

Dated: 04-July-2020

Completion Certificate

Certified that M/s Edison Electrical Works, Manalur, Keerapalayam 608 602, Chidambaram Taluk, Cuddalore District, Tamil Nadu has successfully executed and completed the below works:

Sl. No.	Service order detail	Scope of works	Delivered on
1	4000185437-046-1027, dt. 05.05.2017 Version 1 dt. 21.02.2018 - Services 4000199075-M86-1027, dt. 21.02.2018 - Material	Complete rewinding of stator & rotor of BHEL make, 6.6 KV, 830 KW, 593 RPM CWP motor sl. no. 31258000-2	24-Feb-2018
2	4000190854-046-1027, dt. 29.08.2017 Version 1 dt. 07.05.2018 & TTPS/C&M/CS/2018/47-853, dt.11.06.2018	Complete rewinding of stator & rotor of BHEL make, 6.6 KV, 830 KW, 593 RPM CWP motor sl. no. 31258000-3	19-Jun-2018
3	4000192563-046-1027, dt.10.10.2017	Complete re-coring of stator & rotor of above 2 nos. BHEL make, 6.6 KV, 830 KW, 593 RPM CWP motors sl. nos. 31258000-2 & 31258000-3	As above
4	4000200937-046-1027, dt. 29.03.2018	Additional works on rotor moving parts of above 2 nos. BHEL make, 6.6 KV, 830 KW, 593 RPM CWP motors sl. nos. 31258000-2 & 31258000-3	As above

Both the above re-cored & rewind motors have successfully completed their guarantee period in 2019 and are working very well as one date.

EEW have solved the perennial issue of CWP motors failures with their core and winding redesigns to adapt state of the art materials which have greatly improved the reliability of these two CWP motors.

We wish to place on record our appreciation for the professionalism and capabilities of M/s Edison Electrical Works in solving HT motors problems successfully with full guarantee and reliability.

For NTPC, Talcher,

Authorised signatory

**NTPC Limited**

(A Government of India Enterprise)

Talcher Thermal Power Station**P.O. Talcher Thermal****ANGUL District Angul****Odisha- 759101, India****Telephone No. : 06760-248037 Fax No. : 06760-249054****PURCHASE ORDER****CIN No. : L40101DL1975GOI007966****GST No. : 21AAACN0255D1ZA**

To:

EDISON ELECTRICAL WORKS

MANALUR

LALPURAM POST, KEERAPALAYAM

CHIDAMBARAM TALUK

Tamil Nadu -608602

India

Tel: 04144-230693/...

Fax: 04144-230443

E-Mail : EDISON.OFFICE@EDISON.CO.IN

Vendor Code : 1028569 (SME Vendor)**PAN No : AAAFE1579Q****Purchase Order No. : 4000199075-M86-1027 Date: 21.02.2018 (version : 0)****Reference : SUPPLY OF MATERIAL FOR Complete Rewinding of 830kw,6600v,96A,593 RPM
BHEL make CW Motor stage-II , both Stator and Rotor with shaft
balancing/Replacement.****Our Enquiry No. : Date :****Offer : Date :**

Dear Sir,

We are pleased to accept your above cited offer along with correspondences thereof and place our Purchase Order No. 4000199075-M86-1027 dated 21.02.2018 for total order value of INR 1,353,750.00 . Please arrange to deliver the materials as detailed in Annexure-1 & 2 subject to terms and conditions specified in Annexure-3 and in our General Purchase Conditions, other specifications and requirement. Duplicate copy of the Purchase Order may please be signed and returned back to us within 15 days of its receipt in token of acceptance of the same. If no communication is received within 15 days of receipt of Purchase Order, it will be treated that order has been accepted in entirety.

Our general purchase conditions shall form part of Purchase Order for all other clauses.

For and on Behalf of NTPC Limited

B K Sahoo, Manager(CS).

Enclosures

ANNEXURE - 1

Consignee - Manager/ Senior Manager (Stores)

Delivery Address:

Talcher Thermal Power Station

P.O. Talcher Thermal ANGUL District Angul

Odisha- 759101, India

Telephone No. : 06760-248037 Fax No. : 06760-249054

GST No. : 21AAACN0255D1ZA**Purchase Order Currency:** Indian Rupee**Additional Information:****Our bankers:** UCO BANK(Code 0785)/UNITED BANKOFINDIA(Code J16)
TALCHER THERMAL BRANCH , DIST. - ANGUL, ORISSA**Our Transporter:** M/S EAST INDIA TRANSPORT AGENCY-FOR SMALL&FULL TRUCK/TRAILER
M/S SURAT GOODS TRANSPORT PVT LTD-FOR FULL TRUCK/TRAILER LOD**Insurers:** M/S UNITED INDIA INSURANCE CO. LTD
SRIRAM COMPLEX, NH 42,SIMILIPADA, ANGUL-759122,ORISSA, INDIA, FAX 06764232831

S.No.	Material Code	Description	Qty.	UM	Unit Rate	Discount	Lumpsum Discount	Net Price	Total Amount
10	M3443016015	HS-WP-1:STATOR REWINDING	1.000	NO	780,000.0000	5.0%	0.00	741,000.0000	741,000.00
Tax: IN:Integrated GST-ND @ 18.00 % Extra									
20	M8691756012	ROTOR BARS FOR 1600 KW MOTOR /BALL MILL	1.000	NO	450,000.0000	5.0%	0.00	427,500.0000	427,500.00
Tax: IN:Integrated GST-ND @ 18.00 % Extra									
30	M5501646015	TK9 38B:ROTOR SHAFT	1.000	NO	195,000.0000	5.0%	0.00	185,250.0000	185,250.00
Tax: IN:Integrated GST-ND @ 18.00 % Extra									

Total Amount	INR	1,353,750.00
Discount Value(Lumpsum)		0.00
Net Amount	INR	1,353,750.00

B K Sahoo, Manager(CS).

ANNEXURE - 2**NTPC Limited**
(A Government of India Enterprise)TECHNICAL DATA SHEET

S.No.	Material Code	Specification
10	M3443016015	HT MOTORS (>500-1000KW) Matl Supply
20	M8691756012	HT MOTORS (ROTOR) Rewdg
30	M5501646015	HT MOTORS (ROTOR SHAFT) Matl Supply

ANNEXURE - 3Terms and Conditions

1.	Order Value	INR 1,353,750.00 (THIRTEEN LAKH FIFTY-THREE THOUSAND SEVEN HUNDRED FIFTY ONLY)
2.	Price Basis	Ex Works CHIDAMBARAM-TAMILNADU
3.	Freight Charges	To ntpc's A/c.
4.	Inspection	Material will be inspected at NTPC Stores
5.	Price Variation	Fixed Price Basis
6.	Place of Despatch	MANALUR, CHIDAMBARAM, TAMILNADU
7.	Mode of transport	By NTPC's own arrangement.
8.	P & F Charges	vendor's own arrangement.
9.	Payment Terms	a) 90% payment alongwith 100% taxes against submission of GSTIN invoice shall be paid through DD. The DD shall be handed over after receipt and acceptance of the Motor with associated Inspection & Test Report and LR Copy at Ex-works by EIC. b) Balance 10% shall be released against submission of PBG.
10.	Mode of payment	Through NEFT/RTGS.
11.	Delivery Period	WITHIN 31.03.2018
12.	Insurance	By Buyer
13.	Bank Charges	To respective account
14.	Warrantee / Guarantee	Not Applicable
15.	PBG Amount	Not Applicable
16.	SD Amount	Not Applicable
17.	LD Rate	Not Applicable
18.	LD Ceiling	Not Applicable
19.	Special Instruction	Terms & conditions of the package PO Reg. No.4000185437 are the part of the material PO. This material PO is being prepared in order to facilitatate the payment to agency for material supply portion of the Service PO-4000185437. Version-1 created vide package PO - 4000185437 for service part only with GST incorporation for the contract value Rs.8,69,250.00 only.

Prepared By:
Jnanendra Kumar Mohanty



NTPC Limited

(A Government of India Enterprise)

Talcher Thermal Power Station

P.O. Talcher Thermal

ANGUL District Angul

Odisha- 759101, India

Telephone No. : 06760-248037 Fax No. : 06760-249054

Service Purchase Order

CIN No. : L40101DL1975GOI007966

GST No. : 21AAACN0255D1ZA

Purchase Order No. : 4000185437-046-1027 Date : 05.05.2017 (version : 1 Date : 21.02.2018)

To

EDISON ELECTRICAL WORKS

MANALUR

LALPURAM POST,KEERAPALAYAM

CHIDAMBARAM TALUK

Tamil Nadu

India - 608602

Tel: 04144-230693/...

Fax: 04144-230443

E-Mail : EDISON.OFFICE@EDISON.CO.IN

Vendor Code : 1028569

Kind Attention : AGORAM MUTHUKUMARAN

Subject : GST INCORPORATION AND TIME EXTENSION - Complete Rewinding of 830kw,6600v,96A,593 RPM BHEL make CW Motor stage-II , both Stator and Rotor with shaft balancing/Replacement.

NIT NO. : 40064236 Dated

Your Offer No. : Our Brief Award Letter No.C&M/CS/2017/200066831/794 Dated 20.04.2017.

Your Reference : Your BID No.60194365 Dated 23.11.2016.

