

NIGERIAN ELECTRICITY REGULATORY COMMISSION

ORDER NO: NERC/GL/169

BEFORE THE NIGERIAN ELECTRICITY REGULATORY COMMISSION IN THE MATTER OF NON-COMPLIANCE WITH THE ELECTRIC POWER SECTOR REFORM ACT, TERMS AND CONDITIONS OF ELECTRICITY DISTRIBUTION LICENCE NO: NERC/LC/032, AND OTHER REGULATORY INSTRUMENTS OF THE NIGERIAN ELECTRICITY REGULATORY COMMISSION

WHEREAS:

- Electricity Distribution Licence No: NERC/LC/032 was issued to Abuja Electricity Distribution Company Plc ("AEDC") by the Commission on 1 October 2013 in accordance with section 32(2) (d) of Electric Power Sector Reform Act ("EPSRA").
- 2. Section 63 (1) and (2) of EPSRA imposes an obligation on the holder of an electricity distribution licence to comply with the terms of issuance of the licence, regulations, codes and other requirements issued by the Commission.
- 3. Condition 18 (1) of the distribution licence imposes an obligation on AEDC to take all reasonable steps to protect persons and property from injury and damage that may be caused by the licensee when carrying out the licensed business.
- 4. Condition 38 (8) of the distribution licence imposes an obligation on AEDC to ensure that the distribution system is maintained in accordance with standards in the NERC Distribution Code for the Distribution Sector of the Nigeria Electricity Supply Industry ("Distribution Code") to ensure quality, safety and reliability of the electricity system.
- 5. Section 1.3.26 Part IV of the Distribution Code imposes an obligation on AEDC to ensure that distribution transformers, switchgears, distribution boxes etc. installed in streets and accessible to public shall be protected by locking the doors and/or providing a suitable fence with gate wherever possible. "DANGER" signs must also be prominently displayed on the fence and equipment.

- 6. Section 5.3.1 of the Nigerian Electricity Health & Safety Code ("HSC") requires AEDC to send a preliminary report within 72 hours of accident which result in damage of equipment, loss of life and injury to human beings.
- AEDC's negligence in complying with the terms and conditions of its licence, Distribution Code and HSC resulted in the death of a 4-year old boy, Master Mohammed Arafat Jibril, on 11 April 2019 at the Senior Quarters of the Federal Low-Cost Housing Estate, Maikunkele, Bosso Local Government Area of Niger.
- 8. The Commission conducted a random investigation of AEDC's facilities at different locations in Abuja and similar acts of non-compliance were identified.
- Particulars of the infractions and some photographs of random non-compliant facilities from the inspection conducted by the Commission were disclosed in the Notice of Intention to Commence Enforcement ("NICE") NERC/LLC/CU/2019/IU/1232 that was issued to AEDC by the Commission on 29 April 2019.
- 10. The particulars of non-compliance in the NICE are as follows
 - a. AEDC failed to take reasonable steps to protect the public from injury by ensuring that distribution systems are maintained in accordance with standards in the Distribution Code thereby leading to the fatal electrocution of Master Mohammed Arafat Jibril, contrary to the provisions of –
 - i. Section 71(5) of EPSRA.
 - ii. Condition 18(1) & 38(8) of the terms and conditions of AEDC's distribution licence.
 - iii. Section 1.3.26 of the Distribution Code.
 - b. AEDC failed to send a preliminary report of the accident within 72 hours contrary to the provisions of section 5.3.1 of the HSC.
 - c. AEDC failed to comply with the provisions of the Commission's Regulations and breached the terms and conditions of its distribution licence contrary to –
 - i. Section 63 of EPSRA.
 - ii. Condition 2 of the terms and conditions of the distribution licence.

