ITEM: SUPPLY OF CORONA RINGS FOR INSULATORS AS PER ANNEXURE No. A/12303600/28.07.2023

TECHNICAL PQR, DRAWING, QAP: AS ATTACHED

QUANTITY: As per AS ATTACHED BOQ

BILL OF MATERIAL (BOM):

| Sr. No. | BHEL Item Code | Description of Item/Specification | Quantity | UOM | Technical Specification/ Drawings/QAP |
|------------|----------------|---|----------|-----|--|
| 1 | 125622 | CORONA R(T) Ø500HT210 39831401825/01 | 80 | EA | AS ATTACHED |

- 1. Bidder to provide signed & Sealed GEM BID, drawings, QAP & Annexure No. A/12303600/28.07.2023 with their offer.
- 2. To get MSE preference, bidder to choose MSE purchase preference on GEM portal otherwise purchase preference shall not be applicable.
- 3. To get MII preference, bidder to choose MII purchase preference on GEM portal and bidder to submit signed local content declaration otherwise purchase preference shall not be applicable.
- 4. Item shall be manufactured as per attached drawing.
- 5. Delivery Schedule: Material shall be supplied to BHEL SBD MP Stores, Bangalore within 45 days from the date of PO.
- 6. Delivery location: BHEL SBD MP Stores Bangalore-560012 as per GeM consignee.
- 7. Price basis: Price shall be firm till completion of the contract. No PVC is applicable.
- 8. Payment terms: Hundred Percent (100%) of basic price of the material supplied as per PO, along with 100% taxes & duties (as applicable) shall be payable on pro-rata as per following manner
 - (i) 45 days for Micro & Small Enterprises (MSEs)
 - (ii) 60 days for Medium Enterprises
 - (iii) 90 days for Non-MSME

from the date of receipt of goods at BHEL SBD and receipt of complete documents at BHEL SBD as specified in Clause No. 9 below subject to acceptance of materials. [i.e. date of acceptance of material or date of submission of complete set of documents (whichever is later) shall be considered for reckoning the due date of payment.]

- 9. Documents to be Submitted by Vendor for payment:
 - a. Original GST compliant invoice. (Original for Buyer copy)
 - b. Copy of LR/ Delivery Challan for local supplier in place of LR
- 10. Invoice to be made as per the prevailing GST format only. TDS Deductions applicable as per GST Law & TDS certificate shall be issued by BHEL in line with the latest amendment in GST Law.
- 11. LD/Penalty: As per GeM general T&C.
- 12. Guarantee period: Material supplied should be durable and vendor should guarantee for its durability for minimum three years in use.
- 13. Technical PQR- requirement i.e. Years of Past Experience of 01 year as per technical PQR
- 14. Past Experience shall be supply of 100% of bid quantity.
- 15. Minimum Average Annual Turnover of the Bidders: Not applicable.
- 16. Inspection and Quality Clearance: As per attached QAP

| BOQ FOR 12303600 | | | | | | | | | | |
|------------------|-----------|--|----------|-----|---|---------------------|----------|--|--|--|
| Item Number | Item Code | Item Description | Quantity | UOM | Unit Price (Inclusive of TAX) [QUOTED/NOT QUOTED] | Applicable GST % | HSN Code | | | |
| 1 | 125622 | CORONA R(T) Ø500HT210_ 39831401825/01 | 80 | EA | | | | | | |



PRE-QUALIFICATION REQUIREMENTS

Ref. No.: SBD/Ins. Prodn /PQR-Corona Ring

Dt: 14/07/23

ITEM

: CORONA RING for Porcelain Insulators

P.R.No. 12303600

| S. No. | BHEL qualification requirement | Documents Required |
|--------|--|---|
| | I. PRE QUALIFICATION CRITERIA | |
| 1 | Vendor should have supplied 80nos. of Corona Rings during last one year. | Submitted / Not submitted (vendor should provide documentary evidence by way of P.O/Invoice/SRV/Material acceptance Report) |
| 2 | Material supplied should be durable and vendor should guarantee for its durability for minimum three years in use. | Acceptable / Not acceptable |
| 3 | Vendor should accept for pre despatch inspection of material as per BHEL drawings. | Vendor to confirm Acceptable / Not acceptable |

Note: Vendors to indicate clearly for acceptance or non-acceptance against each point. Technical bid can be processed further only when points mentioned above are responded and required documents are submitted.

