

1X660MW SAGARDIGHI EXTN. UNIT-V

BOQ FOR CABLE TERMINATION AND JOINTING KITS - MAIN SUPPLY

S. No.	ITEM CODE	ITEM DESCRIPTION	UNIT	ORDER QUANTITY
1	507-24070-A	JOINT KIT 11KV 1C-630 AL ARMOURED	NOS.	42
2	507-24082-A	JOINT KIT 11KV 3C-240 AL ARMOURED	NOS.	5
3	507-24404-A	TERM. KIT 11KV 1C-300 AL ARMOURED AL LUG	NOS.	62
4	507-24407-A	TERM. KIT 11KV 1C-630 AL ARMOURED AL LUG	NOS.	222
5	507-24410-A	TERM. KIT 11KV 3C-240 AL ARMOURED AL LUG	NOS.	65
6	507-24495-A	TERM. KIT 3.3KV 1C-240 AL ARMOURED AL LUG	NOS.	74
7	507-24502-A	TERM. KIT 3.3KV 3C-240 AL ARMOURED AL LUG	NOS.	58

Notes:

- 1 The ordered quantities indicated above shall be released for manufacture along with PO/LOI.
- 2 Manufacturing of ordered quantities shall be done as per NIT.
- 3 Subsequent lots, if any shall be cleared for manufacture based on progress of engineering and site requirements.
- 4 Delivery shall be as per NIT.
- 5 Bidder to offer higher voltage grade termination & jointing kits (for which applicable type test certificates are available with them), if they cannot produce relevant type test certificates for particular kits conducted in any govt. / govt. approved lab.


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BOQ FOR CABLE TERMINATION AND JOINTING KITS - MANDATORY SPARES

S. No.	ITEM CODE	ITEM DESCRIPTION	UNIT	ORDER QUANTITY
	507-24000-B			
1		TERM. KIT 11KV 1C-300 AL ARMOURED AL LUG	NOS.	2
2		TERM. KIT 11KV 1C-630 AL ARMOURED AL LUG	NOS.	2
3		TERM. KIT 11KV 3C-240 AL ARMOURED AL LUG	NOS.	2
4		TERM. KIT 3.3KV 1C-240 AL ARMOURED AL LUG	NOS.	2
5		TERM. KIT 3.3KV 3C-240 AL ARMOURED AL LUG	NOS.	2

Notes:

- 1 The ordered quantities indicated above shall be released for manufacture along with PO/LOI.
- 2 Manufacturing of ordered quantities shall be done as per NIT.
- 3 Subsequent lots, if any shall be cleared for manufacture based on progress of engineering and site requirements.
- 4 Delivery shall be as per NIT.
- 5 Bidder to offer higher voltage grade termination & jointing kits (for which applicable type test certificates are available with them), if they cannot produce relevant type test certificates for particular kits conducted in any govt. / govt. approved lab.

	PRE-QUALIFICATION REQUIREMENTS FOR CABLE TERMINATION & JOINTING KITS 2X660MW SAGARDIGHI EXTN. UNIT-V	PE-PQ-445-507-E014
		REVISION NO. 00 DATE 18-01-2023
		SHEET 1 OF 2

ITEMS: Cable termination and jointing kits.

Vendor may be considered for evaluation for one or more type of cable termination kits (Voltage Grade 3.3/6.6/11//33 kV) and Jointing kits (Voltage Grade 3.3/6.6/11/33 kV):

Type 1 – Heat shrinkable [termination Kits & jointing kits]

Type 2 – Pre-moulded push on [termination kits]

Type 3 – Tapex [termination Kits & jointing kits]

1.	Vendor should be manufacturer of applicable type of Cable termination and jointing kits.
2.	Availability of type test certificates as per applicable standards for the applicable type of cable termination and jointing kits.
3.	Vendor should have in house facility for manufacturing and routine & acceptance testing for the applicable type of termination and jointing kits.
4.	Vendor should have capacity to manufacture 200 nos. cable termination and jointing kits per month for the applicable type of cable termination and jointing kits.
5.	Manufactured & supplied at least 450 nos. cable termination and jointing kits of applicable type in one or more orders.
6.	Minimum two (2) nos. purchase orders for cable termination and jointing kits of applicable type shall be submitted which should not be more than five (5) years old from the date of techno-commercial bid opening for establishing continuity in business.

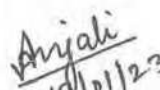
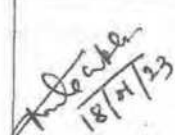
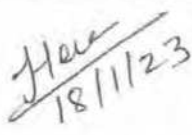


Notes:

- For Sl. No: 1 & 3 vendor to furnish credentials for applicable type of Cable termination and jointing kits for assessment of manufacturing range of the vendor (i.e. for up to which voltage grade and conductor cross-section area).
- For Sl. No: 2, 4, 5 & 6 vendor to furnish credentials for applicable type of Cable termination and jointing kits of any of the voltage grades as mentioned above.

Notes (General points of PQR): -

1. Offers of the JV companies/ Joint Bidders/ bidders having collaboration/ licensing agreement/ MOU/Indian subsidiaries shall be evaluated as follows:

a. If bidder happens to be an Indian subsidiaries of foreign OEM, then the credentials of the foreign OEM can also be considered for meeting PQR.

