

Bid Document/ बिड दस्तावेज़

Bid Details/बिड विवरण	
Bid End Date/Time/बिड बंद होने की तारीख/समय	01-04-2025 15:00:00
Bid Opening Date/Time/बिड खुलने की तारीख/समय	01-04-2025 15:30:00
Bid Offer Validity (From End Date)/बिड पेशकश वैधता (बंद होने की तारीख से)	90 (Days)
Ministry/State Name/मंत्रालय/राज्य का नाम	Ministry Of Heavy Industries And Public Enterprises
Department Name/विभाग का नाम	Department Of Heavy Industry
Organisation Name/संगठन का नाम	Bharat Heavy Electricals Limited (bhel)
Office Name/कार्यालय का नाम	10210015-psr
क्रेता ईमेल/Buyer Email	buycon977.bhelb.wb@gembuyer.in
Total Quantity/कुल मात्रा	14000
Item Category/मद केटेगरी	Supply of 11KV Aluminium Conductor Steel Reinforced 'DOG' conductor
GeMARPTS में खोजी गई स्ट्रिंग / Searched Strings used in GeMARPTS	Supply of 11KV Aluminium Conductor Steel Reinforced 'DOG' conductor
GeMARPTS में खोजा गया परिणाम / Searched Result generated in GeMARPTS	Aluminium Conductors For Overhead Transmission Purposes (V2) Conforming To IS 398
अधिसूचना के लिए चयनित प्रासंगिक श्रेणियाँ / Relevant Categories selected for notification	<ul style="list-style-type: none"> Aluminium Conductors For Overhead Transmission Purposes (V2) Conforming To IS 398
MSE Exemption for Years of Experience and Turnover/ अनुभव के वर्षों से एमएसई छूट	No
Startup Exemption for Years of Experience and Turnover/ अनुभव के वर्षों से स्टार्टअप छूट	No
Document required from seller/विक्रेता से मांगे गए दस्तावेज़	Certificate (Requested in ATC), Additional Doc 1 (Requested in ATC), Additional Doc 2 (Requested in ATC), Additional Doc 3 (Requested in ATC), Additional Doc 4 (Requested in ATC) *In case any bidder is seeking exemption from Experience / Turnover Criteria, the supporting documents to prove his eligibility for exemption must be uploaded for evaluation by the buyer
Do you want to show documents uploaded by bidders to all bidders participated in bid?/	No

Bid Details/बिड विवरण	
Bid to RA enabled/बिड से रिवर्स नीलामी सक्रिय किया	Yes
RA Qualification Rule	H1-Highest Priced Bid Elimination
Type of Bid/बिड का प्रकार	Two Packet Bid
Time allowed for Technical Clarifications during technical evaluation/तकनीकी मूल्यांकन के दौरान तकनीकी स्पष्टीकरण हेतु अनुमत समय	2 Days
Inspection Required (By Empanelled Inspection Authority / Agencies pre-registered with GeM)	No
Payment Timelines	Payments shall be made to the Seller within 90 days of issue of consignee receipt-cum-acceptance certificate (CRAC) and on-line submission of bills (This is in supersession of 10 days time as provided in clause 12 of GeM GTC)
Evaluation Method/मूल्यांकन पद्धति	Total value wise evaluation
Arbitration Clause	No
Mediation Clause	No

EMD Detail/ईएमडी विवरण

Required/आवश्यकता	No
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ePBG Detail/ईपीबीजी विवरण

Required/आवश्यकता	No
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MII Purchase Preference/एमआईआई खरीद वरीयता

MII Purchase Preference/एमआईआई खरीद वरीयता	Yes
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MSE Purchase Preference/एमएसई खरीद वरीयता

MSE Purchase Preference/एमएसई खरीद वरीयता	Yes
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1. Preference to Make In India products (For bids < 200 Crore):Preference shall be given to Class 1 local supplier as defined in public procurement (Preference to Make in India), Order 2017 as amended from time to time and its subsequent Orders/Notifications issued by concerned Nodal Ministry for specific Goods/Products. The minimum local content to qualify as a Class 1 local supplier is denoted in the bid document. If the bidder wants to avail the Purchase preference, the bidder must upload a certificate from the OEM regarding the percentage of the local content and the details of locations at which the local value addition is made along with their bid, failing which

no purchase preference shall be granted. In case the bid value is more than Rs 10 Crore, the declaration relating to percentage of local content shall be certified by the statutory auditor or cost auditor, if the OEM is a company and by a practicing cost accountant or a chartered accountant for OEMs other than companies as per the Public Procurement (preference to Make-in -India) order 2017 dated 04.06.2020. Only Class-I and Class-II Local suppliers as per MII order dated 4.6.2020 will be eligible to bid. Non - Local suppliers as per MII order dated 04.06.2020 are not eligible to participate. However, eligible micro and small enterprises will be allowed to participate .The buyers are advised to refer the OM No.F.1/4/2021-PPD dated 18.05.2023.

[OM No.1 4 2021 PPD dated 18.05.2023](#) for compliance of Concurrent application of Public Procurement Policy for Micro and Small Enterprises Order, 2012 and Public Procurement (Preference to Make in India) Order, 2017.