Dear Sir,

This has reference to our above mentioned NIT, Your offer and subsequent discussions. We are pleased to accept your offer opened on and confirm having awarded on you the work of GST INCORPORATION AND TIME EXTENSION - Complete Rewinding of 830kw,6600v ,96A,593 RPM BHEL make CW Motor stage-II , both Stator and Rotor with shaft balancing/Replacement. of total value INR 869,250.00 (Rupee EIGHT LAKH SIXTY-NINE THOUSAND TWO HUNDRED FIFTY ONLY) mentioned in the scope of works, special terms & conditions, Bill of quantities etc.

The duration of the service period shall be from 15.05.2017 to 31.03.2018. Though the duration of contract shall remain same, the actual date of commencement of the contract shall be as per the direction of EIC. AGM(EMD) shall be EIC for this work.

This service purchase order along with its annexure is being issued to you in duplicate .We request you to return the duplicate copy of this service purchase order, duly signed on each page by your authorised signatory in token of your unequivocal acknowledgment of the same within 15 days from the date of this service purchase order. If no communication is received within 15 days of receipt of Purchase Order, it will be treated that order has been accepted in entirety.

We thank you for the interest shown by you in our project and the cooperation extended to us. We expect to receive your continued cooperation in future also.

Thanking You,

For & on behalf of NTPC Limited.

B.K.Sahoo,Manager(CS)



EIC : AGM(EMD) or authorised representative, F&A, Vigilance, G.F, O/C.

Enclosures :

(Bill of Quantity)

Name of Work:

GST INCORPORATION AND TIME EXTENSION - Complete Rewinding of 830kw,6600v,96A,593 RPM BHEL make CW Motor stage-II , both Stator and Rotor with shaft balancing/Replacement.

SI No.	Code	Description	Unit	Quantity	Net Price	Amount	Long Text
--------	------	-------------	------	----------	-----------	--------	-----------

Delivery Address:

Talcher Thermal Power Station
 P.O. Talcher Thermal ANGUL District Angul
 Odisha
 759101
 India
 06760-248037
 06760-249054
GST No. : 21AAACN0255D1ZA

20		COMPL REWDG OF CW MOTOR STG-II-SER	AU	1.000	869,250.00	869,250.00	
----	--	---------------------------------------	----	-------	------------	------------	--

Tax: IN:Integrated GST-ND @ 18.00 % **Extra**

20 .10	ELHTM02BD80 4	HT MOTORS(>500-1000KW)-Rewdng	NO	1	375,000.0000	375,000.00	
20 .20	ELHTM14BD80 1	HT MOTORS (ROTOR) Repair	NO	1	180,000.0000	180,000.00	YES
20 .30	ELHTM15BD10 1	HT MOTORS (STATOR) CORE RESTAGGERING	NO	1	105,000.0000	105,000.00	YES
20 .40	ELHTM14BD10 1	HT MOTORS (ROTOR) CORE RESTAGGERING	NO	1	105,000.0000	105,000.00	YES
20 .50	ELHTM12BD80 0	HT MOTORS (ROTOR SHAFT) Repl	NO	1	150,000.0000	150,000.00	YES

TOTAL OF BOQ PART : 00020 INR 915000.00

Discount (%) 5.00- % 45750.00-

Amount 869250.00

Other Charges 0.00

Net Amount on BOQ PART : 00020 INR 869250.00

Net Total Amount INR 869,250.00

Less Rebate/Amount INR 0.00

Grand Total INR 869,250.00

INR EIGHT LAKH SIXTY-NINE THOUSAND TWO HUNDRED FIFTY ONLY

Terms & Conditions

Special Instruction

SCOPE OF WORK OF CW MOTOR STAGE-II

Desc: - Complete rewinding, Rotor Re barring and Re shafting of CW-Stage2 Motor Sl. no 31258000-2

Technical Details: Kw-830,V-6600,96A,593RPM ,No of coils:90 BHEL make CW Motor

Weight of stator:4700Kg,Weight of Rotor:2400Kg,Fan-67Kg

Rotor Dimensions: Legth- 600+2150+600=3350mm Rotor Dia:1120mm, Fan Dia -1300mm

A) Scope of work of Stator Rewinding and Core Restagging:

Scope of work for Item No's:

Material Part:

02. ELHTM02GN630 -HT MOTORS (>500-1000KW) Matl Supply,

Service Part:

06. ELHTM02BD804 -HT MOTORS (>500-1000KW)-Rewdg,

08. ELHTM15BD101 -HT MOTORS (STATOR) CORE RESTAGGING

- 1) The scope of work envisages rewinding of stator of HT motor of TTPS at agency's works.
- 2) The existing winding of stator will be stripped out .The stator core will be cleaned properly and hot spot (Full Flux) test will be carried out in presence of NTPC representative at agency's works (Ref: First stage inspection clause no a-1).The agency will submit the test report to EIC for checking, if results are found satisfactory, then clearance will be given. Otherwise NTPC representative will witness the test.
- 3) Fabricating a set of new stator coils with new double glass enameled covered copper conductor machine wound suitable for class-F insulation (Bare conductor as per IS 6160/71 and enamel covering as per IS 3855 Pt #IV-1992). Conductor size should be as per original.
- 4) During hot spot checking, if hot spot (Full Flux) will be there on the core, then core re-staggering to be carried out at extra cost and time. After rectification of core final hot spot (Full Flux) will be carried out by the agency & will be witness by the NTPC representative.
- 5) All insulated winding should be non hygroscopic, oil resistant and the material resistant to flame propagation. All coils should be varnished and suitable processed to effectively seal and prevent deterioration from adverse environmental condition at site during operation period.
- 6) Stator winding to be carried out with fully tested coils.(Ref First Stage inspection clause no a-2)
- 7) Slot wedges should be made up resin bonded glass fiber as per IS 9299.
- 8) The overhang portion of the coils should be insulated with GMP and Glass fiber tape using epoxy as binding material and the slot portion of the coil with SEMICATHERM as binding materials as per IS 6160 /71.
- 9) The coils should be placed in the slots with epoxy glass textolite as bottom liners, inter phase separators, top liners and wedges.
- 10) Complete winding should be adequately supported, braced and blocked to provide sufficient rigidity during all normal condition of services.
- 11) Inspection & Testing: - The Agency will intimate the Engineer-in-charge for inspection .The following tests is to be conducted during inspection.

AA. First stage inspection.

a1)-Stator core testing:- The bare stator core shall be tested with full flux loop test and checked for hot spots with contact type thermometer . Hot spot not to exceed average temperature of core by 10 °C after one hour with full flux (stator full load current) applied to stator core. If hot spot will be found, the core re-staggering to be carried out at an extra cost and time.

a2)-Testing of coils:-Following test shall be conducted on all the stator coils in presence of NTPC representative during first stage of inspection. The agency will inform 15 days in advance for inspection. If due to some unavoidable circumstances, inspection would not be executed by NTPC in time, then the agency will carry out all the tests and send these test results to engineer-in-charge for information and clearance.

i. Inter turn insulation checking of all stator coils by Surge comparison test at 10 KV A.C.

ii. HV test of coils at 18 KV AC for 1 min before placing in side the core.

iii. Loss angle (tan delta) measurement of all the coils shall be taken before winding in steps of 20,40,60,80 and 100% of the rated voltage.

AB. Final stage of inspection:-

i. The complete rewind stator shall be flash tested at 14.2 KV AC for one min and insulation resistance of each phase shall be recorded before and after HV test.

ii. Stator winding DC resistance measurement to be taken.

iii. Measurement of IR & PI with motorized megger.

iv. Surge comparison test at 14.2 KV A.C on complete stator winding.

v. Loss angle (tan delta) measurement of complete stator winding at the rated voltage in at least 5 steps.

AC. The agency will submit a detail test reports with the rewind stator.

AD. Both first & final stage inspections are to be witnessed by NTPC representative.

B) The scope of work of the Rotor Re Barring and Core Re-staggering job:

Scope of work for Item No's:

Material Part:

03. ELHTM14BD804 -HT MOTORS (ROTOR) Rewdg (Mat Supply),

Service Part:

07. ELHTM14BD801 -HT MOTORS (ROTOR) Repair (Rewdg),

09. ELHTM14BD101 -HT MOTORS (ROTOR) CORE RESTAGGERING

1) The end rings and rotor bars will be removed by brazing at agency's workshop

2) During removal of old bars agency should take care not to damage the rotor accessories such as core, and cooling fans etc.

3) Thorough cleaning of rotor and slots

4) Checking of rotor stamping, insulation and rectification.

5) The party has to make the new rotor bars by identical material or improved design bars without affecting the rotor electrical properties as well as mechanical properties.

6) The party will submit new drawing of the bars.

7) Placing newly manufactured rotor copper bars

8) Brazing of rotor bars and end rings

9) Checking of any looseness and rectification of the same

10) The complete rotor dynamic balancing to be done by the party in presence of NTPC/TTPS authorized representative

11) The rotor core, coupling, internal cooling fans & external fan hub are to be fitted with the rotor before balancing

12) Old rotor bars will be retained by the agency & to be kept till final stage inspection of the rotor

13) Final inspection will be done during balancing (UI & DP, final dimension check and balancing)

14) Details dimension measurements balancing report, test certificate of materials from approved testing agency etc are to be submitted by the agency to NTPC representative.

