



Abstract

Idukki HEP - Conducting Condition Monitoring / Diagnostic tests (RLA Studies) on 6 Nos of 48MVA,11/220/V3 KV , Single Phase Generator Transformers under Transformer Maintenance Sub Division, IHEP, Moolamattom- Sanction accorded- Orders issued.

Corporate Office (SBU-G/E)

B.O. (FTD) No. 115 /2021 (No. DGE/G3/IHEP/GT/2020-21 Thiruvananthapuram

dated: 08 -02-2021

- Read:-
1. Board Order No. B.O. (FTD) No. 562/2020 (No. DGE/G3/IHEP/GT/20-21 dated 07-09-2020
 2. Letter No. 3/64Diag/CDD/2020-21 dtd 09-12-2020 of M/s CPRI, Bangalore
 3. Letter No.CEG/AEE1/IHEP/RLA of GT/2020-21/1586 dated 15-01-2021 of the Chief Engineer (Generation & PED),Moolamattom and the accompanying estimate.
 4. Note No.DGE/G3/IHEP/GT/20-21 dated :02-02-2021 of the Director (Generation-Ele. & SCM) (Agenda item No.25/02/21)

ORDER

The 780 MW (6x130MW) Idukki HEP is the largest power station in Kerala , playing a vital role on the stability of southern grid ever since it was commissioned and is supplying the major share of power generated in the state. The first stage units (Unit#1, Unit#2 & Unit#3) were commissioned in 1976 and second stage units (Unit#4, Unit#5 & Unit#6) were commissioned in 1986.The supply from each Generator is fed to the grid through three Nos. of 48MVA, 11/220/V3 kV Single Phase Generator Transformers(GTs). Thus a total No. of 18 such GTs are in service. Out of the 18 Nos. 6 Nos. completed about 44 years of continuous service.

The GTs have a direct impact on the safety of the Power Station and each GT is filled with around 15,500 liters of oil as dielectric media ,any fire or explosion may lead to heavy disaster .Being an underground power station, the devastating effect of such incident would be unpredictable. In this connection, an estimate amounting to Rs .26,00,00,000/- (Rupees Twenty Six Crores Only) is awaiting sanction for the purchase and replacement of 6 Nos. of GT's with fire protection system. At this juncture, KSEBL as per order read (1) above had directed to conduct RLA study of the GTs through a competent agency, before taking a final decision for replacement.

Accordingly, the Chief Engineer (Generation & PED) has forwarded an estimate amounting Rs.32,00,000/- (Rupees Thirty Two Lakhs Only), including GST, for Conducting RLA Studies on 6 Nos of 48MVA,,11/220/V3 kV, Single Phase GTs. The first part of the accompanying estimate has been prepared based on the offer received from M/s CPRI and the second part is taken from the available data with the field offices. The provision for GST @18% is also included in this estimate. For conducting different tests (RLA Tests) on the GTs, it is required to disconnect and reconnect the HV side connection between the GT and 220 KV Cable which has to be done under the supervision of Engineers from OEM M/s TELK and the supervision charges to M/s TELK is also included in the estimate.

M/s CPRI informed that there is no model or criteria for estimation/prediction of remaining life of any HV equipment in service and the RLA study is intended for collecting history of the equipment/conducting appropriate diagnostic tests to assess the present status of equipment and the diagnostic tests shall be repeated periodically in every 2/3/4 years to monitor the trend in parameters. As M/s CPRI is a Government of India undertaking, one of the pioneers in this field with proven competency and reliability in their works and KSEBL has undertaken similar works in various power houses with M/s CPRI , the Chief Engineer(Generation & PED) has requested sanction for conducting RLA study of GTs through M/s CPRI, Bangalore on single quotation, at their quoted rate of Rs. 32,00,000/- (Rupees Thirty Two Lakhs Only) . The expenditure for the subject work can be met from the Budget provision for the year 2020-21 of the Generation Circle, Moolamattom.

The matter was placed before the Full Time Directors as per note read as 4th paper above .Having considered the matter in detail, the Full Time Directors meeting held on 04-02-2021, resolved to accord sanction for an estimate amounting to Rs.32,00,000/-,for conducting RLA study of 6 Nos. of 48MVA,,11/220/V3 kV Generator Transformers at IHEP, Moolamattom .

Further resolved to entrust the work to M/s CPRI ,Bangalore on single quotation basis.
Orders are issued accordingly.

By Order of the Full Time Directors,

Sd/-
(LEKHA.G)

Company Secretary
(In -charge.)

To:

The Chief Engineer (Generation& PED), Moolamattom.
The Deputy Chief Engineer ,Generation Circle, Moolamattom

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The Chief Internal Auditor,
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Asst. Executive Engineer

DESPATCHED

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09.02.2021