

National Electric Power Regulatory Authority Islamic Republic of Pakistan

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No. NEPRA/DG(M&E)/LAD-05/ /04/6

July 05, 2024

Chief Executive Officer,

Lahore Electric Supply Company Limited (LESCO), 22-A, Queens Road, Lahore

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

Please find enclosed herewith, Order of the Authority (total 18 pages) in the subject matter for information and compliance.

Enclosure: Order of the Authority

(Engr. Mazhar Iqbal Ranjha)



National Electric Power Regulatory Authority

<u>ORDER</u>

IN THE MATTER OF SHOW CAUSE NOTICE ISSUED TO LESCO ON ACCOUNT OF FATAL ACCIDENTS OCCURRED DURING FY 2022-23

1. Lahore Electric Supply Company Limited (LESCO) (the "Licensee") was granted a Distribution License (No. DL/03/2023 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 eleven (11) fatalities (08 Employees and 03 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 eleven (11) fatalities that occurred during FY 2022-23. The summary of the same is as under:

Sr.	Name of	Date of	Category	Incident Description	Responsibility /
No.	Victim(s)	Incident			Reasons
1	Unknown	03.12.2022	Public	The victim was a theif and	Others
				trying to steal the	
				independent tube-well	
				15kVA transformer. While	
				disconnecting 11kV	
				Jumpers with the help of	





				bolt cutter he got	j :
· :				electrocuted.	
2	Mr. Ahsan	03.01.2023	Public	An owner of commercial shop namely Mr. Mahmood, was carrying out the paintwork on front side of the shop. The laborer was working on scaffolding, which was slipped and fallen on the 11 kV Anarkali feeder. Meanwhile, a pedestrian namely Mr. Ahsan erroneously touched the scaffolding, got electrocuted and died on the spot.	
3	Mr. Abdul Aziz (Private Electrician)	30.04.2023	Public	The victim lost his life due to electrocution while responding to a complaint received from Mr. Amjad Hussain (ASSA) of 132 kV Bhai Pheru grid station, to repair a burnt 11 kV jumper on a transformer supplying power to his residence. Upon arriving at the site, the victim started to carry out work and he was facilitated by Mr. Amjad Hussain's illegal tripping of the VCB at the grid station. However, when the power supply was restored during his repairs, he suffered an electric shock and fatally fell to the ground. This underscores the risks associated with unauthorized manipulation of electrical systems and the critical importance of adhering to safety protocols.	Lack of Safety Measures/ Culture
4	Mr. Muhammad Aslam (LM-I)	06.07.2022	Employee	The victim, assuming that the 11kV EKHL feeder was deadshort, climbed the structure to remove the hanging wire and came in	LESCO Lack of Safety Measures/ Culture
L	1			contact with the energized	1



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!	- [· · · · · · · ·	TIKV EKHL feeder and died		
			!			
5	Mr. Ilhan Masih (ALM)	16.07.2022	Employee	After confirmation of PTW on 11 kV Green Town Feeder, the victim climbed up the structure, fastened his safety belt, and tried to set right 11 kV jumpers of the tube well transformer, however, he sustained electric shock as he erroneously touched the energized 11 kV Umar Chowk Feeder and died on the spot as the said 100 kVA WASA Tube-well connection was feeding from 11 kV Umar Chowk Feeder instead of Green	•	LESCO Lack of Safety Measures/ Culture
6	Qiaser Mehmood (LM-I)	17.09.2022	Employee	At the incident site, Mr. Qiaser Mehmood (LM-I) i.e. the victim, and Mr. Abrar (LM-I) climbed on the bucket, after attaining the required height, the victim tried to earth the 11 kV Ravi Rayan feeder with lifesaving chain. After clenching the clamp of lifesaving chain with the stay wire when he tried to wrap the other end of lifesaving chain with 11 kV Ravi Rayan feeder, he sustained 11 kV electric shock as the 11 kV feeder was energized. The victim was immediately shifted to hospital where he was declared dead. It is pertinent to mention here that Mr. Junaid Zaman (ASSA), 132 kV Ittehad		LESCO Lack of Safety Measures/ Culture
		OWER RE		the time of issuance of PTW to concerned LS mistakenly switched off and wracked out the VCB trolley of 11 kV		

