

**Abstract**

Idukki HEP – Periodical Monitoring tests of Generator shaft of Unit#2–Sanctioned –Orders issued.

**Corporate Office (SBU-G/E)**

B.O. (FTD) No.529 /2019 (DGE/G3/IHEP/2019-20) Thiruvananthapuram dated: 09 -07-2019

- Ref:- 1. Letter No.CEG/AE-VIII/Idukki/Generator/2019-20/533 dated 26-06-2019 of the Chief Engineer (Generation & PED).  
2. Note DGE/G3/IHEP/2019-20 dated 02-07-2019 of the Director (CP,GE,SCM & Safety) ( Agenda Item No.10/07/19)

**ORDER**

The Residual Life Assessment (RLA) study of stage –I machines (3x130MW) at IHEP was carried out during August and September 2011 by M/s CPRI, Thermal Research Centre, Nagpur. During their study, they had observed and reported a discontinuity, below 100mm from the surface of the generator shaft of unit#2, through ultrasonic flaw detection and recommended to monitor the shaft periodically, at least once in three years to confirm the status of the discontinuity observed.

It is reported that the periodical monitoring test of unit#2 machine shaft involves identification of cracks or crack like discontinuities present in the rotor shaft by means of Phased Array Ultrasonic Inspection (PAUT) followed by 3D crack growth rate through FEM under actual operating dynamic stress conditions. The surface and near surface cracks shall be identified by standard DPT and MPI techniques.

Considering the proven competency and reliability of M/s CPRI, Bengaluru, Government of India undertaking , one of the pioneers in this field, an estimate amounting to Rs.16,50,000/- was prepared based on the budgetary offer collected from M/s CPRI, Begaluru for the subject work. Sanction was requested for carrying out the subject test through M/s CPRI, Bengaluru on a single quotation basis, at their quoted rate of Rs.16,50,000/-(Rupees Sixteen Lakh Fifty Thousand only) .

The matter was placed before FTD vide note read as 2<sup>nd</sup> paper above .Having considered the matter in detail, the Full Time Director's meeting held on 05-07-2019, resolved to accord sanction to the Chief Engineer(Generation & PED) Moolamattom), to conduct Periodic Monitoring Test of Unit#2 Generator Shaft, through M/s CPRI, Bengaluru on a single quotation basis, at their quoted rate of Rs.16,50,000/-(Rupees Sixteen Lakh Fifty Thousand only).

Further resolved to explore the possibility of engaging other agencies like IIT, for this type of works.

Orders are issued accordingly.

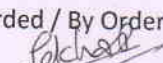
By Order of the Full Time Directors,  
Sd/-  
(LEKHA.G)  
Company Secretary  
(In -charge.)

To:

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

Copy to:

The Financial Advisor/The Chief Internal Auditor,  
The TA to CMD/D(CP,GE,SCM&S)/ D(T&SO)/ D(D&IT)  
The Fair copy Superintendent/Library/Stock File

Forwarded / By Order  
  
Asst. Executive Engineer

DESPATCHED

No. 108

Date 12.07.19