15) The core re staggering of the Rotor to be carried out by the agency if any abnormality and hot spot is noticed during flux loop test. This item is optional and will be carried out with extra cost and time. The detailed report of the flux loop test should be submitted to the NTPC/TTPS for clearance for carrying out the rotor core re staggering job.

C) The scope of work of the Rotor Re shafting job:

Scope of work for Item No's:

Material Part:

04. ELHTM12GN630 -HT MOTORS (ROTOR SHAFT) Matl Supply

Service Part:

10. ELHTM12BD800 -HT MOTORS (ROTOR SHAFT) Repl

1) The rotor shaft run out to be checked immediately after receipt of the rotor and if any damage or run out is found, the same to be informed to EIC for necessary clearance for carrying out re shafting job.

2) If shaft dimensions and run out is within the permissible limits, then Reshafting job of rotor will not be carried out and these items will be kept as optional (Later PO amended for deletion of these items).

3) The rotor shaft will be dismantled by hydraulic jack at the agency's workshop

4) During removal of old shaft agency should take care not to damage the rotor accessories such as core, rotor bars, end rings and cooling fans etc.

5) The party has to make the new shaft by identical material (EN-8) of old shaft.

6) The party will make new shaft dimension wise exactly identical to old shaft

7) The shaft machining to be done properly. The finishing of journal area of the shaft should be suitable for Babbitt journal bearing) i.e NS grade with surface finish of 0.4 μ m) and other place single triangle method

8) The party will submit new drawing of the new shaft

9) After removal of the shaft agency will inform NTPC/TTPS for inspection

10) The inspection of new shaft must be done in presence of representative of NTPC/TTPS

11) The shaft dynamic balancing to be done by the party in presence of NTPC/TTPS authorized representative.

12) The rotor core, coupling, internal cooling fans & external fan hub are to be fitted with the shaft before balancing

13) Old shaft will be retained by the agency & to be kept till final stage inspection of the rotor

14) 1st stage inspection will be done after removal of old shaft and final inspection will be done during balancing (UI & DP, final dimension check and balancing)

15) Details dimension measurements balancing report, test certificate of materials from approved testing agency etc are to be submitted by the agency to NTPC representative.

16) Inspection: 1st stage inspection after removal of shaft and Final stage inspection during balancing. This inspection should be matched with 1st and final stage inspection of the rewinding job of stator.

TERMS & CONDITIONS

Desc: - Complete rewinding of CW-STAGE-2 Motor SI no 31258000-2

1. All works to be done at agency's works as per scope of work

2. Transportation: - To and fro transportation and transit insurance is in the scope of NTPC/TTPS.

3. Indemnity Bond: - Indemnity Bond will be submitted by the agency before lifting of the motor . For value of Rs. 20, 00,000/-

4. Guarantee:-12 months from the date of commissioning or 18 months from the date of delivery whichever is earlier.

5. Delivery: - Maximum 6 months from the date of receipt of stator and rotor from NTPC/TTPS.

6. L.D:- Applicable.

7. All the old coils, rotors bars, shaft of the rotor and motor terminal lead wire will be retained by the agency, but the same should be shown to inspecting officer during final stage of inspection.

8. Taxes:-Income tax and other Taxes, if applicable will be deducted as per rule.

9. For PRE-GST Value, Service tax & cess to be paid as per actual after submission of valid documents. Separate invoices for material part and service part to be raised by the agency, even though material is integral part of the motor. The tax part for material and service part to be mentioned separately.
FOR POST-GST Value, GST @ 18% shall be paid extra to the agency against GST invoice.

10. All the materials like winding coils, Rotor bars, rotor shaft and insulating materials etc to be used for completing the rewinding job of stator and rotor. There will not be any supply of materials by NTPC; for the taxation purposes material and service parts have been separated. These materials are integral part of the motor and utilized for executing the rewinding job.

FOR ITEM 10 :- Separate Material PO No.4000199075 created to facilitate the supply payment of material supply portion.

11. a) 90% payment alongwith 100% taxes against submission of GSTIN invoice shall be paid through DD. the DD shall be handed over on certification of EIC regarding completion of the job in all respect including submission of Inspection & Test Report.

b) b) Balance 10% shall be released against submission of PBG.

12. The scope of loading and unloading at TTPS/NTPC will be done by TTPS/NTPC and unloading and loading at Agency's works will be carried out by the Agency.

13. The Agency has to plan the above jobs like stator winding, Rotor Re barring, Re staggering jobs of stator and Rotor and Re shafting of rotor such a manner that it should cover 1st and final stage inspection of all the works at a time. So that inspection will be carried out smoothly.

14. If any extra material is required for completing the job like welding works, machining works, replacement of terminal bushings, replacement of space heaters, Painting, Labeling and RTDs are to be provided without any extra cost and time.

15. The item (C) of SOW, The Rotor reshafing (Items 10.30 and 20.50) job is optional item and will be carried out if any damage or run out is found.

ESI ACT

ESI Act 1948 has been implemented at TTPS with effect from 01.11.2013. ESI code possession has become mandatory for all vendors who wish to participate in tendering process at TTPS.

If the vendor claims that they are not coming under the purview of ESI act, they have to furnish an undertaking along with documentary proof to this effect based on which the tender shall be considered for processing.

The above said ESI code / undertaking & proof of non applicability of ESI code must be submitted along with letter of undertaking, prevention of fraud policy etc. After scrutiny of the same, the tender shall be accepted/rejected.

All vendors shall have to comply with the provisions of ESI Act 1948 under the provisions of the said act.

CONDITION OF CONTRACT

1.0 Work is to be executed as per terms and conditions contained in the following documents issued with tender, except for specific addition(s) / modifications brought out in this award letter.:-

- a) NIT (Notice Inviting Tender)
- b) NTPC General Condition of Contract for civil works / Condition for NON -IDA Supply cum erection.
- c) Special Technical Conditions of contract
- d) Schedule of quantities (BOQ)
- e) Special. Terms & conditions
- f) Scope of work
- g) Technical Specification
- h) Drawing.

i) Special Conditions and instructions of the Bid document with additional Clauses

2.0 Any Other Drawing (s) if required will be issued to you by our executing department during the course of execution of the work.

3.0 CONTRACT VALUE:

3.2 As quoted by you / negotiated by you mentioned in forwarding P.O (Work Order).

3.2 The rates and rebates have been incorporated in the schedule of quantities enclosed, with value of work based on tender quantities and above rates.

3.3 Differential amount, if any, arising out of vitiation which in turn will change the BID position, shall be absorbed by the contractor.

4.0 The work is to be executed with all labour, material, Tools and Plants (T & P), complete in all respect and as directed by EIC (Engineer In charge). Materials which are to be supplied by the NTPC for execution of this work will be issued to you from NTPC stores and these will have to be transported to the work site by you at your own cost. Surplus quantity (if any) will be returned to NTPC store by you at your own cost.

5.0 TIME SCHEDULE:

Time is the essence of this contract. The work shall be completed within stipulated period as mentioned in P.O and Terms. The date of commencement of the work and completion of the work, will be as mentioned in Brief Award letter / Formal Award letter and / OR in the P.O (Detail Award Letter) and Terms and Conditions.

6.0 COMPENSATION FOR DELAY:-

In case the work is delayed in part or in full as per above time schedule, the compensation for delay will be payable by you in accordance with provisions of NTPC General Conditions of contract.

7.0 WEEKLY PROGRESS REVIEW MEETING

The contractor shall be required to attend all weekly site progress review meetings organised by the Engineer-In-Charge or his/her authorised representative. The deliberations in the meetings shall interalia include the weekly program, progress of work (Incl. detail of manpower, tools and plants deployed by the contractor vis-a-vis agreed schedule), inputs to be provided by Owner, delays if any and recovery program, specific hindrances to work and work instruction by owner. The minutes of the weekly shall be recorded in triplicate in a numbered register available with the Engineer-In-Charge or his authorised representative. These recordings shall be jointly signed by the Engineer-In-Charge or his authorised representative and the contractor and one copy of the signed records shall be handed over to contractor.

8.0 BASIS FOR CONSIDERATION OF TIME EXTENSION

The following documents shall form the principal basis for consideration of TIME EXTENSION pursuant to GCC relevant clause with or without LD, determining the compensation amount pursuant to GCC relevant clause and settlement of extra claims during the execution of contract

- 1) The joint recordings in the weekly progress report
- 2) Records of Technical Coordination Meetings
- 3) Records of Contract Review Meetings
- 4) Written notices issued by Engineer-In-Charge or his authorised representative to the contractor in the Relevant period.

9.0 Bills supported by detailed measurement sheets are to be submitted by agency as per extent practice once in a month to facilitate on account payments.

10.0 SECURITY DEPOSIT:

The Earnest Money remitted by agency will be converted into initial security deposit. Further security deposit will be recovered from your bills as per provisions of General conditions of contract, UNLESS otherwise mentioned elsewhere IN DOCUMENTS. EMD-Bank Guarantee will not be converted to Security Deposit.

The EIC is to inform contract services for encashment of EMD-BG, well in before expiry of BG, in case of non-execution of work.

11.0 INCOME TAX:

Deduction towards Income Tax shall be effected from your bills as per provisions of Income Tax act, changing from time to time.

12.0 TAXES, DUTIES ETC. :

12.01 All duties, taxes and other levies royalties if any payable by the contractor under the contract are included in the rates and prices submitted by you and the evaluation and comparison of bids by the employer have been made accordingly. The rates are also inclusive of all costs such as tools & plant, labour and material incorporated by you in the work.