2. Purchase preference will be given to MSEs having valid Udyam Registration and whose credentials are validated online through Udyam Registration portal as defined in Public Procurement Policy for Micro and Small Enterprises (MSEs) Order, 2012 dated 23.03.2012 issued by Ministry of Micro, Small and Medium Enterprises and its subsequent Orders/Notifications issued by concerned Ministry. If the bidder wants to avail themselves of the Purchase preference, the bidder must be the manufacturer / OEM of the offered product on GeM. Traders are excluded from the purview of Public Procurement Policy for Micro and Small Enterprises and hence resellers offering products manufactured by some other OEM are not eligible for any purchase preference. In respect of bid for Services, the bidder must be the Service provider of the offered Service. Relevant documentary evidence in this regard shall be uploaded along with the bid in respect of the offered product or service and Buyer will decide eligibility for purchase preference based on documentary evidence submitted, while evaluating the bid. If L-1 is not an MSE and MSE Seller (s) has / have quoted price within L-1+ 15% (Selected by Buyer) of margin of purchase preference /price band defined in relevant policy, such MSE Seller shall be given opportunity to match L-1 price and contract will be awarded for 100% (selected by Buyer) percentage of total quantity. The buyers are advised to refer the OM No. F.1/4/2021-PPD dated 18.05.2023 [OM No.1 4 2021 PPD dated 18.05.2023](#) for compliance of Concurrent application of Public Procurement Policy for Micro and Small Enterprises Order, 2012 and Public Procurement (Preference to Make in India) Order, 2017. Benefits of MSE will be allowed only if seller is validated on-line in GeM profile as well as validated and approved by Buyer after evaluation of documents submitted.

3. Estimated Bid Value indicated above is being declared solely for the purpose of guidance on EMD amount and for determining the Eligibility Criteria related to Turn Over, Past Performance and Project / Past Experience etc. This has no relevance or bearing on the price to be quoted by the bidders and is also not going to have any impact on bid participation. Also this is not going to be used as a criteria in determining reasonableness of quoted prices which would be determined by the buyer based on its own assessment of reasonableness and based on competitive prices received in Bid / RA process.

4. Reverse Auction would be conducted amongst all the technically qualified bidders except the Highest quoting bidder. The technically qualified Highest Quoting bidder will not be allowed to participate in RA. However, H-1 will also be allowed to participate in RA in following cases:

- i. If number of technically qualified bidders are only 2 or 3.
- ii. If Buyer has chosen to split the bid amongst N sellers, and H1 bid is coming within N.
- iii. In case Primary product of only one OEM is left in contention for participation in RA on elimination of H-1.
- iv. If L-1 is non-MSE and H-1 is eligible MSE and H-1 price is coming within price band of 15% of Non-MSE L-1
- v. If L-1 is non-MII and H-1 is eligible MII and H-1 price is coming within price band of 20% of Non-MII L-1

Supply Of 11KV Aluminium Conductor Steel Reinforced' DOG' Conductor (14000 meter)

(Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively/क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक)

Technical Specifications/तकनीकी विशिष्टियाँ

Buyer Specification Document/क्रेता विशिष्टि दस्तावेज़	Download
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Consignees/Reporting Officer/परेषिती/रिपोर्टिंग अधिकारी and/ तथा Quantity/मात्रा

S.No./क्र. सं.	Consignee Reporting/Officer/ परेषिती/रिपोर्टिंग अधिकारी	Address/पता	Quantity/मात्रा	Delivery Days/डिलीवरी के दिन
1	INDRANIL CHAKRABORTY	723133,BHEL Site Office 2 X 660 MW, Raghunathpur Thermal Power Station Phase-II Raghunathpur, District – Purulia, State – West Bengal PIN-723133	14000	50

Buyer Added Bid Specific Terms and Conditions/क्रेता द्वारा जोड़ी गई बिड की विशेष शर्तें**1. Buyer Added Bid Specific ATC**

Buyer Added text based ATC clauses

ANNEXURE-A**BUYER ADDED BID SPECIFIC ADDITIONAL TERMS AND CONDITIONS****JOB: Supply of 14000 Meters OF 11KV Aluminium Conductor Steel Reinforced 'DOG' conductor at 2 x 660 MW Raghunathpur TPP Ph-II, Purulia, West Bengal****1.0 PRE-QUALIFYING CRITERIA**

JOB	Supply of 14000 Meters OF 11KV Aluminium Conduct or Steel Reinforced 'DOG' conductor at 2 x 660 MW Raghunathpur TPP Ph-II, Purulia, West Bengal
SL NO	CRITERIA
FINANCIAL	
1.0	<p>a) BIDDER SHOULD HAVE AVERAGE MINIMUM ANNUAL FINANCIAL TURNOVER OF RS. 3 LACS, DURING THE LAST THREE (3) FINANCIAL YEARS ENDING ON 2021-22, 2022-23 and 2023-24 AND SHOULD SUBMIT THEIR AUDITED BALANCE SHEET AND PROFIT & LOSS ACCOUNT FOR LAST THREE FINANCIAL YEARS, IN SUPPORT OF THE SAME.</p> <p>b) IN CASE AUDITED BALANCE SHEET AND PROFIT & LOSS ACCOUNT HAS NOT BEEN SUBMITTED FOR ALL 3 YEARS INDICATED ABOVE THEN THE APPLICABLE FINANCIAL AUDITED STATEMENTS SUBMITTED BY THE BIDDERS AGAINST THE REQUISITE THREE YEARS, WILL BE AVERAGED FOR THREE YEARS.</p> <p>c) IF FINANCIAL STATEMENTS ARE NOT REQUIRED TO BE AUDITED STATUTORILY, THEN INSTEAD OF AUDITED FINANCIAL STATEMENTS, FINANCIAL STATEMENTS ARE REQUIRED TO BE CERTIFIED BY CHARTERED ACCOUNTANT.</p>

