



इरकॉन इन्टरनेशनल लिमिटेड

(भारत सरकार का उपक्रम)

IRCON INTERNATIONAL LIMITED

(A Govt. of India Undertaking)

An integrated Engineering and Construction Company

Project Office: House No. 59, Ashoka Lifestyle, Dharampura-3, Jagdalpur-494001 Dist: Bastar (C.G.)

Phone No. : 07782-229577, Email-ircon.2062@ircon.org, GSTIN-22AAACI0684H2ZV.

IRCON/2070/NMDC-PKG IV/24-25/E-tender/Gen_Elect/1843 Date: 31-05-2025

(By speed post & Email)

To,

M/s RASS CONTRACTOR AND ENGINEERS
302,3rd Floor, Devika Chamber
Rajnagar, Ghaziabad, Uttar Pradesh-201001
Phone :91 - 120 - 4569340 Mobile:91-9810383532
Email:rass.engineer@gmail.com

Attn: Mr. NARENDRA SINGH

Sub: Execution of General Electrical works for Staff Quarters & Service Buildings, Shifting of Sectioning cum paralleling post and allied works in Package IV in connection with "Construction of Private Railway Siding for NMDC Steel Limited's Integrated Steel Plant at Nagarnar near Jagdalpur in Chhattisgarh.":- **LETTER OF ACCEPTANCE**

Reference No.

1. Tender Notice No:-IRCON/2070/NMDC-PKG IV/24-25/E-tender/Balance works/ General Electrical, Dated: 01.02.2025
2. Your Bid ID:-829035, dated 17-03-2025.
3. LOI No. IRCON/2070/NMDC-PKG IV/24-25/E-tender/Gen_Elect/1832, Dated: 13.05.2025

Dear Sir,

This is to inform you that competent authority of Ircon International Limited has accepted your offer 17.03.2025 for aforesaid Tender at a total cost of **Rs. 3,38,26,632/- Plus GST @ 18%, Totalling to Rs 3,99,15,425/-** (Rupees Three Crore Ninety Nine Lakhs Fifteen Thousand Four Hundred and Twenty Five Only) details enclosed as **Annexure-A**.

1. SCOPE OF WORK: [Ref SCC Clause no 2]

The scope of work will include but not limited to "Execution of General Electrical works for Staff Quarters & Service Buildings, Shifting of Sectioning cum paralleling post and allied works in Package IV in connection with "Construction of Private Railway Siding for NMDC Steel Limited's Integrated Steel Plant at Nagarnar near

पंजीकृत कार्यालय : सी-4, डिस्ट्रिक्ट सेंटर, साकेत, नई दिल्ली-110017, भारत

Registered office: C-4, District Center, Saket, New Delhi-110017, INDIA

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CIN - L45203DL1976GOI008171

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Jagdalpur in Chhattisgarh." As per Bill of Quantities/Schedule of Rates, Technical Specifications, Drawings etc. within delivery period specified in the tender documents.

The scope of work shall also include any and all work, supplies and services for construction and completion of all works as described in Bill of Quantities and Technical Specifications.

The contractor shall also execute all such works which, in opinion of Employer, are required to be executed for the successful completion of the work. All such works shall be deemed to have been included in the original scope of the tender.

Contractor shall obtain necessary clearance for his staff/agents/works execution from Engineering In-charge of NMDC Steel Limited.

Contractor shall also binding to executed general electrification works other allied electrification works related to partially completed electrification works already constructed 122 units of staff quarters, etc as specified in BOQ & SCC clause 24.

Scope of work also includes (1) Electrification of OHE Depot (Near to Jagdalpur Railway station) (2) Electrification of New Block Station (NBS at Chowkawada) (3) Electrification of Electrical Panel Room (at Chowkawada) (4) Installation of Transformer (at Chowkawada) (5) Electrification of borewell (at Chowkawada) (6) Street lighting of NBS & staff quarters area etc, as directed by NSL/IRCON.

Scope of work also includes shifting of Sectioning cum paralleling post as per BOQ and as directed by NSL/IRCON.

Any other incidental / ancillary Works required in connection with completion of the above as directed by IRCON/Engineer.

The scope given above is only indicative. The detailed scope has been described in the tender documents.

2. MOBILISATION ADVANCE – Not applicable. : [Ref SCC Clause no 3]

3. TAXES AND DUTIES (Ref.: SCC Clause no 7 & G.C.C. Clause '56.0','57.0', '62.0' '64.0' and sub-clause no. 4.3, 4.4 and 4.5 of 'Instructions To Tenderers')

- 3.1 The Contractor shall get registered with the concerned Goods and Services Tax Department of the relevant state(s) of the project and submit a copy of the same to the Employer/Engineer. He shall be responsible for filing Goods and Services tax returns and assessments, as necessary as per prevalent Laws, Rules and Regulations and shall also furnish necessary certificates to Employer/Engineer from time to time. (Refer clause 56.0 (v) of GCC).
- 3.2 Wherever certain exemptions / benefits are available on custom duty the Contractor shall consider the same while quoting his rates. For instance, materials/ Plant and Machinery etc. used for execution of the projects financed by International organizations enjoy exemption from custom duty under Foreign Trade Policy as Deemed Export on fulfilling the conditions as per Govt. notifications. Similarly the Contractor shall ensure that whenever any benefits are available under any other law, these shall be considered while quoting the rates.



3.3 GST, TDS & Income tax shall be deducted at source from the payments of the contractor as per the prevailing rules/tariff and a certificate of such deductions Tax Deducted at Source (TDS) shall be issued by the employer.

