

**Bid Document/ बिड दस्तावेज़**

| Bid Details/बिड विवरण                                                                                                                   |                                                                                                                                                                                                                                          |
|-----------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Bid End Date/Time/बिड बंद होने की तारीख/समय</b>                                                                                      | 09-06-2025 14:00:00                                                                                                                                                                                                                      |
| <b>Bid Opening Date/Time/बिड खुलने की तारीख/समय</b>                                                                                     | 09-06-2025 14:30:00                                                                                                                                                                                                                      |
| <b>Bid Offer Validity (From End Date)/बिड पेशकश वैधता (बंद होने की तारीख से)</b>                                                        | 60 (Days)                                                                                                                                                                                                                                |
| <b>Ministry/State Name/मंत्रालय/राज्य का नाम</b>                                                                                        | Ministry Of Heavy Industries And Public Enterprises                                                                                                                                                                                      |
| <b>Department Name/विभाग का नाम</b>                                                                                                     | Department Of Heavy Industry                                                                                                                                                                                                             |
| <b>Organisation Name/संगठन का नाम</b>                                                                                                   | Bharat Heavy Electricals Limited (bhel)                                                                                                                                                                                                  |
| <b>Office Name/कार्यालय का नाम</b>                                                                                                      | 10020009-cffp Haridwar                                                                                                                                                                                                                   |
| <b>क्रेता ईमेल/Buyer Email</b>                                                                                                          | buyer634.bhelb.ua@gembuyer.in                                                                                                                                                                                                            |
| <b>Total Quantity/कुल मात्रा</b>                                                                                                        | 70                                                                                                                                                                                                                                       |
| <b>Item Category/मद केटेगरी</b>                                                                                                         | Graphite Electrode as per IS 9050 (Q3)                                                                                                                                                                                                   |
| <b>MSE Exemption for Years of Experience and Turnover/ अनुभव के वर्षों से एमएसई छूट</b>                                                 | No                                                                                                                                                                                                                                       |
| <b>Startup Exemption for Years of Experience and Turnover/ अनुभव के वर्षों से स्टार्टअप छूट</b>                                         | No                                                                                                                                                                                                                                       |
| <b>Bid to RA enabled/बिड से रिवर्स नीलामी सक्रिय किया</b>                                                                               | Yes                                                                                                                                                                                                                                      |
| <b>RA Qualification Rule</b>                                                                                                            | H1-Highest Priced Bid Elimination                                                                                                                                                                                                        |
| <b>Type of Bid/बिड का प्रकार</b>                                                                                                        | Two Packet Bid                                                                                                                                                                                                                           |
| <b>Primary product category</b>                                                                                                         | Graphite Electrode as per IS 9050                                                                                                                                                                                                        |
| <b>Time allowed for Technical Clarifications during technical evaluation/तकनीकी मूल्यांकन के दौरान तकनीकी स्पष्टीकरण हेतु अनुमत समय</b> | 2 Days                                                                                                                                                                                                                                   |
| <b>Inspection Required (By Empanelled Inspection Authority / Agencies pre-registered with GeM)</b>                                      | No                                                                                                                                                                                                                                       |
| <b>Payment Timelines</b>                                                                                                                | Payments shall be made to the Seller within <b>90</b> 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) |

| Bid Details/बिड विवरण              |                       |
|------------------------------------|-----------------------|
| Evaluation Method/मूल्यांकन पद्धति | Item wise evaluation/ |
| Arbitration Clause                 | No                    |
| Mediation Clause                   | No                    |

#### EMD Detail/ईएमडी विवरण

|                   |    |
|-------------------|----|
| Required/आवश्यकता | No |
|-------------------|----|

#### ePBG Detail/ईपीबीजी विवरण

|                   |    |
|-------------------|----|
| Required/आवश्यकता | No |
|-------------------|----|

#### MII Purchase Preference/एमआईआई खरीद वरीयता

|                                            |     |
|--------------------------------------------|-----|
| MII Purchase Preference/एमआईआई खरीद वरीयता | Yes |
|--------------------------------------------|-----|

#### MSE Purchase Preference/एमएसई खरीद वरीयता

|                                           |     |
|-------------------------------------------|-----|
| MSE Purchase Preference/एमएसई खरीद वरीयता | Yes |
|-------------------------------------------|-----|

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 25% (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:

- If number of technically qualified bidders are only 2 or 3.
- If Buyer has chosen to split the bid amongst N sellers, and H1 bid is coming within N.
- In case Primary product of only one OEM is left in contention for participation in RA on elimination of H-1.
- 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
- 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