TECHNICAL

2.0	TECHNICAL PQR THE BIDDER SHOULD HAVE PREVIOUS EXPERIENCE OF SUPPLYING MINIMUM QUANTITY 4200 METERS OF ALUMINIUM CONDUCTOR STEEL REINFORCED 'DOG' CONDUCTOR TO GOVT./ PSU/ REPUTED ORGANISATIONS AGAINST SINGLE/MULTIPLE ORDER IN LAST THREE YEARS ENDING ON LATEST DUE DATE OF SUBMISSION OF OFFER, BIDDER SHALL HAVE TO SUBMIT RELEVANT DOCUMENTS IN SUPPORT OF THE SAME.
3.0 Notes:	
A	BIDDER SHOULD HAVE VALID PAN. RELEVANT DOCUMENT IN SUPPORT OF ABOVE SHALL BE SUBMITTED.
B	IN CASE THE JOB IS UNDER EXECUTION/ ONGOING JOB, THE VALUE OF EXECUTED PORTION OF THE JOB SHALL AT LEAST CORRESPOND TO THE RESPECTIVE VALUES SPECIFIED ABOVE EVEN IF THE CONTRACT HAS NOT BEEN COMPLETED OR CLOSED.
C	AFTER SATISFACTORY FULFILLMENT OF ALL THE ABOVE CRITERIA, OFFER SHALL BE CONSIDERED FOR FURTHER EVALUATION & PARTICIPATION AS PER NIT & ALL OTHER TERMS OF TENDER.
D	CONSORTIUM/JOINT VENTURE BIDDING IS NOT ALLOWED.

2.0 PROJECT INFORMATION

Sl. No.	Description	Details
1	Project Title	Raghunathpur TPP Ph-II (2x660 MW)
2	Customer	Damodar Valley Corporation (DVC)
3	Location & Approach to Site	<p>The Site can be approached from District Head Quarters Purulia through State Highway SH-5 (Purulia-Barakar).</p> <p>Nearest Town: Raghunathpur - 7 Km</p> <p>District Head Quarters: Purulia - 38 Km</p> <p>Nearest City: Asansol - 50 Km</p> <p>Nearest Major City: Kolkata - 270 Km</p>

4	Nearest Railway Station	Nearest Railway Station: Bero – 20 Km Other Nearby Stations: Asansol Junction – 50 Km Durgapur Junction – 100 Km
5	Nearest Airport	Nearest Commercial Airport: Durgapur Airport – 92 Km
6	Access By Road /Major Cities	National Highway NH-19 about 44 Km from the site. National Highway NH-10 about 8 Km from the site.
7	Address	Project Director/ Construction Manager, BHEL Site Office Raghunathpur Thermal Power Station Phase-II Raghunathpur, District – Purulia, State – West Bengal

3.0 SCOPE OF WORK

This specification covers

- the Supply of Aluminium Conductor Steel Reinforced (ACSR) 'DOG' Conductor with proper packing, for 11KV Over-head line Power Distribution system.
- The transportation, and delivery to site as mentioned in this specification in the head of Project Information on F.O.R. basis, including insurance during transit.
- MDCC will be obtained by vendor before dispatch.
- Vendor has to submit Test Certificate (TC), Guarantee Certificate and certificate of conformance (COC) for issuance of MDCC by BHEL.
- MATERIAL DESPATCH CLEARANCE CERTIFICATE (MDCC) shall be issued by BHEL prior to dispatch.
- Copy of MDCC and other dispatch document shall accompany with every dispatch.

3.01 MATERIAL:

- The material shall be of best quality and workmanship. The stranded steel reinforced conductors shall be manufactured from hard-drawn Aluminum wires and galvanized steel wires, which have the mechanical and electrical properties specified in Technical Specification.
- The coating of the galvanized steel wires shall be applied by the hot process or electrolysis process in accordance with IS: 4826: 1968 or latest amendment thereof. The wires shall be smooth and free from all imperfections such as soils and splits.

3.02 SIZE AND PROPERTIES:

The sizes of Aluminum Conductor Steel Reinforced 'DOG' conductors shall be as given in Technical Specification which also indicates the values of resistance and strengths etc. Aluminum size 6/4.72 mm (100 mm² nominal Aluminum area,) 7/1.57 mm steel wire equivalent to Conductor DOG.

3.03 TOLERANCES:

The following tolerance shall be permitted:

- Tolerance on nominal diameter of aluminum wires: $\pm 1\%$ (one) percent.
- Tolerance on nominal diameter of galvanized steel wires: $\pm 2\%$ (two) percent.
- Tolerance on the total length of ACSR 'DOG' Conductor is: $\pm 0.1\%$ (one) percent.

3.04 MODULUS OF ELASTICITY & CO-EFFICIENT OF LINEAR EXPANSION:

The values of the final modulus of elasticity and Co-efficient of linear expansion for ACSR 'DOG' Conductor shall be as given hereunder:

No. of Wires (Al./Steel)	Final Modulus of Elasticity GN/m ² (Practical)	Co-efficient of linear expansion/°C
ACSR 6/7	75	19.8 x 10 ⁻⁶

3.05 JOINTS IN WIRES:

There shall be no joints of any kind in any wire of a stranded conductor containing 7 wires, except those made in base rod or wire before final drawing.

3.06 STRANDING:

- The wires used in manufacturing of stranded conductors shall satisfy all requirements of IS: 398/ 1996 (Part-I & II) before stranding. For ACSR 'DOG' Conductor, the lay ratio of the different layers shall be within the limit given under clause No. 3.08 below.
- In all constructions, the successive layers shall have opposite directions of lay and the outer most layers being right handed. The wires in each layer shall be evenly and closely stranded.
- In conductor having multiple layers of Aluminum wires, the lay ratio of any Aluminum layers shall be not greater than the lay ratio of the Aluminum layer immediately beneath it.