3.4 **GST as applicable shall be paid by the contractor on submission of Tax Invoice(e-invoice) to the concern department within due date and the same should be reflected in IRCON's GST form no 2B within due date. IRCON will withheld GST amount claimed in the bill from respective running account bill. However, this will be released only after the amount of GST is reflected in IRCON's GST form no 2B.**

4.0 PRICE ADJUSTMENT (Ref: SCC Clause no 8 & GCC Clause 57.0)

Price adjustment shall not be applicable for this tender. The quoted/accepted rates shall remain firm till the completion of works.

5.0 PERFORMANCE SECURITY [Ref SCC Clause no 9 & GCC clause no 8.]

- (i) The successful bidder shall submit a Performance Security (PS) in the form of a Performance Guarantee (PG).
- (ii) The Performance Guarantee shall be in the form of irrevocable Bank Guarantee (BG) on the Proforma annexed as Annexure-II from any Scheduled Bank for an **amount of 5% (Five percent) of the contract value (including GST and all other duties & taxes)**. In case of foreign bidder or in case of Global Tender, if Bank Guarantee is from a foreign bank branch situated outside India, the Bank Guarantee shall be issued through any of the Scheduled Commercial Bank in India. In case BG is issued directly by a bank outside India, it should be in the same currency as the contract, executed on Letter Head of the Bank and should be advised and payable through their Indian Branch/ Corresponding Bank in India. The issuing Bank shall also state the name and designation of the next Higher Authority of the Officials who have issued the BG. This B.G. shall be initially valid upto 60 days beyond the stipulated date of completion. In case, the time for completion of work get extended, the Contractor shall get the validity of P.G. extended to cover such extended time for completion of work plus 60 days.

All Other provisions of clause 8.1 of General Conditions of Contract shall remain unchanged.

6.0 RETENTION MONEY [Ref SCC Clause no 10 & GCC clause no 8]

Clause 8.2 (i) of the General Conditions of Contract is as under:-

Retention money for all contracts shall be recovered from on account/ final bills of the Contractor @ 10 % of gross value of each bill amount adds upto 5% of the contract value of the work.



All other provision of Clause 8.2 of General Conditions of Contract pertaining to retention money shall remain unchanged.

7.0 COMPLETION PERIOD[Ref SCC clause no 11]

- 7.1 The work is required to be completed within a period of 06 months (Six Months)from the date of issue of letter of acceptance by IRCON International Ltd The Time given is inclusive of monsoon. The work has to be executed in co-ordination with other agencies working on or near the project.
- 7.2 Along with the tender, the tenderer shall submit his programme for the completion of works within the stipulated completion period.
- 7.3 Within 7 (Seven) days of the acceptance of the tender and before the work is commenced, the contractor shall have to submit a detailed programme for the execution of work, for the approval of the employer. The agreement or the approval of the programme by the employer shall not relieve the contractor of any of his responsibilities to complete the whole works by the prescribed time.
- 7.4 The contractor shall commence the works within the period stipulated in the letter of acceptance and execute the works as per the approved programme.

8.0 DEFECT LIABILITY PERIOD[Ref: SCC clause no 12 &GCC Clause 68.0]

The Defect Liability Period for the works in the subject tender shall be 12 (Twelve) months from the date of completion of the complete work as certified by the Engineer-in-charge. The contractor shall be required to make good any defect due to defective workmanship or faults due to faulty construction and notified by IRCON within the above period. In event of failure of the contractor in promptly rectifying the defective work notified by the employer, the employer shall have the full right/liberty to withhold any due payment to the contractor and en-cash the bank guarantees furnished by the contractor. The employer's decision in this regard shall be final and binding on the contractor.

9.0 DEPLOYMENT OF ENGINEERS & PROVIDING VEHICLE TO IRCON [Ref: SCC clause no 13]

- 9.1 The contractor shall provide and keep on the works, during the execution of the works, efficient and competent Engineers to ensure that the work is executed strictly as per provisions of the Contract. It shall be the obligation on the part of the contractor to provide the following minimum Engineering staff at site:

Sl. No.	Position/Qualification/Experience	Minimum Nos. to be deployed
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31/5/2025

1	Project Manager – Electrical Engineering Graduate with minimum experience of 15 years in the field of General Electrical engineering works Electrification of Buildings (Residential & Industrial) etc.	1
2	Engineer (Quality Control, Environmental &safety) – Electrical Engineering Graduate with minimum experience of 5 years / Electrical Engineering Diploma with minimum experience of 7 years in the field of general electrical of residential and industrial type buildings worked with quality control & safety at site.	1
3	Site Engineer (Electrical) - Electrical Engineering Graduate with minimum experience of 5 years / Civil Engineering Diploma with minimum experience of 7 years in the in the field of general electrical of residential and industrial type buildings worked with quality control & safety at site.	1
4	Wire Man – ITI in electrical Engineering having experience of Connection of electrical wire to power supply including electric pole and transformers and having experience of general electrical work of residential and industrial type buildings	1

In addition to the above, requisite number of staff for laboratory and other supervisory staff shall be deployed by the contractor.

The technical staff shall be got approved in writing from the Employer (whose approval may be withdrawn any time) for supervision of works and to receive direction from the Employer of the work on behalf of the contractor. The supervisory staff of the contractor will not be changed without the approval of the Employer.

- 9.2 In case, the Contractor fails to deploy sufficient Engineers as described above, the Employer shall be entitled to recover the following amount from the dues of the contractor :-

1	Non Deployment of Project Manager.	Rs. 80,000/- per month or part thereof
2	Non Deployment of Engineer (Quality Control, Environmental &safety)	Rs. 40,000/- per month or part thereof
3	Non Deployment of Site Engineer (Electrical)	Rs. 40,000/- per month or part thereof



4	Non Deployment of Wire Man	Rs. 40,000/- per month or part thereof
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The decision of the Employer as to the period for which the required technical staff was not employed by the contractor and as to reasonableness of the amount to be deducted on this account shall be final and binding on the contractor.