#### Evaluation Method ( Item Wise Evaluation Method )

Contract will be awarded schedulewise and the determination of L1 will be done separately for each schedule. The details of item-consignee combination covered under each schedule are as under:

| Evaluation Schedules | Item/Category                     | Quantity |
|----------------------|-----------------------------------|----------|
| Schedule 1           | Graphite Electrode As Per Is 9050 | 10       |
| Schedule 2           | Graphite Electrode As Per Is 9050 | 40       |
| Schedule 3           | Graphite Electrode As Per Is 9050 | 20       |

#### Graphite Electrode As Per IS 9050 ( 10 metric tonne )

(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

\* जेम कैटेगरी विशिष्टि के अनुसार / As per GeM Category Specification

| Specification | Specification Name/विशिष्टि का नाम | Bid Requirement/बिड के लिए आवश्यक (Allowed Values)/अनुमत मूल्य                                                                                                                                                                                                                                                                                                                                                                               |
|---------------|------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Grades        | Type fo grade                      | High Power                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Capacity      | Current Carrying Capacity, kA      | 16-24, 24-32, 32-40, 40-48, 48-56, 56-64, 64-72, 72-80, 80-88, 88-96, 96-104, 104-112, 112-120, 120-128, 128-136, 136-144, 144-152, 152-160, 5.2 to 9.1, 6.5 to 11.7, 7 to 10, 7 to 13, 8.45 to 14.3, 10.4 to 17.6, 11.7 to 19.5, 12 to 20, 13 to 24.7, 14.4 to 24, 16 to 30.4, 18.2 to 30.55, 19.5 to 32, 20 to 35, 20 to 38, 22.1 to 35.75, 22.4 to 37.6, 23 to 36, 27.2 to 44, 28 to 47, 28 to 51, 32 to 51.2, 40 to 48, 40 to 64, 45 Min |

| Specification        | Specification Name/विशिष्टि का नाम                           | Bid Requirement/बिड के लिए आवश्यक (Allowed Values)/अनुमत मूल्य                                                                                                        |
|----------------------|--------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Dimensions           | <b>Electrode Nominal Length</b>                              | 1000, 1200, 1500, 1800, 2100, 2400, 2700 (millimeter)                                                                                                                 |
|                      | <b>Electrode Nominal Diameter</b>                            | 300.0 (millimeter)                                                                                                                                                    |
|                      | <b>Tolerance in Nominal Length</b>                           | 1100-1350, 1400-1550, 1400-1650, 1700-1850, 1700-1875, 1700-1975, 1975-2275                                                                                           |
|                      | <b>Short Length Tolerance</b>                                | Upto 975, Upto 1225, Upto 1525, Upto 1825, Upto 2125                                                                                                                  |
|                      | <b>Tolerance in Nominal Diameter</b>                         | 302-307                                                                                                                                                               |
| Technical Parameters | <b>Apparent Density in GMS/CC, Min</b>                       | 1.62, 1.66-1.76, 1.68-1.76, 1.73-1.85, 1.55 to 1.65, 1.56 to 1.66, 1.65 to 1.75, 1.66 to 1.76, 1.65 Min                                                               |
| Nipples Parameters   | <b>Type of nipple used</b>                                   | 4 TPI                                                                                                                                                                 |
|                      | Accessories Complementary (Included With Graphite Elcetrode) | Torque Wrench- 1 no. per order, Transfer Nipple/ Lifting Plug- 1 no. every 40 pcs., Strap Cutter- 1 no. per order, Transfer Nipple/ Lifting Plug- 1 no. every 80 pcs. |

#### Additional Specification Parameters - Graphite Electrode As Per IS 9050 ( 10 metric tonne )

| Specification Parameter Name                                                                                                                                                                                                              | Bid Requirement (Allowed Values)                                                                                                 |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| 300mm nominal Diameter HP grade Graphite Electrodes along with connecting Nipples are to be supplied in accordance to IS:9050. Diameter tolerance: 302-307 mm. Length: 1500-1800 mm Nipples (4TPI of UHP grade) as per IS 9050.           | Vendor to accept to supply Graphite Electrode as per dimensions specified to the left without any deviation.                     |
| Physical & Chemical properties. Bulk Density: 1.58-1.63 g/cc, Grain Size: 1.68 mm (max), Resistivity (micro-ohm-cm): 700-900, Flexural Strength (Kg/Cm2):100-130, Compressive Strength (Kg/Cm2):180-230, Tensile Strength (Kg/Cm2): 60-80 | Vendor to accept to supply Graphite Electrode as per Physical & Chemical properties specified to the left without any deviation. |
| Coefficient of thermal expansion (/Deg Cx10 <sup>^(-7)</sup> ):10-13, Youngs Modulus (Kg/mm2): 800-900, apparent porosity (%): 25-27, Ash content (% max): 0.2%, Carbon content: 99.8% (Min).                                             | Vendor to accept to supply Graphite Electrode as per Physical & Chemical properties specified to the left without any deviation. |

| Specification Parameter Name                                                                                                                                                                                                                                | Bid Requirement (Allowed Values)                       |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|
| Supplier is required to furnish 4 set of originals manufacturers test certificate along with supply of material containing BHEL PO number, Supplier name, Batch Number & Serial Number, Test result against above mentioned Physical & Chemical Properties. | Vendor to agree                                        |
| To be supplied in suitably packed wooden crates/pallets, the end of electrodes shall be covered with corrugated boards to protect the threads and other damage during transit. Nipples to be packed separately in thick corrugated boxes.                   | Vendor to agree and quantity variation shall be +/- 5% |

\* Bidders offering must also comply with the additional specification parameters mentioned above.

