job*
- Arrangement and procedure of job briefing before the work is started*
- Requirements to safe guard the public and property when work in progress*
- Requirements for housekeeping in a safe working conditions*
- Arrangements and requirements of fire protection*
- Requirements, arrangements and use of proper tools and plants for the proper and safe storage lifting and carrying of different types of material*
- Procedure and reporting requirements of patrolling of lines*
- Procedure for tree trimming*
- List of common protective devices and equipment used for the safety purposes.*



10. The Licensee has submitted that its management is fully aware of the importance of safety for DISCOs as a moral and legal obligation, and it is totally committed to improve its safety performance. There are several challenges facing the Licensee, at the

[Handwritten signature]

moment. The Licensee has further added that the shortage of skilled manpower is on the top which is directly affecting the safety performance, but the company is still maintaining Safety as its key priority areas.

The Authority has considered the submissions of the Licensee and observes that the shortage of staff and the adoption of safety culture are two different issues. It is equally important for the Licensee to implement broader safety measures and foster a proactive safety culture. The Licensee should focus on systematic improvements in safety protocols, training, and overall management practices within the company. The Licensee cannot be absolved from its liability merely on a reason of lack of staff.

11. The Licensee has submitted that its distribution facilities are being constructed, operated, controlled, and maintained in a manner consistent with the Distribution Code, Power Safety Code, Consumer Service Manual, and other applicable documents. These instructions are being implemented through our HSE manual which was approved by the Authority in August 2022. In addition to instructions given in the Safety Manual, certain SOPs and specific safety procedures have been prepared and are being reinforced by Safety Instructions, issued from time to time.

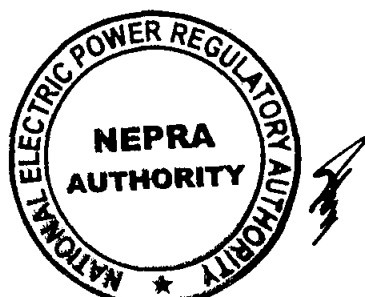
The Authority has gone through the submissions of the Licensee and observes that the claims of the Licensee are only on paper as on-ground results are not significant/convincing. In the service territory of the Licensee, forty-one (41) fatalities occurred in a single year which clearly reflects that the Licensee's efforts are how much effective in the reduction of safety hazards and work in a safe environment. If it is assumed to be true that the Licensee is following all applicable documents, then there should have been significant reduction in fatal accidents, however, in actual it is not so, as 150 number of fatal accidents have been occurred in the Licensee's jurisdiction in last five years, which is very concerning. Therefore, the submissions of the Licensee seem not satisfactory.

12. The Licensee has submitted that for prevention of harm to human life due to leakage current/step potential or due to breakdown of equipment, a project for earthing of 431226 number of HT/LT poles worth PKR 86.28 million is approved by the BoD of the Licensee for a spell of 89 Days.

The Authority has examined the submissions of the Licensee and is of the considered opinion that NEPRA has started the exercise of earthing/grounding of poles/structures of DISCOs territory since July 2022. Despite the lapse of almost two years, the on-ground performance is still far behind the target. The committed timeline of 89 days seems unrealistic and the Licensee has failed to achieve the same. Therefore, the Licensee is just trying to divert the attention of the Authority by giving unrealistic and baseless numbers.

13. The Licensee has submitted that, in order to comprehensively address the challenge of regulatory compliance, a legal register of all HSE Laws applicable on the Licensee is being prepared with the help of a consultant. This will ensure that a record of 100% compliance of HSE Laws and Regulations is available in one place and can be monitored effectively. This legal register will become a part of the syllabus of safety trainings along with, the First Aid Training and Leaders Training Syllabus for the Licensee employees, 33 Master Trainers in Safety have been trained to provide further

[Handwritten signature]



training in their respective departments which has further enhanced the pace of training infield.

The Authority after carefully considering the submissions of the Licensee observes that all the efforts being taken by the Licensee are only on paper. The tangible implementation on the ground by the Licensee is the worst among all the DISCOs. Additionally, while training programs for employees are beneficial, their impact on safety culture and actual safety performance requires ongoing evaluation and reinforcement to ensure sustained improvement. Therefore, it can be said that the Licensee has failed to inculcate a safety culture in its territory.

