



KERALA STATE ELECTRICITY BOARD LIMITED

(Incorporated under the Companies Act, 1956) CIN: U40100KL2011SGC027424
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Abstract

Barapole SHEP (3x5MW) – E&M works - Deviation from contract conditions - Ratified - Orders issued.

Corporate Office (SBU-G/E)

B.O (FTD)No. 610 /2021 (No. 26/AE2/2013/CE(PED)) Thiruvananthapuram. Dated: 13 - 08 - 2021

- Read:-
1. B.O (FB) No.2967/2009(TC.5/38/2000) Dated 20-11-2009.
 2. Agreement No. CE (PED)/4/2012-13 dated 27-09-2012.
 3. B.O (FTD) No 207/2015(D(SCM & GE)/G2/Barapole/2014-15) dated 28-01-2015.
 4. Amendment No. 1 dated 28-01-2015 to Work Order No. 2/2012-13 dated 13-09-2012.
 5. Letter No 26/AE2/2013/CE (PED)/442 dated 18-08-2015 and No. 493 dated 07-09-2015 of the Chief Engineer (Projects-Electrical Designs).
 6. Letter No 26/AE2/2013/CE (PED)/784 dated 25-11-2015 of the Chief Engineer (Projects-Electrical Designs).
 7. B.O(FTD)No.3033/2015 (D(GE)/G2/Barapole/2015-16) dated 09-12-2015.
 8. B.O (FTD) No.1358/2016(D(GE)/G2/Barapole/2016-17) dated 03-05-2016.
 9. Letter No 26/AE2/2013/CE (PED)/353 dated 26-07-2017 of the Chief Engineer (Projects-Electrical Designs).
 10. Letter No D(GE & SCM)/GL/2019-20/28 dated 28-12-2019 of the Director (GE&SCM).
 11. Note No. D(GE)/G2/Barapole/2020-21/39 dated 29-05-2020 of the Director (GE & SCM).
 12. Note No 26/AE2/2013/CE (PED)/367 dated 01-07-2020 of the Chief Engineer (Gen.&PED) to the Legal Advisor & Disciplinary Enquiry Officer.
 13. Note No LA & DEO/R/73/2020/84 dated 17-08-2020 of the Legal Advisor & Disciplinary Enquiry Officer.
 14. Note No 26/AE2/2013/CE (PED)/572 dated 19-08-2020 and No. 113 dated 05-05-2021 of the Chief Engineer (Gen.& PED).
 15. Direction dated 27-05-2021 on the FTD Note No D(GE)/G2/Barapole/2021-22 dated 19-05-2021.
 16. Note No. 26/AE2/2013/CE(PED)/426 dated 14-07-2021 of the Chief Engineer (Gen.&PED) to the Full Time Directors (Agenda No. 53/8/21).

ORDER

The Agreement read as 2nd above for carrying out the electromechanical (E & M) works of Barapole Small Hydro Electric Project (3 x 5 MW), was executed with M/s. Kirloskar Brothers Limited and the original scheduled date of completion of electromechanical works was 04/10/2014. The project was proposed with three machines each having a capacity of 5 MW plus 10% continuous over load (5.5 MW).

The Chief Engineer (Gen.&PED) has reported that the time extension for completing the E&M works of the project was initially granted up to 30-09-2015 as per B.O read as 3rd above without any additional financial implications to KSEBL as the power evacuation scheme had to be changed by KSEBL at a very late stage. Subsequently, time extension was granted up to 15-01-2016 as per B.O read as 7th above, without any additional financial implications to KSEBL. The Civil works of the power

house of the project was completed at the end of January 2016 and one machine i.e Unit-1 of Barapole SHEP was synchronized and the project was dedicated to the nation on 29-02-2016. Due to the non availability of water, other two machines could not be synchronized and hence, time extension was granted up to 30-06-2016 as per B.O read as 8th above without any additional financial implications to KSEBL for enabling the contractor to commission all the units in auto mode, on availability of water in June 2016 and to hand over the project.

Unit No 1 was commissioned on 26-06-2016, but it became faulty on 28-06-2016 as the runner of turbine got stuck against head liner of the turbine and was jammed. Subsequently, Unit 2 and Unit 3 were commissioned on 14/07/2016 and 25/07/2016 respectively. However, the contractor could not prove the output as per the Guaranteed Technical Parameters. The output achieved for Unit No 1 was 4.97 MW, Unit No 2 was 4.57 MW and Unit No 3 was 4.7 MW against the contract requirement of 5.5 MW (5 MW + 10% COL). The contractor carried out many rectification works to improve the output, but failed and finally agreed to supply newly manufactured 3D printed runner on 19/03/2018.

Due to the slow progress of the balance E & M works to be completed by the contractor from March 2016, the PMC on the 7th PMC meeting held on 17/08/2016 decided not to accept any further request of the contractor for the time extension for the E & M contract beyond 30/06/2016 and further decided that time extension of the contract can be considered only after completion of all the E & M works by the contractor as per the contract including the 5.5 MW (5+10% COL) output of the machine as well as 72 hours successful trial run test.

The E & M contractor completed all the E & M works of the project, including all minor works and major works (commissioning of all the Units in auto mode, demonstration of rated output and 10% COL of all the Units after replacing the runner with new 3D printed runner, 72 hours trial run test, Performance test of Unit No 2, replacement of MIV inlet casing pipe of Unit No 2 which was damaged during the accident, installation of SCADA instead of redundant PLC etc), The project was taken over by KSEBL on 16/01/2020 based on the direction as per 10th above. Subsequently, based on the clarification of the Legal advisor & Disciplinary Enquiry Officer and as per the decisions of the Project Monitoring Committee meeting held on 03/12/2019, the time extension for the E & M works upto 29/02/2020 was requested by imposing maximum Liquidated Damages of 10 % of contract amount as per agreement condition, as per note read as 14th above.