**Consignees/Reporting Officer/परेषिती/रिपोर्टिंग अधिकारी and/ तथा Quantity/मात्रा**

| S.No./क्र. सं. | Consignee Reporting/Officer/ परेषिती/रिपोर्टिंग अधिकारी | Address/पता                                                 | Delivery Schedule/डिलीवरी अनुसूची (In number of days from contract start days/अनुबंध प्रारम्भ होने की तारीख से दिनों की संख्या में ) |                                                          |                                                            |
|----------------|---------------------------------------------------------|-------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|------------------------------------------------------------|
| 1              | Kumar Siddhartha                                        | 249403,Central Foundry Forge Plant, BHEL, Ranipur, Haridwar | Quantit y/मात्रा                                                                                                                     | Delivery to start after/प्रारंभ होने की तारीख से डिलीवरी | Delivery to be completed by/डिलीवरी _____तक पूरी कर ली जाए |
|                |                                                         |                                                             | 5                                                                                                                                    | 1                                                        | 30                                                         |
|                |                                                         |                                                             | 5                                                                                                                                    | 70                                                       | 90                                                         |
|                |                                                         |                                                             |                                                                                                                                      |                                                          |                                                            |

**Graphite Electrode As Per IS 9050 ( 40 metric tonne )**

**(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**

[\\* जेम केटेगरी विशिष्टि के अनुसार / As per GeM Category Specification](#)

| Specification | Specification Name/विशिष्टि का नाम | Bid Requirement/बिड के लिए आवश्यक (Allowed Values)/अनुमत मूल्य |
|---------------|------------------------------------|----------------------------------------------------------------|
| Grades        | Type fo grade                      | High Power                                                     |

| Specification        | Specification Name/विशिष्टि का नाम                           | Bid Requirement/बिड के लिए आवश्यक (Allowed Values)/अनुमत मूल्य                                                                                                                                                                                                                                                                                                                                                                               |
|----------------------|--------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Capacity             | <b>Current Carrying Capacity, kA</b>                         | 16-24, 24-32, 32-40, 40-48, 48-56, 56-64, 64-72, 72-80, 80-88, 88-96, 96-104, 104-112, 112-120, 120-128, 128-136, 136-144, 144-152, 152-160, 5.2 to 9.1, 6.5 to 11.7, 7 to 10, 7 to 13, 8.45 to 14.3, 10.4 to 17.6, 11.7 to 19.5, 12 to 20, 13 to 24.7, 14.4 to 24, 16 to 30.4, 18.2 to 30.55, 19.5 to 32, 20 to 35, 20 to 38, 22.1 to 35.75, 22.4 to 37.6, 23 to 36, 27.2 to 44, 28 to 47, 28 to 51, 32 to 51.2, 40 to 48, 40 to 64, 45 Min |
| Dimensions           | <b>Electrode Nominal Length</b>                              | 1000, 1200, 1500, 1800, 2100, 2400, 2700 (millimeter)                                                                                                                                                                                                                                                                                                                                                                                        |
|                      | <b>Electrode Nominal Diameter</b>                            | 400.0 (millimeter)                                                                                                                                                                                                                                                                                                                                                                                                                           |
|                      | <b>Tolerance in Nominal Length</b>                           | 1100-1350, 1400-1550, 1400-1650, 1700-1850, 1700-1875, 1700-1975, 1975-2275                                                                                                                                                                                                                                                                                                                                                                  |
|                      | <b>Short Length Tolerance</b>                                | Upto 975, Upto 1225, Upto 1525, Upto 1825, Upto 2125                                                                                                                                                                                                                                                                                                                                                                                         |
|                      | <b>Tolerance in Nominal Diameter</b>                         | 403-409                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Technical Parameters | <b>Apparent Density in GMS/CC, Min</b>                       | 1.62, 1.66-1.76, 1.68-1.76, 1.73-1.85, 1.55 to 1.65, 1.56 to 1.66, 1.65 to 1.75, 1.66 to 1.76, 1.65 Min                                                                                                                                                                                                                                                                                                                                      |
| Nipples Parameters   | <b>Type of nipple used</b>                                   | 4 TPI                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|                      | Accessories Complementary (Included With Graphite Elcetrode) | Torque Wrench- 1 no. per order, Transfer Nipple/ Lifting Plug- 1 no. every 40 pcs., Strap Cutter- 1 no. per order, Transfer Nipple/ Lifting Plug- 1 no. every 80 pcs.                                                                                                                                                                                                                                                                        |

