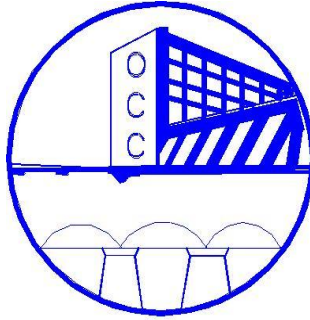


ODISHA CONSTRUCTION CORPORATION LTD.
(A Government of Odisha undertaking)
REGIONAL WORKSHOP
JEYPORE, KORAPUT – 764002 (ODISHA)



DESIGNED TO EXCEL

TENDER DOCUMENT

TENDER CALL NOTICE No: OCCL/RWS/ 01 /2019-20 Dated. 14.02.2020

Name of work: “Dismantling and Supply of electrical items, its transportation, fabrication, erection and electrical installation, commissioning & testing of 35 Ton Gantry Crane with all electrical arrangements for its hoists and long travels of both Indravati Dam & Muran Dam of Upper Indravati Hydro-Electric Project”.

The tender document comprises of the following:

- | | | |
|----|---|-------------------|
| 1) | Tender call notice including front page of tender document. | - 4(Four) sheets |
| 2) | Particular of tender document issue,
EMD & document deposit particulars,
Undertaking of Tenderer. | - 3(Three) sheets |
| 3) | General terms and condition. | - 5 (Five) sheets |
| 4) | Technical Specification | - 4 (Four) sheets |
| 5) | Scope of the work. | - 1 (One) sheet |
| 6) | Bill of Quantities & Price Schedule. | - 6 (Six) Sheets |

Total:- 23 (Twenty three) sheets

Signature of Tenderer or his
Power of attorney holder with date,
full name, designation and official seal

Senior Manager (Mechanical)
OCCL, Regional Workshop,
Jeypore,Koraput-764002 (Odisha)



ODISHA CONSTRUCTION CORPORATION LTD.
(A Government of Odisha undertaking)
REGIONAL WORKSHOP
JEYPORE, KORAPUT – 764002 (ODISHA)

No: OCCL/RWS/ 110

Dated.14.02.2020

Tender Call Notice No.: OCCL/RWS/ 01 /2019-20 Dated.14.02.2020

Name of work: “Dismantling and Supply of electrical items, its transportation, fabrication, erection and electrical installation, commissioning & testing of 35 Ton Gantry Crane with all electrical arrangements for its hoists and long travels of both Indravati Dam & Muran Dam of Upper Indravati Hydro-Electric Project”.

1. On behalf of M/s. Odisha Construction Corporation Ltd. (“OCCL”), the Senior Manager (Mechanical), Regional Workshop, Jeypore, Koraput, Odisha invites sealed Tenders from enlisted Electrical Job Worker of OCCL having LT / HT license for the following work(s).

Sl. No.	Name of the work	EMD	Cost of Document (Including GST 12%)	Period of engagement	Agency
1.	“Dismantling and Supply of electrical items, fabrication, erection and electrical installation, commissioning & testing of 35 Ton Gantry Crane with all electrical arrangements for its hoists and long travels of both Indravati Dam & Muran Dam of Upper Indravati Hydro-Electric Project”.	1% of quoted value	Rs.6720/-	02 (Two) Months	Enlisted Electrical Job worker of OCCL

Cost of Tender document (Non-refundable)	Sale of Tender document		Receipt of Tender	Opening of Tender
	From	To		
Rs.6720/- By hand and Rs.6820/- by Speed post inclusive of GST @ 12% on Rs.6000/-	15.02.2020	25.02.2020 Upto2.00PM	25.02.2020 Upto3.00 PM	25.02.2020 at 4.00 PM

2. The Tender document may be purchased by hand from the office of the Senior Manager (Mechanical), Odisha Construction Corporation Ltd., Regional Workshop, (Irrigation Colony, OCC Building), Jeypore Dist.: Koraput, Odisha on any working day during office hours on deposit of cost of Tender document as indicated in the table above in shape of cash/ account payee Demand Draft/ account payee Banker’s Cheque drawn in favour of “**Odisha Construction Corporation Ltd., Project Account**” on any Nationalized Bank/Scheduled Bank payable at Jeypore (Odisha) (Non-refundable) and production of attested copies of following documents and verification thereof by the Senior Manager (Mech.).

- (i) Copy of up-to-date valid GST certificate
- (ii) Copy of PAN Card
- (iii) Copy of document indicating residential address

Signature of Tenderer or his
Power of attorney holder with date,
full name, designation and official seal

Senior Manager (Mechanical)
OCCL, Regional Workshop,
Jeypore, Koraput-764002 (Odisha)

4. The tender document can also be downloaded from the OCCL website www.odishaconstruction.com or from Govt. of Odisha website www.odisha.gov.in. However, the cost of tender document as indicated in the table above must be deposited with the tender documents in shape of account payee Demand Draft drawn in favour of **“Odisha Construction Corporation Ltd., Project Account”** on any Nationalized Bank/Scheduled Bank payable at Jeypore (Odisha) (Non-refundable) along with attested photo copies of all below mentioned documents, otherwise, the tender will be cancelled. OCCL will not be responsible for missing of any pages, while downloading the tender documents. Interested tenderers may obtain further information, if any, from the undersigned.