- 9.3 Along with the tender, the tenderer is required to submit the details of Project Manager and other technical staff proposed to be deployed for the execution of works and on award of work the same persons or persons having equivalent qualifications/experience shall be deployed for the execution of work. The contractor shall deploy competent and experience workmen, operators for the execution of works/operation of machinery. The contractor shall make all arrangement for the provision of boarding /lodging for his personnel.
- 9.4 Contractor shall provide 1 nos of Peon/office boy/Guard for housing keeping & maintenance of site offices /office of IRCON till completion of Works as directed by IRCON. If contractor fails to provide the Peon/office boy within one month from date of issue of LOA, IRCON shall keep 2 nos of Peon/office boy and recovery will be made @ Rs. 16,500/- per Month +statutory deductions as per govt rule including GST & PF etc for each Peon/office boy/Guard from the R.A. bills of the contractor. Cost of this is deemed to be included in your quoted price.
- 9.5 Contractor shall provide 01 nos Diploma Electrical Engineer (to be reported to AGM/C(PH)/IRCON). If contractor fails to provide the engineer within one month from date of issue of LOA, IRCON shall keep 01 nos of diploma engineer and recovery will be made @ Rs. 27,000/- per Month+ statutory deductions as per govt rule including GST & PF etc for each engineer from the R.A. bills of the contractor. Cost of this is deemed to be included in your quoted price.
- 9.6 Contractor shall provide one four wheeler vehicle (Mahindra make Scorpio or equivalent) with Driver & POL to Ircon for supervision of works. The vehicle should be with Ircon's custody till completion of Works within one month from the date of issuing LOA. The Vehicle running will be restricted to maximum of 3500 KM/month. The cost of providing and maintenance of vehicle is deemed to be included in your quoted price. If contractor fails to provide the vehicle within one month from date of issue of LOA, IRCON will have right to deploy inspection vehicle actual expenses per months or Rs. 60,000/- per month whichever higher shall be deducted from the R.A. bills/any amount payable to the Contractor



10. METHOD OF MEASUREMENT AND PAYMENT [Ref Clause no 14 of SCC & Clause no 61 of GCC]

The method of measurement for various items of work is given in the technical specifications. The payment for the various items shall be made for the actual quantities executed and measured as per the above methods. However, the payable quantities for various items shall be restricted to those paid by client to IRCON.

10.1 Payment is subject to receipt from Client.

- i. Ircon International is executing the work as per the requirement of and at the cost of the Client, NMDC Steel Ltd. as indicated in the Appendix to Bid.
- ii. Payment to the Contractor will be released after certification of measurements from client NMDC Steel Limited. If the payment received from the Client is in variance with payment made by IRCON to contractor, the difference will be recovered from contractor's subsequent bills.
- iii. In case of delay in making payment to the Contractor beyond average 56 days, the Engineer will suitably adjust the target date of completion of the affected activity. No other claim what so ever will be entertained on this account.

11.0 CONTRACT AGREEMENT [Ref SCC Clause no 15]

The contractor shall enter into and execute the contract agreement in the form of agreement (Annexure - I of GCC) within 30 days from the date of issue of Letter of Acceptance. The stamp papers of the requisite value as per the prevailing laws shall be provided by the contractor at his own cost. Original agreement shall be retained by the Employer and certified copy shall be made available to the contractor.

12.0 INSURANCE [Ref SCC Clause no 17]

In terms of Clause 9 of the General Conditions of Contract, the Employer shall obtain a Contractors All Risk Policy (CAR) for the entire contract awarded by the client to the Employer and hence the contractor is not required to take any CAR policy for the work awarded to him by the Employer. However, as provided in Clause 9.3 of the General Conditions of Contract, **other insurances pertaining to plant & Machinery, workmen Compensation, Third Party liability etc. shall be taken by the contractor (successful bidder) at this own cost and the cost towards the same shall be included in the quoted rates.**

The Contractor shall provide evidence to the Employer/Engineer before commencement of work at site that the insurances required under the contract have been effected and shall within 60 days of the commencement date,



provide the insurance policies to the Employer/Engineer. The Contractor shall, whenever, called upon, produce to the Engineer or his representative the evidence of payment of premiums paid by him to ensure that the policies indeed continue to be in force.

The Contractor shall also obtain any additional insurance cover as per the requirements of the Contract.

The Employer/Engineer shall not be liable for or in respect of any damages or compensation payable to any workman or other person in the employment of the Contractor his sub-contractor, petty contractor. The Contractor shall indemnify and keep indemnified the Employer/Engineer against all such damages and compensation for which the Contractor is liable.

The Policies of the Contractor shall remain in force throughout the period of execution of the works and till the expiry of the defect liability period except for any specific insurance covers necessary for shorter period. If the Contractor fails to effect or keep in force or provide adequate cover as acceptable to the Engineer in the insurance policies mentioned above, then in such cases, the Engineer may effect and keep in force any such insurance or further insurance on behalf of the Contractor. The recovery shall be made at the rate of 1.5 times the premium/premiums paid by the Engineer in this regard from the payment due to the Contractor from the Contractor's Performance Security. However, the Contractor shall not be absolved from his responsibility and/or liability in this regard.

13.0 Milestone Achievements:- [Ref SCC Clause no 20]

In order to ensure progress during execution of the work, the contractor will be expected to achieve the following milestone targets ahead of dates mentioned against each. Failure to accomplish milestone targets within allocated time frame, save for reasons accepted as valid by the Engineer-in-charge, shall create and constitute ground for failure on the part of contractor for maintaining progress of the work as per agreed programme sufficient enough to recover liquidated damage @ Rs.25,000/-per day after the due date of each milestone, limited to amount as per clause 49.8(a) of GCC.