#### Additional Specification Parameters - Graphite Electrode As Per IS 9050 ( 40 metric tonne )

| Specification Parameter Name                                                                                                                                                                                                     | Bid Requirement (Allowed Values)                                                                             |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|
| 400mm nominal Diameter HP grade Graphite Electrodes along with connecting Nipples are to be supplied in accordance to IS:9050. Diameter tolerance: 403-408 mm. Length: 1500-1800 mm, Nipples (4TPI of UHP grade) as per IS 9050. | Vendor to accept to supply Graphite Electrode as per dimensions specified to the left without any deviation. |

| Specification Parameter Name                                                                                                                                                                                                                                                       | Bid Requirement (Allowed Values)                                                                                                 |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| Physical & Chemical properties.<br>Bulk Density: 1.58-1.63 g/cc.<br>Grain Size: 6-7 mm (max),<br>Resistivity (micro-ohm-cm):<br>700-900, Flexural Strength<br>(Kg/Cm2):70-90, Compressive<br>Strength (Kg/Cm2):125-160,<br>Tensile Strength (Kg/Cm2): 42-<br>54                    | Vendor to accept to supply Graphite Electrode as per Physical & Chemical properties specified to the left without any deviation. |
| Coefficient of thermal;<br>expansion (/Deg C x 10 <sup>-7</sup> ):10-13, Youngs Modulus<br>(Kg/mm2): 600-700, Apparent<br>porosity (%): 26-28, Ash<br>content (% max): 0.2%, Carbon<br>content: 99.8% (Min).                                                                       | Vendor to accept to supply Graphite Electrode as per Physical & Chemical properties specified to the left without any deviation. |
| Supplier is required to furnish 4<br>set of originals manufacturers<br>test certificate along with<br>supply of material containing<br>BHEL PO number, Supplier<br>name, Batch Number & Serial<br>Number, Test result against<br>above mentioned Physical &<br>Chemical Properties | Vendor to agree                                                                                                                  |
| To be supplied in suitably<br>packed wooden crates/pallets,<br>the end of electrodes shall be<br>covered with corrugated boards<br>to protect the threads and other<br>damage during transit. Nipples<br>to be packed separately in thick<br>corrugated boxes.                     | Vendor to agree and quantity variation shall be +/- 5%.                                                                          |

\* Bidders offering must also comply with the additional specification parameters mentioned above.

**Consignees/Reporting Officer/परेषिती/रिपोर्टिंग अधिकारी and/ तथा Quantity/मात्रा**

| S.No./क्र. सं. | Consignee Reporting/Officer/ परेषिती/रिपोर्टिंग अधिकारी | Address/पता | Delivery Schedule/डिलीवरी अनुसूची (In number of days from contract start days/अनुबंध प्रारम्भ होने की तारीख से दिनों की संख्या में ) |
|----------------|---------------------------------------------------------|-------------|--------------------------------------------------------------------------------------------------------------------------------------|
|----------------|---------------------------------------------------------|-------------|--------------------------------------------------------------------------------------------------------------------------------------|

| S.No./क्र. सं. | Consignee Reporting/Officer/ परेषिती/रिपोर्टिंग अधिकारी | Address/पता                                                 | Delivery Schedule/डिलीवरी अनुसूची (In number of days from contract start days/अनुबंध प्रारम्भ होने की तारीख से दिनों की संख्या में ) |                                                          |                                                            |
|----------------|---------------------------------------------------------|-------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|------------------------------------------------------------|
| 1              | Kumar Siddhartha                                        | 249403,Central Foundry Forge Plant, BHEL, Ranipur, Haridwar | Quantit y/मात्रा                                                                                                                     | Delivery to start after/प्रारंभ होने की तारीख से डिलीवरी | Delivery to be completed by/डिलीवरी _____तक पूरी कर ली जाए |
|                |                                                         |                                                             | 20                                                                                                                                   | 1                                                        | 30                                                         |
|                |                                                         |                                                             | 20                                                                                                                                   | 70                                                       | 90                                                         |

