

MAHARASHTRA STATE POWER GENERATION CO. LTD.

Office of Chief Engineer (P&P), 'Prakashgad', 3rd floor, Bandra (East), MUMBAI 400 051
Phone (O) 2647 4211 / 2647 2131 (P) 26475759 Email: cgmpp@mahagenco.in

Ref. No. DG/BSL U-6/2011/T-1/BTG+BoP EPC Contract/Amendment to LOA /

Date:

13 1 DEC 2018

Amendment No 1 to LOA.

BY COURIER/Email

No - 1974

To

M/s. Bharat Heavy Electricals Ltd.,

BHEL House,

Siri Fort,

NEW DELHI - 110 049

gkh@bhel.in, koppikar@bhel.in, ajaya@bhel.in

Attn: Shri G.K. Hedao, Executive Director, Power Sector Marketing, BHEL, Delhi

Subject : 1x660 MW Bhusawal Project Unit-6- Additional scope of work to meet revised stack emission norms and additional O&M requirement - Amendment to LOA to carry out the work thereof along with Original bid specification No. DG/BSL U-6/2011/T-1 as a fully integrated package on Single point responsibility basis contract-Reg.

- Reference : 1. LOA No. DG/BSL U-6/2011/T-1/BTG+BoP EPC Contract/Supply/054 Date 17.01.2018
2. LOA No. DG/BSL U-6/2011/T-1/BTG+BOP EPC Contract/ETC/055 Date 17.01.2018
3. LOA No. DG/BSL U-6/2011/T-1/BTG+BOP EPC Contract/Civil/056 Date 17.01.2018.
4. This office letter DG/BSL U-6/1x660 MW/M/s BHEL/1959 dated 22.12.2017.
5. MoM dated 24.01.2018 & 25.01.2018.
6. Your technical offer dated 17.02.2018 & 19.02.2018.
7. Your Commercial offer vide Letter No. MS-1-17-0011 dated 03.03.2018.
8. Your email dated 13.03.2018 regarding details of GST for single contract & Three separate contracts.
9. MoM dated 16.03.2018 & 17.03.2018.
10. Your email dated 20.03.2018 regarding Price break up.
11. Your letter MS-1-17-0011 dated 24.03.2018.
12. CE(P&P)/BTG/BSL/660MW/Turb/0670 dated 05.05.2018.
13. Meeting on 9th May 2018
14. MoM dated 09.05.2018 & 10.05.2018 issued vide this office letter CE(P&P)/BSL U-6/1x660MW/BTG+BoP EPC Contract/976 dated 26.06.2018.
15. Your offer Technical offer for FGD vide letter No MS-1-17-0011 dated 03.07.2018.

16. T.O Letter No. CE(P&P)/BSL U-6/1x660MW/BTG+BoP EPC Contract/ 1150 dated 21.07.2018
17. T.O Letter No. CE(P&P)/BSL U-6/1x660MW/BTG+BoP EPC Contract/ 1176 dated 24.07.2018.
18. T.O. Letter No CE(P&P)/BSL U-6/1x660MW/BTG+BoP EPC Contract/ 1240 Date: 06.08.2018.
19. MoM dated 07.08.2018.
20. Your Letter MS-1-17-0011 dated 09.08.2018 regarding acceptance of NTP.
21. Your Letter MS-1-17-0011 dated 10.08.2018 regarding commercial offer.
22. Your Letter MS-1-17-0011 dated 10.08.2018 regarding technical clearance.
23. Meeting on dated 20.08.2018
24. Your Letter PS:PMG:BHUSAWAL660:06 dated 15.09.2018 regarding clearance wrt revised technical specifications.
25. MoM dated 05.10.2018.
26. T.O Letter CE(P&P)/BSL U-6/1x660MW/BTG+BoP EPC Contract /1796 dated 20.11.18, regarding Technical clearance to proceed for design & engineering in respect of Additional scope of work.
27. Your letter MS-1-17-0011 dated 29.11.18
28. T.O Letter No. CE(P&P)/BSL U-6/1x660MW/BTG+BoP EPC Contract/1875 Date:12.12.2018.
29. Your Letter No.MS-1-17-0011 dated 26.12.2018.

Dear Sir,

With reference to various correspondence as above regarding additional scope of work to be integral with scope as per LOA dated 17.01.2018 issued to you, so as to carry out the work thereof as a fully integrated package on Single point responsibility basis contract., this is to inform you that your proposal vide letter dated 10.08.2018 read with MoM dated 05.10.2018 is accepted by this office.