MANOJ KUMAR DGM/Ins.Production



BHARAT HEAVY ELECTRICALS LIMITED
SOLAR BUSINESS DIVISION
PROF.C.N.R RAO CIRCLE, IISC POST MALLESHWARAM,
BENGALURU-560012

STANDARD QUALITY ASSURANCE PLAN

ITEM: GRADING RING/ CORONA RING (CASTED/ TUBULAR)

QP NO.: EPD_QP_CI_2021-22_0004

REV. NO.: 00 DATE: 01.07.2021

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| 011 | LL-300 | | | | <u> </u> | | | | | | | |
|----------|----------------|---|----------|------------------|--------------------------------|-----------------------|---|----------------------|----------|------------|----|--|
| L. IO | COMPONENT | CHARACTERISTICS | CLASS | TYPE OF CHECK | QUANTUM OF CHECK | REFERENCE DOCUMENT | ACCEPTANCE NORMS | FORMAT (| | AGENCY M B | | REMARKS |
| 1. | 2. | 3. | 4. | 5. | 6. | 7. | 8. | 9. | D* | 3 | ** | 11. |
| | INSPECTION | BY SUPPLIER AT THEIR | WORKS | | 55 | | | | | 1 | 0. | |
| .1 | Corona Ring | Chemical Composition of Al Raw Material | Major | Chemical | 1 / Ingot batch | BHEL Drg | BHEL Drg | Supplier TC | ٧ | P | V | |
| .2 | | Visual Inspection | Major | Physical | 100% | BHEL Drg | BHEL Drg | Supplier TC | ٧ | Р | V | |
| 1.3 | | Dimensions & Markings of Corona Ring including holder, clamp, support | Major | Physical | 1% of Batch / Min 10 nos. | BHEL Drg | BHEL Drg | Supplier TC | ٧ | P | V | BHEL &Supplier Identification Marking To Be Present |
| .4 | | Dye Penetration Test on weld joints | Major | Physical | 100% | BHEL Drg/ IS 3658 | Free from crack , ,surface discontinuities | Inspection Report | ٧ | Р | ٧ | |
| .5 | Fasteners | Dimension | Major | Physical | 4 per lot | BHEL Drg | BHEL Drg | Supplier TC | ٧ | Р | V | |
| .6 | | Chemical Composition | Major | Chemical | 1 per lot/type of Fasteners | BHEL Drg | BHEL Drg | Supplier TC | ٧ | P/ V | V | |
| 7 | | Mass/Thickness of Zinc Coating on galvanized components | Major | Physical | 4 per lot | IS 2633 | No permanent deposit of copper for 1 min each after 4 dips | Supplier TC | V | Р | ٧ | |
| | PRE DISPATCH I | NSPECTION /INSPECTION AT | BHEL WOR | KS | | | | | | | | CONTRACTOR OF THE |
| .1 | Corona Ring | Visual | Major | Physical | 5% of Lot | BHEL Drg | BHEL Drg | Inspection Report | - | - | Р | 15 15 15 15 15 16 16 16 16 16 16 16 16 16 16 16 16 16 |
| 2 | | Dimensions & Markings of Corona Ring including holder, clamp, support | Major | Physical | 2 nos/1000 nos or part thereof | BHEL Drg | BHEL Drg | Inspection Report | - | - | Р | 30.0 g *24.00 |
| 3 | | Dye Penetration Test on weld joints | Major | Physical | IS:2500 PtII AQL 0.25% | BHEL Drg/ IS 3658 | Free from crack ,surface discontinuities | Inspection Report | - | - | Р | |

| LEGEND: *D: RECORDS, INDENTIFIED WITH "TICK" (√) SHALL BE ESSENTIALLY INCLUDED BY VENDOR IN QA DOCUMENTATION. | FOR BHEL USE | | | |
|--|----------------------------|------------------------------|--------|----------------------|
| ** M: MANUFACTURER/SUB-VENDOR, B: BHEL/BHEL NOMINATED INSPECTION AGENCY P: PERFORM W: WITNESS AND V: VERIFICATION. | D. W. Mulely | 99 | | |
| | PREPARED BY: D K MUKHERJEE | APPROVED BY: KUMAR MOURYA | ADITYA | QUALITY ASSURANCE |