14. The Licensee has submitted that majority of its line staff succumbed to head injuries after falling from height while at work. In this respect, fourteen numbers Insulated Bucket Mounted Vehicles were purchased to protect its line staff falling from height and electrocution. But 190 bucket-mounted vehicles are required for each subdivision. Morning safety talks are now being made a mandatory requirement before start of work to ensure work is planned keeping safety in mind. Regular checks are being carried out to ensure the care and use maintenance of PPE in the field. Tree trimming is being done regularly as a part of the Preventive Maintenance Program.

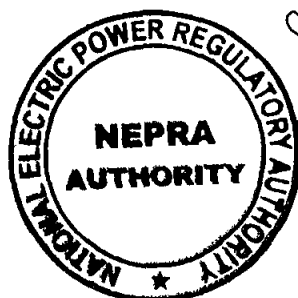
The Authority has considered the submissions of the Licensee and perceives that despite the aforementioned efforts by the Licensee, people are dying. In FY 2022-23, twelve employees of the Licensee died on account of violations of safety SOPs. The efforts claimed by the Licensee should have been taken by it a lot earlier, which it failed to do. Now, these efforts will give results in prevention of accidents in the future, however, the Licensee cannot be exonerated for accidents occurred in FY 2022-23. Further, all the efforts being taken by the Licensee seem not sufficient. In addition to the above, all the submissions by the Licensee are generic in nature and need no reply.

15. In conclusion, the Licensee is supposed to provide electric services in its territory in a safe and reliable manner, however, it has failed to do so, which is a clear violation of the terms and conditions of its Distribution Licence and NEPRA Laws.

16. **Decision**

- 16.1. Keeping in view the submissions of the Licensee, the evidence available on record, and provisions of relevant NEPRA laws and terms and conditions of distribution license issued to the Licensee, the Authority hereby rejects the response of the Licensee against the served Show Cause Notice dated August 30, 2023, and imposed a fine of PKR 62,000,000/- (Sixty two Million) on the Licensee under the NEPRA Act, and NEPRA (Fine) Regulations, 2021 on account of non-compliance by the Licensee with NEPRA Act, Terms & Conditions of its License, Performance Standards (Distribution) Rules 2005, Distribution Code, Power Safety Code, Consumer Service Manual and other applicable documents.

- 16.2. The Authority has also observed that the Licensee gives compensation of PKR 4.0 Million to the families of its employees in case of their fatal accidents along with a job to next of kin. However, the Licensee has not provided compensation to the members of bereaved families of public persons who lost their lives due



to the above-mentioned contraventions of the law by the Licensee. Therefore, the Authority hereby directs the Licensee to give compensation to the families of four deceased public persons equal to the amount being given to its employee's family and provide jobs to their next of kins. Further, the Licensee shall submit documentary evidence of its compliance in this regard to the satisfaction of the Authority within a period of two months.

- 16.3. The Licensee is directed to pay the fine amount of PKR 62,000,000/- (Sixty two Million) in the designated bank of the Authority within a period of 15 days from the date of issuance of this order and forward a copy of the paid instrument to the Registrar Office for information, failing which the Authority may recover the amount due under section 41 of the NEPRA Act as arrears of the land revenue or through any other appropriate legal means in addition to taking any other appropriate legal action against the Licensee for non-compliance.

AUTHORITY

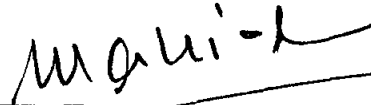
Rafique Ahmed Shaikh
Member (Technical)



Engr. Maqsood Anwar Khan
Member (Licensing)



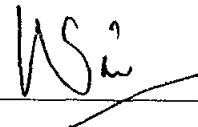
Mathar Niaz Rana (nsc)
Member (Tariff)



Amina Ahmed
Member (Law)



Waseem Mukhtar
Chairman



Dated 05/07/2024