The Chief Engineer (Gen. & PED) has reported that in the meeting convened by the Chairman and Managing Director, KSEBL on 27/05/2021, it was directed to take appropriate decisions strictly complying the agreement condition and legal advice. It was also informed that, if there are any deviations from the contract condition, such cases only be taken up with the Board for resolution.

The Chief Engineer (Gen.&PED) has pointed out certain deviations from the contract condition, in this regard. The clause 5.3.11 of Volume II of Agreement condition for Liquidated Damages states that "if the delay prolongs in excess of 200 days from the agreed date of completion as per the original agreement, the work will be terminated and balance work will be arranged to be completed at the risk and cost of the contractor as per clause 5.3.14". The contractor took more than 200 days from the agreed date of completing the contract i.e 30-06-2016 in completing all the E & M works at Barapole SHEP including demonstration of the outputs of all the machines as per contract. Hence, as per the clause, the work was to be terminated during the year 2017 which was not opted for in the best interests of the Board. Also, as per the provisions of clause 5.3.10 of Vol II of Agreement conditions, no penalty was levied from the part bills of the contractor by KSEBL. The contractor was not penalized as per the provisions of clause 5.3.10 of Vol II of Agreement conditions or terminated as per the provisions of clause 5.3.11 of Vol II of Agreement conditions in the best interest of Board. This is a deviation from the agreement condition. Hence, the Chief Engineer (Gen.&PED) has requested ratification for the above action, for taking an appropriate decision with regards to the time extension of the contract for the E & M works as directed as per 15th above.

The Chief Engineer (Gen.&PED) has also pointed out the following aspects regarding the waiver of testing charges of Dynamic Short circuit test for 11/33 kV, 8 MVA Generator transformer and 33/11 kV, 5 MVA Power transformer. Consequent to the change in power evacuation scheme for Barapole SHEP, in the meeting convened by the Director (SCM & Gen. Ele.) on 11/11/2014, M/s KBL agreed to supply 4 Nos of 11/33 kV, 8 MVA transformers (including 1 spare) and one 33/11 kV, 5 MVA transformer along with all required accessories and switchyard equipment at the same agreed rate as per the original agreement with 2 Nos of 11/110kV, 12.5 MVA GT and one 110 /11kV, 10 MVA Distribution transformer. It was decided to waive the Dynamic Short circuit test provided M/s. Kirloskar Brothers Ltd supplies transformer of M/s. Volt Amp make or other reputed make approved by the Chief Engineer (PED). It was never agreed to waive the deduction of testing charge for the Dynamic Short Circuit test.

Since the financial commitment was maintained the same for the supply and erection of 33kV yard equipment as that of the original proposal with 110kV parameters and no other tender conditions were altered, the Dynamic Short Circuit test is also a part of the revised proposal. In the clause 1.2 of the specific requirements, in the Amendment as per 4th above, it is clearly stated that the general technical requirements remain the same as per the section 4.2 Power transformers of Vol. III A of the original contract, under which the Short Circuit test is mentioned. The said amendment has also been accepted by M/s Kirloskar Brothers Ltd. Moreover in the case of Pallivasal Extension Scheme as well as Perunthenaruvi Project, where Short Circuit tests mandated in tender conditions, were waived by the Board, deduction of corresponding testing charges was ordered.

It is reported that based on the contractor's request to waive the testing charges, the recommendation/remarks regarding the same was offered in detail as per letters read as 5th and 9th above. The dynamic short circuit testing charges of 8 MVA as well as 5 MVA transformers amounting to Rs. 13,75,320/- and Rs. 8,14,152/- with a total amount of Rs. 21,89,472/- obtained from M/s CPRI, Bangalore was also intimated as per letter read as 6th above. Hence, the Chief Engineer (Gen.&PED) has requested appropriate decision with respect to the testing charges of Dynamic Short circuit for 11/33 kV, 8 MVA Generator transformer and 33/11 kV, 5 MVA Power transformer for Barapole SHEP.

The matter was placed before the Full Time Directors as per Note read as 16th above. Having considered the matter in detail, the Full Time Directors in the meeting held on 04-08-2021 resolved to ratify the decision of Chief Engineer (Gen. & PED) not to terminate the contract in line with the decision of the 7th PMC meeting and to allow the completion of the project in the best interest of the Board, in spite of delay in excess of 200 days from agreed date of completion.

Further resolved to accord sanction to deduct the dynamic short circuit testing charges for 11/33kV, 8 MVA and 33/11kV 5 MVA transformers amounting to Rs. 21,89,472/- from the bills/funds/BGs of the E&M contractor.

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 (Projects-Electrical Designs).

Copy to:

The Financial Advisor/ The Chief Internal Auditor/The Company Secretary.

The Chief Engineer (IT)/ The RAO/The RAO.
The TA to Chairman & MD/ Director (GE&SCM)/ Director(GC)/ Director
(Trans.&SO)/ Director (D,IT&HRM) /Director (Planning, Safety& REES).
The PA to Director (Finance).

Forwarded / By Order

Sunit Kumar
Asst. Exe. Engineer

DISPATCHED

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16.08.21