12.02 SERVICE TAX : Service tax will be reimbursement wherever applicable against documentary evidence, UNLESS otherwise mentioned elsewhere IN DOCUMENTS. Service Providers, those who are under preview of service tax imposition as per order of Commissioner, Central Excise & customs - Should submit Bills/Invoice, for amount of service tax, under appropriate contract for payment.

12.03 As the work awarded under this contract is work contract the sales tax or turnover/works contract tax levied under law becomes payable and therefore deemed included in your rates/prices. As per the statue of local Sales tax Authority all the contractors required to be registered as per the statue if not already done.

12.04 Income Tax as applicable of the gross value of each on account bill shall be deducted at source unless exempted by income tax authority and shall be deposited with income tax department.

12.05 Deduction of Sales Tax on the works contract at source as applicable to O.S.T. Act and rules there under shall be effected from your On Account Bills.

12.06 CESS: Reimbursement of welfare cess under BUILDING & OTHER CONSTRUCTION WORKERS ACT 1996, will be applicable in all contracts coming under the purview of the said act.

13.0 All other deviations/stipulations explicit or implicit in your bid proposal, except specifically modified and agreed in this award letter, are deemed withdrawn and shall have no liability to NTPC.

14.0 Unless otherwise specified in the various documents forming part of the contract, all items of work shall be executed in accordance with latest technical specification and/or IS codes of practice as the case may be and the instructions of Engineer-In-Charge.

15.0 All incidental items of work not shown or specified but reasonably implied or necessary for successful completion of the work, shall be deemed to be included in the scope of work at no extra cost to NTPC.

16.0 Several documents forming part of contract are taken as mutually explanatory to one another. Detailed drawing being followed in preference to the General Conditions.

In the case of discrepancy between the schedule of quantities, the technical specification and/or drawings, scope of work, the order of preference shall be- (1) Description in schedule of quantity. (2) Special conditions, (3) Technical specifications, (4) Detail drawings, (5) Scope of work, (6) General specifications, ---in that order.

17.0 FIRM PRICE : The rates and quoted price agreed by you shall be fixed for the duration of contract including authorised extension if any and shall not be subjected to adjustments on any account, unless otherwise provided in the conditions of contract.

18.0 The defect liability period vide clause 33 of G.C.C. for this work shall be 12 (Twelve) months from the date of completion of work, unless otherwise specified in special conditions of contract.

19.0 LABOUR LAW & CONTRACTORS LIABILITY

Wherever Labour deployment in work is involved ,you shall obtain Labour License as applicable to contract labour under contract labour (Regulation and Abolition) Act , issued by competent authority of Labour Department of Govt. of Orissa under relevant Act within 10 Days from the date of issue of this letter and submit the same to Engineer-IN-Charge. You shall comply with all rules and regulations of Contract labour Act vide clause 16 of Section G.C.C for time being in force, Minimum wages Act, Compensation Act etc. Contractor shall pay minimum wages of Central and / or State Govt. whichever shall be higher. The labour payment shall be done by the agency through bank only.

20. Your final bill payment shall be release only on obtaining and furnishing NO DUES CERTIFICATE from EPF Commission or authority in proof of your having complied to statutory Under Employees Provident Fund and miscellaneous provisions Act 1952 or on submission of PF slips issued by RPF in name of the individuals for the labour deployed as per wage sheet.

21. SECTION III: SCOPE & PERFORMANCE Sub-Clause 16: Labour (G.C.C)

The Contractor shall employ labour in sufficient numbers to maintain the required rate of progress and of quality to ensure workmanship of the degree specified in the contract and to the satisfaction of the Engineer-In-Charge. The contractor shall not employ in connection with the works any person who has not completed his eighteen years of age.

22. INELIGIBILITY FOR FUTURE TENDER.

22.01 (Applicable for Domestic Competitive bidding CIVIL CONSTRUCTION PACKAGES)

"Notwithstanding the provisions regarding forfeiture of Earnest Money Deposit, if a tenderer after having been issued the Letter of Award, either does not sign the contract Agreement or does not submit an acceptable initial Security Deposit / Entire security Deposit in line with the provisions of the contract, such bidder may be considered ineligible for participating in future tenders of NTPC for a period as may be decided by the employer

22.02(Applicable for Domestic Competitive bidding for Supply / Supply-cum-supervision of Erection /supply-cum-installation/supply-cum-installation-cum-civil package)

"Notwithstanding the provisions specified in INB Sub-Clause 7.5, if a bidder after having been issued the Letter of Award, either does not sign the Contract Agreement pursuant to GCC clause 5.0 or does not submit a acceptable performance security pursuant to INB sub-clause 23 and GCC Clause 5.0, such bidder may be considered ineligible for participating in future tenders of NTPC for a period as may decided by the Employer."

23.0 ENVIRONMENTAL NORMS : The contractor shall adopt all environmental measures and strictly abide by all rules and regulations of local Pollution Control Board during execution of work.

24.0 SETTLEMENT OF DISPUTE IF ANY.

24.1 All disputes and differences arising out of this contract between the contractor and employer shall be settled through the process of settlement and arbitration in accordance with clause 56 of section G.C.C. of civil work / or condition of contract non-IDA supply cum erection.

24.2 The Contract shall be governed by the Indian laws and rules and their amendments for time being in force. The Orissa High Court shall be exclusive jurisdiction over the subject matter.

25. Acceptance: This award letter is being sent to you in duplicate. You are requested to accept this award letter and return the duplicate copy duly signed on each page including Annexure and corrections there of as proof of your acceptance within 10 days from the date of issue of this award letter.

26. Agreement: For Contract Value more than One Lakh Rupees, agency has to enter into a formal agreement

with us on non-judicial stamp paper purchased from any Odisha Court worth Rs.51/- (Rupees fifty one only) before 1st RA Bill.

Break up of Price

SI No.	Service Code	Description	Qty.	UOM	Rate	Premium	Discount	Addl Discount	Net Rate	Value
20 .10	ELHTM02 BD804	HT MOTORS(>500- 1000KW)-Rewdg	1	NO	375,000.00	0.00	0.00	0.00	375,000.0 000	375,000.00
20 .20	ELHTM14 BD801	HT MOTORS (ROTOR) Repair	1	NO	180,000.00	0.00	0.00	0.00	180,000.0 000	180,000.00
20 .30	ELHTM15 BD101	HT MOTORS (STATOR) CORE RESTAGGERING	1	NO	105,000.00	0.00	0.00	0.00	105,000.0 000	105,000.00
20 .40	ELHTM14 BD101	HT MOTORS (ROTOR) CORE RESTAGGERING	1	NO	105,000.00	0.00	0.00	0.00	105,000.0 000	105,000.00
20 .50	ELHTM12 BD800	HT MOTORS (ROTOR SHAFT) Repl	1	NO	150,000.00	0.00	0.00	0.00	150,000.0 000	150,000.00

SERVICE SPECIFICATIONS

20 .20 - ELHTM14BD801 (HT MOTORS (ROTOR) Repair)

As per SOW.

20 .30 - ELHTM15BD101 (HT MOTORS (STATOR) CORE RESTAGGERING)

As Per SOW

20 .40 - ELHTM14BD101 (HT MOTORS (ROTOR) CORE RESTAGGERING)

As Per SOW

20 .50 - ELHTM12BD800 (HT MOTORS (ROTOR SHAFT) Repl)

As Per SOW

Prepared By:
Ritanjali Sahu



A Maharatna Company

NTPC Limited

(A Government of India Enterprise)

Talcher Thermal Power Station

P.O. Talcher Thermal

ANGUL District Angul

Odisha- 759101, India

Telephone No. : 06760-248037 Fax No. : 06760-249054

Service Purchase Order

CIN No. : L40101DL1975GOI007966

GST No. : 21AAACN0255D1ZA

Purchase Order No. : 4000190854-046-1027 Date : 29.08.2017 (version : 1 Date : 07.05.2018)

To

Vendor Code : 1028569 (SME Vendor)

EDISON ELECTRICAL WORKS

MANALUR

LALPURAM POST,KEERAPALAYAM

CHIDAMBARAM TALUK

Tamil Nadu

India - 608602

Tel: 04144-230693/...

Fax: 04144-230443

E-Mail : EDISON.OFFICE@EDISON.CO.IN

Subject: : Time Extension of Complete Rewinding of 830kw,6600v,96A,593 RPM BHEL make CW Motor stage-II

NIT NO. : 200075585 Dated

Your Offer No. : Our Brief Award Letter No.C&M/CS/2017/200075585/1679 Dated 12.08.2017.

Your Reference : Your Confirmation vide email dated 10.08.2017, 11.08.2017 and 12.08.2017.

Dear Sir,

This has reference to our above mentioned NIT, Your offer and subsequent discussions. We are pleased to accept your offer opened on and confirm having awarded on you the work of Time Extension of Complete Rewinding of 830kw,6600v,96A,593 RPM BHEL make CW Motor stage-II of total value INR 1,895,250.00 (Rupee EIGHTEEN LAKH NINETY-FIVE THOUSAND TWO HUNDRED FIFTY ONLY) mentioned in the scope of works, special terms & conditions, Bill of quantities etc.

The duration of the service period shall be from 16.08.2017 to 31.05.2018. Though the duration of contract shall remain same, the actual date of commencement of the contract shall be as per the direction of EIC. DGM(EMD) shall be EIC for this work.