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			· · · · · · · · · · · · · · · · · ·	P-Liner feeder instead of 11	i
!!!				kV Ravi Rayan Feeder.	
! :				KV Kavi Kayan i boden	
7	Mr. Muhammad Shabaz	11.05.2023	Employee	Mr. Muhammad Shabaz (LM-I), the victim, along with the consumer reached at the site khairy kalan where the tube-well connection was installed. Mr. Muhammad Shahbaz LM-I found that 02 No. 11 kV jumpers of 10 kVA transformer of the tube-well connection were damaged. Mr. Muhammad Shabaz LM-I climbed up the structure and when he touched the 11 kV jumper of 10 kVA transformer of said tube-well connection, he sustained 11 kV electric shock and fell down on the ground as he did not fasten the safety belt and died on	Lack of Safety Measures/ Culture
8	i. Mr. Hasan Raza (LM-I) ii. Mr. Muhammad Hafeez (ALM)	01.07.2023	Employee	the spot. For maintenance purpose, upon reaching the site, Mr. Hassan Raza (LM-I) and Mr. Muhammad Hafeez (ALM) got into the bucket along with a steel-x-arm for the bus-bar. When the bucket reached a height of approximately 10-11 feet, breakage of boom occurred which causing the bucket to tilt downwards. Consequently, both officials fell to the ground along with the steel-x-arm and sustained severe injuries. Both the officials were immediately shifted to the hospital, however, they died.	Lack of Safety Measures/ Culture
9	Mr. Masood Sarwar (LM-I)	05.06.2023	Employee	The victim lost his life while performing testing	
	,,			procedures for the newly constructed 132 kV Eden City Grid Station. While	Lack of Safety Measures/ Culture



			connecting wires to the potential transformer, he slipped and fell from the structure, resulting in a severe head injury when his head struck against a trench slab. Despite immediate transportation to the Hospital, he was pronounced dead upon	
			arrival. This unfortunate incident underscores the importance of strict safety protocols in such high-risk work environments.	
10 Mr. Khalid Id (LM-I)	qbal 24.06.2023	Employee	The victim lost his life due to electrocution while attempting to reconnect 11 kV jumpers. The incident occurred as he climbed the 11 kV dead-end structure to restore power to a tube-well connection. Despite the availability of appropriate grounding sets, proper grounding/earthing procedures were not followed by Mr. Muhammad Rafique LS-II, who was supervising the task. This failure to ensure safety protocols ultimately led to the fatal accident.	•

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

Description :	Number of ac-	Responsibility.		
	Latanties	E LESCO CO	a Official	
Employees	08	08	00	
Public	03	01	02	
Total	11	09	02	

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.



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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 eleven (11) fatalities (08 Employees and 03 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.

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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 iob
- 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 eleven (11) fatalities (8 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

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as the general public that occurred in its service territory. Accordingly, in FY 2022-23, the Licensee has reported a total number of fourteen (14) fatalities (4 Employees & 10 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 facia, 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 28, 2023, against the SCN served. The summarized points of the Licensee's response are narrated below:

We wish to use this opportunity to clarify that LESCO has diligently adhered to all rules and regulations set forth by NEPRA. We aim to shed light on a detailed analysis of all fatalities, emphasizing that the root cause of each accident primarily resides in individual human behavior, and we are committed to addressing these behavioral factors as a central aspect of our safety improvement efforts.

We acknowledge that NEPRA has meticulously outlined the rules and regulations in the show cause notice letter. However, we believe it is imperative to reiterate these regulations within our response to underscore our unwavering commitment to compliance. By re-stating these rules, we aim to emphasize that LESCO has been vigilant in its adherence to NEPRA's directives, and any deviations from the established standards were neither deliberate nor indicative of a systemic or operational failure. Our intent is to demonstrate that LESCO has been operating within the framework of NEPRA's regulations and will continue to do so with increased vigilance and dedication to safety.

In examining the unfortunate series of accidents that transpired during the fiscal year 2022-23 within the LESCO, it becomes evident that each incident was the result of individual actions and human behavior. In order to bring fatal accidents to zero, first there is a dire need to analyze the root causes of such accidents. We approach this analysis with a commitment to transparency and a genuine desire to ensure the safety of both our valued employees and the public we serve. It is essential to recognize that while we have robust safety protocols, SOPs, and rigorous training programs in place, the root causes of these accidents often trace back to the choices and actions of individuals. By delving into each case, we aim to shed light on the critical role of personal responsibility and behavior in preventing such occurrences in the future.

