

KERALA STATE ELECTRICITY BOARD LIMITED (Incorporated under the Companies Act, 1956) CIN :U40100KL2011SGC027424 Reg. Office: Vydyuthi Bhavanam, Pattom, Thiruvananthapuram – 695 004 Kerala. Phone: (O) +91 471 2514554 (CUG) +91 944 600 8137 E-mail: safety@kseb.in; website: www.kseb.in.

ABSTRACT

Distributing B-Alert voltage proximity detectors to Linemen & Electricity workers of all Electrical Sections under Electrical Circle, Thiruvananthapuram –Sanctioned- Orders issued.

CORPORATE OFFICE (Safety)

B.O (FTD).No 267/2004 (CSC/AE2/FTD /2022-23) Tvpm,

Dated: 30.05.2024.

- Read: 1) Letter No. EE/ED-CTLA/MIDEA/B- Alert/2023-24/1498 dated 16.12.2023 from the Executive Engineer, Electrical Division, Cherthala.
 - Note No: KSEBL/FIN/CSC/25/2023-AE2, dated. 24.12.2023 of the Chief Engineer (REES,SOURA) & Chief Safety Commissioner.
 - 3) Note No:CSC/AE2/MIDEA/B-Alert/2022-23, dated. 06.03.2024 of the Chief Engineer (REES,SOURA) & Chief Safety Commissioner.
 - 4) Note No:CSC/AE2/MIDEA/B-Alert/2023-24, dated. 13.05.2024 of the Chief Engineer (REES,SOURA) & Chief Safety Commissioner.

<u>ORDER</u>

The Hon'ble Minister for Electricity emphasized the need for precautions to be taken to prevent accidents. Even though earnest efforts were taken from KSEBL for reducing accidents, accidents are still occurring. It may please be noted that total accidents occurred during the year 2020, 2021 2022 and 2023 were 554, 563, 480 and 401 respectively.

During 2022 from Board's Installation 344 Nos. of accidents were occurred which include 5 fatal accidents to Board staff and 9 fatal accidents to contract workers. During 2023, from Board's installation 270 Nos. of accidents occurred including 6 fatal accidents to Board staff and 6 fatal accidents to contract workers. It is noticed that the cause of all major accidents are due to carelessness, the wrong isolation of supply and non-confirming of disconnection of supply to the work place and accidents happened mainly due to working in installations without proper earthing, which is the prime part of Safety Procedure before working on Electrical lines and many accidents happened to contract workers due to negligence from the part of workers in observing safety procedure.

On analyzing the cause of accidents, it is found that most of the accidents were happened due to the unknown presence of hazardous voltage on the working portion of line and connected equipment. This type mishap can be avoided by using voltage proximity detectors in field works. Now a days, many manufacturers have manufactured and marketed various types of voltage proximity detectors for serving the above said purpose. But the cost of such devices are very high and most of those devices are coming with minimum technical features. In this way, considering these shortcomings, MIDEA, a unit under safety wing has developed low cost Proximity Voltage Detector B-Alert and some samples were successfully made inhouse. This is a secondary safety alert device and has many advantages and technical features which provide reliable and convenient operation than other type of voltage proximity detectors. This device can be used like wrist watch, and is water proof so that it can be used in any weather condition. MIDEA informed that one B-Alert water proof wrist watch costs only about Rs.500/-, if manufactured in large quantity as in-house by MIDEA.

Considering the advantages of this device in view of safety and cost, it is proposed to distribute B-Alert device to all Linemen & Electricity Workers in the distribution wing of KSEBL. An amount of Rs. 69,84,000/- (Rupees Sixty Nine Lakh and Eighty Four Thousand only) is required for distributing a total of 13968 numbers of B-Alert device for 776 numbers of Electrical Sections with 12 Linemen & 6 Electricity Workers in each section.

In the above circumstances the Chief Safety Commissioner vide note read as 2nd above requested further direction. Hence the matter was placed before the Full Time Directors for decision. The board note was circulated among all Directors and resolved to accord in principal approval of the proposal. The Chairman and Managing Director directed to explore whether we can maintain minimum and add on only after justification, also directed to rework the number of devices to be distributed.