<u>PREPARED BY</u>	<u>CHECKED BY</u>	<u>REVIEWED BY</u>	<u>APPROVED BY</u>
 NAME: ANJALI (DY. MANAGER)	  NAME: KAVITA GUPTA / HEMA KUSHWAHA (SR. MANAGER / SR. MANAGER)	 NAME: PRAVEEN DUTTA (AGM)	 NAME: DEBASISA RATH DH ELECT(AGM)

	TECHNICAL SPECIFICATION FOR CABLE TERMINATION & JOINTING KITS	PE-PQ-445-507-E014
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b. If bidder happens to be the Joint Venture Company, then the credentials of any of JV partners can be also considered for meeting PQR.

c. If bidder happens to bid jointly with their partner, then credentials of both the partners will be considered for meeting PQR as per distribution of the work. In all such cases, lead bidder as specified in bid documents shall be responsible for overall execution of the contract and all guarantee/ warranty.

d. If bidder happens to be the having valid collaboration agreement/ MOU/ licensing agreement with some other company, then the credentials of collaborator/ MOU partner/ licensing company can also be considered for meeting PQR.

Note: If bidder(s) qualifies on the basis of credentials of his principal/ JV partner/ Collaborator/ joint bidder etc., then the principal/ JV partner/ Collaborator/ MOU partner/ joint bidder shall be responsible for overall design vetting and warranty/ guarantee of the package. The scope matrix clearly defining their respective roles including design vetting, manufacturing of critical component, E&C etc. etc. and warranty/ guarantee shall be submitted along with the offer.

2. Bidder to note that the arrangement of bidding (joint bid partners/ collaborator/ MOU partner/ licensing company etc.) once offered to BHEL as a part of bidding documents cannot be changed till the execution of the project.

3. Consideration of offer shall be subject to customer's approval of bidders, if applicable.

4. Bidder to submit all supporting documents in English. If documents submitted by bidder are in language other than English, a self-attested English translated document should also be submitted.

5. Notwithstanding anything stated above, BHEL reserves the right to assess the capabilities and capacity of the bidder to perform the contract, should the circumstances warrant such assessment in the overall interest of BHEL.

6. After satisfactory fulfilment of the above criteria/ requirement, offer shall be considered for further evaluation as per NIT and all the other terms of tender.

<u>PREPARED BY</u>	<u>CHECKED BY</u>	<u>REVIEWED BY</u>	<u>APPROVED BY</u>
 18/01/23 NAME: ANJALI (DY. MANAGER)	 18/01/23 NAME: KAVITA GUPTA / HEMA KUSHWAHA (SR. MANAGER / SR. MANAGER)	 18/01/2023 NAME: PRAVEEN DUTTA (AGM)	 18/01/23 NAME: DEBASISA RATH DH ELECT(AGM)

STANDARD DELIVERY/ DOCUMENT SUBMISSION SCHEDULE								ANNEXURE-A
CABLE TERMINATION & JOINTING KITS : 1 X 660 MW WBPDC SAGARDIGHI EXTN UNIT V								
Sl. No.	Package Code	Package name	DEPTT	BHEL Drawing No	Drawing Title	Primary/ Secondary	Drg Sch for Vendors	Standard Delivery Terms for Supply Portion
1	507-24000-A	CABLE TERMINATION & JOINTING KITS	ELECT	PE-V0-XXX-507-E904	QUALITY PLAN FOR CABLE TERMINATION & JOINTING KITS	Primary	R-0 within 14 days from PO & subsequent revisions within 10 days of comments received from BHEL.	For Lot-1: Within Four (04) months from date of CAT-1 approval of Primary drawing/documents, subjected to drawing/document submission/re-submission schedule as stipulated, in case of any delay in submission/re-submission of Primary drawing/documents, then same shall be reduced from the given delivery period. For Subsequent Lots: Within 3 months from Lot clearance by BHEL. Mandatory Spares :- Mandatory Spares shall be supplied within Four (04) months from BHEL Manufacturing Clearance. Separate manufacturing clearance shall be accorded for mandatory spares.
				PE-V0-XXX-507-E032	GA OF CABLE TERMINATION & JOINTING KITS	Primary		
				PE-V0-XXX-507-E031	TECHNICAL DATA SHEET OF CABLE TERMINATION & JOINTING KITS	Primary		
				PE-V0-XXX-507-E033	TYPE TEST REPORT / CERTIFICATES	** Primary/ Secondary	<p><u>Case 1:</u> If Type Test Report is available and Type test conduction is not required as per technical Specification, Type test report to be submitted as below: R-0 within 14 days from date of PO & subsequent revisions within 10 days of comments received from BHEL.</p> <p><u>Case 2:</u> If Type Test Report is not available as per technic al Specification, Newly conducted test report to be submitted as below: R-0 within 02 months of approval of other primary drawing/documents & subsequent revisions within 10 days of comments received from BHEL.</p> <p><u>Case 3:</u> For the cases where earlier conducted Type test reports are available as per technical Specification, however the Type Test need to be conducted as per contractual requirement, Type Test Report to be submitted within 1 week of type test conduction & subsequent revisions within 10 days of comments received from BHEL.</p> <p>** For Cases 1 & 2 above, the document shall be "Primary " and for Case - 3 the document shall be "Secondary "</p>	