Sl. No	Particulars	Quantity	Completion Milestone by Month					
			MONTHS					
			1st	2nd	3rd	4th	5th	6th
1	Completion of Balance Electrification Works of already constructed 122 units of staff Quarters at Chowkawada	122 units	Completed in all respect					
2	Installation of Electrical Pannel in Electrical Pannel Room in	Complete work			Completed in all			

	chowkawada along with installation of Transformer				respect		
3	General Electrical Works of OHE Depot at Jagdalpur, Near Jagdalpur Railway Station.	Complete building				Completed in all respect	
4	General Electrical Works of New Block Station at Chowkawada	complete station				Completed in all respect	
5	Connection of Bore well & Water Sump motors to Electric Pannel Room	complete work	Completed in all respect				
6	Shifting SP building electrical arrangement & completing SP building electrical works.	complete work	Completed in all respect				
7	Commissioning of electrical arrangement & Handing over to Railway/NSL	Complete				completed in all respect	

Note:

1. 'Date of Start' (DOS) is the date of Handing over of drawings for construction to the contractor but not earlier than 10 days after issue of LOA. First mile stone will be reckoned at the end of calendar month. Progress of work will be monitored on a proportionate basis for part of the month after the DOS.
2. The liquidated damages to be recovered under SCC clause 20 and SCC clause 21 together would be limited to 5% of the contract value of the work. It is understood that progress in monsoon months between July to September will be slightly less. No penal action will be taken if the progress is made up in the following months.

14.0 DELAYS DUE TO CONTRACTOR AND LIQUIDATED DAMAGES [Ref SCC Clause 21 & Clause no 49 of GCC]

Clause 49.8 (a) of the General Conditions of Contract is as under :

If the Contractor fails to complete the work/ facilities within the time fixed under the Contract or any extension thereof and / or to fulfill his obligations in time under the Contract, he shall be liable to pay as agreed liquidated damages



and not by way of penalty a sum equivalent to 0.25 % of total Contract value excluding taxes and duties per week of such delay or part thereof subject to maximum of 5% (Five Percent) of the total Contract value Price excluding Taxes & Duties.

All other provisions of clause 49 of General Conditions of Contract shall remain unchanged.

15.0 Miscellaneous Civil works related to electrical wiring:- [Ref to SCC Clause 23]

Rate of all Civil works related to electrical wirings for example cutting of plastering for making conduits for wiring or placing points, electrical board sockets etc & finishing it back along with proper plastering and painting to make it good as it was before cutting, making foundations for feeder pillars and posts etc are deemed to be included in your quoted rate , hence necessary civil works required for general electrical works in buildings shall not be measured for payment.

16.0 Handing Over of already constructed 122 units of Staff Quarters[Ref to SCC Clause 24]

122 unit of staff Quarter has already been constructed by previous agency in all respect except electrical items (electrical items are partially executed in 36 units out of 122 units) including installation of sanitary fittings at chowkawada near proposed New Block Station at Nagarnar.

These building shall be handed over with last approved measurements to the successful bidder for completing balance works required for handing over these building to Railway NSL after completion of balance water supply and electrical supply.

Successful contractor shall require to co-ordinate with civil contractor for the completing balance electrical works in already constructed 122 units of staff quarters without theft & damages. Cost of it is also deemed to be included in your quoted rate. No extra charge shall be admissible for these works. If any thing damaged or theft in building during execution of electrical works that shall be recoverable from your running bills., no any extra charges shall be admissible for these works.

The successful bidder is required to keep sufficient nos of security guards to prevent thefts from these buildings till handing over to Railways/NSL. Any theft shall be recouped by the successful bidder. Cost of safeguard of components of these 122 units of staff quarter till handing over to Railway/NSL shall be deemed to considered in your quoted rate, no any extra charges shall be admissible for these works

All other terms and conditions contained in the e-tender documents vide "Tender Notice No: . IRCON/2070/NMDC-PKG IV/24-25/E-tender/Balance works/ General Electrical, Dated: 01.02.2025" shall form part and parcel of the contract.

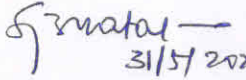


This letter of acceptance is being sent in duplicate. One copy may please be signed, stamped, and returned to this office as a token of unconditional acceptance.

You are requested to contact undersigned for further instructions.

Thanking You

Your's Faithfully
For & on behalf of
Ircon International Ltd.


31/5/2025
(Suresh B. Matali)
Addl. General Manager/PH



Enclosure: BOQ at Annexure-A

Copy to CGM/Electrical Bilaspur, Chattisgarh for information

Execution of General Electrical works for Staff Quarters & Service Buildings, Shifting of Sectioning cum paralleling post and allied works in Package IV in connection with "Construction of Private Railway Siding for NMDC Steel Limited's Integrated Steel Plant at Nagarnar near Jagdalpur in Chhattisgarh

BILL OF QUANTITIES (BOQ)