5. The tenders must be accompanied with Earnest Money Deposit @ **1%** of total quoted basic value excluding (GST, packing & forwarding and transportation etc.) in any one of the forms specified in the tender document drawn on any Nationalised / Scheduled Bank payable at Jeypore only in favour of **“Odisha Construction Corporation Ltd., Project Account”** and should be valid for 90 (Ninety) days from the date of opening of tenders.

6. The tender document must be submitted in the office of **Senior Manager (Mechanical)**, Odisha Construction Corporation Ltd., Regional Workshop (Irrigation Colony, OCC Building), Jeypore, Koraput, Odisha, which will be received and opened as per the date and time indicated in the table above in the presence of the tenderers or their authorized representatives, if so they desire. If the date of purchase of the tender document or last date of receipt of tender or opening of tender happens to be a holiday, the date will be deferred to the next working day, however, the time and venue shall remain unaltered.

7. Intending tenderers are required to furnish the following documents:

- (i) Copy of valid ESI registration & GSTIN registration issued by competent authorities.
- (ii) Copy of valid labour license.
- (iii) Copy of valid LT / HT license from ELBO / Electrical competent authorities.
- (iv) Copy of valid registration certificate with Employees Provident Fund Authority.
- (v) Copy of valid Service Tax registration issued by competent authorities.
- (vi) Copy of PAN card
- (vii) Copy of document indicating residential address
- (viii) Copies of documents on credentials and proofs in support of successful execution of similar nature and magnitude earlier.
- (ix) Undertaking in prescribed format available in the tender document.
- (x) Details of Earnest Money Deposit (EMD) in prescribed format available in the tender document.
- (xi) Complete tender documents duly filled-in and signed on each page by the tenderer or his/their power of attorney holder with date, full name, designation and official seal.
- (xii) Valid enlisted certificate issued by OCC Ltd. should be furnished.

8. The intending bidder(s) is / are to quote their rates in the enclosed blank price schedule format.

9. The successful bidder shall have to execute the work as per scope of work, relevant drawings, technical specifications, terms and conditions of agreement.

10. Any dispute arising out of this tender or order thereof is to be settled in proper court under the jurisdiction of Odisha High Court at Cuttack or Courts at Bhubaneswar only under the jurisdiction of Odisha High Court.

11. Tender through Fax/Telex/Telegram/e-mail will not be accepted.

12. The authority reserves the absolute right to accept or reject any or all tenders and to split up works to award to one or more tenderers without assigning any reason thereof.

13. Time Period - 2 (two) months.

Signature of Tenderer or his
Power of attorney holder with date,
full name, designation and official seal

Senior Manager (Mechanical)
OCCL, Regional Workshop,
Jeypore, Koraput-764002 (Odisha)

Memo No: OCCL/RWS/111(WE) (2)

Dt.14.02.2020

Copy submitted to the Managing Director/ Director (Mechanical), OCC Ltd., Unit-VIII, Gopabandhu Nagar, Bhubaneswar-751012 (Odisha) for favour of kind information and necessary action.

Encl: Tender document

Senior Manager (Mech.)

Memo No: OCCL/RWS/112(WE) (2)

Dt.14.02.2020

Copy submitted to the General Manager (Mechanical), H.O., OCC Ltd., Unit-VIII, Gopabandhu Nagar, Bhubaneswar-751012 / General Manager (Mechanical), Erection & Maintenance, OCC Ltd., Central Workshop Premises, Rasulgarh, Bhubaneswar-751010 (Odisha) for favour of information and necessary action .

Encl: Tender document

Senior Manager (Mech.)

Memo No: OCCL/RWS/113(WE) (2)

Dt.14.02.2020

Copy along with soft copy forwarded to the Senior System Manager, System Business Division, OCC Ltd., Unit-VIII, Gopabandhu Nagar, Bhubaneswar-751012 for hosting of Tender Call Notice in Website of OCCL/ The Head State Portal, IT Center, Secretariat, Department of Information & Technology, Bhubaneswar for hosting in Govt. of Odisha Website.

.Encl: Soft copy of Tender in CD – 1 No.

Senior Manager (Mech.)

Memo No: OCCL/RWS/114 (3)

Dt.14.02.2020

Copy to Notice Board of Head Office, OCCL / Notice Board of Central Workshop, OCCL / Notice Board of Regional Workshop, OCCL.

Senior Manager (Mech.)

Signature of Tenderer or his
Power of attorney holder with date,
full name, designation and official seal

Senior Manager (Mechanical)
OCCL, Regional Workshop,
Jeypore, Koraput-764002 (Odisha)

EMD AND DOCUMENT DEPOSIT PARTICULARS

DETAILS OF EARNEST MONEY DEPOSIT (EMD) AND DOCUMENTS SUBMITTED ALONG WITH TENDER

1. EMD amount Rs. _____ (Rupees _____) only vide A/C
Payee D.D. / B.C./ Pay Order No. _____ Dated _____ issued by
_____ Bank, _____ Branch.

2. GST Clearance Certificate :

3. P.A.N. card :

4. Names of relations in O.C.C. Ltd. :

5. Money receipt No. _____ Dated _____ issued by _____
_____ for Rs. _____ (Rupees _____
_____) only in support of purchase of tender schedule.

