

ABSTRACT

Idamalayar HEP - Procurement of Multi Activity Crane having 21 meter (69 feet) height with man lift for using at Idamalayar Power Station - Sanctioned - Orders issued.

Corporate Office (SBU-G/E)

BO (FTD)No.10/2023(DGE/G3/Idamalayar Crane)/1014

Thiruvananthapuram, Dated: 05.01.2023

- Read: 1. Letter No.CEG/AEE1/IDMR/MACrane/2022-23/1204 dated 19.11.2022 of the Chief Engineer (Generation) and the enclosed estimate.
2. Letter No.CEG/AEE1/IDMR/MACrane/2022-23/1362 dated 23.12.2022 of the Chief Engineer (Generation).
3. Note No. DGE/G3/Idamalayar Crane /2021-22 /161 dated 26.12.22 of the Director (Gen.-Ele.&HRM) submitted to the Full Time Directors (Agenda item No.78/12/22).

ORDER

The Chief Engineer (Generation) as per letter read 1st above has reported the exigency of a new Crane for the Operation & Mace of the (2x37.5 MW) Idamalayar HEP.

It is reported that, during annual maintenance of each machine, one of the major works is lowering and lifting of the stop logs. Currently the station has a Coles crane which is used to lift and transport the stop logs from the main store to the power house. The same is used to lift heavy items from the main store to the power house and switchyard. Due to ageing, the station faces regular breakdown maintenance in the Coles crane (1960 model) itself. As the model is obsolete and the spare parts are not available for its repair works, it is very difficult to manage the works using the service of this crane. The bearings of the gearbox & the steering wheel, Brake cylinder and its rubber washer, clutch finger are damaged and are being repaired. Since the OEM parts are not available, the bearings of TATA 407 and Jeep are used for the gearbox and steering wheel respectively. As the problems with this crane escalate day by day, it is very difficult to do the lifting and transporting of heavy items like stop logs during annual maintenance works. Also the speed of this crane is very low and requires a longer time to finish the work. The availability of the machines and feeders are very critical and hence for time bound completion of the planned/breakdown maintenance activities, smooth operation of the crane is highly essential. Also, the crane is a vital equipment in a powerhouse, especially when it is equipped with a Francis Turbine. Due to its design criteria, to prevent water from entering into the draft cone during annual maintenance/ emergencies, stop logs are to be placed at the opening to the tail race channel. This is the primary step during the annual maintenance.

Since the repair and use of the existing crane is not feasible and viable, it was suggested to go for a modern multi activity crane, ACE make (NXP 150) suitable for the purpose. It has a capacity of 15 tonnes (Pick 'N' carry Duty) which is adequate to lift the stop logs and other equipment / components in the switchyard. Also it has a man lift which can lift up to 21 meters and has a 4 cylinder water cooled / oil cooled diesel engine, twin hydraulically controlled steering wheel, fully air actuated brakes on rear wheels and pneumatically assisted hydraulic brakes on front wheels for safe operation. As per the specification, the total boom length of the crane is 13.2 meters and a man basket is attached at the boom end, which could be used to do

maintenance activities at heights. If the stop log is connected on a hook at its 5 meter length, it can be easily lifted and transported because at this length, the crane can carry a weight of 4.6 ton. This crane has a maximum speed of about 40 km/hr, so that it could be easily transported to nearby power stations in emergencies and can perform all the above mentioned operations.

Accordingly, the Chief Engineer (Generation) has forwarded an estimate amounting to Rs.44,30,000/- (Rupees Forty Four Lakh and Thirty Thousand only), for the procurement of Multi Activity Crane having 21 meter (69 feet) height with a man lift and requested sanction for the procurement, as the amount is beyond the delegation of the Chief Engineer. Since the crane can be used in the nearby power houses, provision for life time road tax@8%, Cess amount, transportation charges, TCS @ 1%, annual insurance are included in this estimate. GST @ 18%, is also included in the estimate. The matter was placed before the Full Time Directors meeting as per note read as 3rd above.

Having considered the matter in detail, the Full Time Directors meeting held on 28.12.2022 resolved to accord sanction to the Chief Engineer (Generation), Moolamattom, for the procurement of a new Multi Activity Crane having 21 meter (69 feet) height with man lift at an estimate amounting to Rs.44,30,000/- (Rupees Forty Four Lakhs and Thirty Thousand only) including taxes, for the use at Idamalayar Power Station and the purchase shall be carried out by inviting open tender.

Orders are issued accordingly.

**By Order of the
Full Time Directors**

Sd/-


**LEKHA G
Company Secretary**

To:

The Chief Engineer (Generation), Moolamattom.

Copy to: The Financial Adviser/ Chief Internal Auditor/ Company Secretary
The Deputy Chief Engineer, Generation Circle, Kothamangalam.
The TA to CMD/ D(GE&HRM)/ D(T,SO,P&S)/ D(D,IT &SCM)/ D(G-C)/ D(RSS&W)
The PA to D(F)
The Senior CA to Secretary (Administration)
Stock File.

Forwarded / By Order



Assistant Executive Engineer