Item No.	Description	Unit	Estimated Qty	Estimated Rate	Estimated Amount
PART-01: GENERAL ELECTRICAL WORKS					
	Electrification of Station building, Staff quarters and Substation building				
	Wiring for light/ceiling fans/light plug etc				
1	Wiring for light/ceiling fan/exhaust fan/call bell/light plug points including circuit wiring, sub-main wiring with fire retardant (FR) PVC insulated, multistranded, copper conductor, single core cable on surface/in recessed PVC conduits, distribution boards, sub distribution boards, earthing etc as required. Wiring shall be done as per sizes of cables, no. of points permissible in each circuit and sub main as indicated in explanatory notes.	Point	2095.00	1,612.50	33,78,187.50
2	Wiring for power plug point including circuit wiring, sub main wiring with fire retardant (FR) PVC insulated, mistranslated copper conductor single core cable on surface/in recessed PVC conduits distribution boards, sub distribution boards, earthing etc as required. Wiring shall be done as per sizes of cables, no. of points permissible in each circuit and sub main as indicated in explanatory notes.	Point	937.00	2,958.40	27,72,020.80
3	Extra for provision of industrial type iron clad plug socket with 32 A DP MCB in M.S Box (For AC units)	Point	12.00	778.13	9,337.61
	Provision of luminaries, fans, air conditioners, water coolers etc.				
4	Supply, installation, testing and commissioning of 1X 18 Watt, T-8, LED type luminary similar to Bajaj Cat. Ref. No. BLRB 18W CW LED complete with all accessories as required.	Nos.	1064.00	555.50	5,91,052.00
5	Supply, installation, testing and commissioning of 45W LED street light luminary similar to Bajaj Cat. Ref. No. NEXO 54L WH PO PC SD complete with all accessories as required for installation on bracket pipe of erected pole or on wall bracket of GI class "B" pipe and connections from junction box/overhead line/light point etc. to luminary with 1.5 sq.mm FRLS PVC insulated multistranded copper conductor single core cable and earthing etc as required.	Nos.	76.00	1,666.50	1,26,654.00
6	Supply, installation, testing and commissioning of LED street light luminary on bracket pipe of class "B" G.I. Pipe and connections from junction box/overhead line/ light point etc. to luminary with 1.5 sq.mm FRLS PVC insulated multistranded copper conductor, single core cable and earthing etc as required.				
	45 Watt similar to Bajaj Cat. Ref. No.VISTA P 58L WH PO PC SD	Nos.	89.00	1,818.00	1,61,802.00
7	Supply, installation, testing and commissioning of 1200 mm sweep A.C. Ceiling fan (without regulator) complete with wiring the down rod with 1.5 sq.mm FR PVC insulated copper conductor single core cable earthing etc. as required	Nos.	404.00	2,652.03	10,71,418.10

Signature —
31/5/2025

Execution of General Electrical works for Staff Quarters & Service Buildings, Shifting of Sectioning cum paralleling post and allied works in Package IV in connection with "Construction of Private Railway Siding for NMDC Steel Limited's Integrated Steel Plant at Nagarnar near Jagdalpur in Chhattisgarh

BILL OF QUANTITIES (BOQ)

Item No.	Description	Unit	Estimated Qty	Estimated Rate	Estimated Amount
8	Supply and fixing of stepped type, electronic fan regulator, 300 Watt on the existing phenolic laminated connections, testing and commissioning as required.	Nos.	359.00	536.43	1,92,576.58
9	Supply, installation, testing and commissioning of 9 Watt 250 volt, 2 pin, LED Lamp similar to bajaj catalogue no. BAJAJ LEDZ PLUS LED LAMP 9W CDL B22	Nos.	959.00	95.02	91,121.25
10	Supply, erection, testing and commissioning of call bell	Nos.	122.00	257.20	31,378.90
11	Supply, erection, testing and commissioning of 300mm, 900 rpm exhaust fan suitable for 1-Phase, 230 Volts, AC supply system complete with capacitor, louver shutters, grouting bolts with nuts, making opening/modification in the wall to suit the size of the fan, making good the damages, connections with 1.5 sq.mm FRPVC insulated multistranded copper conductor single core cable earthing etc as required.	Nos.	338.00	4,005.45	13,53,842.10
12	Supply, installation, testing and commissioning of split type, 1.5 Tonne capacity AC unit (5 star rating as per BEE) suitable for single phase 230 volt AC supply complete with rotary compressor, remote control (Cordless with LCD display) shall be provided with one On/Off timer, selecting fan speed and setting up of temperature and connection and fixing of rubber pads below the outdoor unit, 19/25 mm diameter rigid PVC pipe (ISI marked) for drain including interconnecting cable and refrigerant copper pipes with thermal insulation and 5 KVA wall mounted I.C. Controlled electronic auto voltage corrector conforming to relevant I.S (latest version) suitable for operation on single phase 180-260 Volt, 50 Hz incoming AC supply and output 200-230 Volt A.C Supply, complete with time delay relay, voltmeter, instant start provision with push button switch, earthing etc as required.	Nos.	5.00	57,976.90	2,89,884.51
13	Supply, installation, testing and commissioning of self contained drinking water cooler 150 liters capacity (Cooling Capacity 150 Liters/hour) conforming to IS:1475/1978(latest version) suitable for operation on 230 Volts +/-10% 50 Hz AC supply system complete with all connected standard fittings, accessories etc. and 5 KVA wall mounted I.C. Controlled electronic auto voltage corrector conforming to relevant IS(latest version) suitable for operation on single phase 180 to 260 Volts 50 Hz incoming A.C. supply and output 200 to 230 Volts A.C. Supply, complete with time delay relay, voltmeter, instant start provision with push button switch, earthing etc as required.	Nos.	2.00	78,553.38	1,57,106.77
	LT switch board and feeder pillar.				