6. Any other documents :

Full signature of "Tenderer" with date and seal

Signature of Tenderer or his
Power of attorney holder with date,
full name, designation and official seal

Senior Manager (Mechanical)
OCCL, Regional Workshop,
Jeypore, Koraput-764002 (Odisha)

UNDERTAKING OF TENDERER

I / We Shri

(In case of the firm, the name of the proprietor/head of the firm along with the designation & name of firm should be mentioned)

S/o Sri _____, Permanent resident of

Vill./Street - _____, P.O. - _____, P.S.- _____

Via - _____, Dist. - _____

State - _____, PIN - _____

Declare that I/We have thoroughly gone through the tender document and I/We know the sites of works. I/We agree to work at rates quoted by me/us or at settled rates and abide by the terms and conditions of the tender document.

Full signature of "Tenderer" with date and seal

Present address for correspondence:

Signature of Tenderer or his
Power of attorney holder with date,
full name, designation and official seal

Senior Manager (Mechanical)
OCCL, Regional Workshop,
Jeypore, Koraput-764002 (Odisha)

GENERAL TERMS AND CONDITIONS

1. **DEFINITIONS:** i) "CORPORATION" means "ODISHA CONSTRUCTION CORPORATION LTD, ("OCCL" in short)" with registered office at Unit – VIII, Gopabandhunagar, Bhubaneswar-751012 (Odisha) represented through its Managing Director or any other officer as designated by the "Corporation" from time to time.
- ii) "**ENGINEER-IN-CHARGE**" means the qualified Engineer deployed by the "Corporation" at work site for the work including the Senior Manager (Mech.) / Manager (Elect.)/ Asst. Manager (Elect.), "OCCL".
- iii) "**CONTRACTOR**" means the person / firm / organization i.e. reputed Electrical Contractor enlisted in OCC Ltd. having HT/LT license / Registered Electrical Firm having relevant experience on L.T. erection and installation work, subsequent technical person, machinery, materials etc. have been awarded by OCCL to execute the work satisfactorily as per scope indicated herein within stipulated period.

2. AGREEMENT:

The "**Contractor**" shall enter into an agreement with the "Engineer-in-Charge" in the format on requisite value of stamp paper prescribed for the purpose by the "Corporation" within a stipulated period to be specified by the "Engineer-in-Charge" failing which the EMD and ISD shall be forfeited. The work may be awarded in favour of some other agency at the discretion of the "Corporation".

3. CONDITIONS FOR SUPPLY ITEMS.

i) The tender shall quote their rates **F.O.R. Odisha Construction Corporation Ltd., Indravati Dam & Muran Dam of Upper Indravati Hydro-Electric Project** inclusive of all levies, duties, transportation, transit insurance etc. Applicable taxes as per GST shall be indicated separately besides basic price strictly in the space provided in price schedule format. ii) The material should be guaranteed against any manufacturing defects for a period of one year from the date of operation/ supply whichever is earlier. Materials if found defective within the guarantee period, the same shall have to be replaced free of cost by the supplier. iii) Materials to be supplied shall be strictly as per proper specification & applicable make should be clearly mentioned against each item. In case of any doubt on the item the tenderer/supplier may contact the undersigned for confirmation before quoting rate. iv) The validity of the offer should be for a period of **120 (One hundred) days** from the date of opening of the tender. v) The complete order shall have to be executed within **30 (Thirty) days** from the date of issue of the work order failing which the order is liable for cancellation. In case of any delay in supply of material beyond the delivery schedule whatever may the reason, supplier shall be liable to pay L.D. @ 0.5%(half percent) of the total work value of delay or part thereof subject to a maximum of 5% (five percent) of the total work value. vi) Manufacturer shall have to provide circuit diagram of each assembled unit for reference of the purchaser. Copy of the test report of all electrical accessories, spares, equipments etc. used for repair of gantry crane are to be tested in Govt. approved laboratory by electrical job-worker and to be submitted to OCCL when required.

4. **RATE:** The rate quoted by the tenderer is to be indicated in Rupees, which shall be valid for the full period of execution or till completion of work whichever is later. No escalation or price variation in whatsoever form shall be entertained. The rates quoted by the tenderer should be firm for the entire period of execution. The tenderer shall quote the rates to complete the works as per specifications inclusive of all transportation, handling, loading, unloading, lift, de-lift, taxes, duties, levies, incidental expenses etc. that will be applicable on the work to be executed by him. No claim in this regard in whatsoever form shall be entertained.

5. PAYMENT TERMS:

- i) No advance, price escalation and price adjustment shall be paid for the work. The rates shall remain firm throughout the agreement period.
- ii) The payment to the "**Contractor**" shall be limited to the measurements taken and accepted by the client. The "Job-worker" cannot raise any dispute over the measurements allowed by the "Engineer-in-Charge" for the purpose of payment.
- iii) The tenderer will bear the full cost of rectification or replacement of works required as per direction of "Client" or "Engineer-in-Charge".

Signature of Tenderer or his
Power of attorney holder with date,
full name, designation and official seal

Senior Manager (Mechanical)
OCCL, Regional Workshop,
Jeypore, Koraput-764002 (Odisha)

- iv) 60% of value towards cost of materials shall be made within 30(thirty) days after receipt, verification and acceptance of the complete materials along with bill, test certificate, guarantee certificate and other documents. 30% towards cost of materials and 90% value towards transportation and erection, electrical installation, testing and commissioning shall be made within 30(thirty) days after successful erection, electrical installation, testing & commissioning. Balance 10% of total work cost shall be released within 60(sixty) days against receipt of Performance Bank Guarantee (PBG) for 10% value of total work cost(basic) valid for 18(eighteen) months from the date of successful erection, electrical installation, testing & commissioning.