In the fiscal year 2022-23, a total of 8 fatal accidents of employees were reported at LESCO. These incidents have highlighted the critical necessity of addressing employee behavior. The majority of these accidents were attributed to employee actions such as working without authorization. This collective negligence



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resulted in 6 out of 8 accidents, indicating a pressing need to enforce safety protocols at individual-level. The following table shows the breakdown of accidents and resultant cause:

Sr. No.	Cause of Accident (Employees)	2022-23 (Total No. of Accidents = 8)		
		No. of Accident	%age	
1	Working without PTW & SOP Violations	-	-	
2	Working Carelessly + Gross Unsafe Act Committed by Individual(s)	3	37.5	
3	Working without Proper Authorization/ On One's own Discretion	4	50.0	
4	Working under Unsafe Conditions	-	-	
5	Failure of Equipment/T&P	1	12.5	

Analysis of Fatalities of Employees:

The breakdown of root causes for the eight fatal accidents involving LESCO employees during FY 2022-23 reveals a clear pattern where individual actions and mistakes played a pivotal role. The fact that one accident occurred due to working carelessly and in haste, four accidents transpired as a result of employees working without proper authorization or exercising their own discretion, and two incidents were the direct outcome of gross unsafe acts committed by individuals, such as working on energized lines. Furthermore, only one accident was attributed to equipment failure, which is unpredictable. This analysis unequivocally highlights that the majority of these accidents were preventable and stemmed from the decisions and actions of individuals rather than systemic or operational deficiencies.

Accident Prevention Efforts by LESCO:

• Strict Implementation of Safety SOP's & PTWs:

To this end, we are actively enforcing comprehensive SOPs that are not only meticulously designed but also easy to implement, ensuring that safety measures are practical and accessible to all. LESCO HSE team is committed to keep a strict check and balance for taking PTW and energization of conductors prior to work.

To curb accidents stemming from work without proper permits (PTW), LESCO has rolled Out an E-Permit to Work (E-PTW) system. This system, aligned with LESCO's safety commitment, streamlines permit management for enhanced accident prevention. In this system, dedicated WhatsApp groups for each circle enable quick PTW request forwarding by SDOs. PTW requests swiftly move through the system, ensuring



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timely evaluation and approval. Manual processes are sidestepped, eurbing administrative bottlenecks that could delay PTW issuance.

Behavior Based Trainings for Line Staff

Our behavior-based training programs are geared towards instilling a heightened sense of personal responsibility and safety consciousness among our employees, while quick impact safety training programs for supervisors ensure that safety leadership is ingrained at every level of our organization. LESCO understands that safety is a mindset that needs to be built and then reinforced through positive reinforcement. These programs focus on cultivating safe work habits, fostering responsible decision-making, and instilling a culture of individual responsibility toward safety.

• Quick Impact Safety Trainings (QIST) for Supervisory Staff

LESCO's quick impact safety training programs for supervisory staff (Line. Superintendents & SDOs) play a crucial role in safeguarding the well-being of our line staff and preventing accidents. These refresher courses equip our supervisory staff with the knowledge, skills, and awareness needed to effectively oversee and guide the daily activities of their teams. Till June 2023, 29 batches of QISTs have been trained at RTC LESCO.

• Incentivization for Line Staff

LESCO have adopted a balanced approach by incentivizing our line staff through recognition and, when necessary, disciplinary actions to deter safety violations. Incentivizing line staff is a proactive approach aimed at preventing accidents by emphasizing the importance of safety in their daily tasks. By rewarding employees who consistently adhere to safety protocols and demonstrate responsible behavior, we create a strong motivation for others to follow suit.

• Safety Audits, Surprise Sites Checks & Safety Calls for Strict Implementation of SOPs

Safety audits, surprise site checks, and safety calls to check the implementation of safety SOPs are integral components of our comprehensive safety management system at LESCO. Safety audits are conducted regularly to assess the adherence to safety protocols across various departments and work sites.

Surprise site checks are unannounced inspections carried out by our safety inspectors. These impromptu visits allow us to assess safety compliance in real-time, without prior notice. This approach ensures that employees are consistently following safety guidelines even when they are not expecting an audit, reinforcing the importance of adhering to SOPs on a daily basis. Moreover, as a direct consequent of E-PTW mechanism, our safety inspectors remotely inspect the works sites

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through phone calls (Safety Calls) to supervisors (Line superintendents) and checks the implementation of safety SOPs.