Execution of General Electrical works for Staff Quarters & Service Buildings, Shifting of Sectioning cum paralleling post and allied works in Package IV in connection with "Construction of Private Railway Siding for NMDC Steel Limited's Integrated Steel Plant at Nagarnar near Jagdalpur in Chhattisgarh

BILL OF QUANTITIES (BOQ)

Item No.	Description	Unit	Estimated Qty	Estimated Rate	Estimated Amount
14	Supply, erection, testing and commissioning of sub service main wall mounted (size 350 mm x 300 mm x 150 mm approx.) consisting of I/C: 1 No. 5-20 amps capacity HS meter, 1x25/20 amps, 240 volts, 50 Hz DP ELCB with 100 mA sensitivity, 10 KA short circuit capacity, 1x32 Amps DP MCB and 2x16 Amps Kit Kat fuse as outgoing with LED type indication lamp. (For Type-II & III)	Nos.	115.00	6,939.96	7,98,095.62
15	Supply, erection, testing and commissioning of sub service main wall mounted (size 350 mm x 300 mm x 150 mm approx.) consisting of I/C: 1 No. 5-20 amps capacity HS meter, 1x25/20 amps, 240 volts, 50 Hz DP ELCB with 100 mA sensitivity, 10 KA short circuit capacity, 1x32 Amps DP MCB and 2x32 Amps Kit Kat fuse as outgoing with LED type indication lamp. (For Type-IV)	Nos.	5.00	6,939.96	34,699.81
16	Supply, installation, testing and commissioning of weather proof, L.T feeder pillar (degree of protection not less than IP 54), fabricated with 2 mm thick CRCA sheet, powder coated, suitable for operation on 3 phase, 4 wire, 415 volt, AC supply system, including construction of 450 mm high brick masonry platform, inter connections with copper conductor cable, copper bus bars 200 amps, LED type indication lights, cable glands, earthing studs etc. and shall be comprising of the following: i) Incoming MCCB 63A, 4 pole, 35kA, Fixed type (Ics=100%Icu) - 1 no ii) Outgoing: MCB Double pole 6-32A 10kA - 20 nos iii) sleeved/epoxy coated copper bus bar in bus bar chamber iv) indication lamps.	Nos.	7.00	44,568.56	3,11,979.94
17	Supply, erection, testing and commissioning of 4 way SPN DB with 4 nos MCB SP 6/10/16 A, 10 KA	Nos.	125.00	3,866.00	4,83,250.00
18	Supply, erection, testing and commissioning of 6 way SPN DB with 6 nos MCB SP 6/10/16 A, 10 KA	Nos.	248.00	4,431.00	10,98,888.00
	Wiring in PVC Conduit				
19	Wiring for circuit/Sub main/A.C units/Power plug wiring along with earth wire the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/recessed medium class PVC conduit as required.				
(a)	2 x 1.5 sq.mm + 1 x 1.5 sq.mm earth wire	Meters	13120.00	256.30	33,62,656.00
(b)	2 x 2.5 sq.mm + 1 x 2.5 sq.mm earth wire	Meters	9536.40	301.40	28,74,270.96
(c)	2 x 4.0 sq.mm + 1 x 4.0 sq.mm earth wire	Meters	9469.10	367.40	34,78,947.34
(d)	2 x 6.0 sq.mm + 1 x 6.0 sq.mm earth wire	Meters	400.00	482.90	1,93,160.00
	SW-2- Substation Arrangement.				
20	Supply, installation, testing and commissioning of 11KV/433V, 250 KVA capacity Delta-Star connected, copper wound distribution transformer (Outdoor type) complete with all other connected accessories as required.	Nos.	2.00	7,38,106.77	14,76,213.55
21	Provision for excavation and construction for transformer plinth with cement, sand and concrete ballast.	Cum	10.00	7,329.37	73,293.71



Execution of General Electrical works for Staff Quarters & Service Buildings, Shifting of Sectioning cum paralleling post and allied works in Package IV in connection with "Construction of Private Railway Siding for NMDC Steel Limited's Integrated Steel Plant at Nagarnar near Jagdalpur in Chhattisgarh"

BILL OF QUANTITIES (BOQ)

Item No.	Description	Unit	Estimated Qty	Estimated Rate	Estimated Amount
21(A) (143)	Supply, installation, testing and commissioning of cubicle type LT panel (Indoor type) with 800 Amps copper bus bar should be provide with suitable size KWH meters, Ammeter, voltmeter, selector switches and RYB LED indication lamps. LT panel should be confirm to IS-8263, MCCB should confirm to IS-2516.	Set	2.00	2,99,860.93	5,99,721.86
(a)	Incoming: (i) 1 x 400 Amps 4 pole MCCB,35 KA				
(b)	Out going:(i) 2 x 100 Amps 3 pole,16 KA MCCB (ii) 4 x 63 Amps 3 Pole MCCBs (iii)2 x 32 Amps DP MCB				
22	Provision of cable trench of 30 cm wide x 90 cm deep in all type of soil and filling the trench (After laying cables) to bring the original condition.	Rmt	7550.00	374.98	28,31,118.81
23	Excavation of cable trench under road/track and and making good by providing cement concrete after laying the cable.	Rmt	62.00	4,415.64	2,73,769.59
24	Supply and laying of RCC Hume pipes of 150 mm diameter.	Rmt	150.00	823.82	1,23,573.60
25	Provision of cable route indicators	Nos.	90.00	400.71	36,063.91
26	Provision of 3 core 70 sq.mm size 11 KV HT XLPE cable complete including supply, laying, connecting and commissioning etc.,	Rmt	100.00	1,679.28	1,67,927.88
27	Provision of 11 KV XLPE cable end termination kits (heat shrinkable type) for 3 core 70 sq.mm complete including supply fixing and connecting etc.,	Set	8.00	14,786.42	1,18,291.37
28	Provision of GI pipe of 100mm diameter of 'B' class including fixing and connecting etc.	Rmt	50.00	1,006.90	50,344.80
29	Provision of GI pipe of 50mm diameter of 'B' class including fixing and connecting etc.	Rmt	300.00	503.45	1,51,034.40
30	Provision of DP structure by 11 meter long Rail poles/PSCC with all connected accessories.	Nos.	0.00		
31	Provision of four pole structure by 10/11 Mtrs long Rail Poles / PSC Poles using cement concrete of 1:2:4 ratio with other connected accessories including channels, clamps etc.	Nos.	2.00	1,95,436.34	3,90,872.68
32	Provision of 11 KV isolating arrangements with 200 A capacity AB switch vertical mounting type fixed on 4 pole structure with gang operated rod complete with all other connected accessories etc	Nos.	2.00	9,942.13	19,884.26
33	Provision of 11 KV HG fuse set and operating rod to be fixed on the 4 pole structure complete with all other connected accessories etc.	Set	2.00	25,860.20	51,720.40
34	Provision of set of 3 Nos. of lightening arrestor out door type suitable for 11 KV system to be fixed on 4 pole structure.	Set	2.00	1,824.08	3,648.16