1X660 MW SAGARDIGHI EXTN. UNIT-V

TECHNICAL SPECIFICATION

FOR

CABLE TERMINATION & JOINTING KITS

SPECIFICATION NO: *PE-TS-445-507-E014*

REVISION: 0



BHARAT HEAVY ELECTRICALS LIMITED
POWER SECTOR
PROJECT ENGINEERING MANAGEMENT
NOIDA, UP (INDIA) – 201301

1287522/2023/PS-PEM-EL



TECHNICAL SPECIFICATION FOR CABLE TERMINATION & JOINTING KITS

SPECIFICATION NO. PE-TS-445-507-E014

VOLUME II

SECTION

REVISION 00

DATE: 16.01.2023

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Sl. No.	DESCRIPTION	NO. OF SHEETS
1.0	SECTION- I	
	COMPLIANCE CERTIFICATE	01
	SPECIFIC TECHNICAL REQUIREMENTS	01
	DATA SHEET – A	02
2.0	SECTION- II	
	STANDARD TECHNICAL REQUIREMENTS	03

Total nos. of sheets (including cover and separator sheets) = 11 sheets

1287522/2023/PS-PEM-EL



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COMPLIANCE CERTIFICATE

The bidder shall confirm compliance to the following by signing/ stamping this compliance certificate and furnishing same with the offer.

1. The scope of supply, technical details, construction features, design parameters etc. shall be as per technical specification & there are no exclusion/ deviation with regard to same.
2. There are no deviation with respect to specification other than those furnished in the 'schedule of deviations'.
3. Only those technical submittals which are specifically asked for in NIT to be submitted at tender stage shall be considered as part of offer. Any other submission, even if made, shall not be considered as part of offer.
4. Any comments/ clarifications on technical/ inspection requirements furnished as part of bidder's covering letter shall not be considered by BHEL, and bidder's offer shall be construed to be in conformance with the specification.
5. Any changes made by the bidder in the price schedule with respect to the description/ quantities from those given in 'BOQ-Cum-Price schedule' shall not be considered.

BIDDER'S STAMP & SIGNATURE

1287522/2023/PS-PEM-EL

**TECHNICAL SPECIFICATION FOR CABLE
TERMINATION & JOINTING KITS**

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SECTION – I**SPECIFIC TECHNICAL REQUIREMENTS**



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1.0 SCOPE OF ENQUIRY

- 1.1 This specification covers the design, manufacture, inspection and testing at manufacturer's works, proper packing and delivery to site of Cable Termination & Jointing Kit, conforming to this specification.
- 1.2 Technical requirements of Cable Termination & Jointing Kit are indicated in Data Sheet-A & Section-II.
- 1.3 The stipulation of Data Sheet-A shall prevail in case of any conflict between the stipulations of Data Sheet-A & Section-II.

2.0 DRAWINGS & DOCUMENTS TO BE SUBMITTED

2.1 Documents required to be submitted by the bidder along with the Technical offer: -

- a) Type test report for 3.3 kV and 11kV as applicable. Test Report should not be older than 5 years from the date of bid opening i.e. 01.07.2020.

2.2 List of documents and their submission / resubmission schedule after order placement shall be as per NIT

3.0 BILL OF QUANTITIES

3.1 Quantity requirement shall be as per BOQ-cum-price schedule attached with NIT

3.2 Supplier to give the following undertaking in the BOM: "The BoM provided herewith completes the scope (in content and intent) of material supply under PO No. -----, dated -----. Any additional material which may become necessary for the intended application of the supplied item(s)/package will be supplied free of cost in most reasonable time."

NOTE:-

Document indicated above, shall be submitted through document management system (DMS).



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DATASHEET-A

1.0 REFERENCE CODES & STANDARDS

- 1.1 IS: 13573 (Latest Revision): Cable accessories for extruded power cables.
- 1.2 IS: 8309: Compression type tubular terminal ends for aluminium conductors of insulated cables.

2.0 TERMINATION KITS

- 2.1 Voltage grade: 3.3 kV(UE) / 11 kV(UE)
- 2.2 Application: Indoor
- 2.3 Type: Heat Shrinkable/pre-moulded type/ tapex type
- 2.4 Sizes: As per BOQ
- 2.5 Type testing conforming to As per IS 13573 and IEC60502
- 2.6 Total Shrouding of all live parts: Yes

3.0 STRAIGHT THROUGH JOINTING KITS

- 3.1 Voltage grade: 3.3 kV(UE) / 11 kV(UE)
- 3.2 Type: Heat Shrinkable/pre-moulded type/ tapex type
- 3.3 Sizes: As per BOQ.
- 3.4 Testing requirement conforming to As per IS 13573 and IEC60502

4.0 BRIEF CABLE SPECIFICATION

- 4.1 Voltage grade: 3.3 kV(UE) / 11 kV(UE)
- 4.2 Conductor material: Aluminium H2 Grade Class 2
- 4.3 Conductor screening material: Extruded Semi conducting compound
- 4.4 Insulation material: Extruded Cross-linked polyethylene (XLPE)
- 4.5 Insulation Screen material
- a) Non-conducting: Extruded Semi-conducting compound
- b) Conducting: Copper tape