3.07 LAY RATIO:

The lay ratio (Ratio of the aerial length of a complete turn of the helix formed by an individual wire in a stranded conductor to the external diameter of the helix) shall be within the limits given below :

No. of Wires		Lay ratio for Steel core		Lay ratio for outside layer		Aluminum Wire in inner most layer	
Al.	Steel	Max.	Min.	Max.	Min.	Max.	Min.
6	7	28	13	14	10	-	-

3.08 GROSS WEIGHT:

- The gross weight of each wooden drum containing conductor of all sizes shall not exceed 500 kg with a tolerance limit of ±10%.
- Drums containing conductor having gross weight above 550 kg will not be accepted in any case. Also more than two lengths in one conductor drum will not be accepted.

3.09 STANDARD LENGTH:

Standard length of ACSR 'DOG' Conductor should be 1(one) km per Drum. Longer lengths are also acceptable provided they are within gross weight limit. The conductor supplied shall be in standard lengths of not less than 95% of the total quantity.

3.10 TESTS:

- Selection of test sample shall be done as per relevant IS.
- The conductors shall be subjected to routine and acceptance test in accordance with the relevant IS with latest amendments if any.

3.11 REJECTION AND RE-TESTING:

- As per relevant IS with latest amendment if any.
- BHEL also reserves the right to check length of the conductor at Store/ Site.
- The entire cost of testing for acceptance & routine tests and checking of length etc. shall be borne by the supplier.

3.12 PACKING & MARKING

i) PACKING

- The conductor shall be wound on non-returnable drum strong enough and provided with lagging of adequate strength, constructed to protect the conductor against all displacement during transport.

ansit, storage and subsequent handling and stringing operation in the field. The drum shall conform to IS: 1778: 1980 as amended up to date and the dimensions shall be as per drum under column 9 of Table- 2 of the IS.

- b. The drum shall be suitable for wheel mounting.
- c. The general construction of drum shall be as shown in IS: 1778: 1980. However, the drum shall be suitable for letting off the conductor under controlled tension of the order of 300 kg minimum.
- d. After application of bituminized and plastic paper protective lagging or circumferential batten of minimum 50 mm thickness shall be provided suitably, in order to protect conductor from damage during transit in the event of breakage/detachment of the external protective lagging. The thickness of the external protective lagging or circumferential batten shall be sufficient to nail across grains as far as possible to the flange edges with at least one nail per end. The length of the nails shall be not less than twice the thickness of the battens. The nails shall not protrude above general surface and shall not expose sharp edges or allow the battens to be released due to correction.
- e. Outside the protective lagging, there shall be minimum two binders consisting of hoop iron or galvanized steel wire. Each protective lagging shall have recesses to accommodate hoop binders.
- f. The conductor ends shall be properly sealed and secured with the hoop of "B" nails or bolts on the side of one of the flanges to avoid loosening of the conductor layers during transit and handling.

ii) MARKING:

Each drum shall have the following information stenciled on it in indelible ink along with other essential details:

- a. Purchase Order number
- b. Name and address of the consignee
- c. Manufacturer's name or trade mark
- d. Drum number
- e. Code name and size of the conductor
- f. Length of the conductor
- g. Gross weight of the drum
- h. Weight of empty drum with protective lagging
- i. Net weight of the conductor
- j. Arrow marking for unwinding
- k. Position of the conductor end
- l. Lot number
- m. Before dispatch, property identification mark 'BHEL' shall be engraved in each drum.

iii) CONSTRUCTION OF DRUMS:

a. FLANGES:

- i. The flanges shall be of two ply construction with such ply at right angle of the other and nailed together. The nails shall be driven from the inside face of flanges, punched and then cleaned on the outer face. There shall be at least 3 nail per plank of ply with maximum nail spacing 70-75 mm.
- ii. There will be a slot in the flange to receive the inner end of the conductor; the entrance shall be in line with the periphery of the barrel.
- b. All wooden components shall be manufactured out of seasoned soft wood free from defects that may materially weaken the component parts of the drums. Preservative treatment shall be applied to the entire drum with preservative of such a quality which is not harmful to the conductor.
- c. Spindle hole shall be provided at the center of the middle planks of the plies and spindle planets with 100 mm diameter holes shall be fitted on either side of both the flanges.

d. DRUM AND SUPPORTS:

The end supports shall be securely fixed by nailing and may be disc or segmental type. The middle barrel support of the two ply construction of disc type with a 100 mm diameter concentric with the holes in flanges shall be provided at the centers of the barrel supports.

e. DRUM:

The wooden batons used for making the barrel of the conductor shall be segmental type. These s

hall be nailed to the barrel supports with at least two nails. The batons shall be closely butted and shall provide a round barrel with smooth surface. The edges of the batons shall be rounded or compared to avoid damage to the conductor.

f. DRUM STUDS:

Barrel studs shall be used for the construction of drum. The flanges shall be holed and the barrel supports slotted to receive them. The barrel studs shall be threaded over a length on either end sufficient to accommodate washers, spindle plates and nuts for fixing at the required spacing. Normally, the nuts on the studs shall stand proud of the flange. All the nails used on the inner surface of the flanges and the drum barrel shall be counter sunk at least 5 mm. deep. The ends of barrel shall generally be flush with the top of the nuts.

iv) PROTECTIVE ARRANGEMENT:

- The inner side of the flanges and drum barrel surfaces shall be painted with bitumen based paint.
- Before reeling, cardboard of double corrugated or thick bituminized water proof bamboo paper shall be secured to the drum barrel and inside the flanges of drum by means of suitable adhesive materials. These protective wrappings and the adhesive material used shall be of a quality which is not harmful to the conductor.
- After reeling the conductor, the exposed surface of the outer layer of the conductor shall be wrapped with water proof, thick, bituminized bamboo paper and also with thick plastic sheet to prevent the conductor from dirt, grit and damage during transport and handling.