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BILL OF QUANTITIES (BOQ)

Item No.	Description	Unit	Estimated Qty	Estimated Rate	Estimated Amount
35	Provision of fencing arrangements to the 11 KV HT new sub station with the following.				
(a)	Supply and erection of fencing panels including foundations.	Mtr	60.00	4,191.51	2,51,490.43
(b)	Supply and erection of fencing uprights .	MT	2.00	1,76,711.35	3,53,422.71
(c)	Supply and erection of anti climbing device.	Mtr	60.00	754.26	45,255.35
36	Maintenance free earthing with 600 mm x 600 mm x 6 mm thick copper earth plate, adding of charcoal or coke and salt to achieve earth resistance less than 1.0 ohm, providing masonry enclosure and RCC plate etc as required.	Nos.	18.00	12,899.83	2,32,196.95
37	Providing earth electrode of low carbon steel rod of 17 mm dia coated with 250 microns thick copper 3 mtr long with clamps and 2 bags of LORESCO ZEROLITE back fill compound etc complete	Nos.	107.00	9,943.00	10,63,901.00
38	Provision of following size 1.1 KV grade LT XLPE insulated armored, aluminum conductor cable conforming to IS:7098/ Pt-I (latest version) including digging of cable trench, sand cushioning, protective covering with second class bricks, refilling of trench with excavated earth, making good the damages, end terminations with aluminum crimping sockets/lugs, provision of cable route makers, testing and commissioning as required.				
(a)	3 ½ core 150 sq.mm (Apprx. Length of cable from S/S to the feeder Pillar box near station building)	Rmt	360.00	1,650.75	5,94,269.69
(b)	3 ½ core 120 sq.mm (Approx. length of cable from S/S to feed the domestic load)	Rmt	1500.00	1,021.47	15,32,208.90
(c)	3 ½ core 95 sq.mm (Apprx. Length of cable from S/S to feeder pillar box for external lighting system + street lighting)	Rmt	1600.00	854.82	13,67,714.56
39	Provision of 8 SWG GI wire along with cables for earthing inter connections including laying etc.,	Rmt	1600.00	37.63	60,200.00
40	Provision of 25mm x 6mm size GI strip with other connected accessories.	Rmt	308.00	85.73	26,406.29
41	Provision of spreading of 40mm size ballast in the out door substation.	Cum	20.00	1,198.00	23,960.00
42	Provision of portable fire extinguishers dry chemical type 10 Kgs. Capacity fitted with gun metal capacity. Dry chemical powder 10 Kgs conform to IS:4303 and Carbon dioxide conform to IS:4947.	Nos.	2.00	7,628.00	15,256.00
43	Provision of Fire Buckets.	Nos.	2.00	6,178.68	12,357.36



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BILL OF QUANTITIES (BOQ)

Item No.	Description	Unit	Estimated Qty	Estimated Rate	Estimated Amount
44	Provision of Safety helmet.	Nos.	2.00	156.15	312.30
45	Provision for First Aid Box.	Nos.	1.00	1,159.46	1,159.46
46	Provision of Earth Discharge rod.	Nos.	2.00	4,525.53	9,051.07
47	Provision of shock treatment boards.	Nos.	1.00	3,051.20	3,051.20
48	Provision of 11 KV hand gloves.	Sets	3.00	538.59	1,615.77
49	Provision of key box.	Nos.	1.00	3,232.52	3,232.52
50	Supply and fixing of danger boards in Hindi/English/Regional language on enameled steel plate with clamps, bolts, nuts, etc.	Nos.	6.00	325.27	1,951.61
51	Supply and fixing of cable crossing details board in English on enameled steel plate with clamps, bolts, nuts etc.	Nos.	4.00	2,693.77	10,775.08
	SW-3 -External electrification works.				
52	Supply and erection of 7 meters long, swaged type steel tubular pole, with canopy type single/double pipe bracket 200 mm long (diameter of pipe bracket shall match with the inlet diameter of luminaries to be provided) including digging of pit in ground, earthing etc. as required, complete with the following.				
	(I) Double door, weather proof M.S Junction box (degree of protection not less than IP 54) complete with MCB 6 amps, copper bus bar for looping 4 core, 3 nos. Lt cables and clamping with pole as required.				
	(II) Casting of foundation with cement, sand and concrete aggregate mixture in ratio 1:2:4 and providing muffing up to 300 mm above ground level as required				
	(III) Erection of GI pipe class 'B' ISI marked up to junction box for passing cable.				
(a)	7 Meter long pole with canopy type single pipe bracket.	Nos.	56.00	20,991.94	11,75,548.44
(b)	7 Meter long pole with canopy type double pipe bracket.	Nos.	20.00	21,105.63	4,22,112.53
	UG Cabling.				
53	Supply, laying under ground/railway track/recessing in wall/floor in laid RCC/G.I Pipe etc. 1.1 KV grade LT XLPE insulated armored, aluminum conductor cable conforming to IS:7098/ Pt-I (latest version) including digging of cable trench, sand cushioning, protective covering with second class bricks, refilling of trench with excavated earth, making good the damages, end terminations with aluminum crimping sockets/lugs, provision of cable route makers, testing and commissioning as required.				
(a)	3 ½ Core 25 sq. mm (Approx. length of cable from feeder pillar to junction box of station approach road lighting system, SP lighting DB and for other important loads)	Meters	0.00		