### Graphite Electrode As Per IS 9050 ( 20 metric tonne )

(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

[\\* जेम केटेगरी विशिष्टि के अनुसार / As per GeM Category Specification](#)

| Specification        | Specification Name/विशिष्टि का नाम | Bid Requirement/बिड के लिए आवश्यक (Allowed Values)/अनुमत मूल्य                                                                                                                                                                                                                                                                                                                                                                               |
|----------------------|------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Grades               | Type fo grade                      | Ultra High Power                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Capacity             | Current Carrying Capacity, kA      | 16-24, 24-32, 32-40, 40-48, 48-56, 56-64, 64-72, 72-80, 80-88, 88-96, 96-104, 104-112, 112-120, 120-128, 128-136, 136-144, 144-152, 152-160, 5.2 to 9.1, 6.5 to 11.7, 7 to 10, 7 to 13, 8.45 to 14.3, 10.4 to 17.6, 11.7 to 19.5, 12 to 20, 13 to 24.7, 14.4 to 24, 16 to 30.4, 18.2 to 30.55, 19.5 to 32, 20 to 35, 20 to 38, 22.1 to 35.75, 22.4 to 37.6, 23 to 36, 27.2 to 44, 28 to 47, 28 to 51, 32 to 51.2, 40 to 48, 40 to 64, 45 Min |
| Dimensions           | Electrode Nominal Length           | 1000, 1200, 1500, 1800, 2100, 2400, 2700 (millimeter)                                                                                                                                                                                                                                                                                                                                                                                        |
|                      | Electrode Nominal Diameter         | 350.0 (millimeter)                                                                                                                                                                                                                                                                                                                                                                                                                           |
|                      | Tolerance in Nominal Length        | 1100-1350, 1400-1550, 1400-1650, 1700-1850, 1700-1875, 1700-1975, 1975-2275                                                                                                                                                                                                                                                                                                                                                                  |
|                      | Short Length Tolerance             | Upto 975, Upto 1225, Upto 1525, Upto 1825, Upto 2125                                                                                                                                                                                                                                                                                                                                                                                         |
|                      | Tolerance in Nominal Diameter      | 352-357                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Technical Parameters | Apparent Density in GMS/CC, Min    | 1.62, 1.66-1.76, 1.68-1.76, 1.73-1.85, 1.55 to 1.65, 1.56 to 1.66, 1.65 to 1.75, 1.66 to 1.76, 1.65 Min                                                                                                                                                                                                                                                                                                                                      |
| Nipples Parameters   | Type of nipple used                | 4 TPI                                                                                                                                                                                                                                                                                                                                                                                                                                        |

| Specification | Specification Name/विशिष्ट का नाम                            | Bid Requirement/बिड के लिए आवश्यक (Allowed Values)/अनुमत मूल्य                                                                                                        |
|---------------|--------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|               | Accessories Complementary (Included With Graphite Elcetrode) | Torque Wrench- 1 no. per order, Transfer Nipple/ Lifting Plug- 1 no. every 40 pcs., Strap Cutter- 1 no. per order, Transfer Nipple/ Lifting Plug- 1 no. every 80 pcs. |

**Additional Specification Parameters - Graphite Electrode As Per IS 9050 ( 20 metric tonne )**

| Specification Parameter Name                                                                                                                                                                                                                                | Bid Requirement (Allowed Values)                                                                                                 |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| 350mm nominal Diameter UHP grade Graphite Electrodes along with connecting Nipples are to be supplied in accordance to IS:9050. Diameter tolerance: 352-357 mm. Length: 1500-1600 mm Nipples (4TPI of UHP grade) as per IS 9050.                            | Vendor to accept to supply Graphite Electrode as per dimensions specified to the left without any deviation.                     |
| Physical & Chemical properties. Bulk Density: 1.66-1.73 g/cc, Grain Size: 6.7 mm (max) Resistivity (micro-ohm-cm): 550-800, Flexural Strength (Kg/Cm2):110-180, Compressive Strength (Kg/Cm2):200-270, Tensile Strength (Kg/Cm2): 65-90.                    | Vendor to accept to supply Graphite Electrode as per Physical & Chemical properties specified to the left without any deviation. |
| Coefficient of thermal; expansion (/Deg C x 10 <sup>^(-7)</sup> ): 11-15, Youngs Modulus (Kg/mm2): 1100-1185, Apparent porosity (%): 22-24, Ash content (% max): 0.2%, Carbon content: 99.8% (Min).                                                         | Vendor to accept to supply Graphite Electrode as per Physical & Chemical properties specified to the left without any deviation. |
| Supplier is required to furnish 4 set of originals manufacturers test certificate along with supply of material containing BHEL PO number, Supplier name, Batch Number & Serial Number, Test result against above mentioned Physical & Chemical Properties. | Vendor to agree.                                                                                                                 |

| Specification Parameter Name                                                                                                                                                                                                              | Bid Requirement (Allowed Values)                        |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|
| To be supplied in suitably packed wooden crates/pallets, the end of electrodes shall be covered with corrugated boards to protect the threads and other damage during transit. Nipples to be packed separately in thick corrugated boxes. | Vendor to agree and quantity variation shall be +/- 5%. |

\* Bidders offering must also comply with the additional specification parameters mentioned above.

