

Before

UTTARAKHAND ELECTRICITY REGULATORY COMMISSION

In the matter of:

Fatal accident due to electrocution of Shri Usman, S/o Shri Ismile Ali, labour of Electrical Contractor M/s Avon Electric, Turner Road Dehradun, occurred on 09.09.2009 at 12.00 Hrs.

Coram

Shri V.J. Talwar Chairman

Shri Anand Kumar Member

Date of Order: 15th December 2009

ORDER

A fatal electrical accident had taken place with 11 kV HT line at village Ishwar Vihar, Khala, on Tapowan Road at Sunderwala, Raipur, Division- Dehradun (Rural) in which a person namely Sh Usman S/o Ismile Ali working as labour of Electrical contractor, namely M/s Avon Electric Contractor, died due to electric shock from 11 kV overhead line namely 11 kV ordinance feeder emanating from 33/11 kV Sub-station Sahastradhara while working on a 25 kV transformer replacement work.

2. The incident came to Commission's notice through various press reports. A show Cause notice was, accordingly, issued to MD, UPCL, vide Commission's letter no. 861/UERC/9/9-10 dated 16.09.2009, to submit a report on this accident and to show cause as to why an action should not be initiated for not complying with the requirements of Indian Electricity Rules, 1956 read with relevant provisions of Electricity Act, 2003. A copy of this letter was endorsed to Electrical Inspector for

furnishing his report in the matter within 15 days. This letter was followed by reminder for reply vide letter no. 970/UERC/9/9-10/C&L/49 dated 15.10.2009.

3. Para 10.2 of the Distribution and Retail Supply License issued to UPCL (licensee) mandates that licensee should prepare and submit a comprehensive report of the fatal accident before the Commission, giving full details of the facts of the accident and its causes, within the time frame specified therein. In gross violation of the license conditions, detailed report of the accident was not submitted by the licensee and the Commission had to take suo-moto cognizance of the matter. The said report is still awaited. In spite of this, the Executive Engineer, Dehradun (Rural), gave a short and vague reply on 30.10.2009 in a very casual manner emphasizing that proper shutdown for the concerned ordinance factor 11 kV feeder was taken. The Commission took a serious view over lackadaisical approach of the licensee in treating such sensitive issue in which a person's life has been lost and directed to licensee vide letter no. 1110/UERC/09/Tech/49 dated 16.11.2009 to submit the detailed report clearly pointing out the lapses and the person responsible for this mishap clearly indicating:
 - i. Whether the deceased person was authorized to work on HT line as per Indian Electricity Rule, 1956.
 - ii. Under whose supervision, the work was being carried out.
4. The Executive Engineer, Dehradun (Rural) again submitted his comments vide its letter no 5704/EDD-R/UPCL/A-2 dated 25.11.2009 giving, incomplete and in a roundabout manner, the replies on the above points and, therefore, he was directed to appear in person with other concerned officers alongwith full log book and other relevant papers on 30.11.2009 at 11:00 AM.
5. Shri Saeed Ahmed, Executive Engineer, Dehradun (Rural) appeared in the Commission's office alongwith Shri K.S. Aswal, JE, wherein he could not give satisfactory replies to the questions related to lapses on safety measures/procedures in this case and it was stated that the work was being done under supervision of Shri Aswal who had taken the shutdown. Therefore, Director (Projects/Operations), UPCL was directed to appear before the Commission on 08.12.2009 at 11.00 AM alongwith all

concerned officers viz. SSO/SSA, posted at sub-station, the concerned contractor and other staff present at accident site to explain as to why appropriate action should not be taken in accordance with provisions of Electricity Act, 2003 and for non-compliance of the Indian Electricity Rules 1956 and Commissions order on safety. Director (Projects/Operations) UPCL was also directed to submit the details in advance by 07.12.2009 clearly mentioned that:

- i. Whether the deceased person was authorized to work on HT line as per Indian Electricity Rules, 1956
- ii. What safety measures were taken during working on HT line i.e. discharging of line & creation of proper safety zone etc.
- iii. The name of Supervisor/ Engineer who has taken the permit to work (PTW) & present at site under which the work was being carried out & the name of SSO/SSA who has given PTW.
- iv. Whether complete procedure for such work as specified in Indian Electricity Rules, 1956 has been followed and mention each step followed.

Director (Projects/Operations) was also directed to submit the MRI dump of sub-station meter of concerned outgoing 11 kV feeder for September 2009 and in case meter is not in existence/defective, the MRI dump of any one HT/KCC consumer connected to the same line alongwith complete log book for September 2009 and mobile phone call details of SDO/JE concerned for 09.09.2009 from 10.00 Hrs. to 14.00 Hrs.