- 11. AEDC was required to respond to the NICE within 7 days of being served by the Commission.
- 12. The Commission received a letter dated 6 May 2019 from AEDC requesting for an extension of the deadline to respond to the NICE to 10 May 2019 because "the issues to be addressed are of a serious nature and require thorough analysis of the root causes to enable the organisation implement companywide preventive measures, in addition to addressing other network defects observed by the Commission".
- 13. AEDC sent a final response to the NICE dated 9 May 2019 and this response addressed 3 main issues.
- 14. ADEC's response to the fatal electrocution of Master Mohammed Arafat Jibril is as follows
 - a. "The unfortunate incident occurred at about 1310 hours on Thursday, the 11th day of April 2019, at 300kVA 11/0.415kVA Senior Staff distribution substation in Maikunkele area, which feeds from 33/11kV Maikunkele injection substation on Airport feeder in Bosso, Niger region.
 - Our investigation revealed that the deceased was in the care and custody of his elder sister who was on her way to fetch water at another street, when the deceased, at some point in the walk, separated from the said elder sibling, only to be later found dead in the said distribution substation.
 - c. A mesh fence wiring and an iron gate with a padlock originally secured the said distribution substation.
 - d. AEDC acknowledges all its obligation outlined by the Commission under the EPSRA, our distribution licence, the Distribution Code and the HSC. However, due to recurring incidents of vandalism/theft of electricity infrastructure around the community, coupled with the suspicions/accusations by members of the community that some supposed staff of AEDC could facilitate theft, our Maikunkele area office reluctantly acceded to the community's insistence on safekeeping the key of the padlock that secured the gate to the substation in issue. It is noteworthy that the substation in issue was installed by the community and hence their entitled sense of ownership. Against this backdrop, the said padlock key used in securing the station was kept in the

custody of the community chairman in the person of DSP Baba Abubakar (Rtd.).

- e. The practice was for the community to provide Maikunkele area office access to the said substation whenever AEDC were to undertake maintenance work therein. Considering the tender age of the deceased, he could not have ordinarily gained access into the perimeters of the substation if the padlock was properly in use. It would appear that the said padlock was either destroyed, dilapidated or not in proper use before the incident since it was nowhere to be found around the vicinity when the deceased's body was being recovered from inside the substation.
- f. We gave notice of the incident to the Commission via our email dated 12th April 2019. This was followed by a preliminary report on 15th April 2019 and the final report was emailed to the Commission on 7th May 2019.
- g. We are taking urgent steps across all our territory to ensure that such unfortunate incidents do not reoccur. We are also taking steps to more effectively monitor security arrangements between AEDC and all host communities in its franchise area of operations to avoid a repeat of the unfortunate scenario that claimed the life of the deceased".
- 15. AEDC's response to the identified unsafe facilities at different locations in Abuja is that "regarding the nine facilities mentioned in the Commission's notice, we have taken all necessary measures to remedy the safety defects highlighted therein, and their recent statuses are as contained in the attached schedule. We are also overhauling our HSE plan of work and we will be sharing that with the Commission shortly".
- 16. AEDC's response to the risk of unfenced and exposed infrastructure is that "AEDC would like to bring to the Commission's attention that we have identified exposed infrastructure as a major risk and a breach of industry best practice requirements as well as regulatory requirements. We have therefore escalated the implementation of CAPEX projects to address these defects. Our initial focus and priority areas are critically exposed infrastructure in public places such as markets and schools".
- 17. The Commission's records indicate that the following accidents in the table below occurred in AEDC's network area for the period 2018 2019.