**Consignees/Reporting Officer/परेषिती/रिपोर्टिंग अधिकारी and/ तथा Quantity/मात्रा**

| S.No./क्र. सं. | Consignee Reporting/Officer/ परेषिती/रिपोर्टिंग अधिकारी | Address/पता                                                 | Delivery Schedule/डिलीवरी अनुसूची (In number of days from contract start days/अनुबंध प्रारम्भ होने की तारीख से दिनों की संख्या में ) |                                                          |                                                            |
|----------------|---------------------------------------------------------|-------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|------------------------------------------------------------|
| 1              | Kumar Siddhartha                                        | 249403,Central Foundry Forge Plant, BHEL, Ranipur, Haridwar | Quantit y/मात्रा                                                                                                                     | Delivery to start after/प्रारंभ होने की तारीख से डिलीवरी | Delivery to be completed by/डिलीवरी _____तक पूरी कर ली जाए |
|                |                                                         |                                                             | 10                                                                                                                                   | 1                                                        | 30                                                         |
|                |                                                         |                                                             | 10                                                                                                                                   | 70                                                       | 90                                                         |

**Buyer added Bid Specific Additional Scope of Work**

| S.No.क्र.सं. | Document Title                                  | Description                                                                                                                 | Applicable/रिवर्स प्रभार के अनुसार जीएसटी i.r.o. Items |
|--------------|-------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|
| 1            | Item description 300 MM<br><a href="#">View</a> | Bidder has to submit signed and stamped copy of attached specification as acceptance to supply material as per requirement. | Graphite Electrode As Per IS 9050(10)                  |
| 2            | Item description 400 M<br><a href="#">View</a>  | Bidder has to submit signed and stamped copy of attached specification as acceptance to supply material as per requirement. | Graphite Electrode As Per IS 9050(40)                  |
| 3            | Item description 350 M<br><a href="#">View</a>  | Bidder has to submit signed and stamped copy of attached specification as acceptance to supply material as per requirement. | Graphite Electrode As Per IS 9050(20)                  |

| S.No.क्र.सं. | Document Title                                      | Description                                                                                                                 | Applicable/रिवर्स प्रभार के अनुसार जीएसटी i.r.o. Items                                                              |
|--------------|-----------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|
| 4            | UHP 350 length confirmation<br><a href="#">View</a> | Bidder has to submit signed and stamped copy of attached specification as acceptance to supply material as per requirement. | Graphite Electrode As Per IS 9050(20)                                                                               |
| 5            | Specification<br><a href="#">View</a>               | Bidder has to submit signed and stamped copy of attached specification as acceptance to supply material as per requirement. | Graphite Electrode As Per IS 9050(10), Graphite Electrode As Per IS 9050(40), Graphite Electrode As Per IS 9050(20) |
| 6            | PQC<br><a href="#">View</a>                         | Bidder has to submit documents as per attached PQC to qualify in the GEM bid.                                               | Graphite Electrode As Per IS 9050(10), Graphite Electrode As Per IS 9050(40), Graphite Electrode As Per IS 9050(20) |

**The uploaded document only contains Buyer specific Additional Scope of Work and / or Drawings for the bid items added with due approval of Buyer's competent authority. Buyer has certified that these additional scope and drawings are generalized and would not lead to any restrictive bidding.**

## Buyer Added Bid Specific Terms and Conditions/क्रेता द्वारा जोड़ी गई बिड की विशेष शर्तें

### 1. Generic

OPTION CLAUSE: The Purchaser reserves the right to increase or decrease the quantity to be ordered up to 25 percent of bid quantity at the time of placement of contract. The purchaser also reserves the right to increase the ordered quantity up to 25% of the contracted quantity during the currency of the contract at the contracted rates. The delivery period of quantity shall commence from the last date of original delivery order and in cases where option clause is exercised during the extended delivery period the additional time shall commence from the last date of extended delivery period. The additional delivery time shall be  $(\text{Increased quantity} \div \text{Original quantity}) \times \text{Original delivery period (in days)}$ , subject to minimum of 30 days. If the original delivery period is less than 30 days, the additional time equals the original delivery period. The Purchaser may extend this calculated delivery duration up to the original delivery period while exercising the option clause. Bidders must comply with these terms.

### 2. Generic

Bidders are advised to check applicable GST on their own before quoting. Buyer will not take any responsibility in this regards. GST reimbursement will be as per actuals or as per applicable rates (whichever is lower), subject to the maximum of quoted GST %.

### 3. Generic

Bidder shall submit the following documents along with their bid for Vendor Code Creation:

- Copy of PAN Card.
- Copy of GSTIN.
- Copy of Cancelled Cheque.
- Copy of EFT Mandate duly certified by Bank.