6. Shri A. K. Johari, Director (Projects/Operations), UPCL appeared alongwith Shri R.S. Barfal, DGM, Shri Saeed Ahmed, Executive Engineer-Dehradun (Rural), Shri Prakash Chand Shri K.S. Aswal, JE and Shri Mohd. Yusuf, M/s. Avon Electric Contractor on 08.12.2009 at 11:00AM. Assistant Electrical Inspector, Government of Uttarakhand, Shri Gyan Prakash also attended the hearing. Contrary to earlier Executive Engineer's reply and the report of SDO concerned, who said that Shri Aswal, JE was eye witness and under his supervision the work was being carried out, Shri Aswal submitted that he was not present at the site at the time of accident. Shri Aswal maintained his stand given in his initial report dated 9.9.2009 that the shutdown was taken by the lineman,

Shri Vijay Singh Chauhan who was supervising the work of replacement of 25 kV transformer at 11 kV Ordinance factory feeder. However, in spite of Commission's categorical direction for appearance of concerned personnel of UPCL, lineman Shri Vijay Singh Chauhan, who had taken the shutdown and was present at site, and SSO Shri Ramesh, posted at Sahastradhara sub-station, who had given the shutdown, did not appear. It appeared that Director (Projects/Operations) was also not acquainted with the facts of the case and had not prepared for the hearing. Further, instead of providing complete MRI dump (in soft form) of sub-station meter of the concerned outgoing 11 kV feeder, only a summary report for September 2009 was presented which did not give any accident related data and hence was returned. The mobile call details of SDO/JE for 09.09.2009 from 10 Hrs. to 14.00 Hrs. were submitted but the call details were not given for persons requesting and giving shutdowns i.e. the lineman and the SSO. While the written statement of XEN and JE maintain that shutdown was taken for carrying out the maintenance on dead 11 kV line, they were unable to explain that if shutdown was taken while the contractor's labour was working on dead line, how the person was electrocuted. Only one probable reason has been given by SDO in his report where he has recorded that the shutdown was taken by lineman on phone for Balawala feeder at 11.50 AM and Ordinance factory feeder at 11.57 AM. According to him the accident appears to have taken place at 12 PM when in a habitual manner the SSO might have switched on the 11 kV Ordinance feeder after failure of its incoming no. 1 feeder at 11.55 AM. He suspects the reason for the same to be not pulling out the trolley by SSO whereas the log-book record says that the shutdown was taken at 11.57 AM for checking the line and trolley was pulled out. But he also fails to explain how the feeder on which shutdown was taken could have been switched on if a caution notice was put and switch had been locked at sub-station till shutdown was cleared. There is also no explanation to the question that whether the line was properly discharged through earth as per Rules and if yes, how could accidental switching on the line lead to charging of line. All this clearly point out that there has been a serious procedural lapse

in taking the shutdown including taking shutdowns on telephone without taking written permit to work. Rule 36 of the IE Rules, 1956 in this regard stipulate that:

“36. Handling of electric supply lines and apparatus:- (1) Before any conductor or apparatus is handled adequate precautions shall be taken, by earthing or other suitable means, to discharge electrically such conductor or apparatus, and any adjacent conductor or apparatus if there is danger therefrom, and to prevent any conductor or apparatus from being accidentally or inadvertently electrically charged when persons are working thereon:

Every person who is working on an electric supply line or apparatus or both shall be provided with tools and devices such as gloves, rubber shoes, safety belts, ladders, earthing devices, helmets, line testers, hand lines and the like for protecting him from mechanical and electrical injury. Such tools and devices shall always be maintained in sound and efficient working conditions:

(2) No person shall work on any live electric supply line or apparatus and no person shall assist such person on such work, unless he is authorised in that behalf, and takes the safety measures approved by the Inspector.”

7. The log-book details and other evidences also need to be examined to arrive at the correct reason for the untoward incident. The log-book for the relevant period reads as follows:

11.55 HRS पर I/C No I 11 KV E/F पर Trip हुई, 11.57 HRS 11 KV ordinance feeder का J.E. Aswal के आदेशानुसार चौहान ने S/D लिया
12-00HRS पर I/C NO I feeder चालू किया & 11 सहस्त्रधारा, 11 KV नदी रिस्पना फीडर Hold किये, 13-30 HRS पर 11 kv बाला वाला फीडर का J.E श्री K.S Aswal के आदेशानुसार चौहान ने टेलीफोन द्वारा S/D वापस किया व साथ ही 11 KV ordinance फीडर का भी S/D वापस किया व फीडर Hold किया

11.50 HRS 11KV Balawala feeder का J.E Aswal के आदेशानुसार S/D लिया ईश्वर विहार में T/F की लीड लगाने हेतु।
Linecheck करने हेतु, और ट्राली बाहर कर दी,
(Emergency S/D)

8. The above details show that the incoming feeder no. 1 tripped on 11 kV earth fault, which might have been due to the accident and, thus, give rise to another possibility that the shutdown for the Ordinance feeder was not actually taken or if taken, it was not properly given by the concerned personnel of the licensee. Further, the reason for taking shutdown of a different (Balawala) feeder 7 minutes prior to shutdown taken for working on Ordinance factory feeder is not clear. Taking two shutdowns by same person through two telephonic calls seven minutes apart with tripping of incoming feeder on earth fault in between the two calls creates doubt. **All these facts need to be**

properly examined for which the Assistant Electrical Inspector at Dehradun is directed to carry out detailed investigation and submit his report to the Commission within 15 days.