BHARAT HEAVY ELECTRICALS LIMITED SOLAR BUSINESS DIVISION PROF.C.N.R RAO CIRCLE, IISC POST MALLESHWARAM, BENGALURU-560012

| STANDARD QUALITY | ASSURANCE PLAN |
|------------------------|----------------|
| ITEM: GRADING RING/ CO | RONA RING |

(CASTED/ TUBULAR)

QP NO.: EPD_QP_CI_2021-22_0004 REV. NO.: 00

DATE: 01.07.2021

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| J D71 | BHEL-SBU | | | | | | | | | | | |
|-----------|--------------------|---|-------|------------------|---------------------|-----------------------|---|----------------------|----|----------|----------|---------------------------------|
| SL. NO | ITEM/ COMPONENT | CHARACTERISTICS | CLASS | TYPE OF CHECK | QUANTUM OF CHECK | REFERENCE DOCUMENT | ACCEPTANCE NORMS | FORMAT C RECORD | | AGE M | NCY B | REMARKS |
| 1. | 2. | 3. | 4. | 5. | 6. | 7. | 8. | 9. | D* | | * D | 11. |
| B.4 | | Chemical Composition of Aluminium Corona Ring | Major | Chemical | 1 per lot | BHEL Drg | As per Grade in BHEL Drg | Inspection Report | - | - | P | NABL accredited third party lab |
| B.5 | Fasteners | Dimension | Major | Physical | 4 per lot | BHEL Drg | BHEL Drg | Inspection Report | - | - | Р | <u>.</u> |
| B.6 | | Mass/Thickness of Zinc Coating on galvanized components | Major | Physical | 4 per lot | IS 2633 | No permanent deposit of copper for 1 min each after 4 dips | Inspection Report | - | - | Р | |

Notes:

- 1. For first time supply of any new item by the vendor, vendor should take sample approval before bulk manufacturing from Quality/Engineering.
- 2. The SQAP shall be read in conjunction with BHEL Specification mentioned in Purchase Order and shall deem to include any additional tests as per the specification/Standard.
- 3. Material supplied shall be in line with BHEL Purchase Order, Technical Specification, Approved Drawings, applicable Standard References, or any other document/references.
- 4. In case of any contradiction between this SQAP, BHEL Specifications the following precedence shall be followed:
 - 1st: BHEL Purchase Order Specification;
 - 2nd: This STANDARD QUALITY ASSURANCE PLAN & Applicable standard;
 - 3rd: Manufacturers plant standards
- 5. Packing shall be as per BHEL purchase order.
- 6. BHEL reserves the right for pre-dispatch inspection at vendor works by BHEL or BHEL nominated agency.
- 7. In case of pre-dispatch inspection, Supplier shall raise the inspection call in the CQIR with inspection agency as BHEL SBD URL: www.cqir.bhel.in and shall upload Test Certificates, Internal Tests Report as per this SQAP in CQIR Portal. TC to be verified w.r.t to inspected item during inspection and to be signed by the inspector.
- 8. Original Test Certificates, Internal Tests Report (Duly Sealed & signed), test bar per heat per lot as per this SQAP shall be sent along with lot for review.

| LEGEND: *D: RECORDS, INDENTIFIED WITH "TICK" (√) SHALL BE ESSENTIALLY INCLUDED BY VENDOR IN QA | FOR BHEL USE | | |
|---|----------------------------|----------------------------------|----------------------|
| DOCUMENTATION. ** M: MANUFACTURER/SUB-VENDOR, B: BHEL/BHEL NOMINATED INSPECTION AGENCY P: PERFORM W: WITNESS AND V: VERIFICATION. | D. h. Muhlye | | |
| | PREPARED BY: D K MUKHERJEE | APPROVED BY: ADITYA KUMAR MOURYA | QUALITY ASSURANCE |