In absence of PBG, balance 10% value of total work cost shall be released after 18 months of successful erection, electrical installation, testing & commissioning.

6. INCOME TAX, GST ETC. :

Income Tax at the prevailing rate from time to time will be deducted from each bill of the “**Contractor**” and shall be deposited with Income Tax Authorities. The **Contractor** will have to produce tax invoice against each bill for payment.

7) RETURN OF PLANT, MACHINERY, EQUIPMENTS, TOOLS, TACKLES, MATERIALS,

CONSUMABLES ETC.:

- a) The plants, machinery, equipments etc. of the “Corporation” are to be returned by the “**Contractor**” in good working condition after completion of the work/termination of the contract by the “Corporation”. The “Corporation” may hire plants, machinery, equipments, etc. from the owner as well as outside for use in work. The same are also to be returned by the “**Contractor**” in acceptable good working condition with original fittings after completion of the work/termination of the contract by the “Corporation”.

Any damage to/ by the plants, machinery, equipments etc. during use by the “**Contractor**” shall be booked to the “**Contractor**” for recovery from his bills.

Signature of the “Tenderer or his/their power Senior Manager (Mech.), of attorney holder with name, date and seal OCCL, Mahanadi Birupa Gate Works Project.

- b) The Job Worker has to return all old electrical equipment and accessories etc. to the Manager / Asst. Manager of OCCL at site. These materials will be handed over to the UIHE Project by OCCL.

8) MEASUREMENT OF WORK:

The quantity of work executed shall be measured and payment shall be made on completion of work or on termination of the agreement, when final measurement will be made and account will be adjusted accordingly. The decision of the “Engineer-in-Charge” regarding the rates, progress, measurement and quality of the work shall be final and binding on the “Contractor”.

9) ELECTRICITY

Electricity if required for execution of work shall be provided by the Corporation and/or owner free of charges at one point only from where the contractor shall arrange further distribution with his own materials and labour. 10) **PAYMENT TO WORKMEN:**

The “Contractor” should maintain job register and payment rolls of their workmen and get those checked by the “Engineer-in-Charge” or his authorized representative from time to time. The payment to the workers/ supervisory staff shall be made by the “Contractor” in the presence of the owner and/or “Engineer-in-Charge” or his authorized representative as a token of disbursement. The copies of paid pay roll shall be submitted to the “Engineer-in-Charge” within a period of 7 (Seven) days from the date of payment failing which no further payment to the “**Contractor**” shall be released.

Signature of Tenderer or his
Power of attorney holder with date,
full name, designation and official seal

Senior Manager (Mechanical)
OCCL, Regional Workshop,
Jeypore, Koraput-764002 (Odisha)

11) WORKMEN COMPENSATION:

In case of any loss due to accident arising during / in connection with execution of the contract, the "Contractor" will pay compensation to his workmen. The "Contractor" will be fully responsible for his workmen as per workmen's compensation Act and Labour Laws in force during entire period of execution of contract. In case, the "Contractor" fails to do so, the "Corporation" may pay the same and recover the same from the bills / dues of the "Contractor".

12) INFORMATION OF WORKMEN:

The "Contractor" will make his own arrangements of labour and shall furnish all information of workmen employed by him like name, father's name, full permanent address, sex and age to the "Engineer-in-Charge" along with the pay.

13) STATUTORY REQUIREMENTS:

The "Job-worker" shall comply all statutory requirements applicable at site of work such as Minimum Wage Act, Labour Act, Factory Act, Workmen's Compensation Act, Provident Fund Rules, etc. A certificate to this effect shall be enclosed by the "Contractor" with each Running Account Bill for payment.

14) MINIMUM AGE OF WORKMEN:

The "Contractor" shall not employ any person, who is below the age of 18 (Eighteen) years or unfit for the tendered items. The "Engineer-in-Charge" shall have right to decide, whether any labour employed by the "Job-worker" is below the age of 18 (Eighteen) years or unfit and refuse to allow any labour, whom he decides to be below the age of 18 years or unfit for any other reason.

15) LABOUR LICENCE:

The "Contractor" has to obtain valid labour license and maintain all records at his own cost as per the conditions laid down in the labour rules in vogue and amended from time to time.

Signature of the "Tenderer or his/their power Senior Manager (Mech.), of attorney holder with name, date and seal
OCCL, Mahanadi Birupa Gate Works Project, 10

16) MINIMUM WAGES ACT:

The "Contractor" shall pay wages of each labour at the rate not less than the wages as per Minimum Wages Act in force and as may be amended from time to time. The "Engineer-in-Charge" has the right to enquire into and decide on any complaint of the labourers relating to non- payment or less payment of wages to them and his decision will be final and binding on the "Job- worker".

17) INSURANCE:

The workmen insurance shall be the responsibility of the "Contractor". He shall produce the records in support of workmen insurance to the "Engineer-in-Charge" for check and record. Further the materials supplied and work executed shall be fully insured by supplier under compressive insurance policy covering all risk against loss or damaged incidental manufacturer or acquisition, transportation, storage execution and till acceptance/handing over of the completed work.

18) IDLE LABOUR:

"OCCL" will not be held responsible for idle labourers of the "Contractor" for any reason, whatsoever and no claim on this account will be entertained.