	Date	Nature of Accident	Description of Accident				
1	1 February 2018	Fall	The victim (Hamisu Abubakar) and his supervisor Musa Dahiru Mohammed went to the site to amend a J&P fuse after working on an LT line at Uke General Hospital. Supply was restored when the victim was on the line, he received an arc and fell from height.				
2	23 February 2018	Flash burn	Arc flash involving 3 employees of AEDC while working on a line to reconnect Deels Water Factory in Lokoja.				
3	31 March 2018	Electrocution	Jafar Abdullahi was electrocuted while connecting cable lugs J&P fuses at Maraba.				
4	28 April 2018	Electrocution	Master Jonathan Mike, a minor, was electrocuted while playing around a TV antenna at Old Chief Palace, Durumi II.				
5	13 June 2018	Electrocution	A lady was electrocuted at a hotel at Masashi.				
6	22 June 2018	Electrocution	Mr. Ryekat Caleb Dakilak was electrocuted while working on the J&P fuse at the Masaka simple 500kVA 33/0.415kV distribution substation when power supply was restored.				
7	26 June 2018	Electrocution	Mr. Silas was electrocuted in Suleja while replacing the J&P fuse on the dedicated 50kVA transformer supplying a house.				
8	7 September 2018	Electrocution	A painter, Mr. Salis Samuel, was electrocuted when his aluminium ladder contacted the 11kV line at Deeper Life School.				
9	15 September 2018	Electrocution	Mallam Baffa was electrocuted after touching the stay wire at Kwali Park mosque.				
10	10 February 2019	Burns & Electrocution	An electrical accident led to the burns and death of 3 family members at Randan Ruwa under the Bosso area office in Niger.				
11	16 February 2019	Burns	Mr. Dabo ran into an energised RMU at Hilltop Plaza near Foursquare Gospel Church at Asokoro leading to severe burns.				
12	20 March 2019	Electrocution	The victim, an unauthorised person, contacted a down-dropper after closing the J&P fuse at the				
			Th 2				

Date	Nature of Accident	Description of Accident						
		School	of	Health	substation	when	he	was
		electrocuted.					_	

- The Commission constituted a 2-man Accident Investigation Team ("AIT") made up of Engrs. Abu Kadiri and Abdulrasheed Busari to investigate the accident in compliance with section 5.3.1 of the HSC.
- The AIT conducted the site investigation from 15 16 April 2019 and reached the following conclusions –
 - "The accident occurred on Thursday 11th April, 2019 at about 1.00pm, inside the switchyard of Senior Staff Quarters 300kVA, 11/0.415kV distribution substation, Bosso, Minna.
 - b. The accident led to the death of 4-year old Arafat Ibrahim Muhammad.
 - c. The victim inadvertently gained access into the substation yard and grabbed the internal connection of the feeder pillar on potential and got electrocuted instantly.
 - d. The Senior Staff Quarters 300kVA, 11/0.415kV distribution substation was fenced with mesh wire and provided with iron access door.
 - e. The distribution substation was protected with J&P lightening arrestor on the primary side and high rated capacity fuses in the feeder pillar on the secondary side. Both the feeder pillar and transformer were earthed with bare aluminium conductor within the switch yard.
 - f. <u>The iron access door was not under secured lock and this made it vulnerable</u> to unauthorised persons or intruders.
 - g. <u>The feeder pillar was also not under secured lock and the plinth has collapsed</u> with generally untidy environment in the switchyard.
 - h. <u>AEDC technical crew comprising; Bala Aliyu, Hassan Abubakar, Chachanga</u> <u>Mohammed and Alih Isah from Bosso area office carried out maintenance</u> <u>work at the distribution substation 2 weeks before the incident. The team</u> <u>confirmed that the fence of the substation was not under padlock but they</u> <u>used binding wire to secure the iron gate on the substation fence.</u>