### 4. Generic

Buyer Organization specific Integrity Pact shall have to be complied by all bidders. Bidders shall have to upload scanned copy of signed integrity pact as per Buyer organizations policy along with bid. [Click here to view the file](#)

## 5. Scope of Supply

Scope of supply (Bid price to include all cost components) : Only supply of Goods

## 6. Purchase Preference (Centre)

Purchase preference to Micro and Small Enterprises (MSEs): Purchase preference will be given to MSEs 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 the Purchase preference, the bidder must be the manufacturer of the offered product in case of bid for supply of goods. Traders are excluded from the purview of Public Procurement Policy for Micro and Small Enterprises. 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. If L-1 is not an MSE and MSE Seller (s) has/have quoted price within L-1+ 15% of margin of purchase preference /price band defined in relevant policy, such Seller shall be given opportunity to match L-1 price and contract will be awarded for percentage of 25% of total value.

## 7. Inspection

**Nominated Inspection Agency:** On behalf of the Buyer organization, any one of the following Inspection Agency would be conducting inspection of stores before acceptance:  
Pre-dispatch Inspection at Seller Premises (applicable only if pre-dispatch inspection clause has been selected in ATC):

by Seller at Seller Works

Post Receipt Inspection at consignee site before acceptance of stores:  
by CFFP at CFFP BHEL Haridwar

## 8. Certificates

Material Test Certificate Should Be Sent Along with The Supply. The Material Will Be Checked by Buyer's Lab & the Results of the Lab will be the Sole Criteria for Acceptance of the Item.

## 9. Warranty

Warranty period of the supplied products shall be 1 years from the date of final acceptance of goods or after completion of installation, commissioning & testing of goods (if included in the scope of supply), at consignee location. OEM Warranty certificates must be submitted by Successful Bidder at the time of delivery of Goods. The seller should guarantee the rectification of goods in case of any break down during the guarantee period. Seller should have well established Installation, Commissioning, Training, Troubleshooting and Maintenance Service group in INDIA for attending the after sales service. Details of Service Centres near consignee destinations are to be uploaded along with the bid.

## 10. Buyer Added Bid Specific ATC

Buyer Added text based ATC clauses

**1. Payment terms:** Payment shall be made through e-payment, subject to acceptance of material and submission of the required documents, complete in all respects, as per following details:

| Type of Bidder                   | Payment Terms (Number of Days) |
|----------------------------------|--------------------------------|
| Micro & Small Enterprises (MSEs) | 45 days                        |
| Medium Enterprises               | 60 days                        |
| Non MSME                         | 90 days                        |

The vendors who wish to avail benefit of payment terms for MSEs need to apply for MSE purchase preference in the bids. MSME bidders can also avail benefits of payment through TReDS (RXIL).

**2. Breach of contract, Remedies and Termination:**

In case of breach of contract, recovery of 10% of total contract value shall be applicable. Recovery shall be done by encashing security instruments like Contract Execution Bank Guarantee, performance bank guarantee, EMD. In case value of security instruments available is less than 10% of the contract value, the balance amount be recovered from other financial remedies (i.e. available bills of the contractor, retention amount, etc. with BHEL) or legal remedies shall be pursued. Further, levy of liquidated damages, debarment, termination, de-scoping, short-closure, etc., shall be applied as per provisions of the contract.

**3. Original Manufacturer's Test certificate & Guarantee Certificate required along with dispatches.**

**4. Quantity variation +/-5% is acceptable.**

**5. Final inspection at CFFP, BHEL Haridwar.**

**6. Early delivery is acceptable for first lot only.**

**7. Conflict of Interest:** A bidder shall not have conflict of interest with other bidders. Such conflict of interest can lead to anti-competitive practices to the detriment of Procuring Entity's interests. The bidder found to have a conflict of interest shall be disqualified. A bidder may be considered to have a conflict of interest with one or more parties in this bidding process, if:

- a) They have controlling partner (s) in common; or
- b) They received or have received any direct or indirect subsidy/financial stake from any of them; or
- c) They have the same legal representative/agent for purposes of this bid; or
- d) They have relationship with each other, directly or through common third parties, that puts them in a position to have access to information about or influence on the bid of another bidder: or
- e) Bidder participates in more than one bid in this bidding process. Participation by a Bidder in more than one Bid will result in the disqualification of all bids in which the parties are involved. However, this does not limit the inclusion of the components/sub-assembly/Assemblies from one bidding manufacturer in more than one bid; or
- f) In cases of agents quoting in offshore procurements, on behalf of their principal manufacturers, one agent cannot represent two manufacturers or quote on their behalf in a particular tender enquiry. One manufacturer can also authorise only one agent/dealer. There can be only one bid form the following:

- 1. The principal manufacturer directly or through one Indian agent on his behalf; and
- 2. Indian/foreign agent on behalf of only one principal;

Or

- a) A Bidder or any of its affiliates participated as a consultant in the preparation of the design or technical specifications of the contract that is the subject of the Bid; or
- b) In case of a holding company having more than one independently manufacturing units, or more than one unit having common business ownership/management, only one unit should quote. Similar restrictions would apply to closely related sister companies. Bidders must proactively declare such sister/common business/management units in same/similar line of business.