3.13 WEIGHT OF ALUMINIUM AND STEEL PER KM LENGTH OF CONDUCTOR IS GIVEN BELOW:

Item No.	Description of materials	Weight in kg//km		
		Aluminum	Steel	Total
1	ACSR:100mm ² (DOG)	287.46	105.71	393.17

3.14 SIZES & PROPERTIES OF ALUMINIUM CONDUCTOR STEEL REINFORCED:

Nominal Al. Area (mm ²)	Stranding and wire diameter (mm)		Sectional Area of Al. (mm ²)	Total Sectional area (mm ²)	App. overall dia. (mm)	App. mass (kg/km)	Calculated resistance at 20°C Max. (Ω/km)	App. Calculated breaking Load (kN)
	Al. (Nos. of wires/dia.)	Steel (Nos. of wires/dia.)						
100	6/4.72	7/1.57	105.00	118.5	14.15	394	0.2792	32.41

3.15 SIZES & PROPERTIES OF STEEL WIRES USED IN THE CONSTRUCTION OF ALUMINIUM CONDUCTOR STEEL REINFORCED:

Diameter (mm)			Cross sectional area of nominal dia. of wire (mm ²)	Mass (kg/km)	Breaking Load (Min.) (in kN)	
Nominal	Min.	Max.			Before Stranding	After Stranding
1.57	1.54	1.6	1.936	15.1	2.7	2.57

3.16 TRANSPORTATION

The transportation, freight including transit insurance for supply by the bidder to the site mentioned, is in the scope of the bidder.

3.17 GUARANTEE

The ACSR 'DOG' Conductor supplied should be guaranteed for 18 months from the date of supply at site.

e.

3.18 UNLOADING: Unloading and storage will be in BHEL's scope.

4. TECHNICAL SPECIFICATION

S. No.	Description	Value	UoM
Aluminum			
1	Number of wires	6	nos.
2	Nominal aluminum wire diameter	4.72	mm
3	Nominal aluminum area	100	mm ²
4	Calculated sectional area	105	mm ²
5	Weight of all aluminum wires combined	288	kg/km
Steel			
1	Number of wires	7	nos.
2	Minimum wire diameter	1.54	mm
3	Nominal wire diameter	1.57	mm
4	Maximum wire diameter	1.60	mm
5	Approximate weight of single wire	14.15	kg/km
6	Weight of all steel wires combined	106	kg/km
7	Cross sectional area of nominal diameter of wire	1.936	mm ²
8	Minimum Breaking Load before stranding	2.7	kN
9	Minimum Breaking Load after stranding	2.57	kN
ACSR 'DOG' Conductor			
1	Calculated sectional area	118.5	mm ²
2	Approximate overall diameter	14.15	mm
3	Total weight	394	kg/km
4	Calculated electrical resistance at 20°C	0.279	Ω/km
5	Approximate calculated Breaking Load	32.41	kN
6	Co-efficient of Linear Expansion/°C	19.8 x 10 ⁻⁶	

LAY RATIO

No. of Wires		Lay ratio for Steel core		Lay ratio for outside layer		Aluminum Wire inner most layer	
Al.	Steel	Max.	Min.	Max.	Min.	Max.	Min.
6	7	28	13	14	10	-	-

5.0 TIME SCHEDULE

5.1 Total completion Period for supply at site shall be within 50 days from the date of Purchase Order. In case of any delay beyond mentioned period, LD will be applicable as per clause no 15.

5.2 BHEL at its discretion may grant extension of time schedule in case the reasons are beyond the control of the contractor. Contractor shall provide every documentary evidence to prove to the satisfaction of BHEL that the reasons for delay are not in his control.

5.3 Definition of Work Completion: The work under the scope of the contractor will be deemed to have been completed in all respect, only when all the activities, supplies and obligations under the scope of this Tender Specification are completed satisfactorily and so certified by the BHEL site in charge. The decision of BHEL shall be final and binding on the contractor.

6.0 PAYMENT TERMS AND CONDITION

A) For Supply:

1. 95% of supply value, on pro-rata basis, shall be released within 90 days (45 days for MSE, 60 days for Medium Enterprises) against receipt and acceptance of material at site and submission of following documents: -

i. GST compliant Invoice (1 original plus 2 copies) along with Copy of LR/ Delivery Challan.

ii. Copy of Material Dispatch Clearance Certificate issued by BHEL site.

iii. Store Receipt Voucher issued by BHEL Site.

2. Balance 5 % of supply value, shall be released on completion of warranty period or by submission of Performance Bank Guarantee (PBG) valid for 30 days beyond warranty period by supplier from any of consortium Banks of BHEL for equivalent amount in prescribed format. The PBG confirmation charges to be borne by the bidder.

B) For GST: Applicable GST shall be released upon compliance of following documents:

(a) The goods or services covered under the invoice must be received in full, along with the corresponding valid tax invoice by BHEL.