19) CLAIMS AND LIABILITIES:

All claims/liabilities etc. arising out of Explosives Act and Labour laws shall be borne by the "Contractor" and he shall keep the "Corporation" indemnified against them and also in case of injuries or death of labourer (s) resulting from accidents during the execution of the work. In case the "Corporation" will have to pay for any such claims under Workmen's Compensation Act, the same shall be adjusted from the pending bills/dues of the "Job-worker" or shall be recovered otherwise as per law from him.

Signature of Tenderer or his
Power of attorney holder with date,
full name, designation and official seal

Senior Manager (Mechanical)
OCCL, Regional Workshop,
Jeypore, Koraput-764002 (Odisha)

20) SAFETY:

The "Contractor" should abide by the safety laws and rules of statutory bodies, "Corporation" and owner as per direction of "Engineer-in-Charge" and Safety Officers inspecting from time to time.

21) WATCH AND WARD:

The "Contractor" shall arrange watch and ward and safety of the site his materials, vehicles, equipments, etc. at his own cost. No accommodation will be provided by OCCL. The **Contractor** has to arrange accommodation for their working staff during execution of work as well as proper shed for storage of materials with safety precautions.

22) AUTHORISED PERSON:

The "Contractor" may in writing authorize his power of attorney holder or any other person to draw materials, avail facilities, attend measurements etc. during the course of execution of work. All liabilities created by the authorized person of the "Contractor" by way of loss of materials drawn, amenities availed, unpaid wages created etc. shall be considered as the liabilities of the Job worker and such liabilities shall be made good by the "Job-worker" or it shall be recovered from the bill/payment due to him.

23) RESPONSIBILITY OF JOB-WORKER:

The work shall be completed by the "Contractor" in all respect within the stipulated period of completion and the responsibility of the "Contractor" shall cease only, when the items are fully accepted by the owner after erection at project site.

Signature of the "Tenderer or his/their power Senior Manager (Mech.), of attorney holder with name, date and seal OCCL, Mahanadi Birupa Gate Works Project, 11

24) REJECTION DUE TO BAD WORKMANSHIP:

The rejection due to bad workmanship shall be charged to the "Contractor" at a cost of rejected items plus 20 (twenty) %. **25) BREACH OF CONTRACT:**

The ISD including EMD, SD and additional SD are liable to be forfeited in the event of breach of contract and the agreement shall be terminated. The dues of the "Corporation" including due of labourers/ workmen and other statutory payable liabilities payable by the "Corporation" as principal employer shall be cleared by the "Contractor". The decision of the "Engineer-in- Charge" in this regard shall be final and binding on the "Contractor". The amount remaining as outstanding against the "Contractor" after adjustment of his dues shall be payable by him to "OCCL". If necessary, legal action may be taken for recovery of the dues of the "Corporation" including labour and statutory dues to be cleared by the "Corporation" as principal employer and "OCCL" reserves the right to recover the payable amount from the "Contractor" from works done by his under any other organization or from his properties.

25) TERMINATION OF CONTRACT:

The "Engineer-in-Charge" may put an end to the agreement at his option at any time due to (a) Bad workmanship (b) Dis-proportionate progress (c) Non-compliance of labour rules or (d) Any other reason. The decision of the "Engineer-in-Charge" is final in this respect and no claim on this account will be entertained. "OCCL" also reserves the right to take exparte measurements, if the "Contractor" does not co-operate in taking final measurements after termination of contract.

26) SITE VISIT:

The "Contractor", interested to participate in the tender, should visit the site of work and get himself acquainted with site conditions and tendered work before submitting the tender. The site of the work at Indravati Dam is about 44 KM from Nawarangapur. The Muran site is about 25 KM from Indravat.

Signature of Tenderer or his
Power of attorney holder with date,
full name, designation and official seal

Senior Manager (Mechanical)
OCCL, Regional Workshop,
Jeypore, Koraput-764002 (Odisha)

27) RIGHT OF THE “CORPORATION”:

The “Corporation” reserves the right to cancel a particular tender call or all tender calls without assigning any reason thereof. The offer of any tenderer or all may be cancelled without assigning any reason thereof. **The requirement shown in any tender call notice are only indicative and may vary.**

28) FORCE MEASURE:

Neither party shall be liable to the other for any loss or damage occasioned by or arising out of acts of God such as unprecedented flood, volcanic eruption, earthquake or other convulsion of nature and other acts such as but not restricted to invasion, the act of foreign countries, hostilities, or war-like operations before or after declaration of war, rebellion, military or usurped power which prevent performance of the contract and which could not be foreseen or avoided by a prudent person.

29) JURISDICTION:

For all liabilities created under the various contractual obligations/impositions under this agreement, the “Contractor” undertakes not to raise any dispute or litigations in connection there with and shall make all endeavors to resolve all disputes amicably through conciliation and in all such cases, the decision of the Managing Director, “OCCL” shall be final and binding on the “Corporation” as well as on the “Contractor” failing which all such disputes arising out of the agreement shall be subject to jurisdiction of Hon’ble High Court of Odisha at Cuttack and their sub-ordinate courts at Bhubaneswar only. Both the parties agree by mutual consent that any dispute relating to this agreement is barred from arbitration.