**8.** "The offers of the bidders who are under suspension as also the offers of the bidders, who engage the services of the firms debarred across BHEL, shall be rejected. The list of firms debarred across BHEL is available on BHEL website : [www.bhel.com](http://www.bhel.com).

**8.0** Integrity commitment, performance of contract and punitive action thereof:

**8.1** Commitment by BHEL:

BHEL commits to take all measures necessary to prevent corruption in connection with the tender process and execution of the contract. BHEL will during the tender process treat all bidder(s) in a transparent and fair manner, and with equity.

**8.2** Commitment by Bidder/Supplier/Contractor:

**8.2.1** The Bidder/Supplier/Contractor commit to take all measures to prevent corruption and will not directly or indirectly influence any decision or benefit which he is not legally entitled to nor will act or omit in any manner which tantamount to an offence punishable under any provision of the Indian penal code, 1860 or any other law in force in India.

**8.2.2** The Bidder/Supplier/Contractor will, when presenting his bid, disclose any and all payments he has made, and is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the contract and shall adhere to relevant guidelines issued from time to time by Govt. of India/BHEL.

**8.2.3** The Bidder/Supplier/Contractor will perform/execute the contract as per the contract terms & conditions and will not default without any reasonable cause, which causes loss of business/money/reputation, to BHEL.

If any Bidder/Supplier/Contractor during pre-tendering/tendering/post tendering/award/execution/post-execution stage indulges in mal-practices, cheating, bribery, fraud or and other misconduct or formation of cartel so as to influence the bidding process or influence the price or acts or omits in any manner which tantamount to an offence punishable under any provision of the Indian Penal Code, 1860 or any other law in force in India then, action may be taken against such bidder/supplier/contractor as per extant guidelines of the company available on [www.bhel.com](http://www.bhel.com) and/or under applicable legal provisions."

**9.** "Suppliers/Contractors may track payment status of their invoices using BHEL Unified Supplier Payment (USP) Portal - <https://uspp.bhel.in> .

**10.** No relaxation in PQC (prior experience) for MSE & Start-Ups.

**11. Documents required for Material Acceptance & Payment:**

Vendors are required to send the following set of documents in **duplicate (two copies each)** to the address mentioned below:

| S. No. | Document                                      |
|--------|-----------------------------------------------|
| 1      | Invoice – Original for Buyer                  |
| 2      | Invoice – Duplicate for Transporter           |
| 3      | Test Certificate                              |
| 4      | Guarantee Certificate                         |
| 5      | Third Party Inspection Report (If applicable) |
| 6      | Bill of Lading (If Applicable)                |
| 7      | Packing List (If Applicable)                  |

In addition to this any other document mentioned in the purchase order (even if not mentioned in the above list) will be required to be sent by the vendor.

**Address:**

Amit Sharma

Dy. Manager (Purchase)

Central Foundry Forge Plant

Bharat Heavy Electricals Ltd.

Ranipur, Haridwar

Uttarakhand - 249403

Ph. No. 9442644641

Alternatively, vendors can send a **digitally signed copy** of above-mentioned documents to the following email address: a.sharma@bhel.in; [hwcmm@bhel.in](mailto:hwcmm@bhel.in)

These documents are required for timely acceptance of material and payment of the vendors. **Without these documents, payment may not be processed in timely manner. BHEL will bear no responsibility towards the same.**

**12.** Any Bidder falling under MSE category shall furnish the following details & submit documentary evidence/ Govt. Certificate etc. in support of the same along with their techno-commercial offer.

| <b>Type under MSE</b> | <b>SC/ST Owned</b> | <b>Women Owned</b> | <b>Others (excluding SC/ST &amp; Women Owned)</b> |
|-----------------------|--------------------|--------------------|---------------------------------------------------|
| <b>Micro</b>          |                    |                    |                                                   |
| <b>Small</b>          |                    |                    |                                                   |

**Note:** If the bidder does not furnish the above in the tender, offer shall be processed construing that the bidder is not falling under MSE category.

## **Disclaimer/अस्वीकरण**

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.
15. Buyer added ATC Clauses which are in contravention of clauses defined by buyer in system generated bid template as indicated above in the Bid Details section, EMD Detail, ePBG Detail and MII and MSE Purchase Preference sections of the bid, unless otherwise allowed by GeM GTC.
16. In a category based bid, adding additional items, through buyer added additional scope of work/ additional terms and conditions/or any other document. If buyer needs more items along with the main item, the same must be added through bunching category based items or by bunching custom catalogs or bunching a BoQ with the main category based item, the same must not be done through ATC or Scope of Work.

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 कार्रवाई का आधार होगा।

**---Thank You/धन्यवाद---**