• Hazard Identification and Removal for Safe System

We are actively addressing hazards and unsafe conditions, and proactively identifying and rectifying potential risks to create a safer working environment. LESCO HSE directorate and CE (O&M) collectively supervise the Hazard identification and prompt removal of hazards for creating a safe working environment. A large chunk of O&M budget is spent on hazard removal and ensuring safe distribution system for both public and employees.

Analysis of Fatalities of Public:

Sr. No.	Cause of Accident (Public)	2022-23 (Total No. of Accidents = 3)			
	<u> </u>	No. of Accident	%age		
Ī	Cross Unsafe Act Committed by Individuals (Public)	02	66.67		
		Electrocuted while stealing Transformer.			
		Literal Falling of Painting Platform on Live Conductor			
2	Working without Authorization/ Illegal	01	33.33		
	Work/One's own discretion	Illegal Working of Self discretion			

- Electrocution while Stealing Transformer: In the first incident, the
 individual involved was electrocuted while attempting to steal a
 transformer. This tragic accident underscores the importance of personal
 responsibility and the dangers associated with unauthorized tampering
 with electrical equipment. It is evident that this incident was a direct
 result of the individual's actions and choices.
- 2. Literal Falling of Painting Platform on Live Conductor: The second incident involving the literal falling of a painting platform onto a live conductor highlights the critical need for proper authorization and adherence to safety protocols. Engaging in tasks near live electrical lines without proper authorization is inherently risky and, in this case, resulted in a fatal accident.
- 3. **Illegal Working:** The third incident, where a private electrician was engaged in unauthorized and illegal work on self-discretion, again emphasizes the importance of following established safety procedures and obtaining proper authorization. Working without proper

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authorization or discretion can lead to hazardous situations, as was tragically demonstrated in this case.

In conclusion, a generic analysis of these accidents underscores that LESCO's distribution network and operational systems were not the primary causes of these incidents. Instead, these tragic accidents were a direct result of individual actions, decisions, and behaviors.

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 the service territory of LESCO, eight fatalities of its employees and three fatalities of the general public occurred in FY 2022-23. The comprehensive reply of LESCO regarding all the fatalities has been submitted in response to the Show Cause Notice.
 - (ii) Three out of eight fatalities occurred due to the carelessness of the staff. They worked illegally without intimation to the higher management.
 - (iii)One fatality of the employee occurred due to the breakage of the boom of the bucket.
 - (iv) Further, the Director (HSE), LESCO apprised the Authority about the occurrence of all the fatal accidents. (The same are also described in the below paras.)
 - (v) LESCO is carrying out training of the staff, in order to avoid these fatal accidents.
 - (vi) From 1st July 2023 to December 2023, the trainings of 3978 Staff members were conducted.
 - (vii) In addition to the above, Safety Committee meetings and morning assemblies have also been carried out in LESCO on a regular basis.
 - (viii) LESCO is trying its level best to avoid fatal accidents in its territory.

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;

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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. LACK OF SAFETY MEASURES/CULTURE:

It has been observed that eight (08) fatalities of the Licensee employees, and one (01) public fatality occurred due to lack of safety measures/culture in the the Licensee's service territory. Further, details are the following:

- i. Mr. Abdul Aziz (Private Electrician)
- ii. Mr. Muhammad Aslam (LM-I)
- iii. Mr. Ilhan Masih (ALM)
- iv. Qiaser Mehmood (LM-I)
- v. Mr. Muhammad Shabaz
- vi. Mr. Hasan Raza (LM-I)
- vii. Mr. Muhammad Hafeez (ALM)
- viii. Mr. Masood Sarwar (LM-I)
- ix. Mr. Khalid Iqbal (LM-I)

In the case of Mr. Abdul Aziz, a private electrician was facilitated with illegal tripping by the grid staff, which led to his demise. In addition to the above, in the cases of the Licensee's own employees, the root causes of the accidents were casual attitude, risky decisions, equipment failure, 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, improper PPE, and lack of supervision of work under safety precautions at the worksite are also contributing factors to the accidents. Moreover, the execution of work in an unplanned and haphazard manner is also a reason for the fatal accidents.

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.