Signature of Tenderer or his
Power of attorney holder with date,
full name, designation and official seal

Senior Manager (Mechanical)
OCCL, Regional Workshop,
Jeypore, Koraput-764002 (Odisha)

TECHNICAL SPECIFICATION FOR GANTRY

Name of Work- “Dismantling and Supply of electrical items, its transportation, fabrication, erection and electrical installation, commissioning & testing of 35 Ton Gantry Crane with all electrical arrangements for its hoists and long travels of both Indravati Dam & Muran Dam of Upper Indravati Hydro-Electric Project”.

SCOPE OF WORK:- **The are two existing 35 Ton Capacity Gantry Crane at both Indravati Dam & Muran Dam. Gantry Crane has not been in operation since long. The scope of work under this invitation includes all works related to electrical works including supply of material etc to bring the Gantry Cranes into operational condition.**

1. Details circuit diagram with write up shall be furnished by the firm for approval by the purchase before manufacturing the equipment. The design of components such as resistance etc. with their make & rating shall be furnished.
2. Supply of control equipments in full as per specifications.
3. Erection of the equipments in gantry crane at site after shop test.
4. Complete wiring of the control equipments from the power supply point to the crane including supply of power cable, control cable & lighting cable to be used after approval of the purchaser. The firm has to furnish the detailed specifications of the cables to be used in the circuit.
5. Complete lighting of gantry crane. The permanent 220V lighting system on the gantry crane shall consist of 2 No. 1X60 Watt L.E.D. lighting units with reflectors to illuminate the area under the gantry crane and 1 No. 1X30 Watt C.F.L. in the operator’s cabin. The system shall be supplied from 400/440V crane power system through a 400/440 circuit breaker. One branch circuit shall be connected to 1 No. 1 X 30 Watt C.F.L. lights in the operator’s cabin. Another branch circuit shall be connected to lighting of hoist mechanism through flexible conduit with four 100W lighting units with reflector. The wiring shall be done in accordance with the Indian Electricity Rules. The 400/440V circuit breaker shall be provided with an overload tripping element for each pole.
6. Design standard IS: 3177-1999 and its revision. IS:807-2006 & its revision and other relevant standards.

TYPE OF OPERATION OF GANTRY CRANE:-

1. Hoisting / lowering of a load of 40 Ton at a lifting speed 1.2m/min. 2. Travel of gantry crane with/without load at a speed of 8(eight)m/min in either direction.

SPECIFICATIONS OF MOTOR OF GANTRY CRANE:-

1. Hoist Motor: Three phase, 415V + 6%, 50 Hz, 13.2 KW crane duty slip ring motor to be operated in both direction of rotation – 6 pole - 1 No. TELC slip ring motor.
2. Long travel motor: Three phase, 415V + 6%, 50 Hz, 5.05 KW slip ring motor to be operated in both direction of rotation - 6 Pole - 2 Nos. TELC slip ring motor.

CONTROL EQUIPMENT:-

Gantry crane electrical master control equipment shall be placed in operator’s cabin. Operator shall control all the functions of the gantry crane from operator’s cabin. All the controls for operation of hoist, cross trolley travel and gantry crane travel mechanism shall be of fully magnetic, reversing with definite-time-limit type, equipped with overload relays, instantaneous over current, low voltage & single phase preventers etc. They shall be so designed that it will be possible to limit the vertical movement of hook with full rated lifting load when starting from stand still to within 10mm from the previous point. Hoist, cross trolley travel and gantry crane travel motor controller shall have at least six speed control point in each direction of operation. The contacts of protection relays of motor shall be so wired that the operation of the relays will trip the motor primary contractors thus making it

Signature of Tenderer or his
Power of attorney holder with date,
full name, designation and official seal

Senior Manager (Mechanical)
OCCL, Regional Workshop,
Jeypore, Koraput-764002 (Odisha)

necessary to return all controls to the "OFF" position before the motor can be started again. The instantaneous relay shall be adjusted between 200 to 300 % of the motor full load current. The power supply from the main connectors shall be protected by a 3 pole 400/440V A.C. totally enclosed, air circuit breakers equipped with three time relays, direct acting overload tripping element and shunt trip coil located in the operation cage, for emergency tripping. A circuit breaker shall be provided to control and protect the control circuit for each motor and all control circuits shall be fused properly. An indicating lamp shall be provided to show that the control circuits is healthy.