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4.6 Armour: Yes (As Applicable)

4.7 Inner sheath material: Extruded HRPVC conforming to Type ST2 (For multicore cables)

4.8 Outer sheath material: Extruded HRPVC,FR-LSH conforming to Type ST2

5.0 REQUIRED FAULT LEVEL:

Voltage Grade	3.3 kV (UE), 11 kV (UE)
RMS Value	40 kA (for 3.3KV) & 50kA (for 11kV) for 3 sec
Peak Value	100 kA (for 3.3KV) & 125kA (for 11kV)

6.0 TYPE TEST REQUIREMENT: Type test certificates to be furnished in line with clause 4.4, 4.5, 4.6 of Section-II of specification. Type testing/Test certificates shall conform to IS: 13573 and IEC60502.

7.0 CABLE LUGS/ FERRULE (AS PER DIN): Aluminium solderless crimping type cable lugs & ferrule as per DIN standard.

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SECTION-II

STANDARD TECHNICAL REQUIREMENTS



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1.0 INTENT OF SPECIFICATION

It is not the intent to specify herein all the details of design & manufacture of material. However, the material shall conform in all respects to high standard of design, engineering and workmanship and shall be capable of performing in continuous commercial operation at site conditions & purchaser shall have power to reject any work or material which in his judgement is not in full accordance with this specification.

2.0 CODES AND STANDARDS

- 2.1 The material shall comply with all currently applicable safety codes and statutory regulations of India as well as of the locality where the material is to be installed.
- 2.2 The design, material, construction, manufacture, inspection, testing and performance of **Cable Termination & Jointing Kit** shall conform to the latest revision of relevant standards and codes of practices as per Datasheet-A.
- 2.3 In case of conflict between the applicable reference standard and this specification, this specification shall govern.

3.0 TECHNICAL REQUIREMENTS

- 3.1 Technical particulars of Cable termination & jointing kits are specified in Technical Datasheet.
- 3.2 Termination Kits shall be of proven design and make, which have already been extensively used and fully type tested. Critical components used in cable accessories shall be of tested and proven quality as per relevant product specification/ESI specification. Kit contents shall be supplied from the same source as were used for type testing.
- 3.3 The termination/jointing kits shall be suitable for site ambient conditions and polluted atmosphere, and for storage without deterioration at 50°C ambient temperature.
- 3.4 Termination kits shall be suitable for installation inside motor terminal boxes, metal clad switchgear, transformer terminal box etc.
- 3.5 Each kit shall contain all necessary components, accessories and consumables to make a complete termination in such a way that no live parts of the terminals and connecting lugs are exposed. Cable lugs for termination kits & jointing ferrules for straight through jointing kits shall form part of the kit.
- 3.6 Cable lugs shall be of Tinned Copper/Aluminium & heavy duty type. Material of cable lug shall be as per project specific technical data sheet. ~~Same shall be provided with bimetallic washer.~~
- 3.7 Termination and jointing kits shall have requisite stress relieving characteristics.
- 3.8 Termination and joints shall have provision for shield connection and earthing, wherever cable screening is specified.



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- 3.9 All materials and components of the terminations/joints shall be suitable for and compatible with the type of cables for which the terminations/joints are intended.
- 3.10 Any surface treatment or sealants used to ensure environmental protection to the components of termination/joint or on the cable surface shall be non-tracking type and shall withstand the associated electric stress.
- 3.11 Cable jointing kits shall be suitable for directly buried cables.
- 3.12 Cable glands are excluded from the scope of supply of termination kit/ jointing kits.

4.0 QUALITY ASSURANCE, TESTING & INSPECTION

- 4.1 At contract stage, the successful bidder shall submit the signed & stamped Manufacturing Quality Plan for BHEL/ ultimate customer's approval. In case bidder has reference Manufacturing Quality Plan agreed with ultimate customer, same can be submitted for specific project after award of contract for BHEL/ ultimate customer's approval. There shall be no commercial implication to BHEL on account of Manufacturing Quality plan approval.
- 4.2 All materials shall be procured, manufactured, inspected and tested by vendor/ sub-vendor as per approved Manufacturing quality plan, to be submitted by the bidder.
- 4.3 The bidder shall perform all tests necessary to ensure that the material and workmanship conform to the relevant standards and comply with the requirements of the specification. Charges for all these tests for all the equipments & components shall be deemed to be included in the bid price.
- 4.4 The bidder shall furnish the reports of all the type tests carried out, which shall conform to the latest revision of relevant standards. These reports should be for the tests conducted either in government approved third party laboratory or witnessed by client (such as major utilities/ industries) on identical/ similar items to those ordered under this contract.
- 4.5 In case bidder is not able to submit report of type test(s), or in case type tests report(s) are not found to be meeting the specification/ relevant standard requirements, then all such tests shall be conducted under this contract by the bidder free of cost to BHEL, and reports shall be submitted for approval. No charges shall be paid for testing under such circumstances.
- 4.6 Irrespective of the bidder furnishing valid type test report as indicated above, BHEL may get type tests as listed in Technical Datasheet, for which cost shall be borne by BHEL as per actual with additional 10% handling charges.
- 4.7 Bidder to offer higher voltage grade termination & jointing kits, if they cannot produce relevant type test certificates for particular kits conducted in any govt. / govt. approved lab, without any price implication.