(b) Following GST compliances must be ensured within the timelines prescribed for availing Input Tax Credit (ITC) under GST law:

i) You declaring such invoice in FORM GSTR-1, and it being auto-populated into FORM GSTR- 2B of BHEL through the common portal.

ii) Confirmation of GST payment by you to the government, verified through the filing of your FORM GSTR-3B for the corresponding month or quarter.

(c) Notwithstanding anything contained above, GST amount may be released along with the payment against Tax Invoice, provided:

(i) Exposure of BHEL against such GST amount is sufficiently covered by the security deposit / Bank Guarantee / any other amount due to the vendor/contractor at the time of releasing such GST payment.

(ii) Such relaxation to be allowed till the subsequent month i.e. till the GST compliances are done by the vendor / contractor against the given Tax Invoice.

(iii) As long as the GST compliances are ensured on the part of the vendor / contractor, this practice of releasing GST payment may be continued.

C) Paying Authority: Site (Finance), Raghunathpur TPP Ph-II

D) No Advance shall be paid

7.0 LIST OF STANDARDS APPLICABLE

S. No.	List of IS applicable	Description
1	IS: 2121: 1981 (Part -I)	Conductors and earth wire accessories for overhead power lines Armour rods, binding wires and tapes for conductors
2	IS: 2121: 1981 (Part -II)	Conductors and earth wire accessories for overhead power lines Mid span joints and repair sleeves for conductors
3	IS: 2121: 1991 (Part -II)	Conductors and earth wire accessories for overhead power lines Non tension joints
4	IS: 2121: 1992 (Part -II)	Conductors and earth wire accessories for overhead power lines Accessories for earth wire
5	IS: 2629: 1985	Recommended Practice for Hot-Dip Galvanizing of Iron and Steel
6	IS: 2633: 1986	Methods for testing uniformity of coating of zinc coated articles
7	IS: 398: 1976 (Part-II)	Aluminium conductors for overhead transmission purposes: Part 3 Aluminium conductors, aluminiumized steel reinforced
8	IS: 398: 1994 (Part-I V)	Aluminium conductors for overhead transmission purposes: Part 4 Aluminium alloy stranded conductors (aluminium magnesium silicon type)
9	IS: 398: 1996 (Part-I)	Aluminium conductors for overhead transmission purposes: Part 1 Aluminium stranded conductors
10	IS: 398: 1996 (Part-II)	Aluminium conductors for overhead transmission purposes: Part 2 Aluminium conductors, galvanized steel reinforced
11	IS: 5613: 1985 (Part -I) Sec-I	Code of Practice for Design, Installation and Maintenance of Overhead Power Lines - Part 1 Lines Up to and Including 11 kV - Section 1 Design
12	IS: 800: 2007	General Construction in Steel - Code of Practice
13	IS: 4826: 1979	Specification for Hot-Dipped Galvanized Coatings on Round Steel Wires
14	IS: 1778: 1980	Reels and drums for bare conductors (superseeding IS:2889)

NOTE: This list of standards applicable is indicative in nature and cannot be taken as a comprehensive list. All the other standards which are applicable as per the statutory rules and regulations are applicable to this scope.

8.0 GENERAL REQUIREMENTS -

8.1 The intent of specification is to complete supply according to the most modern and proven techniques and codes. The omission of specific reference to any method, equipment or material necessary for proper and efficient execution of this supply shall not relieve the Contractor of the responsibility of providing such facilities to complete the supply without any extra compensation.

8.2 All necessary certificates and licenses, permits & clearances required to carry out this supply

from the respective statutory/ local authorities are to be arranged by the Contractor at his cost in time to ensure smooth progress of work.

8.3 Quality items should be used for manufacturing the items.

8.4 It is not the intent to specify herein all the details of design & manufacture. However, the equipment shall conform in all respects to high standards of design, engineering and workmanship and shall be capable of performing in continuous commercial operation up to bidder's guarantee.

8.5 The general terms and conditions, instructions to bidders and other attachment referred to elsewhere be hereby made part of technical specification.

8.6 The bidders shall be responsible for and governed by all requirements stipulated hereinafter.

8.7 Requirements of the specification shall be agreed upon for total compliance by Bidders without any deviations.

8.8 Price offers of only those bidders complying with the requirements mentioned in this document shall be acceptable.

8.9 The documents shall be in English language and MKS system of units.

9.0 MODE OF DISPATCH & ROAD PERMIT:

Mode of dispatch: Mixed

E-way bill / road permit (if applicable) to be arranged by supplier.

10.0 TAXES AND DUTIES:

10.1 Bidder's quoted/ accepted rates/ price shall be inclusive of all taxes including GST, Charges, Royalties, any State or Central Levy and other taxes for materials if any obtained for the work and for execution of the contract.

Any increase of above at any stage during execution of contract, including extension of the contract, shall have to be borne by successful bidder contractor. However, any increase of GST subsequent to due date of offer submission as per NIT & TCN, by statutory authority during contract period (including extension, if the same is not attributable to you), shall be reimbursed by BHEL on production of relevant supporting document to the satisfaction of BHEL.

Benefit of any decrease of taxes including GST, Charges, Royalties, any State or Central Levy and other taxes for materials if any obtained for the work and for execution of the contract; subsequent to due date of offer submission as per NIT & TCN, by statutory authority shall be passed on to BHEL.

10.2 Successful bidder shall furnish proof of GST registration with GSTN Portal covering the services under this contract.

Registration should also bear endorsement for the premises from where the billing shall be done by successful bidder on BHEL for this project / work.

10.3 Since GST on output will be paid by BHEL as enumerated above, bidder's quoted rates / price should be after considering the Input Credit under GST law at bidder's end.