A. The additional scope of work includes-

- a. Installation of FGD along with its auxiliaries. (Absorber lining made of Haste Alloy C-276 and Chimney lining made of Borosilicate)
- b. Installation of SCR along with its auxiliaries.
- c. Modification in ESP to meet SPM norms.
- d. Modification in Boiler & Auxiliaries due to adoption of Worst Coal GCV as 3200 Kcal/Kg instead of 3500 Kcal/Kg
- e. Modification due to O&M requirements are as below-
 - i. Operating time for Dry fly Ash evacuation shall be 5 Hrs per shift.
 - ii. HCSD Pump capacity shall be maintained as 193 M³/ Hr instead of Bid Specified 300 M³/Hr
 - iii. Slurry pump capacity shall be approx 1000M³/ Hr
 - iv. In CHP- Y chute instead of travelling chute at Apron to feeder belt.- (D-07 Y Chute with Flap Gate for Apron Feeder instead of moving head.)

- v. RBF 1,2 to be replaced with Y chute.-(D-08 Y Chute instead of RBF 1& 2 in Crusher House:)
- vi. RBF 3,4 shall be provided with gravity take up instead of screw take up.
- vii. BF after RBF 3,4 Conveyor 7 shall be replaced with Y chute.
- viii. Chute instead of BF in Crusher House (after RBF-3,4)
- ix. Oil coolers for Power pack -Refrigerant type.
- x. Heating, Ventilation and Air Conditioning system- as per Bid specifications.
- xi. LED lighting for entire plant area
- xii. Mill Reject Handling system as per Bid Specifications.
- xiii. Installation of High Pressure Water Mist Generating System for Dust suppression System in place of DFDS in CHP.
- xiv. 100 Tonne Weigh Bridge [Tender specification are for 30 T] at location Stores & Weighment of Dry fly ash

B. Contract Price:

With issuance of this amendment, Price schedule indicated at Sr No 3 of each LOA under ref (1), (2) & (3) above stands amended to extent below-

1. For supply of Equipments, Spares, Materials etc.

1.1 Price for one unit of 660 MW at Bhusawal TPS Project Unit-6 for the scope of contract including additional scope of work shall be as detailed below:

A. Price for Supply of Equipment, Spares & Materials etc.:

Sr. No	Particulars	Amount in Rs.
A.1	Price for Supply of Equipments inclusive of cost of withdrawal of deviations along with Additional scope of work	2018,51,72,687/-
A.2	Price for Supply of Mandatory Spares as per Annexure - IX submitted with EPC bid	141,29,82,440/-
A.3	Inland Freight for FOR site delivery for Original Scope and additional scope	51,24,11,000/-
A.4	Total Price for Supply (Equipment+Spares+Freight) (A.1+A.2+A.3)	22,11,05,66,127/-
A.5	Estimated GST @ 18%	397,99,01,903/-
A.6	Total Price Inclusive of GST (A.4+A.5)	2609,04,68,030/-
	Rs. Two Thousand Six Hundred Nine Crores and Four Lakhs Sixty Eight Thousand Thirty Only.	

1.2 The prices for Supply of Equipments, Mandatory Spares/Materials indicated at A above are on Ex-works/ Sub-Supplier's works.

1.3 Total Foreign currency component of Import content of bid (CFR) of Rs. 800 Crores included at Sr. No. A above

1.4 Input Tax credit offered earlier by you, shall be reviewed before finalisation of contract.

2. Price for Erection, Testing & Commissioning of plant:

- 2.1** Price for one unit of 660 MW at Bhusawal TPS Project Unit-6 for the scope of contract including additional scope of work shall be as detailed below:

A. Price for Erection, Testing & Commissioning of plant

Sr. No	Particulars	Amount in Rs.
A.1	Price for Erection, Testing & Commissioning including equipment related Design & Engineering along with additional scope of work	292,00,00,000/-
A.2	Estimated GST @ 18%	52,56,00,000/-
A.3	Total Price (A.1+A.2) including GST	344,56,00,000/-
	Rs. Three Hundred Forty Four Crores and Fifty Six Lakhs Only	

3. Price for Civil Works:

- 3.1** Price for one unit of 660 MW at Bhusawal TPS Project Unit-6 for the scope of contract including additional scope of work shall be as detailed below:

A. Price for Civil Works inclusive of associated supply:

Sr. No	Particulars	Amount in Rs.
A.1	Price for Civil works, Arch. & Constr. Works plus cost of withdrawal of technical deviations pertaining to Civil Scope (including associated supply) along with additional scope of work.	681,85,10,577/-
A.2	Estimated GST @ 18%	122,73,31,904/-
A.3.	Total Price (A.1+A.2) including GST	804,58,42,481/-
	Rs. Eight Hundred Four Crores and Fifty Eight Lakhs Forty Two Thousand Four Hundred Eighty One Only	

Total Basic Contract Price is Rs. 3184,90,76,704/- (Rs. Three Thousand One Hundred Eight Four and Ninety Lakhs Seventy Six Thousand Seven Hundred Four Only) including Mandatory Spares, Inland Freight and Excluding GST.