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5.0 PACKING

Individual parts of termination & jointing kits shall be packed in strong plastic bags to protect them from ingress of dust & moisture. Further total kits shall be placed in a strong cardboard container to protect it against damage during transit, storage for prolonged periods and handling. It shall have proper marking over the box for early identification.

PEM/PG-I BHEL, NOIDA
SPECIAL CONDITIONS OF CONTRACT (REV.00) DATED 28-04-2021
1X 660 MW SAGARDIGHI TPP EXTENSION UNIT 5



These Conditions shall be read and construed along with General Condition of Contract enclosed along with the tender enquiry. In case of any conflict or inconsistency, the condition given in special condition of contract shall prevail over the general condition of the contract and its corrigenda, if any.

- 1.0 **Project Name** : Sagardighi Thermal Power Extension Project Phase- III, Unit 5 [1X660MW, Supercritical]
- 2.0 **Customer** : West Bengal Power Development Corporation Limited.
- 3.0 **Consignee-Ship to Address {to be mentioned in LR/RR, consignment note}** : Construction Manager-BHEL Site office Unit-V
Sagardighi Thermal Power Project
P.O. Manigram,
District - Murshidabad, PIN:742237, West Bengal, India
- 4.0 **Consignee/Buyer's Name (Bill To) To be mentioned in Supplier's Invoice** : For Supply Packages: (Purchase order by BHEL-PEM):
Bharat Heavy Electricals Limited
Power Sector – Project Engineering Management
PPEI Building, Plot No.25, Sector-16A,
Noida-201301 (Uttar Pradesh)
GSTIN No. – 09AAACB4146P2ZC

For Turnkey Packages: (LOA by BHEL-PEM and PO by BHEL-PSER, Sagardighi site):
Construction manager, BHEL Site office,
1X660 MW WBPDCS SAGARDIGHI TPP EXTENSION UNIT 5
P.O. Manigram, District - Murshidabad, PIN:742237, West Bengal, India
BHEL PSER GSTIN No.- 19AAACB4146P1ZC
- 5.0 **BHEL Site Office Address** : Construction Manager
BHEL site office Unit-V
Sagardighi Thermal Power Project
P.O. Manigram, District - Murshidabad, PIN:742237, West Bengal, India
- 6.0 **Customer Address** : Deputy General Manager (I/C projects)
Sagardighi Thermal Power Project
P.O. Manigram,
District - Murshidabad, PIN:742237, West Bengal, India
- 7.0 **Mode of Dispatch** : By Rail/Road on Door Delivery and freight Pre-Paid Basis.
Nearest Railway Station :- Manigram
- 8.0 **Road Permit/Way Bill Required** : Yes. Supplier to generate the e-waybill at their end and furnish the scanned copy of e-waybill along with dispatch document to BHEL immediately on dispatch. In case of default, supplier shall be held responsible.
- 9.0 **Project Consultant** : DCPL
- 10.0 **Material Inspection Procedure** : All equipment's/items under inspection category shall be sub categorized as follows:

CAT-A: QAP will be submitted to WBPDCS / DCPL for approval. Inspection activities will be jointly witnessed by BHEL QC / TPIA and WBPDCS/TPIA of WBPDCS as per approved QAP witness/hold points.

CAT-B: QAP will be submitted to WBPDCS / DCPL for approval. Inspection shall be carried out by BHEL QC/TPIA only.

CAT-C: These are non QAP items and shall be accepted by BHEL QC/ TPIA on the basis of review of manufacturer's test certificate / certificate of compliance (COC) / internal

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SPECIAL CONDITIONS OF CONTRACT (REV.00) DATED 07-01-2021
1X 660 MW SAGARDIGHI TPP EXTENSION UNIT 5



inspection report/ guarantee certificate etc. issued by the equipment manufacturer itself confirming all the technical and contractual requirements. For these items, submission of QAP and approval by WBPDCCL are not envisaged. However, quality of these items must be ensured through respective BHEL QC.

Vendor to give five (05) days advance notice for stage inspection and ten (10) days for final inspection.

Details for Inspection procedure involving the TPIA shall be intimated later by BHEL/ WBPDCCL.

11.0 Clearance for Dispatch of materials

MDCC will be issued by BHEL/WBPDCCL.

12.0 Prior Dispatch intimation to BHEL Site Office and Underwriters

YES

NOTE :- One set consisting dispatch documents indicating the items dispatched (with their gross and net weights) and after informing the underwriters about the value of consignment and dispatch details to be sent to following

- a) BHEL Site Office
- b) BHEL- PEM, PPEI - Noida(U.P)
- c) Insurance Co.

It is Vendor's responsibility to ensure availability of trucks well in advance where consignment will require more number of trucks to be deployed for dispatch. No concession for non-availability of trucks, after having given dispatch clearance shall be admissible.