This service purchase order along with its annexure is being issued to you in duplicate .We request you to return the duplicate copy of this service purchase order, duly signed on each page by your authorised signatory in token of your unequivocal acknowledgment of the same within 15 days from the date of this service purchase order. If no communication is received within 15 days of receipt of Purchase Order, it will be treated that order has been accepted in entirety.

We thank you for the interest shown by you in our project and the cooperation extended to us. We expect to receive your continued cooperation in future also.

Thanking You,
For & on behalf of NTPC Limited.

B.K.Sahoo, Manager(CS)

EIC : DGM(EMD), F&A, G.F., O/C

Enclosures :

(Bill of Quantity)

Name of Work:

Time Extension of Complete Rewinding of
830kw,6600v,96A,593 RPM BHEL make CW Motor stage-II

SI No.	Code	Description	Unit	Quantity	Net Price	Amount	Long Text
--------	------	-------------	------	----------	-----------	--------	-----------

Delivery Address:

Talcher Thermal Power Station
P.O. Talcher Thermal ANGUL District Angul
Odisha
759101
India
06760-248037
06760-249054
GST No. : 21AAACN0255D1ZA

10		COMPL REWDG OF CW MOTOR STG-II-MAT	AU	1.000	1,168,500.00	1,168,500.00	
----	--	---------------------------------------	----	-------	--------------	--------------	--

Tax: IN:Integrated GST-ND @ 18.00 % Extra

10 .10	ELHTM02GN63 0	HT MOTORS (>500-1000KW) Matl Supply	NO	1	741,000.0000	741,000.00	YES
10 .20	ELHTM14BD80 4	HT MOTORS (ROTOR) Rewdg	NO	1	427,500.0000	427,500.00	YES

TOTAL OF BOQ PART : 00010 INR 1168500.00

Amount **1168500.00**
Other Charges 0.00

Net Amount on BOQ PART : 00010 INR 1168500.00

20		COMPL REWDG OF CW MOTOR STG-II-SER	AU	1.000	726,750.00	726,750.00	
----	--	---------------------------------------	----	-------	------------	------------	--

Tax: IN:Integrated GST-ND @ 18.00 % Extra

20 .10	ELHTM02BD80 4	HT MOTORS(>500-1000KW)-Rewdg	NO	1	356,250.0000	356,250.00	
20 .20	ELHTM14BD80 1	HT MOTORS (ROTOR) Repair	NO	1	171,000.0000	171,000.00	YES
20 .30	ELHTM15BD10 1	HT MOTORS (STATOR) CORE RESTAGGERING	NO	1	99,750.0000	99,750.00	YES
20 .40	ELHTM14BD10 1	HT MOTORS (ROTOR) CORE RESTAGGERING	NO	1	99,750.0000	99,750.00	YES

TOTAL OF BOQ PART : 00020 INR 726750.00

Amount **726750.00**
Other Charges 0.00

Net Amount on BOQ PART : 00020 INR 726750.00

Net Total Amount INR 1,895,250.00
Less Rebate/Amount INR 0.00
Grand Total INR 1,895,250.00

INR EIGHTEEN LAKH NINETY-FIVE THOUSAND TWO HUNDRED FIFTY ONLY

Terms & Conditions

Special Instruction

SCOPE OF WORK OF CW MOTOR STAGE- II

Desc: - Complete rewinding, Rotor Re barring and Re shafting of Stage2 CWP Motor.
 Technical Details: Kw-830,V-6600,96A,593RPM ,No of coils:90 BHEL make CW Motor

A) Scope of work of Stator Rewinding and Core Restagging:

Scope of work for Item No's:

Material Part:

10.10 ELHTM02GN630 -HT MOTORS (>500-1000KW) Matl Supply,

Service Part:

20.10 ELHTM02BD804 -HT MOTORS(>500-1000KW)-Rewdg,

20.30 ELHTM15BD101 -HT MOTORS (STATOR) CORE RESTAGGING

- 1) The scope of work envisages rewinding of stator of HT motor of TTPS at agency's works.
- 2) The existing winding of stator will be stripped out .The stator core will be cleaned properly and hot spot (Full Flux) test will be carried out in presence of NTPC representative at agency's works (Ref: First stage inspection clause no a-1).The agency will submit the test report to EIC for checking, if results are found satisfactory, then clearance will be given .Otherwise NTPC representative will witness the test.
- 3) Fabricating a set of new stator coils with new double glass enameled covered copper conductor machine wound suitable for class-F insulation . Conductor size should be as per original.
- 4) Hot spot checking to be done in front of NTPC _ representative , if hot spot (Full Flux) will be there on the core, then core re-stagging to be carried out . After rectification of core final hot spot (Full Flux) will be carried out by the agency & will be witness by the NTPC representative.
- 5) All insulated winding should be non hygroscopic, oil resistant and the material resistant to flame propagation. All coils should be varnished and suitable processed to effectively seal and prevent deterioration from adverse environmental condition at site during operation period.
- 6) Stator winding to be carried out with fully tested coils.(Ref First Stage inspection clause no a-2)
- 7) Slot wedges should be made up resin bonded glass fiber as per IS 9299.
- 8) The overhang portion of the coils should be insulated with GMP and Glass fiber tape using epoxy as binding material and the slot portion of the coil with SEMICATHERM as binding materials as per IS 6160 /71.
- 9) The coils should be placed in the slots with epoxy glass textolite as bottom liners, inter phase separators, top liners and wedges.
- 10) Complete winding should be adequately supported, braced and blocked to provide sufficient rigidity during all normal condition of services.
- 11) Inspection & Testing: - The Agency will intimate the Engineer-in-charge for inspection .The following tests is to be conducted during inspection.

AA. First stage inspection.

a1)Stator core testing:- The bare stator core shall be tested with full flux loop test and checked for hot spots with contact type thermometer . Hot spot not to exceed average temperature of core by 10 °C after one hour with full flux (stator full load current) applied to stator core. If hot spot will be found, the core re-stagging to be carried out at an extra cost and time.

a2)Testing of coils:-Following test shall be conducted on all the stator coils in presence of NTPC representative during first stage of inspection. The agency will inform 15 days in advance for inspection. If due to some unavoidable circumstances, inspection would not be executed by NTPC in time, then the agency will carry out all the tests and send these test results to engineer-in-charge for information and clearance.

- i. Inter turn insulation checking of all stator coils by Surge comparison test at 10 KV A.C.
- ii. HV test of coils at 18 KV AC for 1 min before placing in side the core.
- iii. Loss angle (tan delta) measurement of all the coils shall be taken before winding in steps of 20,40,60,80 and 100% of the rated voltage.

AB. Final stage of inspection:-

- i. The complete rewind stator shall be flash tested at 14.2 KV AC for one min and insulation resistance of each phase shall be recorded before and after HV test.
- ii. Stator winding DC resistance measurement to be taken.
- iii. Measurement of IR & PI with motorized megger.
- iv. Surge comparison test at 14.2 KV A.C on complete stator winding.
- v. Loss angle (tan delta) measurement of complete stator winding at the rated voltage in at least 5 steps.

AC. The agency will submit a detail test reports with the rewind stator.

AD. Both first & final stage inspections are to be witnessed by NTPC representative.

B) The scope of work of the Rotor Re Barring and Core Re-staggering job:

Scope of work for Item No's:

Material Part:

10.20 ELHTM14BD804 -HT MOTORS (ROTOR) Rewdg(Mat Supply),

Service Part:

20.20 ELHTM14BD801 -HT MOTORS (ROTOR) Repair(Rewdg),

20.40 ELHTM14BD101 -HT MOTORS (ROTOR) CORE RESTAGGERING

- 1) The end rings and rotor bars will be removed by de-brazing at agency's workshop
- 2) During removal of old bars agency should take care not to damage the rotor accessories such as core, and cooling fans etc.
- 3) Thorough cleaning of rotor and slots
- 4) Checking of rotor stamping, insulation and rectification.
- 5) The party has to make the new rotor bars by identical material or improved design bars without affecting the rotor electrical properties as well as mechanical properties.
- 6) The party will submit new drawing of the bars.
- 7) Placing newly manufactured rotor copper bars
- 8) Brazing of rotor bars and end rings
- 9) Checking of any looseness and rectification of the same
- 10) The complete rotor dynamic balancing to be done by the party in presence of NTPC/TTPS authorized representative
- 11) The rotor core, coupling, internal cooling fans & external fan hub are to be fitted with the rotor before balancing
- 12) Old rotor bars will be retained by the agency & to be kept till final stage inspection of the rotor
- 13) Final inspection will be done during balancing (UI & DP, final dimension check and balancing)
- 14) Details dimension measurements balancing report, test certificate of materials from approved testing agency etc are to be submitted by the agency to NTPC representative.
- 15) The core re staggering of the Rotor to be carried out by the agency if any abnormality and hot spot is noticed during flux loop test. This item is optional and will be carried out with extra cost . The detailed report of the flux loop test should be submitted to the NTPC/TTPS for clearance for carrying out the rotor core re staggering job.