- i. When the incident occurred, a rescuer from the neighbourhood rushed to Maikunlele injection substation to notify the Distribution System Operator before he opened the Airport 11kV feeder, which supplies power to the area on emergency at 1.10pm.
- Men of the Nigeria Police Force were invited to the scene after the accident occurred.
- k. The body of the deceased victim was evacuated from the substation after power supply to the area was interrupted and was handed over to the family by the Nigeria Police.
- I. The deceased was buried on the same afternoon of 11th April, 2019 in line with Islamic rites.
- m. There was no medical report because the victim was not taken to the hospital after the incident occurred, before he was buried".
- 20. UPON being satisfied that AEDC has violated the provisions of section 7 of the Nigerian Electricity Regulatory Commission (NERC) Regulations for investment in Electricity Networks 2015 by failing to complying with the Regulations on the investment made by the community.
- 21. UPON being satisfied that AEDC has violated the provisions of section 6.2 of the Nigerian Electricity Supply and Installation Standards (NESIS) Regulations 2015 by failing to adequately fence and secure their distribution substation to prevent unauthorised access even after this breach was identified by the AEDC technical crew that worked on the site 2 weeks before the incident.
- 22. UPON being satisfied that AEDC has violated the provisions of section 6.3.1(c) of the Nigerian Electricity Supply and Installation Standards (NESIS) Regulations 2015 which provides that "feeder pillars shall be installed on a plinth of not less than 600mm from the ground with furnished tamperproof lock and appropriate clamp".
- 23. UPON being satisfied that AEDC has violated section 1.3.26 Part IV of the Distribution Code which imposes the obligation on distribution licensees to ensure that "distribution transformers, switchgears, distribution boxes etc. installed in streets and accessible to the public shall be protected by locking the doors and/or providing a suitable fence with gate wherever possible. DANGER signs must also be prominently displayed on the fence and equipment".

- 24. UPON being satisfied that AEDC has violated the provisions of section 1.2 (ii) of the HSC which provides that "an operator shall have a corporate culture that promotes safety of workers and the environment".
- 25. UPON being satisfied that AEDC's safety record in 17 above and the other acts of commission or omission identified in this order contributed remotely and directly to the death of Master Mohammed Arafat Jibril on 11 April 2019.
- 26. UPON being satisfied that AEDC has violated condition 18(1) of its distribution licence which imposes an obligation on AEDC to take all reasonable steps to protect persons and property from injury and damage that may be caused by the licensee when carrying out the licensed business.
- 27. UPON being satisfied that AEDC has violated condition 38(8) of its distribution licence which imposes an obligation on AEDC to ensure that the distribution system is maintained in accordance with standards in the Distribution Code to ensure quality, safety and reliability of the electricity system.
- 28. UPON being satisfied that AEDC has violated section 63 (1) and (2) of EPSRA which imposes an obligation on the holder of an electricity distribution licence to comply with the terms of issuance of the licence, regulations, codes and other requirements issued by the Commission.
- 29. **UPON** being satisfied that AEDC has admitted to the random non-compliant facilities that were identified by the Commission and confirmed in writing that "regarding the nine facilities mentioned in the Commission's notice, we have taken all necessary measures to remedy the safety defects highlighted therein, and their recent statuses are as contained in the attached schedule. We are also overhauling our HSE plan of work and we will be sharing that with the Commission shortly"
- 30. UPON being satisfied that has admitted in writing to the major risk of its exposed infrastructure and confirmed in writing that "AEDC would like to bring to the Commission's attention that we have identified exposed infrastructure as a major risk and a breach of industry best practice requirements as well as regulatory requirements. We have therefore escalated the implementation of CAPEX projects to address these defects. Our initial focus and priority areas are critically exposed infrastructure in public places such as markets and schools".

THE COMMISSION HEREBY ORDERS as follows -

- A. AEDC shall pay the sum of NGN50million to the family of late Master Mohammed Arafat Jibril as compensation to his family and this compensation payment shall be made to the family at formal presentation to be held at the Commission on 28 May 2019.
- B. AEDC shall pay a fine in the sum of NGN250million to the Commission for all infractions/violations identified in this order. This fine shall be due and payable by 20 May 2019.
- C. AEDC shall conduct a detailed safety audit of its network and the findings of this safety audit shall be sent to the Commission within 90 days from the date of this order.
- D. AEDC shall send the Commission a detailed remediation plan to address the issues in the safety audit in the short, medium and long term.

BY ORDER OF THE COMMISSION

DATED THIS 14TH DAY OF MAY 2019

James A. Momoh Chairman

Dafe C. Akpeneye Commissioner Leggl, Licensing & Compliance