

**KERALA STATE ELECTRICITY BOARD Ltd** 

(Incorporated under the Companies Act, 1956) Registered Office: Vydyuthi Bhavanam, Pattom, Thiruvananthapuram – 695 004 CIN: U40100KL2011SGC027424 Web: www.kseb.in Phone: +91471-2514614 Email :dtkaseb@kseb.in,dtkseb@gmail.com

## **ABSTRACT**

Field testing of Sensor for Geo-magnetically Induced Currents (GICs) in power system developed by M/s Space Physics Laboratory, VSSC - Request for conducting the testing in KSEBL's transmission network - Sanctioned - Orders issued.

B.O. (FTD) No.106/2024 [D(T,SO&P)/T1/VSSC/GIC/2023-24/I/21842] Dated:11-03-2024 Thiruvananthapuram.

Read: 1. Letter dated 06.12.2023 of the Director, Space Physics Laboratory, VSSC, Trivandrum. 2. Note No. D(T,SO&P)/T1/VSSC/GIC/2023-24/I/21842/2024 dated 11.02.2024 of the Director (T,SO&P) to the Full Time Directors(Agenda No:18-3/2024).

## ORDER

The Director, Space Physics Laboratory (SPL), VSSC, Trivandrum as per letter read as 1<sup>st</sup> above requested permission to install a prototype sensor developed by them in the KSEBL EHV transmission network for conducting studies on the effect of Geomagnetically Induced Currents (GIC) in the Power system.

M/s SPL reported that the development was taken up in view of the possible impact of space weather and sudden solar activity enhancement, which causes severe geomagnetic disturbances, and some of them might result in damages to power system. As part of their experiment, M/s SPL intent to monitor the possible GIC induced fluctuations in power systems in the country.

After discussing the matter with M/s SPL / VSSC team, it was proposed to give permission to install the prototype sensor in two EHV substations of KSEBL by connecting to the neutral earthing leads of the power transformers. 220kV Substation, Pothencode and 110kV Substation, Veli were selected for conducting the studies.

Since the matter is related to permitting an external agency to install devices to KSEBL's installations and conduct studies, the Director (Transmission, SO & P) placed the matter before the Full Time Directors for sanction as per note read as 2<sup>nd</sup> above.

Having considered the matter in detail, the Full Time Directors resolved to accord sanction to grant permission to M/s Space Physics Laboratory, VSSC, Trivandrum for installing the prototype sensor developed by them for conducting studies on the effects of Geo-magnetically Induced Currents in the power system, by connecting the devices in the neutral earthing leads of the power transformers at 220kV Substation, Pothencode and 110kV Substation, Veli, subject to the following conditions:

• The installations shall only be used for the field testing and evaluation of the prototype equipment developed by M/s SPL for scientific analysis and shall not be used for any other purpose.

- The permission for installing the equipment will be granted initially for a period of six months, which may be extended based on written request from M/s SPL.
- All prevailing safety and security protocols applicable to EHT installations shall be strictly adhered to by the personnel engaged by M/s SPL while carrying out the installations and analysis at the substation premises.
- The outcome/result of the study shall be shared with KSEBL.

Orders are issued accordingly.

By Order of the Full Time Directors,

Signed by LEKRAG COMPANY SEDRETARY2024 16:19:36

To: The Chief Engineer (Transmission South).

The Assistant Executive Engineer, 220kV Substation Sub Division, Pothencode. The Assistant Engineer, 110kV Substation, Veli.

Copy to:

The Company Secretary / Chief Engineer (IT,CR&CAPS) / Financial Advisor / LA&DEO / Chief Internal Auditor / Chief Vigilance Officer

The Deputy Chief Engineer, Transmission Circle, Trivandrum.

The Executive Engineer, Transmission Division, Kazhakootam.

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 Executive Engineer