9. It was also noted that the labour of the contractor who was victim of the said accident was not a qualified person to work on HT lines and the contractor present in the hearing repeated his statement given in records that the deceased person was working with him for past 5-6 years and had a good knowledge of electrical maintenance. His men work only on dead line/apparatus and in this case shutdown was taken by the JE concerned. However, it also appears that safety tools and devices specified in the IE Rules were also not provided by the contractor. **The Assistant Electrical Inspector is also directed to confirm whether M/s Avon Electric Contractor had a licence to carry out such works and, if yes, to give the names of the contractor's authorized persons. The licensee is directed to confirm whether it has executed the agreement with the contractor in February 2009 after checking the validity of contractor's licence.** In this regard, Rule 3 of IE Rules, 1956 stipulates that:

"3. Authorization - (1) A supplier or a consumer, or the owner, agent or manager of a mine, or the agent of any company operating in an oil-field or the owner of a drilled well in an oil field or a contractor for the time being under contract with a supplier or a consumer to carry out duties incidental to the generation, transformation, transmission, conversion, distribution or use of energy may authorise any person for the purpose of any or all of the following namely:-

Sub-rule(2) of rule 36, clause(a) of sub-rule(1) of rule 51 , clause (a) of sub-rule(1) and 1[clauses (h) and (i) of sub-rule(2)] of rule 64, sub-rule(2) of rule 110, sub-rule(1) and (4) of rule 121, sub-rule(4) of rule 123, rule 124 and sub-rule(8) of rule 125.

.....

2[(2) No person shall be authorised under sub-rule(1) unless he is competent to perform the duties assigned to him and possesses either on appropriate certificate of competency or permit to work;]

(3) No person shall be deemed to be authorised under sub-rule(1) unless his name has been entered in a list maintained at the office or premises of the person authorizing him, and giving the purpose for

which such person is authorized and the entry has been attested by the authorized person and the person authorizing him.

(4) Every list maintained under sub-rule(3) shall be produced before an Inspector 2[or any officer of a specified rank and class appointed to assist the Inspector] when required;

(5) An Inspector may cancel or amend, in such manner as he considers necessary, any authorisation, made under sub-rule(1)."

10. Important finding of this case has been non-serious attitude of the licensee in following the safety rules and procedures and in particular not following any laid down guidelines for carrying out planned/emergency maintenance works, which is costing dearly to the State in terms of human lives. In fact, the Commission on its own had taken the initiative of educating the officers and staff of the licensee regarding safety rules and conducted two workshops on the same, which were attended by JE level officers of the licensee. The Commission had given to the licensee and all the participants alongwith the rules a copy of Safety Manual of Delhi's private distribution licensee, North Delhi Power Limited (NDPL) and had requested the licensee to make its own manual on similar lines. The licensee has failed to do the same and there is total chaos even in safety related matters and no procedure/norm is followed for avoiding any such incident. The Commission has taken this attitude of the licensee very seriously and thinks that immediate action needs to be taken to address this issue without waiting for licensee's response.

11. After considering the various reports submitted, personal hearing held with Director (Projects/Operations) UPCL, licensee's officers, Assistant Electrical Inspector, Government of Uttarakhand and after going through the facts presented before the Commission, the Commission hereby orders that:

- 1) Electrical Inspector should enquire the accident case in light of the above observations and bring on record the reasons of the accident and the person/persons responsible for safety lapses within 15 days from the date of issue of this order.

- 2) The licensee is directed to issue instructions that with immediate effect no shutdown shall be taken on phone for planned maintenance work. Proper shutdown i.e. "permit to work" be taken in writing before commencement of any work of HT line & all precautions as prescribed under Electricity Rules, 1956 should be adhered to.
- 3) The licensee is also directed to prepare safety manuals which should be available with the field officers and the Commission by 31.12.2009 so as to implement the same w.e.f. 01.01.2010. In case, the licensee is unable to prepare the same, the NDPL manual shall be deemed to be applicable in its system w.e.f. the specified date till such time UPCL prepares its own manual. A copy of the said manual is again being supplied with this Order.
- 4) The licensee must carry out its own enquiry and submit a report thereon alongwith compliance of directions given to the licensee within 15 days of this order.
- 5) In view of the abovesaid violations of the Electricity Rules, 1956 and Commission's directions, the licensee, its Managing Director and Director (Projects/Operations) are hereby directed to submit detailed reply of queries of the Commission in its letter no. 1601/UERC/Dir(C&L)/EA/09-10 dated 02 December 2009 on affidavit and to show cause as to why an action should not be initiated against them under section 142 of the Electricity Act, 2003. Licensee's replies and compliance report on the directives should be submitted within 15 days of this Order.

-Sd-
(Anand Kumar)
Member

-Sd-
(V.J. Talwar)
Chairman