13.0 Transit Insurance

: By BHEL (vendor to intimate the underwriters quoting the insurance policy no. as below)

14.0 Insurance Policy No. For intimation to Underwriters (Contact Person)

: Policy details and number shall be informed later

15.0 a. Customer GST No.

: 19AABCT3027C1ZQ

b. BHEL-PEM GST No.

: 09AAACB4146P2ZC

c. BHEL PSER GST No.

: 19AAACB4146P1ZC

16.0 Unloading at site

: BY BHEL site for supply packages.
 (The supplier shall give LR wise Gross Wt. Of the consignment for the purpose of handling the consignment by BHEL site loading/unloading Contractor.)
 By Vendor for turnkey packages (Scope consists of supply and Erection & Commissioning).

NOTE: - Please note that unloading of materials at site shall take at least 3-4 days. As such, transporters to be advised suitably before dispatch of materials in this regard. Also, no claim on a/c of delay in unloading shall be entertained.

17.0 Storage and handling at site

: By BHEL site for supply packages

By Vendor for Turnkey packages* (Scope consists of supply and Erection & Commissioning).

PEM/PG-I BHEL, NOIDA
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*Any shortages or damages during unloading and handling at site, including at the time of erection and commissioning, shall be made good by the Seller/ Contractor at his risk and cost, to meet the project schedule. In case of faults/ discrepancies in any material, component, sub-assembly, assembly, etc., the same shall be supplied/ replenished free of cost to enable the equipment to be put to service.

- 18.0 **Movement of Material within Site** : By BHEL/BHEL appointed agency for supply packages
By Vendor for Turnkey packages Scope consists of supply and Erection & Commissioning).
No movement of loose materials shall be allowed. Items are to be properly packed to ensure proper and safe transportation & storage at site.
- 19.0 **Paying Authority** : For packages where PEM will issue the Purchase Order: BHEL PEM will be the paying authority.
For packages where PEM will issue only the LOA and Purchase Order shall be issued by PSER: BHEL Sagardighi Site /PSER will be the paying Authority.
- 20.0 **Documents Required (for supply + freight payment)** : Original + 2 Copies of the following documents: -
1. Invoice checklist duly signed and stamped
2. Invoice
3. Receipted LR (signed & stamped)/ confirmation from site regarding receipt of packages/ Boxes original/ copy)
4. Packing List – Clearly showing number of packages, gross weight net weight.
5. Copy of BHEL MDCC
6. Guarantee Certificates as per GCC.
7. Copy of insurance Intimation.
8. PVC Calculation, and copy of all applicable indices, if PVC applicable as per NIT
9. Transporters document indicating the freight amount
10. Document as proof of Declaration by supplier that GST payment has been made on GST portal to be submitted for GST claim.
11. For claiming PVC if applicable as per NIT, invoice to be submitted on PO unit rates and PVC to be claimed as separate debit/credit note. The debit/ credit note to be submitted along with the main invoice.
- 21.0 **Documents Required (for MRC payment)** : Original + 2 Copies of the following documents:-
a. Invoice
b. Copy of MRC
c. Proof of submission of final documents (6 sets)
d. O&M Manuals (2CD's + 15 Hardcopies)
NOTE:-
1. Customer or his representative will be involved for inspection as per approved Quality Plan.
2. MDCC will be issued by BHEL in line with approved BBU.
3. The supplier during inspection of Main supplies & Mandatory Spares by BHEL/BHEL TPIA, WBPDC/ WBPDC-L-Nominee shall obtain separate MDCC for Main Supplies & Separate MDCC for Mandatory Spares in line with the approved Billing Break Up.
4. It is deemed that copy of complete set of dispatch documents along with necessary TCs will be submitted to BHEL on the date of dispatch.
- 22.0 **Material Certificate(MRC)** : Responsibility to obtain MRC from customer at site
a) For Supply Packages:- For supply packages BHEL- PEM will arrange MRC from BHEL Site. However supplier/contractor shall provide support for verification of material at site, if required.
b) For Turnkey Packages:- By Vendor, where Supply/ Erection and commissioning is under Vendor's scope.

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- 23.0 Dispatch markings** : Each box shall be marked with Capital Letters in "Red" indicating : Main Supply OR Commissioning spare OR Mandatory Spare for 1X 660 MW SAGARDIGHI TPP EXTENSION UNIT 5, P.O. Manigram, District - Murshidabad, PIN:742237, West Bengal, India
Each package/Drum delivered under the Contract shall be marked by Supplier as per details listed below and such marking must be distinct and in English Language (all previous irrelevant markings being carefully obliterated) for purposes of identification. Each and every box(package) shall be marked with following:-
1) Name and address of the consignee.
2) Project Reference.
3) Name of Supplier
4) P.O. reference no. along with package name.
5) Packing No. (1/10, 2/10, 3/10 when there are 10 packages for one consignment)
6) The Gross weight and net weight of the package.
Besides above necessary, packing shall bear a special marking "TOP", "BOTTOM", "DO NOT TURN OVER", "DEEP DRY", "HANDLE WITH CARE", etc.
IMPORTANT
• Two copies of respective standard manufacturer's erection instruction /operation manual shall be provided for immediate reference by BHEL site.