TERMS & CONDITIONS

Desc:- Complete rewinding of CW-STAGE-2 Motor

1. All works to be done at agency's works as per scope of work
2. Transportation: - To and fro transportation and transit insurance is in the scope of NTPC/TTPS.
3. Indemnity Bond :- Indemnity Bond will be submitted by the agency before lifting of the motor .The value of Rs. 20,00,000/-
4. Guarantee:-12 months from the date of commissioning or 18 months from the date of delivery which ever is earlier.
5. Delivery: - within two(02) months from the date of receipt of failed motor from NTPC/TTPS.

6. Contract Period & LD Clause : 16.08.2017 to 31.05.2018 without imposing any LD and LD may be imposed if delivery period is beyond 31.05.2018.

7. All the old coils, rotors bars, shaft of the rotor and motor terminal lead wire will be retained by the agency, but the same should be shown to inspecting officer during final stage of inspection.

8. Taxes:- Income tax to be deducted as per rule

9. GST @ 18% shall be paid extra on submission of GSTIN Invoice.

10. All the materials like winding coils, Rotor bars, rotor shaft and insulating materials etc to be used for completing the rewinding job of stator and rotor. There will not be any supply of materials to NTPC; for the taxation purposes material and service parts have been separated. These materials are integral part of the motor and utilized for executing the rewinding job.

11. Security Deposit to be deducted as per NTPC GCC.

11. Payment: -

A) 90% payment alongwith 100% taxes against submission of GSTIN invoice shall be paid through DD. The DD shall be handed over on certification of EIC regarding completion of the job in all respect including submission of inspection and Test Report.

B) Balance 10% against submission of PBG after receipt and acceptance of Material at NTPC/TTPS site.

12. The scope of loading and unloading at TTPS/NTPC will be done by TTPS/NTPC and unloading and loading at Agency's works will be carried out by the Agency.

13. The Agency has to plan the above jobs like stator winding, Rotor Re barring, Re staggering jobs of stator and Rotor and Re shafting of rotor such a manner that it should cover 1st and final stage inspection of all the works at a time. So that inspection will be carried out smoothly.

14. If any extra material is required for completing the job like welding works, machining works, replacement of terminal bushings, replacement of space heaters, Painting, Labeling and RTDs are to be provided without any extra cost and time.

15. The item (C) of SOW ,The Rotor reshafting (Items 10.30 and 20.50)job is optional item and will be carried out if any damage or run out

=====

CONDITION OF CONTRACT

=====

1.0 Work is to be executed as per terms and conditions contained in the following documents issued with tender, except for specific addition(s) / modifications brought out in this award letter.:-

- a) NIT (Notice Inviting Tender)
- b) NTPC General Condition of Contract for civil works / Condition for NON -IDA Supply cum erection.
- c) Special Technical Conditions of contract
- d) Schedule of quantities (BOQ)
- e) Special. Terms & conditions
- f) Scope of work
- g) Technical Specification
- h) Drawing.

i) Special Conditions and instructions of the Bid document with additional Clauses

2.0 Any Other Drawing (s) if required will be issued to you by our executing department during the course of execution of the work.

3.0 CONTRACT VALUE:

3.2 As quoted by you / negotiated by you mentioned in forwarding P.O (Work Order).

3.2 The rates and rebates have been incorporated in the schedule of quantities enclosed, with value of work based on tender quantities and above rates.

3.3 Differential amount, if any, arising out of vitiation which in turn will change the BID position, shall be absorbed by the contractor.

4.0 The work is to be executed with all labour, material, Tools and Plants (T & P), complete in all respect

and as directed by EIC (Engineer In charge). Materials which are to be supplied by the NTPC for execution of this work will be issued to you from NTPC stores and these will have to be transported to the work site by you at your own cost. Surplus quantity (if any) will be returned to NTPC store by you at your own cost.

5.0 TIME SCHEDULE:

Time is the essence of this contract. The work shall be completed within stipulated period as mentioned in P.O and Terms. The date of commencement of the work and completion of the work, will be as mentioned in Brief Award letter / Formal Award letter and / OR in the P.O (Detail Award Letter) and Terms and Conditions.

6.0 COMPENSATION FOR DELAY:-

In case the work is delayed in part or in full as per above time schedule, the compensation for delay will be payable by you in accordance with provisions of NTPC General Conditions of contract.

7.0 WEEKLY PROGRESS REVIEW MEETING

The contractor shall be required to attend all weekly site progress review meetings organised by the Engineer-In-Charge or his/her authorised representative. The deliberations in the meetings shall interalia include the weekly program, progress of work (Incl. detail of manpower, tools and plants deployed by the contractor vis-a-vis agreed schedule), inputs to be provided by Owner, delays if any and recovery program, specific hindrances to work and work instruction by owner. The minutes of the weekly shall be recorded in triplicate in a numbered register available with the Engineer-In-Charge or his authorised representative. These recordings shall be jointly signed by the Engineer-In-Charge or his authorised representative and the contractor and one copy of the signed records shall be handed over to contractor.

8.0 BASIS FOR CONSIDERATION OF TIME EXTENSION

The following documents shall form the principal basis for consideration of TIME EXTENSION pursuant to GCC relevant clause with or without LD, determining the compensation amount pursuant to GCC relevant clause and settlement of extra claims during the execution of contract

- 1) The joint recordings in the weekly progress report
- 2) Records of Technical Coordination Meetings
- 3) Records of Contract Review Meetings
- 4) Written notices issued by Engineer-In-Charge or his authorised representative to the contractor in the Relevant period.

9.0 Bills supported by detailed measurement sheets are to be submitted by agency as per extent practice once in a month to facilitate on account payments.

10.0 SECURITY DEPOSIT:

The Earnest Money remitted by agency will be converted into initial security deposit. Further security deposit will be recovered from your bills as per provisions of General conditions of contract, UNLESS otherwise mentioned elsewhere IN DOCUMENTS. EMD-Bank Guarantee will not be converted to Security Deposit.

The EIC is to inform contract services for encashment of EMD-BG, well in before expiry of BG, in case of non-execution of work.

11.0 INCOME TAX:

Deduction towards Income Tax shall be effected from your bills as per provisions of Income Tax act, changing from time to time.

12.0 GST SHALL BE EXTRA AGAINST SUBMISSION OF GSTIN INVOICE.

12.01 Deduction of Sales Tax on the works contract at source as applicable to O.S.T. Act and rules there under shall be effected from your On Account Bills.

12.02 CESS: Reimbursement of welfare cess under BUILDING & OTHER CONSTRUCTION WORKERS ACT 1996, will be applicable in all contracts coming under the purview of the said act.

13.0 All other deviations/stipulations explicit or implicit in your bid proposal, except specifically modified and agreed in this award letter, are deemed withdrawn and shall have no liability to NTPC.

14.0 Unless otherwise specified in the various documents forming part of the contract, all items of work shall be executed in accordance with latest technical specification and/or IS codes of practice as the case may be and the instructions of Engineer-In-Charge.

15.0 All incidental items of work not shown or specified but reasonably implied or necessary for successful completion of the work, shall be deemed to be included in the scope of work at no extra cost to NTPC.

16.0 Several documents forming part of contract are taken as mutually explanatory to one another. Detailed drawing being followed in preference to the General Conditions.

In the case of discrepancy between the schedule of quantities, the technical specification and/or drawings, scope of work, the order of preference shall be- (1) Description in schedule of quantity. (2) Special conditions, (3) Technical specifications, (4) Detail drawings, (5) Scope of work, (6) General specifications, ---in that order.

17.0 FIRM PRICE : The rates and quoted price agreed by you shall be fixed for the duration of contract

including authorised extension if any and shall not be subjected to adjustments on any account, unless otherwise provided in the conditions of contract.

18.0 The defect liability period vide clause 33 of G.C.C. for this work shall be 12 (Twelve) months from the date of completion of work, unless otherwise specified in special conditions of contract.

19.0 LABOUR LAW & CONTRACTORS LIABILITY

Wherever Labour deployment in work is involved ,you shall obtain Labour License as applicable to contract labour under contract labour (Regulation and Abolition) Act , issued by competent authority of Labour Department of Govt. of Orissa under relevant Act within 10 Days from the date of issue of this letter and submit the same to Engineer-IN-Charge. You shall comply with all rules and regulations of Contract labour Act vide clause 16 of Section G.C.C for time being in force, Minimum wages Act, Compensation Act etc. Contractor shall pay minimum wages of Central and / or State Govt. whichever shall be higher. The labour payment shall be done by the agency through bank only.

20. Your final bill payment shall be release only on obtaining and furnishing NO DUES CERTIFICATE from EPF Commission or authority in proof of your having compiled to statutory Under Employees Provident Fund and miscellaneous provisions Act 1952 or on submission of PF slips issued by RPFC in name of the individuals for the labour deployed as per wage sheet.

21. SECTION III: SCOPE & PERFORMANCE Sub-Clause 16: Labour (G.C.C)

The Contractor shall employ labour in sufficient numbers to maintain the required rate of progress and of quality to ensure workmanship of the degree specified in the contract and to the satisfaction of the Engineer-In-Charge. The contractor shall not employ in connection with the works any person who has not completed his eighteen years of age.

