



# Kerala State Electricity Board Limited

(Incorporated under the Companies Act, 1956)

Registered Office: Vidyuthi Bhavanam, Pattom,

Thiruvananthapuram – 695 004

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## ABSTRACT

Coil earthing-fabrication of earthing coil- procurement of coiling machine on pilot basis at Central Mechanical Division, Pallom under Civil Circle, Pallom- Proposal - Sanctioned- Orders issued.

## CORPORATE OFFICE (SBU-D)

B.O(FTD)No.316/2019(D(D&IT)/D5/PG/2018-19/0004/)Dated,Thiruvananthapuram 09.04.2019

### **Read:**

1. Central Electricity Authority (Technical Standards for construction of electrical plants and electric lines) Regulations, 2010
2. Letter No. CCP/DB2/PM-GNL/2018-19/859 dated 30.11.2018 of the Deputy Chief Engineer & Principal Team Leader, Civil Circle, Pallom
3. Letter No. CCP/DB2/PM/GL/2018-19/1104 dated 30.01.2019 of the Deputy Chief Engineer & Principal Team Leader, Civil Circle, Pallom
4. Note No.D(D&IT)/D5/PG/2018-19/0004 dated 02.04.2019 of the Director(Distribution & IT) to the Full Time Directors(Agenda Item No.9/4/19)

## ORDER

As per regulation(99) of CEA Regulations read as 1<sup>st</sup> paper above, all metallic supports shall permanently and effectively be earthed and the earthing arrangement shall confirm to relevant IS. Metal cross arms and insulator pins for PCC and PSC poles shall be bonded together and normally earthed at every pole for 33 kV or 22 kV or 11 kV lines and at every 5<sup>th</sup> pole for lines below 500 volts. As per regulation 99(4), normally coil earthing shall be provided except for locations involving railways, telegraph line, power line crossings and special structures where pipe/ rod type earthing shall be provided.

The practice of coil earthing is being carried out for earthing of LT electric poles, for isolation of LT line automatically on fault by means of a Circuit Breaker or a Fuse, for safety of the personnel and animals. In coil type earthing, GI wire of 8 SWG (approx. 4 mm diameter) is usually used in the form of coil of diameter 50mm and 450mm length (115 turns approximately) and placed

at the bottom vertically in the center of the pole. The G.I wire from the top of the coil extends right above the ground level and fixes firmly with the bottom end of earth wire embedded in the PSC pole.

The Deputy Chief Engineer, Civil Circle, Pallom as per letter read as 2<sup>nd</sup> paper above reported that earthing coils can be manufactured at Civil Circle, Pallom, if a spring coiling machine costing nearly 8 lakh (as per enquiry made), GI wire as per specification and ferrule are available. It is also pointed out that if the required quantity of the item in the current year is above 1,00,000 nos. and if there are yearly targets, it is worth purchasing the machine and in such case of in house manufacturing of coils, immediate requirement at any point of time can be met with and quality/ specification can be assured.

The matter was placed before the Full Time Directors as per note read as 4<sup>th</sup> paper above. In the note, it was pointed out that there is always bulk requirement for earthing coils and if in house manufacturing of earthing coils are done at CM Division, Pallom then, quality & specifications of earthing coils can be assured and its delivery to the field Offices can also be done along with the other fabricated items allocated from CM Division, Pallom.

Having examined the matter in detail, the Full Time Directors in the meeting held on 04.04.2019 resolved to accord sanction to the Deputy Chief Engineer, Civil Circle, Pallom for the following:

- i. to purchase a Coiling Machine for fabrication of earthing coils, on pilot basis at Central Mechanical Division, Pallom as per KSEBL's required technical specifications, by inviting open tender, in due consultation with the Chief Engineer(SCM).
- ii. to purchase the required quantity of GI wire for fabricating the Earthing Coils as per KSEBL's required technical specifications, in due consultation with the Chief Engineer(SCM).

Orders are issued accordingly.

By Order of the Full Time Directors

Sd/-

**Lekha G.**  
**Company Secretary In Charge**

**To**

1. The Deputy Chief Engineer & Principal Team Leader, Civil Circle, Pallom
2. The Chief Engineer(SCM)

**Copy to:**

1. The Chief Engineer, Distribution (South/ Central/ North/ North Malabar)
2. The Chief Engineer (IT & CR)

3. The TA to Chairman & Managing Director/ The TA to Director (Distribution & IT/ Transmission & System Operation/ Corporate Planning, Generation-Electrical, Supply Chain Management & Safety/ Generation-Civil & HRM)
4. The RCAO/ECA, Vidyuthi Bhavanam, Pattom/ The Legal Liaison Officer
5. The PA to Director (Finance) / Senior C.A. to Secretary (Administration)
6. Fair Copy Section / Library / Stock File.

Forwarded / By Order,



Assistant Engineer