This office note read as 3rd above submitted some additional details regarding the effects on the financial aspects if minimizing the quantity of production of B-Alert Voltage Proximity Detector. MIDEA informed that, the overall cost of manufacturing of B-Alert will meet a hike more than 175% if the quantity of production is less than 10000 Nos. A proposal for implementing as pilot project in Thiruvananthapuram Circle was submitted. There are 42 Electrical Sections under Electrical Circle, Thiruvananthapuram and the proposal is prepared for issuing 756 Nos. B-Alerts to these Electrical Sections with 12 Linemen & 6 Electricity Workers per section. By including 44 Nos B-Alerts for reserve / buffer stock purpose, the total quantity will come to 800 Nos.

The production cost for a compact & water proof B-Alert is more if the quantity of production is 800 Nos. MIDEA informed that the cost for a customized, compact and water proof PVC / ABS casing of the device will come to Rs.260/-. Also, the cost of other parts will be increased if the production quantity is minimized. These will cause an increase in production cost of a B-Alert to Rs.835/- when manufactured in 800 Nos quantity batch production.

An amount of Rs.6,68,000/- (Rupees Six Lakh Sixty Eight Thousand only) is required for distributing a total of 800 numbers of B-Alert device for 42 numbers of Electrical Sections with 12 Linemen & 6 Electricity workers in each section under Electrical Circle, Thiruvananthapuram. The Deputy Chief Engineer, Electrical Circle, Thiruvananthapuram may be authorized to conduct pilot study for a period of one calendar year in different climatic conditions regarding the performance of compact & water proof B-Alert device.

The amount for implementing this project may be met from the safety for the distribution wing and may be processed and audited through Electrical Division, Cherthala as the present ARU of the MIDEA is Electrical Division, Cherthala. The raw material purchase for this project may be entrusted with Electrical Division, Cherthala and the finished product transactions may be through Sub Regional Store, Alappuzha under Electrical Circle, Alappuzha. In the light of the above, the matter is resubmitted before the Full Time Directors as per the note read as 4th above.

Having considered the matter in detail the Full Time Directors, agreed to the proposal, with the following remarks.

"It is a secondary device to ensure safety. Now a days accidents happening due to live line contact which can be avoided using this device. When distributing on a pilot basis, users must be informed that the equipment is a secondary device intended to enhance safety and is currently in testing mode. Therefore, normal safety protocols must be followed scrupulously. To conduct a pilot and put up the report for taking further actions."

and resolved to accord sanction for the following:

- 1. Resolved to accord sanction for distributing voltage proximity detectors to the Linemen & Electricity workers in 42 Nos. of Electrical Sections under Electrical Circle, Thiruvananthapuram as pilot project.
- 2. Further resolved to entrust MIDEA, Cherthala for manufacturing 800 Nos of B-Alert device including a buffer stock of 44 Nos.
- 3. Further resolved to give sanction for an amount of Rs 6,68,000/- (Rupees Six Lakh Sixty Eight Thousand only) for meeting the expenditure towards the manufacturing cost of 800 Nos of B-Alert devices.
- 4.Further resolved to authorize the Deputy Chief Engineer, Electrical Circle Thiruvananthapuram to conduct pilot study for a period of one calendar year regarding the performance of compact & water proof B-Alert device in different climatic conditions on different terrain under Electrical Circle, Thiruvananthapuram.
- 5. Further resolved to meet the fund for implementing this project from the safety for the distribution wing.
- 6. Further resolved to entrust Electrical Division, Cherthala and Sub Regional Store, Alappuzha for process of fund, raw material purchase, audit and finished product transactions.

Orders are issued accordingly.

By Order of Full Time Directors

Sd/-LEKHA.G Company Secretary

То

- 1. The Chief Safety Commissioner.
- 2. The Deputy Chief Engineer (Ele. Circle Thiruvananthapuram).
- 3. The Deputy Chief Engineer (Ele. Circle Alappuzha)
- 3. The Executive Engineer, Ele Division, Cherthala.
- 4. The Assistant Engineer, MIDEA, Cherthala.

Copy to

The Company Secretary / Chief Engineer (IT,CR&CAPS) / Financial Advisor / LA&DEO / Chief Internal Auditor / Chief Vigilance Officer The TA to the Chairman & Managing Director / Director (Generation-Civil) / Director (Distribution, Safety, SCM & IT) / Director (Transmission. SO & Planning) / Director (Generation - Electrical, REES, SOURA, Sports & Welfare) The PA to the Director (Finance & HRM) The Sr.CA to the Secretary (Administration) The RCAO/ RAO Stock File

Forwarded by order

Assistant Engineer