

KERALA STATE ELECTRICITY BOARD Ltd

(Incorporated under the Companies Act, 1956) Registered Office: Vydyuthi Bhavanam, Pattom, Thiruvananthapuram – 695 004 CIN: U40100KL2011SGC027424

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<u>ABSTRACT</u>

Sengulam Augmentation Scheme (85 Mu) - Formation of Standing Technical Committee - Sanctioned - Orders issued.

CORPORATE OFFICE (SBU-G/C)

BO (FTD)No.153/2023(No.DGC/AEEIV/SAS/2014)

Thiruvananthapuram, Dated: 25.03.2023

Read: Note No. DGC/AEEIV/SAS/2014(17) dated 10.03.2023 of the Director (Generation-Civil) to the Full Time Directors (Agenda Item No. 38/03/23).

ORDER

The Sengulam Augmentation Scheme (85Mu) envisages diversion of water from Western Kallar River to the existing Sengulam reservoir by constructing a 12.50m high and 80m long concrete gravity Weir, just upstream of Kallar bridge across Western Kallar river (tributary of Mudirapuzha of Periyar basin in Idukki District) along Aluva -Munnar road. Water is proposed to be diverted through a 6.71km long, 3.5m 'D" shaped unlined diversion tunnel and 376m long exit channel for augmenting power generation at Sengulam Power House by 85 Mu.

The Tunnel driving was carried out through different faces such as intake, exit and intermediate Adits. Tunnel driving from Face V through Adit II and Face VI from exit was already completed. As the Adit-I was abandoned as per the recommendations of consultant M/s. NHPC Ltd., tunnel driving through Face II & III could not be done thereby limiting the tunnel driving only from Face IV through Adit II and Face I through Intake.

As the tunnel driving progressed from intake, i.e., Face I, water seepage was encountered in most of the stretches and heavy water seepage at Ch: 800m, 1380m etc. Tunnel driving was advanced along with remedial measures such as dewatering using pumps, grouting with micro fine cement etc. During blasting at Ch: 1830m, heavy water jetting occurred and it became uncontrollable and hence the work was stopped on 08.03.2020. The Tunnel in Face I is now filled with water and tunnel driving is going on from Face IV only, hindering the progress of the Project.

In order to enhance the progress and to complete the Project within the scheduled time, KSEB Ltd. has explored various possibilities to sort out the water jetting issue through various organizations / departments / firms, but no fruitful / practically viable procedure / methodology was obtained.

In order to ensure a scientific study based decision, the Chairman & Managing Director convened an on-line meeting on 01.02.2023 4.00 PM along with the Director (Generation - Civil), Chief Engineer (Civil - Construction) South, Deputy Chief Engineer (Civil Circle, Kothamangalam), Project Manager (Sengulam Augmentation Scheme) with participants from Kerala State Council for Science, Technology and Environment (KSCSTE), Kerala State Disaster Management Authority (KSDMA) and Centre for Water Resources Development and Management (CWRDM).

It was decided in the meeting to form a standing Technical Committee to assess and suggest Geology, Hydrology, soil related studies etc. in any Hydro Electric Projects for the existing, ongoing project and future planned project with the following members;

- · Chairman & Managing Director, KSEBL
- Director (Generation-Civil), KSEBL
- Principal Secretary, KSCSTE
- Director, CWRDM
- · Member Secretary, SDMA

The matter was placed before the Full time Directors as per note read as 1st above. Having considered the matter in detail, the Full Time Directors in the meeting held on 13.03.2023, resolved to constitute a Standing Technical Committee to assess and suggest Geology, Hydrology, soil related studies etc. in any Hydro Electric Projects for existing project, ongoing project and future planned projects with the following members.

- Chairman & Managing Director, KSEBL
- · Director (Generation-Civil), KSEBL
- Principal Secretary, KSCSTE
- Director, CWRDM
- Member Secretary, SDMA

Orders are issued accordingly.

By Order of the Full Time Directors

sld

LEKHA G Company Secretary

To:

The Chief Engineer (Civil - Construction) South, Vydyuthi Bhavanam, Thiruvananthapuram.

Copy to: The Chief Engineer (IT,CR&CAPS)/ Chief Internal Auditor/ Company Secretary/ Financial Advisor/ LA&DEO/ RCAO/RAO

The TA to the Chairman & Managing Director / Director (Generation-Civil) / Director (Generation-Electrical & HRM)/ Director (Distribution, SCM & IT)/ Director (Transmission, SO, P&S)/ Director (REES, SOURA, Nilaavu Projects, S&W). The PA to the Director (Finance).

The Sr.CA to the Secretary (Administration). Stock File.

Forwarded By Order

Assistant Executive Engineer