



KERALA STATE ELECTRICITY BOARD Ltd

(Incorporated under the Companies Act, 1956)

Registered Office: Vidyuthi Bhavanam, Pattom,

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ABSTRACT

Sabarigiri HEP - Installation and Commissioning of 2 sets 110 V 645 Ah Plante type battery bank for Power House auxiliary DC Supply and 1 set 110 V 535 Ah Plante Type Battery Bank for the enhancement of existing 400 Ah Battery at Switch yard with associate accessories and recommended tools through open tender –Sanctioned – Orders issued.

SBU/G-E

BO (FTD)No.560/2022(DGE/G1/SHEP/Gnl./2022-23)

Thiruvananthapuram,Dated: 30.06.2022

- Read: 1.Letter No. CEG/AEE1/MZR/Battery/2022-23/423 dated 14.06.2022 of the Chief Engineer (Generation).
2.Note No. DGE/G1/SHEP/Gnl./2022-23/105 dated 16.06.2022 of the Director (Generation - Electrical) to the Full Time Directors (Agenda 62/6/22)

ORDER

The DC Power supply is the most reliable source of power supply for the control, protection, interlock and annunciation requirements of Power House both during the AC power failure and in normal operating conditions. The DC system in power house at Sabarigiri Hydro Electric Power Project consists of one set of 110 V 400 Ah battery and one 60 A dual battery charger. The existing battery charger was installed and commissioned on 29.12.2013 and has completed 8 years of service. The Chief Engineer (Generation) as per the letter read as 1st above has reported that recently sedimentation has been observed on all battery cells due to ageing and sharp decline of voltage levels was also observed during maintenance shutdowns. Though the batteries were replaced on 09.01.2022 with the old spare battery bank availed from the switch yard, it has been reported that the same has to be replaced urgently.

The Chief Engineer (Generation) has further informed that as per the CEA Regulations - 2010 Section 37-6(C), the DC system should comprise of two battery sets. Since the protection and monitoring of generators and associated equipment are maintained through DC system, one more set of battery is highly essential for complying with CEA Regulation and for maintaining redundant DC supply in the Power House. The battery sizing has been calculated considering the load of the Power House control circuits, switchyard control and breaker circuits leaving an option for back feeding power house DC to switchyard and vice versa, sharing total load independently by each DC system. Accordingly it has been proposed to upgrade the DC system at Sabarigiri power House with 2 nos. of battery bank of 110 V (55 nos X 2 V) 645 Ah including its installation and commissioning.

Based on the offer collected ,estimate amounting to ₹.56,00,000/- has been prepared for the work of " Supply, Installation and commissioning of 2 sets of 110V 645 Ah Plante Type battery Bank for power house auxiliary DC supply comprising of supply of 110 V (55 cells) 645

standard accessories". The freight charges, charges for supervision of installation and commissioning of 110 V 645 Ah Plante type battery including buy back cost of old used 55 nos. of 400 Ah Exide plante (YKP 33 Type) are included in the estimate.

The DC system at the Switchyard consists of one set of 110 V 400 Ah battery bank and one set 535 Ah battery bank along with individual 110V 60A battery charger. In order to implement a redundant DC supply, it was proposed to upgrade the DC system at switchyard with 110 V 535 Ah battery bank. An estimate amounting to ₹.24,30,320/- has been prepared for the work of " Supply, Installation and commissioning of 1 set 110V 535 Ah Plante Type battery Bank for Switchyard comprising of supply of 110 V (55 cells) 535 Ah Plante type Battery bank with Stand, Electrolyte, inter cell, inter row connectors and all standard accessories". The freight charges and charges for supervision of installation and commissioning of 110 V 535 Ah Plante type are included in the estimate.

The Chief Engineer (Generation) has requested sanction for the purchase of 2 sets 110 V 645 Ah Plante type battery bank for Power House auxiliary DC Supply and 1 set 110 V 535 Ah Plante Type Battery Bank for Switchyard with associate accessories and recommended tools at an estimated amount of ₹.80,30,320/- for the use at Sabarigiri Hydro Electric Power project.

The matter was placed before the Full time Directors as per Note read as 2nd above for a decision.

Having considered the matter in detail ,the Full Time Directors meeting held on 27.06.2022 resolved to accord sanction to the Chief Engineer (Generation) to carry out the "Supply/ Installation and commissioning of 2 sets 110 V 645 Ah Plante type battery bank for Power House auxiliary DC Supply and 1 set 110 V 535 Ah Plante Type Battery Bank for the enhancement of existing 400Ah battery bank at Switch yard with associate accessories and recommended tools" by inviting open tender at an estimated amount of ₹.80,30,320/- (Rupees Eighty Lakh Thirty thousand Three Hundred and Twenty Only) (inclusive of 18% GST) for the use at Sabarigiri Hydro Electric Project.

Orders are issued accordingly

By Order of the
Full Time Directors

sd/-

LEKHA G
Company Secretary

To:

The Chief Engineer (Generation),Moolamattom.

The Deputy Chief Engineer,Generation Circle,Moozhiyar.

Copy to: The Financial Advisor/ The Chief Internal Auditor/The Company Secretary.

The TA to {Chairman & MD/ Director (GE)/ Director(GC)/ Director (Trans.& SO,Planning &Safety) }/

Director (D&SCM) /Director (REES, Soura, Nilaavu,Sports &Welfare)}

The PA to Director (Finance,IT &HRM)/CA to Secretary (Admn.).

Forwarded / By Order



Assistant Executive Engineer