C. Other Terms & Conditions:

1. TAXES & DUTIES

GST on various items shall be billed as per the HSN/SAC codes with applicable GST rates and same shall be paid by Mahagenco.

2. WORK COMPLETION SCHEDULE:

The Contractual Completion Period of the project shall be as per revised Schedule 6S. In this case, Work completion period shall be 42 months from zero date of contract and is enclosed herewith.

3. ZERO DATE OF THE CONTRACT

"Zero Date" shall be the date of issuance of this amendment to LOA.

4. CONTRACT PRICE ADJUSTMENT / VARIATION:

Considering that Price finalization of additional scope of work has been effected after Tender opening of original scope of work in view of various changes in statutory regulations.

As such, a proper adjustment in Price Adjustment schedule 3 shall be duly effected and will be issued separately at the earliest to ensure the expeditious execution of Project. Price variation shall be paid accordingly; if any.

5. CONTRACT PERFORMANCE SECURITY:

You shall submit the Contract performance security amounting to 10% of contract price in respect of additional scope in addition to Contract performance security submitted as per respective each LOA dated 17.01.2018. All other terms & conditions stipulated in Bid specification for Contract performance security shall prevail.

6. PAYMENT OF ADVANCE:

You shall be eligible to claim the advance Payment amounting to 10% of Contract Price in respect of additional scope in addition to advance payment stipulated in respective each LOA dated 17.01.2018. All other terms & conditions stipulated in Bid specification for Advance Payment shall prevail

You are requested to confirm the acceptance of this amendment to Letter of Award within 7 days. Further, furnish the contract performance security due to amendment to LOA at the earliest.

Reply in respect of your submission vide letter as cited under ref (29) shall be forwarded to you at the earliest.

Amendment to LOA covering other Terms & conditions as per Bid Specifications shall be issued separately. For details please refer Bid specification along with corrigendum, addendum, clarifications, records of meeting and various correspondence in the matter etc.

Thanking you,
Enclosed: as above.

Yours truly,


Chief Engineer (P&P)

Copy s.w.rs. to:
Director (Projects)
Director (Operations)
Director (Finance)
Director (Mining)

ED (Proj)
ED (O&M)
ED (CP)
ED (HR)
ED (Fin)
ED (Coal)

Copy f.w.cs. to:
TA to Hon'ble CMD

CE (Proj) Bhusawal
CE (Works), Prakashgad
CE(GC), Koradi
CE(Civil-I),Dharavi
CE(Civil) Gen.-II, Koradi
CE (Civil) Gen-III.Prakashgad
CE (Gen.O&M), BTPS, Bhusawal
CE (FMC)/(Coal), Prakashgad
CE(PMG), Prakashgad
CE (RCD), Prakashgad
CGM (E & S), HDIL Towers.
CE(Tech), Dharavi
CGM (Fin), Prakashgad
CGM (Accts), Prakashgad
Copy to:
DyCE P&P-I/II/III
Dy CE (Proj) Bhusawal.
Dy CE (Civil) CCC, Bhusawal.
GM (HO A/c) / GM (CA)
Sr. Manager (P&P)- This has reference to IA No. I-128 dated 31.12.2018.

Annexure-I
Work Completion Schedule

Sr. No	Milestone	Duration from the zero date of contract (Months)
1	Commencement of excavation for Boiler foundation	5
2	Site development and grading	10
3	Completion of Boiler foundation	11
4	Commencement of Boiler Erection	11
5	Hydraulic Test	29
6.	Commissioning of DM Plant	29 (Readiness of HT) 35 (Full readiness)
7	Boiler Light up	35
8	Commencement of excavation for TG building	9
9	Casting of TG raft	14
10	Casting of TG Deck	19
11	Commencement of Condenser Erection	22
12	Commencement of TG Erection	23
13	Stator lifting	31
14	Boxing up of Turbine and Generator	35
15	Rolling of Turbine	39
16	Commissioning of Cooling Tower and CW System	38
17	Readiness of SCR	38.5
18	Commissioning of WTP and STP	39
19	Synchronisation of the Unit	39
20	Commissioning of CHP and AHP	39
21	Readiness of FGD	39.5
22	Coal Firing of unit on achieving Commissioning of CHP and AHP	40
23	Completion of successful Trial Operation	41
24	Completion of Performance Guarantee Test and Handover of the unit to the Owner	42