Voltmeter and ammeter shall be fixed in suitable locations in panel boxes in operator's cabin. All switches, contractors and relay shall be enclosed in suitable cabinets and placed in accessible locations to facilitate inspection and maintenance. All motor controls shall have master switches with vertical handles. Changes in speed in the lowering directions shall be under direct control of the operator and shall permit him to stop the motor without time delay from any position by the master switches. All resistors shall be non-breakable, corrosion resisting type and shall have a low temperature co-efficient. Wherever practicable, controller handle should move in the direction of the resultant load movement. Each controller shall be marked in a permanent manner to show the motion controlled & wherever practicable of the direction of movement. The notching for the controller handle in the "OFF" position shall be more positive than the notching in other position. The control lever shall be provided with stops and/or latches to ensure safety & facility of operation. The degree of protection for control panel shall be IP:55 as per IS:4691. The contractors and the resistors shall comply with provisions of the relevant clauses of IS:3177- 1999. They shall be of the non-breakable, corrosion resisting type with a low temperature co-efficient and shall be air cooled. The resistances shall be of stainless steel grid type. The rating of the resistors shall not be less than 5 min for short rating for time rated resistors. The minimum degree of protection for the resistors shall be IP:33. The contractors and resistors shall be adequately protected to prevent accidental contact with live parts. Resistors shall be so arranged that they are easily accessible for adjustment, examination and replacement, care being taken to see that it is not affected by vibrations. All contractors and resistors shall be suitable for appropriate switching duty so as to suit stipulated motor duties. The resistors shall be placed in well ventilated non-combustible cabinets which will not emit flames. The resistances for slip ring motors shall be properly designed for starting and speed control. The resistance shall be designed in such a manner that the starting torque developed by the motor shall be approximately equal to the pull out torque. Each main supply circuit breaker shall have an interrupting capacity of not less than 10,000 amperes at 400/440V. All switches, contractors, primary relays and preliminary circuits on controllers shall have a thermal capacity of 10,000 amperes for one second without injury. Control equipments shall be furnished with starters for hoist, cross trolley travel and gantry crane travel motors having control circuit with control voltage 110V. The control panels shall be suitably placed inside the operator's cabin. The control equipment shall be equipped with resistors, circuit breaker panel, hoist panel, cross trolley travel panel and gantry crane travel panel as specified. A main isolating switch shall be fitted in the cabin or adjacent to it capable of cutting off the supply for all power driven and associated equipment on the crane, except auxiliary connections such as warning lights, lighting, fan and heating circuits and communications circuits etc. The number of protective drive devices shall be minimum 3 per motion in separate lines. Adequate protection against short circuit shall be provided at each isolator positions. The circuit breaker of the main contractor shall be rated to carry at least the combined full load currents of motors for any two motions having largest power is auxiliary loads if any. MCCB should be provided in each isolating position. Cubicles and control panel enclosures shall be sheet steel with minimum thickness 1.8mm for base and top side and 1.6mm for other sides. The panels shall be of rigid self supporting construction and supplied with channel bases. Cubicles shall be fitted with close fitting, gasket, hinge, lift of doors capable of being opened through 180 degrees. The doors shall be provided with integral lock and master key.

Signature of Tenderer or his
Power of attorney holder with date,
full name, designation and official seal

Senior Manager (Mechanical)
OCCL, Regional Workshop,
Jeypore, Koraput-764002 (Odisha)

CABLES FOR CONTROL CIRCUIT:-

Only copper cables shall be used for control circuits. Power and auxiliary multi core control cables, where provided, shall unless otherwise specified herein, be PVC insulated copper cable with the requirements of applicable standards. The cables and wires used in power and control circuits shall be insulated for 1100 voltage grade. Insulating bushings shall be installed where necessary to avoid chafing of wiring. All flexible cables should be multi-stranded copper. Single strand cable should not be used anywhere inside the crane. All cables exposed to direct heat radiation should be of special insulation or should be run in formed steel channel provided with resistant materials. Each conductor shall be individually identified at both ends through a system providing ready and permanent identification, utilizing slip on ferrules approved by the purchaser. All wiring connection shall be readily accessible and removable for tests or other purposes. Wiring between terminals of the various devices shall be point to point. Splices or tee connections between terminal points are not acceptable. Terminal blocks should be robust & segregated for power & control cables. The construction of TB is of such as to preclude possibility of cable connections getting loose due to vibration. Wire runs shall be neatly trunked inside the panels or in wiring through. Wherever possible, unused areas of the panels shall be kept free of wiring to facilitate the installation of future equipment. The cables shall be either armoured or enclosed throughout their length in galvanized trunking or conduit either flexible or rigid except where flexible un- armoured cables are essential.

LIMIT SWITCHES :-

The limit switches shall be self resetting type or change over (Memory) type or snap action type as per the requirement of the motions of the crane. The degree of protection shall be IP:55. Limit switches shall be provided for following operations:

- 1) To limit the travel of gantry crane at both ends of the travel.
- 2) To limit the hoisting travel of the lifting beam.

INTERLOCKING :-

There shall be selector switches and shall be independent for hoist, cross trolley drive and gantry crane drive mechanism. Interlocking circuits must be incorporated in the main control circuit to avoid accidents etc. for above independent operations.

1. While hoisting or lowering the load, both cross trolley travel & gantry crane travel motors shall not get electrical supply.
2. While the cross trolley is in motion in either direction, hoist motor & gantry crane travel motors shall not get electrical supply.
3. While the gantry crane is travelling in either direction, both hoist motor & cross trolley travel motor shall not get electrical supply.

EARTHING :-

The crane structure, motor frames and metal cases of all electrical equipment including metal conduit or cable guards shall be effectively connected i.e. complying with CEA (Measures relating to safety and electric supply) regulation 2010 and IS:3043. The gantry crane wheels shall not be used as means of earthing. Equipments fed by flexible cables shall be earthed by means of spare core provided in the flexible cable.

WIRING :-

All electrical wiring shall conform to latest revision of IS:1554 (Part-I) PVC insulated (Heavy duty) electric cables for working voltage up to and including 1100 volts.

Signature of Tenderer or his
Power of attorney holder with date,
full name, designation and official seal

Senior Manager (Mechanical)
OCCL, Regional Workshop,
Jeypore, Koraput-764002 (Odisha)

CABIN FOR OPERATOR :-

The tenderer shall provide the operator's desk inside the cabin from which operator can control all the operations of the crane. The cabin shall be well equipped with fan, lights and alarm gong which will be supplied by the tenderer. The floor of the cabin shall be covered by linodium over wooden base by the tenderer. All the wirings of the cabin shall be through flexible metal conduits.