10.4 TDS under Income Tax Act shall be deducted as per prevailing IT rules from the bills.

10.5 TDS under GST shall be deducted as per prevailing GST rules from the bills.

10.6.1 You may collect TCS under section 206C(1H) of Income Tax Act, 1961 if applicable.

10.6.2 In case, you collect TCS under section 206C(1H) of Income Tax Act, 1961, following compliance is required.

10.6.2.1 TAN and PAN of vendor should appear in all invoices/claims. Copy of TAN /TCS registration is to be submitted.

10.6.2.2 Amount of TCS and Assessable value on which TCS has been calculated should be specified clearly in the invoice.

10.6.2.3 You shall be required to submit certificate of TCS in Form no. 27D within 15 days from the due date for furnishing the statement of tax collected at the source.

10.6.3 In case, you do not collect TCS under section 206C(1H) of Income Tax Act, 1961, following declaration is to be submitted along with each invoice: -

"I/We hereby declare that I/We are not required to collect TCS under section 206C(1H) of Income Tax Act, 1961, on this bill.

10.6.4 In event of failure to comply with the provisions of the Act, or proper certificate not issued, or if tax collected but not remitted to the Government, or for any other reason and thereby causing loss to BHEL, the same shall be recoverable from the vendor with applicable interest.

10.6.5 You shall comply with all statutory amendment/notifications in this respect.

10.7 Bidder shall note that GST Tax Invoice complying with GST Invoice Rules (Section 31 of GST Act & Rules referred thereunder) wherein the 'Bill To' details shall encompass following.

BHEL GSTN - 19AAACB4146P1ZC.

Name - BHARAT HEAVY ELECTRICALS LIMITED Address - Ref Consignee address.

Specific details of BHEL GSTN, Name and Address as stated above, have been specified elsewhere in the tender

10.8 Successful bidder to intimate immediately on the day of removal of goods (in case of any supply of goods) to BHEL along with all relevant details and send a scanned copy of Tax Invoice to BHEL through following communication mode for enabling BHEL to meet its GST related compliances.

Portal address and Email address - Shall be intimated later.

Specific details of above shall be intimated to successful bidder by BHEL at appropriate juncture.

10.9 In case of delay in submission of above-mentioned documents on the date of dispatch, BHEL may incur penalty/ interest for not adhering to Invoicing Rules under GST Law. The same will be liable to be recovered from successful bidder, in case such delay is not attributable to BHEL.

10.10 In case of raising any Supplementary Tax Invoice (Debit / Credit Note), successful bidder shall issue the same containing all the details as referred to in Section 34 read with Section 31 of GST Act & Rules referred there under.

10.11 Successful bidder shall comply with the Time Limit prescribed under the GST Law and rules thereof for raising of the Tax Invoice. If any supply of goods is applicable, successful bidder shall also ensure prompt delivery of goods after dispatch.

10.12 Bidder shall note that in case GST credit is delayed / denied to BHEL due to delayed / non-receipt of goods and / or Tax Invoice or expiry of the timeline prescribed in GST Law for availing such ITC, or any other reasons, not attributable to BHEL, GST amount shall be recoverable from successful bidder along with interest levied/ leviable on BHEL, as the case may be.

10.13 Successful bidder shall upload the invoices raised on BHEL in IFF/GSTR-1 within the prescribed time as given in the GST Act, and the same should be available to BHEL in FORM GSTR-2B electronically through the common portal; and confirmation of payment of such GST to the Government through filing of GSTR-3B of corresponding month/quarter.

Bidder shall note that in case of delay in declaring such invoice in your return and GST credit available by BHEL is denied or reversed subsequently as per GST Law, GST amount paid by BHEL towards such ITC reversal as per GST law shall be recoverable from the successful bidder along with interest levied / leviable on BHEL.

10.14 Successful bidder to arrange for e-waybill for any movement of goods for the execution of the contract. Successful bidder has to make their own arrangement at their cost for completing the formalities, if required, with Issuing Authorities, for bringing materials, plants & machinery at site for execution of the works under this contract, Road Permit / Way Bill, if required, shall be arranged by successful bidder and BHEL will not supply any Road Permit/ Way Bill for this purpose.

10.15 Any new taxes & duties, if imposed subsequent to due date of offer submission as per NIT & TCN, by statutory authority during contract period (including extension, if the same is not attributable to you), shall be reimbursed by BHEL on production of relevant supporting document to the satisfaction of BHEL. However, you shall obtain prior approval from BHEL before depositing new taxes and duties.

10.16 Benefits and / or abolition of all existing taxes must be passed on to BHEL against new taxes, if any, proposed to be introduced at a later date.

11. EVALUATION CRITERIA: All Inclusive Total F.O.R Destination Price “(Total Basic Price for supply + Freight + transit Insurance) including GST.”

Note: Evaluation shall be done on overall L1 basis for tendered Quantities

12. DOCUMENTS REQUIRED ALONG WITH DISPATCH OF MATERIAL (Billing Documents):

The following documents are required with dispatch:

1. Original Tax Invoice.
2. Copy of LR.
3. Test Certificate.

13. CONSIGNEE DETAILS: Name in GEM - Anirban Mukherjee

Project Director,

BHEL Site Office

Raghunathpur Thermal Power Station Phase-II

Raghunathpur, District – Purulia,

State – West Bengal

14. INPUT DETAILS FOR INVOICE: GSTIN-19AAACB4146P1ZC

15. Liquidated Damages/Penalty:

Subject to force majeure, If vendor fails to complete the job as per aforesaid supply period, BHEL shall have the right to recover as penalty as below.

a) Penalty on delay in ‘supply’ will be applicable to the delays attributed to vendor:

- i) The rate of penalty/LD shall be applicable @ 0.5% of Purchase order value per week of delay or part thereof of the total value of undelivered portion of the material subject to maximum of 10% of total PO value.
- ii) In case of LD recovery, the applicable GST, if any, shall also be recovered from vendor.