The Copy of complete Packing list for the consignment must be put inside the Box/Boxes.
12 copies of supplier's Erection/ Instruction manuals to be given to the BHEL, PEM, PPEI- Noida and 3 copies to BHEL, PSER, Sagardighi site within 30 days of dispatch for handing over to Customer/BHEL site.

Items like pumps, Valves, Hoists, Cranes, etc. shall essentially have O&M Manuals and E&C guidelines duly enclosed in the packing box.
- 24.0 Commissioning Spares** : The commissioning spares shall be properly packed separately in separate box and each spare shall be properly tagged giving details i.e. dispatch (to match the description given in the packing slip) to facilitate their proper identification. One Copy of Packing list must be put inside the Box.
- 25.0 Mandatory Spares** : Supplies of spares will be separate from main supply and separate manufacturing clearance shall be given for mandatory spares. The Mandatory spares shall be properly packed separately in separate boxes & boxes should be painted in red indicating Mandatory Spares in bold letters and each spare shall be properly tagged giving details i.e. item number of the equipment in line with the WBPDCI approved BBU for Mandatory spares & Number per item (to match the description given in the packing slip) to facilitate their proper identification by ultimate customer M/s WBPDCI. One Copy of Packing List must be put inside the BOX along with Manufacturing drawing no. reference, Catalogue reference etc.

Note :- MDCC for mandatory Spares shall be issued only after receipt of detailed list of mandatory spares & photographs before final packing clearly showing mandatory spares with due tagging as per packing list (to be sent over mail/CD). Separate dispatch clearance will be issued for the mandatory spares in line with availability of customer's stores at site.
- 26.0 Statutory Clearance and License (For turnkey packages)** : Bidder has to arrange and obtain all statutory clearances and required licenses at their own cost without any financial implication on BHEL.
- 27.0 Health, Safety and Environment (HSE) (For turnkey packages)** : The bidder will comply with HSE (Health, Safety & Environment) requirements of BHEL and follow all applicable Operational Control Procedures (OCPs) within quoted rate/ price.
Refer Document Number: HSEP:14-SGD Rev.: 02, DATE: 01.09.2020. Refer Document

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Title: Health, Safety and Environment Plan for Site Operation by Subcontractors for Sagardighi.

28.0 Responsibilities with regard to employment of Labour etc. (For turnkey packages)

: Recruitment of Local Labour:

Local labours shall be engaged for unskilled work. Preference may also be given for appointment of local people in semiskilled and skilled categories, if such suitable persons are available.

Labour Laws and Local Regulations:

The Contractor shall abide by the prevailing labour laws and shall have to obtain labour license from the appropriate authority as per the law at his cost and shall indemnify the Purchaser about his financial and other obligations arising out of labours/workers employed by him. On obtaining the labour license, the Contractor at appropriate time shall submit certified photocopy of the same to the Purchaser. The Contractor and its sub-contractor (s) shall possess valid PF & ESI Code.

Wages and Working Hours:

The Contractor shall pay rates of Wages and observe hours and conditions of labour not less favourable than those established for the trade or industry in the district where the work is carried out but not less than the applicable minimum wages or by machinery of negotiation or arbitration to which the parties are organizations of employers and trade union's representatives respectively of substantial proportions of the employers and workers engaged in the trade or industry in the district. In the absence of any rates of Wages, hours or conditions of labour so established the Contractor shall pay rates of wages and observe hours and conditions of labour which are not less favorable than the general levels of wages and hours and conditions observed by other contractor whose general circumstances in the trade or industry in which he is engaged are similar.

Contractor to furnish return of labour employed:

The Contractor shall, if required by the Engineer, deliver to the Engineer or to his office a return in such form and at such intervals as the Engineer may prescribe showing in detail category-wise number of classes of labour from time to time employed by the Contractor on the Site and such information respecting construction machinery as the Engineer may require.

The Contractor shall make his own arrangements for the engagement of all labour and provide on the Site in so far as the Contract otherwise provides, for the transport, housing, feeding and payment thereof.

The Contractor shall, so far as is reasonably practical, having regard to local conditions, provide on the Site, to the satisfaction of the Engineer an adequate supply of drinking and other water for the use of his staff and labour.

Other Requirements:

- a) The Contractor shall not, otherwise than in accordance with the Statutes, Ordinances and Government Regulation or Orders for the time being in force, import, sell, give, barter or otherwise dispose of any alcoholic liquor, or drugs, or permit or suffer any such importation, sale, gift, barter or disposal by his sub-contractor(s), agents of employees.
- b) The Contractor shall not give, barter or otherwise dispose of to any person or persons any arms or ammunition of any kind or permit the same as aforesaid.
- c) The Contractor shall in all dealings with labour in his employment have a due regard to all recognized festivals, days of rest and religious or other customs.

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- d) In the event of any outbreak of illness of an epidemic nature, the Contractor shall comply with and carry out such regulations, orders and requirements as may be made by the Government, or the local municipal or sanitary authorities for the purpose of dealing with and overcoming the same.
- e) The Contractor shall at all times take all reasonable precautions to prevent any unlawful riotous or disorderly conduct by or amongst his employees and for the preservation of peace and protection of persons and property in the neighborhood of the Site against the same.
- f) The Contractor shall be responsible for observance by his sub-contractor(s) of the foregoing provisions.