ADDITIONAL SPECIFICATION

1. There shall be provision for 3 phase testing bench of suitable capacity for test loading all power contractors, overload relays and switches up to their full loading.
2. There shall be provisions for painting the panel in a time temperature controlled heating & drying chamber in order to ensure longer life of panel to work in a highly humid atmosphere.
3. The enclosure should be made for outdoor service conditions suitable for minimum IP-54/55 category and roofs shall be made a little slanting for rain water to fall easily without resting on it.
4. There shall be additional "INCH" control provision for negotiating smaller move of each motion. The motion of each "Master Control" shall be interlocked with respective "INCH" control for forward as well as reverse direction of motion. Also each motion shall be interlocked with the other whether operating in "INCH" or by master control switch mode.
5. There shall be a "FAIL SAFE" provision for control circuit to ensure that in the event of failure of power supply, the control circuit would remain de-energized after power is restored from the failure state. In this condition, the 'Master Control' has to be brought to 'OFF' state before initiating control for any motion. Whether actuated by 'INCH' or 'Master Control' there should be one indication of respective motion by corresponding LED.
6. The resistance shall be out of stainless steel and shall be of non-magnetic type. The resistance panel must be properly made in grid design and its insulation shall be made to withstand temperature rise up to 150 degree Celsius under natural cooling conditions.
7. In addition to the required rating of MCCB, there should be one 'Earth leakage' protection for protecting the life of operator from electrocution in the event of leakage current exceeding 100mA.

Signature of Tenderer or his
Power of attorney holder with date,
full name, designation and official seal

Senior Manager (Mechanical)
OCCL, Regional Workshop,
Jeypore, Koraput-764002 (Odisha)

SCOPE OF WORK FOR JOB-WORKER

Name of Work- “Dismantling and Supply of electrical items, its transportation, fabrication, erection and electrical installation, commissioning & testing of 35 Ton Gantry Crane with all electrical arrangements for its hoists and long travels of both Indravati Dam & Muran Dam of Upper Indravati Hydro-Electric Project”.

- 1). Dismantling of existing cables, panels, starters , MCB etc. of entire Gantry Cranes of both Indravati Dam and Muran Dam and installation with new ones.

The contractor has to supply the main panel 1 (one) no. and 9 (nine) nos. outdoor slanting roof reversible starter made out of 16 SWG thick CRCA sheet metal cubical with slanting roof fixed on M.S. Angle frame work outdoor floor mounted type, duly acid treated for de-rusting with powder coating having minimum paint thickness of 50 micron having hinged door with provision for cable/conduit entry (3.5C 185 sqmm Al PVC APVC 1 no. incoming & 4C 6 Sq.mm Al PVC APVC 2 nos. outgoing), earthing studs , one set of 400 Amp. TPN Cu Bus bar with complete wiring by accommodating the following list of materials including trial & testing as per the direction of Engineer-in-Charge.
- 2) The master control panel should be as per technical specification.
- 3) The tenderer has to supply all switch gears, contactors and reversible starters and other electrical accessories of reputed manufacturer like L & T, Havells, BCH, Siemens or any other ISI marked. If required Job Worker has to produce test certificate for all electrical equipments and accessories from Govt. approved testing laboratories.
- 4) The tenderer has to supply the power cables of reputed make (KEI / Havells / Polycab / any other reputed make) certificates as per IS code and as per enclosed price schedule. . If required Job Worker has to produce test certificate for all electrical equipments and accessories from Govt. approved testing laboratories.
- 5) Electricity shall be supplied by OCCL at single point.
- 6) Welding machine required for erection of cable tray shall be supplied by the Corporation.
- 7) The responsibility of Contractor to return all the dismantled electrical materials to the Client
- 8) Crane for erection of master control equipment on Gantry crane shall be arranged by Tenderer.
- 9) The rates quoted shall be inclusive of all taxes, excise duty and surcharges. In the event of any increase in Govt. taxes, increased amount shall be borne by the contractor.
10. All electrical wiring and accessories should be as per IS specifications and of ISI quality. The approval of Engineer-in-Charge of the works should be obtained for materials regarding quality/brands of cable for street light wiring should preferably be of make like NICCO/POLYCAB/GLOSTER/ HAVLL'S/ FINOLEX.
11. Electrical wiring should be done as per the IS: 732/1989, reaffirmed in 1995 of code of practice of electrical wiring and installations.
12. The materials to be used for this work shall be of approved quality and ISI standards. The contractor shall produce the sample of the materials to the Engineer-in-Charge and shall get it approved before procurement and use.
13. All the materials will be inspected by Engineer-in-Charge / or his authorized representative before dispatch on prior intimation.
14. Copy of the test report of all electrical accessories, spares, equipments etc. used for repair of gantry crane are to be tested in Govt. approved laboratory by electrical job-worker and to be submitted to OCCL when required.
15. Time being the essence of the fund, the Job Worker should complete the work within the specified period and no extension of time in any case shall be allowed by OCCL.

Signature of Tenderer or his
Power of attorney holder with date,
full name, designation and official seal

Senior Manager (Mechanical)
OCCL, Regional Workshop,
Jeypore, Koraput-764002 (Odisha)