16. PVC, ORC & Rate revision: Not applicable.

17. Quantity Variation: +/-10%

18. Splitting of contract: Not Applicable

19. ORDER OF PRECEDENCE:

In case of contradiction / conflict, the order of precedence shall be in the order as per below;

- a) Buyer specific additional terms and conditions against GeM Bid issued
- b) GeM Bid.
- c) General Terms and Conditions on GeM.

BIDDERS TO REFER THE VARIOUS APPLICABLE FORMATS UPLOADED IN “ BUYER UPLOADED ATC DOCUMENT” BELOW

2. **Buyer Added Bid Specific ATC**

Buyer uploaded ATC document [Click here to view the file.](#)

3. **Certificates**

Bidder's offer is liable to be rejected if they don't upload any of the certificates / documents sought in the Bid document, ATC and Corrigendum if any.

4. **Generic**

Supplier shall ensure that the Invoice is raised in the name of Consignee with GSTIN of Consignee only.

5. **Generic**

Actual delivery (and Installation & Commissioning (if covered in scope of supply)) is to be done at following address

Project Director,
BHEL Site Office
Raghunathpur Thermal Power Station Phase-II
Raghunathpur, District – Purulia,
State – West Bengal

The additional terms and conditions have been incorporated by the Buyer after approval of the Competent Authority in Buyer Organization, whereby Buyer organization is solely responsible for the impact of these clauses on the bidding process, its outcome, and consequences thereof including any eccentricity / restriction arising in the bidding process due to these ATCs and due to modification of technical specifications and / or terms and conditions governing the bid. If any clause(s) is / are incorporated by the Buyer regarding following, the bid and resultant contracts shall be treated as null and void and such bids may be cancelled by GeM at any stage of bidding process without any notice:-

1. Definition of Class I and Class II suppliers in the bid not in line with the extant Order / Office Memorandum issued by DPIIT in this regard.
2. Seeking EMD submission from bidder(s), including via Additional Terms & Conditions, in contravention to exemption provided to such sellers under GeM GTC.
3. Publishing Custom / BOQ bids for items for which regular GeM categories are available without any Category item bunched with it.
4. Creating BoQ bid for single item.
5. Mentioning specific Brand or Make or Model or Manufacturer or Dealer name.
6. Mandating submission of documents in physical form as a pre-requisite to qualify bidders.
7. Floating / creation of work contracts as Custom Bids in Services.
8. Seeking sample with bid or approval of samples during bid evaluation process. (However, in bids for [attached categories](#), trials are allowed as per approved procurement policy of the buyer nodal Ministries)
9. Mandating foreign / international certifications even in case of existence of Indian Standards without specifying equivalent Indian Certification / standards.
10. Seeking experience from specific organization / department / institute only or from foreign / export experience.
11. Creating bid for items from irrelevant categories.
12. Incorporating any clause against the MSME policy and Preference to Make in India Policy.
13. Reference of conditions published on any external site or reference to external documents/clauses.
14. Asking for any Tender fee / Bid Participation fee / Auction fee in case of Bids / Forward Auction, as the case may be.

Further, if any seller has any objection/grievance against these additional clauses or otherwise on any aspect of this bid, they can raise their representation against the same by using the Representation window provided in the bid details field in Seller dashboard after logging in as a seller within 4 days of bid publication on GeM. Buyer is duty bound to reply to all such representations and would not be allowed to open bids if he fails to reply to such representations.

All GeM Sellers / Service Providers are mandated to ensure compliance with all the applicable laws / acts / rules including but not limited to all Labour Laws such as The Minimum Wages Act, 1948, The Payment of Wages Act, 1936, The Payment of Bonus Act, 1965, The Equal Remuneration Act, 1976, The Payment of Gratuity Act, 1972 etc. Any non-compliance will be treated as breach of contract and Buyer may take suitable actions as per GeM Contract.

[This Bid is also governed by the General Terms and Conditions/ यह बिड सामान्य शर्तों के अंतर्गत भी शासित है](#)

In terms of GeM GTC clause 26 regarding Restrictions on procurement from a bidder of a country which shares a land border with India, any bidder from a country which shares a land border with India will be eligible to bid in this tender only if the bidder is registered with the Competent Authority. While participating in bid, Bidder has to undertake compliance of this and any false declaration and non-compliance of this would be a ground for immediate termination of the contract and further legal action in accordance with the laws./जेम की सामान्य शर्तों के खंड 26 के संदर्भ में भारत के साथ भूमि सीमा साझा करने वाले देश के बिडर से खरीद पर प्रतिबंध के संबंध में भारत के साथ भूमि सीमा साझा करने वाले देश का कोई भी बिडर इस निविदा में बिड देने के लिए तभी पात्र होगा जब वह बिड देने वाला सक्षम प्राधिकारी के पास पंजीकृत हो। बिड में भाग लेते समय बिडर को इसका अनुपालन करना होगा और कोई भी गलत घोषणा किए जाने व इसका अनुपालन न करने पर अनुबंध को तत्काल समाप्त करने और कानून के अनुसार आगे की कानूनी कार्यवाई का आधार होगा।

---Thank You/धन्यवाद---