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BILL OF QUANTITIES (BOQ)

Item No.	Description	Unit	Estimated Qty	Estimated Rate	Estimated Amount
(b)	4 Core 16 sq. mm (Approx. length of cable from feeder pillar to street lights on approach road)	Meters	4455.00	431.46	19,22,176.23
A	TOTAL : BALANCE GENERAL ELECTRICAL WORKS WORKS OF STAFF QUARTERS , SERVICE BUILDINGS & SP SHIFTING [BASIC COST EXCLUDING GST]				3,83,59,434.22
PART-2: SHIFTING OF SECTIONING CUM PARALLELING POST (As per PKG-IV OHE DEVIATION (TKM-4.5))					
54	Supply and erection of SF-6 gas filled/vacuum 25 KV Interrupter	Each	4	333533	1334132
55	Supply and erection of 25 KV Potential Transformer Type-I or Type-II	Each	4	87597	350388
56	Supply and erection of 42 KV Lightning Arrestor	Each	4	60475	241900
57	Supply and installation of cables for SWS/TSS	Mtr	550	254	139700
58	Supply, erection, oil filtration, testing & commissioning of 25KV/240V 10 KVA Auxiliary (LT) supply transformers oil type with DO fuse switch, anti climbing device, insulator, copper jumper and earth electrode etc.	Set	1	212925	212925
59	Supply and erection of Concrete for Foundation and Plinth, in other than hard and Rocky soil	CUM	150	6755	1013250
60	Supply and erection of Concrete for Foundation and Plinth in rocky soil	CUM	10	10467	104670
61	Supply and erection of Concrete for Foundation and Plinth for Reinforced Concrete.	CUM	10	8699	86990
62	Supply and erection of all types of galvanized Steel Structures, Small Parts Steel etc.	MT	15	127566	1913490
63	Supply and erection of Fencing Panels,Fencing uprights, Gate and Anti-Climbing device	Mtr	55	3918	215490
64	Supply and erection of Copper Strips for equipment earthing	Mtr	50	1769	88450
65	Supply and erection of 160 sq mm Large copper jumper.	Nos	8	10656	85248
66	Supply and erection of all types of copper jumpers.	Nos	20	9554	191080
67	Supply and erection of Aluminum Bus Bar 36mmx28mm	Mtr	60	617	37020
68	Supply & erection of all type of connectors, bus splice and tee connectors etc required for commissioning of SP equipments.	Each	40	6443	257720
69	Supply and spreading of gravel/ ballast in the switch yard	Cum	15	1198	17970
70	Supply and Erection of Terminal boards in control cubicles,	Each	1	11552	11552
71	Supply and Erection of iron clad 240V AC and 110V D.C. board with fuse box in control cubicles,	Set		7543	7543

Final
31/5/2025

Execution of General Electrical works for Staff Quarters & Service Buildings, Shifting of Sectioning cum paralleling post and allied works in Package IV in connection with "Construction of Private Railway Siding for NMDC Steel Limited's Integrated Steel Plant at Nagarnar near Jagdalpur in Chhattisgarh

BILL OF QUANTITIES (BOQ)

Item No.	Description	Unit	Estimated Qty	Estimated Rate	Estimated Amount
72	Supply and Erection of Lead Acid Batteries 40 AH with Battery Chargers:	Set	1	272072	272072
73	Electrification of switching station building as per specification	Each	1	44001	44001
74	Supply & Erection of Earthing arrangement at switching station i. e. earth electrodes, earth bus, 8 SWG GI wire etc. to achieve IR value for energisation	job	1	29219	29219
(a)	Reinforced concrete for cable trench covers	Sq.m	40	8699	347960
(b)	Reinforced concrete for cable trench.	Cum	8	0	0
75	Construction of Switching Station building, RCC work, plastering, brick masonry, retaining wall, filling, compacting and leveling work etc and supply and erection of name board of switching station	Each	0	570034	0
76	Supply and Erection of 25 KV double pole isolator and with insulator with/without earth contact assembly	Each	4	169065	676260
77	Supply and Erection of safety items i. e. Fire extinguishers, set of fire bucket with stand and first aid box, key box with suitable key chain, locks and other misc items required for commissioning of switching station.	Set	1	19952	19952
78	Supply and erection of copper along track feeder (37/2.25 mm HDBC) along with materials for termination of the feeder and insulators required for termination and suspension of the feeder	Mtrs	250	776	194000
79	Dismantling of all existing equipments /installations /materials (Under Non-Power Block / Power Block) at AMAGURA SP and their Transportation to Railway Depot / Site specified by Railways/Client	LS	1	75000	75000
80	Supply and Erection of Danger Boards and caution boards for 25 KV, neutral section approach borads.	Nos	31	1632	50592
81	Supply and Erection of mild steel earth flat of size 40x6 mm for earthing.	Mtrs	90	134	12060
82	Supply,erection,modification testing and commissioning of RTU at SP , augmentation of SCADA (Modification/alteration to existing SCADA) arrangements at Divisional Head Quarter remote control center	LS	1	132600	132600
B	TOTAL : SP SHIFTING [BASIC COST EXCLUDING GST]				81,63,234.00
C	TOTAL : A+B (i.e. General Electrical Works + SP Shifting Works) [BASIC COST EXCLUDING GST]				4,65,22,668.22
E	Contract addition: 27.29 % below on Total basic Cost C				-1,26,96,036.16
F	Grand Total (C+E)				3,38,26,632.06
G	18% GST of F i.e. (Basic Cost + Contract addition)				60,88,793.77
H	Total Cost(Gross Value) Inclusive of 18% GST (F+G)				3,99,15,425.83