22. INELIGIBILITY FOR FUTURE TENDER.

22.01 (Applicable for Domestic Competitive bidding CIVIL CONSTRUCTION PACKAGES)

"Notwithstanding the provisions regarding forfeiture of Earnest Money Deposit, if a tenderer after having been issued the Letter of Award, either does not sign the contract Agreement or does not submit an acceptable initial Security Deposit / Entire security Deposit in line with the provisions of the contract, such bidder may be considered ineligible for participating in future tenders of NTPC for a period as may be decided by the employer

22.02 (Applicable for Domestic Competitive bidding for Supply / Supply-cum-supervision of Erection /supply-cum-installation/supply-cum-installation-cum-civil package)

"Notwithstanding the provisions specified in INB Sub-Clause 7.5, if a bidder after having been issued the Letter of Award, either does not sign the Contract Agreement pursuant to GCC clause 5.0 or does not submit a acceptable performance security pursuant to INB sub-clause 23 and GCC Clause 5.0, such bidder may be considered ineligible for participating in future tenders of NTPC for a period as may decided by the Employer."

23.0 ENVIRONMENTAL NORMS : The contractor shall adopt all environmental measures and strictly abide by all rules and regulations of local Pollution Control Board during execution of work.

24.0 SETTLEMENT OF DISPUTE IF ANY.

24.1 All disputes and differences arising out of this contract between the contractor and employer shall be settled through the process of settlement and arbitration in accordance with clause 56 of section G.C.C. of civil work / or condition of contract non-IDA supply cum erection.

24.2 The Contract shall be governed by the Indian laws and rules and their amendments for time being in force. The Orissa High Court shall be exclusive jurisdiction over the subject matter.

25. Acceptance: This award letter is being sent to you in duplicate. You are requested to accept this award letter and return the duplicate copy duly signed on each page including Annexure and corrections there of as proof of your acceptance within 10 days from the date of issue of this award letter.

26. Agreement: For Contract Value more than One Lakh Rupees, agency has to enter into a formal agreement with us on non-judicial stamp paper purchased from any Odisha Court worth Rs.51/- (Rupees fifty one only) before 1st RA Bill.

Break up of Price (For Service Related Lines Only)

SI No.	Service Code	Description	Qty.	UOM	Rate	Premium	Discount	Addl Discount	Net Rate	Value
10 .10	ELHTM02 GN630	HT MOTORS (>500-1000KW) Matl Supply	1	NO	741,000.00	0.00	0.00	0.00	741,000.00 000	741,000.00
10 .20	ELHTM14 BD804	HT MOTORS (ROTOR) Rewdg	1	NO	427,500.00	0.00	0.00	0.00	427,500.00 000	427,500.00
20 .10	ELHTM02 BD804	HT MOTORS(>500- 1000KW)-Rewdg	1	NO	356,250.00	0.00	0.00	0.00	356,250.00 000	356,250.00
20 .20	ELHTM14 BD801	HT MOTORS (ROTOR) Repair	1	NO	171,000.00	0.00	0.00	0.00	171,000.00 000	171,000.00
20 .30	ELHTM15 BD101	HT MOTORS (STATOR) CORE RESTAGGERING	1	NO	99,750.00	0.00	0.00	0.00	99,750.00 00	99,750.00
20 .40	ELHTM14 BD101	HT MOTORS (ROTOR) CORE RESTAGGERING	1	NO	99,750.00	0.00	0.00	0.00	99,750.00 00	99,750.00

SERVICE SPECIFICATIONS

10 .10 - ELHTM02GN630 (HT MOTORS (>500-1000KW) Matl Supply)

As per SOW.

10 .20 - ELHTM14BD804 (HT MOTORS (ROTOR) Rewdg)

As per SOW.

20 .20 - ELHTM14BD801 (HT MOTORS (ROTOR) Repair)

As per SOW.

20 .30 - ELHTM15BD101 (HT MOTORS (STATOR) CORE RESTAGGERING)

As Per SOW

20 .40 - ELHTM14BD101 (HT MOTORS (ROTOR) CORE RESTAGGERING)

As Per SOW

Prepared By:
Ritanjali Sahu



A Maharatna Company

NTPC Limited

(A Government of India Enterprise)

Talcher Thermal Power Station

P.O. Talcher Thermal

District Angul

Odisha- 759101, India

Telephone No. : 06760-248037 Fax No. : 06760-249054

Service Purchase Order

CIN No. : L40101DL1975GOI007966

GST No. : 21AAACN0255D1ZA

Purchase Order No. : 4000192563-046-1027 **Date** : 10.10.2017 (version : 0)

To

Vendor Code : 1028569

EDISON ELECTRICAL WORKS

MANALUR

LALPURAM POST,KEERAPALAYAM

CHIDAMBARAM TALUK

Tamil Nadu

India - 608602

Tel: 04144-230693/...

Fax: 04144-230443

E-Mail : EDISON.OFFICE@EDISON.CO.IN

Kind Attention : Agoram Muthukumaran

Subject: : Complete re-coring of Stator and Rotor of BHEL make 6.6KV, 830KW, 593 RPM CW Pump motors

NIT NO. : 40081276 Dated

Your Offer No. : NIL

Your Reference : Your BID No.60248035 dated 23.09.2017.

Dear Sir,

This has reference to our above mentioned NIT, Your offer and subsequent discussions. We are pleased to accept your offer opened on and confirm having awarded on you the work of Complete re-coring of Stator and Rotor of BHEL make 6.6KV, 830KW, 593 RPM CW Pump motors of total value INR 4,656,000.00 (Rupee FORTY-SIX LAKH FIFTY-SIX THOUSAND ONLY) mentioned in the scope of works, special terms & conditions, Bill of quantities etc.

The duration of the service period shall be from 06.10.2017 to 05.06.2018. Though the duration of contract shall remain same, the actual date of commencement of the contract shall be as per the direction of EIC. AGM(Maint.) shall be EIC for this work.

This service purchase order along with its annexure is being issued to you in duplicate .We request you to return the duplicate copy of this service purchase order, duly signed on each page by your authorised signatory in token of your unequivocal acknowledgment of the same within 15 days from the date of this service purchase order. If no communication is received within 15 days of receipt of Purchase Order, it will be treated that order has been accepted in entirety.

We thank you for the interest shown by you in our project and the cooperation extended to us. We expect to receive your continued cooperation in future also.

Thanking You,

For & on behalf of NTPC Limited.

P.K.Singh, Manager(CS)

EIC : AGM(Maint.), F&A, Vigilance, G.F., O/C.



Enclosures :

(Bill of Quantity)

Name of Work:

Complete re-coring of Stator and Rotor of BHEL make 6.6KV, 830KW, 593 RPM CW Pump motors

SI No.	Code	Description	Unit	Quantity	Net Price	Amount	Long Text
--------	------	-------------	------	----------	-----------	--------	-----------

Delivery Address:

Talcher Thermal Power Station
 P.O. Talcher Thermal District Angul
 Odisha
 759101
 India
 06760-248037
 06760-249054
GST No. : 21AAACN0255D1ZA

10		RECORING OF HT MOTOR	AU	1.000	4,656,000.00	4,656,000.00	
----	--	----------------------	----	-------	--------------	--------------	--

Tax: IN:Integrated GST-ND @ 18.00 %

10.10	ELHTM02GN80 3	HT MOTORS (>500-1000KW) REFURBISHING	NO	2	2,400,000.0000	4,800,000.00	YES
-------	------------------	---	----	---	----------------	--------------	-----

TOTAL OF BOQ PART : 00010 INR 4800000.00
 Discount (%) 3.00- % 144000.00-

Amount **4656000.00**
 Other Charges 0.00

 Net Amount on BOQ PART : 00010 INR 4656000.00

Net Total Amount INR 4,656,000.00
 Less Rebate/Amount INR 0.00
 Grand Total INR 4,656,000.00
 INR FORTY-SIX LAKH FIFTY-SIX THOUSAND ONLY

Terms & Conditions

Special Instruction

SCOPE OF WORK

1. Recoring of Stator and Rotor of BHEL make, 6.6 KV, 830KW, 593 RPM CWP Motors SI no 31258000-2 and 31258000-3
2. The scope includes supply of CRNGO grade M36, 0.5 mm thick laminations for stator core and rotor core, conducting flux loop test on restacked stator core.
3. The flux loop test on restacked stator core is to be conducted at rated flux in the presence of NTPC representative. The temperature difference between hot spot temperature and average core temperature shall not exceed 10 deg after 1 hr.
4. Material certificate from original core manufacturer is to be produced.

TERMS & CONDITIONS

Defect Liability Period : One year from the date of delivery.

Delivery: The delivery period of 1st motor is 4 to 5 months and the next motor will be delivered in 7 to 8 months.

GST : GST @ 18% shall be paid extra to the agency against submission of GSTIN invoice.

Payment : 90% payment shall be released against dispatch documents and 10% will be deducted as Security Deposit which may be released after submission of BG of equivalent amount.

TDS will be deducted as per rule.

ESI ACT

ESI Act 1948 has been implemented at TTPS with effect from 01.11.2013. ESI code possession has become mandatory for all vendors who wish to participate in tendering process at TTPS. All vendors shall have to comply with the provisions of ESI Act 1948 under the provisions of the said act.

If the vendor claims that they are not coming under the purview of ESI act at TTPS, they have to furnish a letter of undertaking along with documentary proof to this effect based on which the tender shall be considered for processing.