<u>Distribution Code</u> 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 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.
- 10. The Licensee has interalia, submitted that the root cause of each accident primarily resides in individual human behavior. The Licensee has further submitted that it is committed to addressing these behavioral factors as a central aspect of its safety improvement efforts. Moreover, the Licensee has also added that it has been vigilant in



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its adherence to NEPRA's directives, and any deviations from the established standards were neither deliberate nor indicative of a systemic or operational failure. The Licensee has also submitted that it aims to shed light on the critical role of personal responsibility and behavior in preventing such occurrences in the future.

The Authority has considered the submissions of the Licensee and observes that the root cause of each accident cannot be solely attributed to individual human behavior; rather, it is a prime responsibility of the Licensee to train its employees to carry out work by following safety SOPs strictly. This entails not only emphasizing individual accountability but also implementing comprehensive training programs, fostering a safety culture, and providing adequate resources to mitigate risks effectively. Regarding prevention of accidents, the statement of the Licensee seems on paper only, as a number of cases occur every year and the Licensee has failed to prevent the same or even reduce the same. Therefore, the submissions of the licensee are not substantial.

The Licensee has submitted that the breakdown of root causes for the eight fatal accidents involving the Licensee employees during FY 2022-23 reveals a clear pattern where individual actions and mistakes played a pivotal role. The fact that one accident occurred due to working carelessly and in haste, four accidents transpired as a result of employees working without proper authorization or exercising their own discretion, and two incidents were the direct outcome of gross unsafe acts committed by individuals, such as working on energized lines, underscores the critical importance of personal responsibility and behavior. Furthermore, only one accident was attributed to equipment failure, which is unpredictable. This analysis unequivocally highlights that the majority of these accidents were preventable and stemmed from the decisions and actions of individuals rather than systemic or operational deficiencies.

In this regard, the Authority after considering the submissions of the Licensee is of the view that the Licensee has admitted the facts that its employees are working without proper authorization in a hasty and unsafe manner. It is again emphasized that the responsibility for the accidents is not solely attributed to the individual human behavior. Being a distribution licensee, it is the responsibility of the Licensee to ensure proper supervisory role at the time of execution of works which it failed to do so and which is one of the major factors for the occurrence of these accidents. The Licensee should think about why its line staff is working without taking PTW and following safety protocols. This clearly establishes that there is no accountability mechanism in the Licensee's jurisduction which has seriously hampered the development of safety culture. Further, the detailed summary of the accidents as given at para 6 above elaborates the each and every accident and establishes that how and why the Licensee is responsible for those accidents.

12. The Licensee has submitted its various efforts in order to inculcate a safety culture in its territory, such as Strict Implementation of Safety SOP's & PTWs, Behavior-Based Trainings for Line Staff, Quick Impact Safety Trainings (QIST) for Supervisory Staff, Incentivization for Line Staff, Safety Audits, Surprise Sites Checks & Safety Calls for Strict Implementation of SOPs, and Hazard Identification and Removal for Safe System.

The Authority has considered the submissions of the Licensee and is of the considered opinion that despite the aforementioned efforts as claimed by the Licensee, the fatalities are occurring every year in its territory. The tangible impact in terms of reduction in

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fatal accidents of its employees and the public is negligible and in the rainy season, the situation becomes worse. Therefore, all the efforts being taken by the Licensee could not be considered upto the mark.

13. The Licensee has further submitted that in the case of the fatality of a private electrician, he was engaged in unauthorized and illegal work on self-discretion, again emphasizing the importance of following established safety procedures and obtaining proper authorization. Working without proper authorization or discretion can lead to hazardous situations, as was tragically demonstrated in this case.

The Authority while considering the submissions of the Licensee observes that the victim (private electrician) was facilitated with illegal tripping by the grid staff of the Licensee in order to restore the supply of his house. This indicates that the Licensee has no control over its employees as they could facilitate tripping (illegally) without any information to its seniors, even at the 132 kV grid station. This further transpires that all the operational matters are being run by staff on their own, which shows a poor state of affairs. Therefore, the submissions of the Licensee are not justified.

14. 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.

15. Decision

- 15.1. 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 23,000,000/- (Twenty-three 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.
- 15.2. 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.





15.3. The Licensee is directed to pay the fine amount of PKR 23,000.000/- (Twenty-three Million) in 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.

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Dated <u>05/07/</u> 2024
NEPRA AUTHORITY