



## KERALA STATE ELECTRICITY BOARD LIMITED (

Incorporated under the Companies Act, 1956)

Registered Office : Vydyuthi Bhavanam, Pattom, Thiruvananthapuram -695004

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### Abstract

Barapole SHEP (3x5 MW) –Report of the committee constituted to study the water leakage Problem- Leakage arresting in forebay – Administrative Sanction- Orders issued.

### CORPORATE OFFICE (SBU-G/C)

B.O(FTD) No 349 /2020 (DGC/AEE VI/BRPL /2014) Thiruvananthapuram, Dated 25 .05.2020

- Read: 1. B.O (FTD) No.1832/2018(DGC/AEEVI/BRPL/2014) dated.10.10.2018  
2. B.O (FTD) No.343/2019(DGC/AEEVI/BRPL/2014) dated 27-04-2019  
3. Office order (DGC) No.2195/2019(DGC-AEE-VI/BRPL/2014) dated 04.12.2019  
4. B.O (FTD) No 30 /2020 (DGC/AEE VI/BRPL /2014) dated17.01.2020  
5. Letter No CECCN/DB/01/BPLE-Works/2010-11 dated 14.05.2020 of Chief Engineer (Civil-Construction) North  
6. Note No. DGC/AEEVI/BRPL/2014 dated 20 .05.2020 of the Director (Generation-Civil) to the Full Time Directors (Agenda 49 / 5 /20)

### ORDER

The Barapole SHEP was completed and the project was dedicated to the nation on 29.02.2016.The commercial generation from the project was commenced in June 2016.All the components except canal, weir and land were handed over to the Executive Engineer, Generation Division, Kakkayam.

During 2018, south west monsoon season, due to heavy downpour, most of the natural streams at Barapole project area had overflowed and diverted to form new stream from existing cross drainage at Ch.2553 and the pressure build up due to the flooded water impounded at upstream of trapezoidal canal in between Ch.2553 and Ch.2750 caused damage to 15cm thick concrete side wall provided with minimum temperature reinforcement, which can't act as a structural member. There were many underground passages of water in this hillock and the accumulated water escaped through various locations in valley beneath.

The Chief Engineer (CC) North reported that the phenomenon of water coming out beneath the rock situated in the private property of M/s Rini Abraham near chainage 2740 m was observed after the flood in 2018. The soil piping was first observed on 28 /07 /2018 while the canal was filled for trial run. But again flood occurred in August 2019 and lasted for 4 days from 07/08/2019. It was observed that there were some changes in the soil piping behavior. During dry period, flow from cave exit was noticed only when machines would trip and water level rises in the water conductor system 2m above bed level and forebay .

The soil piping phenomenon annoyed the land owner in whose property the cave exit is located and another person residing in the downhill of the above land is also aggrieved due to this. They submitted petitions to the Government and the K.S.E Board Ltd, expressing fear and anguish

that this water seepage might cause landslides during monsoon and threaten their lives and properties. The petitioners requested the KSEBL to acquire their lands. A committee was constituted as per the office order read as 3<sup>rd</sup> above to hear the petitioners affected due to soil piping phenomenon prevailing in the project area near to forebay tank of Barapole SHEP and prepare a report thereon.

The committee suggested four methods for rectification works for making forebay waterproof and out of them, conventional method using non shrinkable grout is adopted based on the recommendation of the committee members as the conventional grouting method is the cheapest method for waterproofing. Based on the report of the committee the Chief Engineer (Civil construction) North as per letter read as 5<sup>th</sup> above furnished an estimate amounting to Rs.28,00,000/- (Rupees twenty eight lakh only) including GST for making the forebay waterproof

The proposal for according Administrative Sanction for an amount of Rs.28,00,000/(including GST) for the subject work was placed before the Full Time Directors as per note read as 6<sup>th</sup> above.

Having considered the matter in detail, the Full Time Directors in the meeting held on 22.05.2020 resolved to accord Administrative Sanction to the Chief Engineer (Civil Construction) North for the rectification works for making forebay waterproof using non shrinkable grout having a financial commitment of Rs.28,00,000/- (Rupees Twenty-Eight Lakhs only) including GST by waiving tender formalities and arranging the work on limited quotation basis considering the urgency. Further resolved to direct Chief Engineer (Civil Construction) North to sanction the estimate after ensuring the reasonableness of the rates proposed for the rectification work.

The expenditure on account of this work be charged to A/c No. No.14.613 Capital expenditure due to natural calamity – Hydraulic works.

The Chief Engineer (Civil Construction) North shall take further necessary action in this regard. Orders are issued accordingly.

BY ORDER OF THE FULL TIME DIRECTORS

Sd/-

LEKHA. G

COMPANY SECRETARY IN CHARGE

To:

The Chief Engineer (Civil Construction-North), Kozhikode

Copy to:-

The Chief Internal Auditor/Financial Adviser

The Chief Engineer (IT)

The RCAO/The RAO

The TA to Chairman & Managing Director/Director (GC)/ Director (D, IT&HRM)

Director (T, S.O, S, CP&REES) /Director (GE&SCM)

The PA to Director (Finance) / Company Secretary

The Legal Liaison Officer, KSE Board Ltd, Kochi

Library/ FC Supt/Stock File

Forwarded/By Order

  
Assistant Executive Engineer