The above said ESI code or a letter of undertaking along with supporting documents for non applicability of ESI Act must be submitted in a separate envelope. The same will be scrutinised before bid opening. After scrutiny, the tender shall be accepted/rejected as the case may be

CONDITION OF CONTRACT

1.0 Work is to be executed as per terms and conditions contained in the following documents issued with tender, except for specific addition(s) / modifications brought out in this award letter.:-

- a) NIT (Notice Inviting Tender)
- b) NTPC General Condition of Contract for civil works / Condition for NON -IDA Supply cum erection.
- c) Special Technical Conditions of contract
- d) Schedule of quantities (BOQ)
- e) Special. Terms & conditions
- f) Scope of work
- g) Technical Specification
- h) Drawing.
- i) Special Conditions and instructions of the Bid document with additional Clauses

2.0 Any Other Drawing (s) if required will be issued to you by our executing department during the course of execution of the work.

3.0 CONTRACT VALUE:

3.2 As quoted by you / negotiated by you mentioned in forwarding P.O (Work Order).

3.2 The rates and rebates have been incorporated in the schedule of quantities enclosed, with value of work based on tender quantities and above rates.

3.3 Differential amount, if any, arising out of variation which in turn will change the BID position, shall be absorbed by the contractor.

4.0 The work is to be executed with all labour, material, Tools and Plants (T & P), complete in all respect and as directed by EIC (Engineer In charge). Materials which are to be supplied by the NTPC for execution of this work will be issued to you from NTPC stores and these will have to be transported to the work site by you at your own cost. Surplus quantity (if any) will be returned to NTPC store by you at your own cost.

5.0 TIME SCHEDULE:

Time is the essence of this contract. The work shall be completed within stipulated period as mentioned in P.O and Terms. The date of commencement of the work and completion of the work, will be as mentioned in Brief Award letter / Formal Award letter and / OR in the P.O (Detail Award Letter) and Terms and Conditions.

6.0 COMPENSATION FOR DELAY:-

In case the work is delayed in part or in full as per above time schedule, the compensation for delay will be payable by you in accordance with provisions of NTPC General Conditions of contract.

7.0 WEEKLY PROGRESS REVIEW MEETING

The contractor shall be required to attend all weekly site progress review meetings organised by the Engineer-In-Charge or his/her authorised representative. The deliberations in the meetings shall inter alia include the weekly program, progress of work (Incl. detail of manpower, tools and plants deployed by the contractor vis-a-vis agreed schedule), inputs to be provided by Owner, delays if any and recovery program, specific hindrances to work and work instruction by owner. The minutes of the weekly shall be recorded in triplicate in a numbered register available with the Engineer-In-Charge or his authorised representative. These recordings shall be jointly signed by the Engineer-In-Charge or his authorised representative and the contractor and one copy of the signed records shall be handed over to contractor.

8.0 BASIS FOR CONSIDERATION OF TIME EXTENSION

The following documents shall form the principal basis for consideration of TIME EXTENSION pursuant to GCC relevant clause with or without LD, determining the compensation amount pursuant to GCC relevant clause and settlement of extra claims during the execution of contract

- 1) The joint recordings in the weekly progress report
- 2) Records of Technical Coordination Meetings
- 3) Records of Contract Review Meetings
- 4) Written notices issued by Engineer-In-Charge or his authorised representative to the contractor in the Relevant period.

9.0 Bills supported by detailed measurement sheets are to be submitted by agency as per extent practice once in a month to facilitate on account payments.

10.0 SECURITY DEPOSIT:

The Earnest Money remitted by agency will be converted into initial security deposit. Further security deposit will be recovered from your bills as per provisions of General conditions of contract, UNLESS otherwise mentioned elsewhere IN DOCUMENTS. EMD-Bank Guarantee will not be converted to Security Deposit.

The EIC is to inform contract services for encashment of EMD-BG, well in before expiry of BG, in case of non-execution of work.

11.0 INCOME TAX:

Deduction towards Income Tax shall be effected from your bills as per provisions of Income Tax act, changing from time to time.

12.0 GST SHALL BE PAID EXTRA AGAINST SUBMISSION OF GSTIN INVOICE.

12.01 Deduction of Sales Tax on the works contract at source as applicable to O.S.T. Act and rules there under shall be effected from your On Account Bills.

12.02 CESS: Reimbursement of welfare cess under BUILDING & OTHER CONSTRUCTION WORKERS ACT 1996, will be applicable in all contracts coming under the purview of the said act.

13.0 All other deviations/stipulations explicit or implicit in your bid proposal, except specifically modified and agreed in this award letter, are deemed withdrawn and shall have no liability to NTPC.

14.0 Unless otherwise specified in the various documents forming part of the contract, all items of work shall be executed in accordance with latest technical specification and/or IS codes of practice as the case may be and the instructions of Engineer-In-Charge.

15.0 All incidental items of work not shown or specified but reasonably implied or necessary for successful completion of the work, shall be deemed to be included in the scope of work at no extra cost to NTPC.

16.0 Several documents forming part of contract are taken as mutually explanatory to one another. Detailed drawing being followed in preference to the General Conditions.

In the case of discrepancy between the schedule of quantities, the technical specification and/or drawings, scope of work, the order of preference shall be- (1) Description in schedule of quantity. (2) Special conditions, (3) Technical specifications, (4) Detail drawings, (5) Scope of work, (6) General specifications, ---in that order.

17.0 FIRM PRICE : The rates and quoted price agreed by you shall be fixed for the duration of contract including authorised extension if any and shall not be subjected to adjustments on any account, unless otherwise provided in the conditions of contract.

18.0 The defect liability period vide clause 33 of G.C.C. for this work shall be 12 (Twelve) months from the date of completion of work, unless otherwise specified in special conditions of contract.

19.0 LABOUR LAW & CONTRACTORS LIABILITY

Wherever Labour deployment in work is involved ,you shall obtain Labour License as applicable to contract labour under contract labour (Regulation and Abolition) Act , issued by competent authority of Labour Department of Govt. of Orissa under relevant Act within 10 Days from the date of issue of this letter and submit the same to Engineer-IN-Charge. You shall comply with all rules and regulations of Contract labour Act vide clause 16 of Section G.C.C for time being in force, Minimum wages Act, Compensation Act etc. Contractor shall pay minimum wages of Central and / or State Govt. whichever shall be higher. The labour payment shall be done by the agency through bank only.

20. Your final bill payment shall be release only on obtaining and furnishing NO DUES CERTIFICATE from EPF Commission or authority in proof of your having compiled to statutory Under Employees Provident Fund and miscellaneous provisions Act 1952 or on submission of PF slips issued by RPF in name of the individuals for the labour deployed as per wage sheet.

21. SECTION III: SCOPE & PERFORMANCE Sub-Clause 16: Labour (G.C.C)

The Contractor shall employ labour in sufficient numbers to maintain the required rate of progress and of quality to ensure workmanship of the degree specified in the contract and to the satisfaction of the Engineer-In-Charge. The contractor shall not employ in connection with the works any person who has not completed his eighteen years of age.

22. INELIGIBILITY FOR FUTURE TENDER.

22.01 (Applicable for Domestic Competitive bidding CIVIL CONSTRUCTION PACKAGES)

"Notwithstanding the provisions regarding forfeiture of Earnest Money Deposit, if a tenderer after having been issued the Letter of Award, either does not sign the contract Agreement or does not submit an acceptable initial Security Deposit / Entire security Deposit in line with the provisions of the contract, such bidder may be considered ineligible for participating in future tenders of NTPC for a period as may be decided by the employer

22.02 (Applicable for Domestic Competitive bidding for Supply / Supply-cum-supervision of Erection /supply-cum-installation/supply-cum-installation-cum-civil package)

"Notwithstanding the provisions specified in INB Sub-Clause 7.5, if a bidder after having been issued the Letter of Award, either does not sign the Contract Agreement pursuant to GCC clause 5.0 or does not submit a acceptable performance security pursuant to INB sub-clause 23 and GCC Clause 5.0, such bidder may be considered ineligible for participating in future tenders of NTPC for a period as may decided by the Employer."

23.0 ENVIRONMENTAL NORMS : The contractor shall adopt all environmental measures and strictly abide by all rules and regulations of local Pollution Control Board during execution of work.

24.0 SETTLEMENT OF DISPUTE IF ANY.

24.1 All disputes and differences arising out of this contract between the contractor and employer shall be settled through the process of settlement and arbitration in accordance with clause 56 of section G.C.C. of civil work / or condition of contract non-IDA supply cum erection.

24.2 The Contract shall be governed by the Indian laws and rules and their amendments for time being in force. The Orissa High Court shall be exclusive jurisdiction over the subject matter.

25. Acceptance: This award letter is being sent to you in duplicate. You are requested to accept this award letter and return the duplicate copy duly signed on each page including Annexure and corrections there of as proof of your acceptance within 10 days from the date of issue of this award letter.

26. Agreement: For Contract Value more than One Lakh Rupees, agency has to enter into a formal agreement with us on non-judicial stamp paper purchased from any Odisha Court worth Rs.51/- (Rupees fifty one only) before 1st RA Bill.

Break up of Price

SI No.	Service Code	Description	Qty.	UOM	Rate	Premium	Discount	Addl Discount	Net Rate	Value
10 .10	ELHTM02 GN803	HT MOTORS (>500-1000KW) REFURBISHING	2	NO	2,400,000. 00	0.00	0.00	0.00	2,400,000. .0000	4,800,000.00

SERVICE SPECIFICATIONS



10 .10 - ELHTM02GN803 (HT MOTORS (>500-1000KW) REFURBISHING)

As Per SOW

Prepared By:
Ritanjali Sahu