Contractor shall deploy only qualified and experienced engineers/ supervisors. They shall have professional approach in executing the work.

The contractor's supervisory staff shall execute the work in the most professional manner in the stipulated time. Accuracy of work and aesthetic finish are essential part of this contract. They shall be responsible to ensure that the assembly and workmanship conform to dimensions and tolerances given in the drawings/instructions given by BHEL engineer from time to time.

The supervisory staff employed by the contractor shall ensure proper outturn of work and discipline on the part of the labour put on the job by the contractor. Also in general they should see that the works are carried out in a safe and proper manner and in coordination with other labour and staff employed directly by BHEL or other contractors of BHEL or BHEL 's client.

If at any time, it is found that the contractor is not in a position to deploy the required engineers/supervisors/workmen due to any reason, BHEL shall have the option to make alternate arrangements at the contractor's risk and cost.

29.0 Type of Project

Project Import Route (Non Mega)

30.0 Taxes and duties

- :
- i) Concessional Custom duty in line with the Essentiality certificate issued by customer shall be applicable for packages for which CIF content is available as per NIT.
 - ii) GST- CGST/SGST/IGST: as per GCC Rev 07 or further revisions of BHEL PEM GCC as applicable for the specific Tender enquiry.
 - iii) Vendor has to comply the BOCW norms as per details of activities noted vide relevant Annexure of NIT.

Information as per Annexure-1 shall be provided by supplier in the GST compliant invoice.

Vendor may collect TCS under section 206C(1H) of Income Tax Act,1961 if applicable. In case, vendor collects TCS under section 206C(1H) of Income Tax Act,1961, following compliance is required.

- a) TAN and PAN of vendor should appear in all invoices/claims. Copy of TAN /TCS registration is to be submitted.
- b) Amount of TCS and Assessable value on which TCS has been calculated should be specified clearly in the invoice.
- c) You shall be required to submit certificate of TCS in Form no. 270 within 15 days from the due date for furnishing the statement of tax collected at the source.

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

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"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.

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.

Vendor shall comply with all statutory amendment/notifications in this respect

**31.0 Construction power &
Construction water**

Construction power shall be provided on free of charge. Construction water shall be provided free of cost. However, metering arrangement shall be established for measuring electricity & water consumption.

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ANNEXURE -1 TO SCC

Excerpts from Chapter VI for compliance of GST Invoice as per Rule 46
TAX INVOICE, CREDIT AND DEBIT NOTES

46. Tax invoice.- Subject to rule 54, a tax invoice referred to in section 31 shall be issued by the registered person containing the following particulars, namely,-

- (a) name, address and Goods and Services Tax Identification Number of the supplier;
- (b) a consecutive serial number not exceeding sixteen characters, in one or multiple series, containing alphabets or numerals or special characters- hyphen or dash and slash symbolised as "-" and "/" respectively, and any combination thereof, unique for a financial year;
- (c) date of its issue;
- (d) name, address and Goods and Services Tax Identification Number or Unique Identity Number, if registered, of the recipient;
- (e) name and address of the recipient and the address of delivery, along with the name of the State and its code, if such recipient is un-registered and where the value of the taxable supply is fifty thousand rupees or more;
- (f) name and address of the recipient and the address of delivery, along with the name of the State and its code, if such recipient is un-registered and where the value of the taxable supply is less than fifty thousand rupees and the recipient requests that such details be recorded in the tax invoice;
- (g) Harmonised System of Nomenclature code for goods or services;
- (h) description of goods or services;
- (i) quantity in case of goods and unit or Unique Quantity Code thereof;
- (j) total value of supply of goods or services or both;
- (k) taxable value of the supply of goods or services or both taking into account discount or abatement, if any;
- (l) rate of tax (central tax, State tax, integrated tax, Union territory tax or cess);
- (m) amount of tax charged in respect of taxable goods or services (central tax, State tax, integrated tax, Union territory tax or cess);
- (n) place of supply along with the name of the State, in the case of a supply in the course of inter-State trade or commerce;
- (o) address of delivery where the same is different from the place of supply;
- (p) whether the tax is payable on reverse charge basis; and
- (q) signature or digital signature of the supplier or his authorized representative:
- (r) Quick Reference code, having embedded Invoice Reference Number (IRN) in it, in case invoice has been issued in the manner prescribed under sub-rule (4) of rule 48".

	PREPARED BY	CHECKED BY	REVIEWED BY	APPROVED BY
Name:	TARUN ARYA	ASHUTOSH SHARMA	HASEEN AHMED	B. L. BEDI
Designation	DY MANAGER /PEM (PG I)	DY MANAGER /PEM (PG I)	SR. MANAGER /PEM (PG I)	AGM(DH)/ PEM (PG I&II)
Signature				
Date				

**Ashutos
h
Sharma**

Digitally signed by Ashutosh Sharma
DN: c=IN, o=BHARAT HEAVY
ELECTRICALS LIMITED, ou=BHEL PS
PEM, postalCode=201301, st=Uttar
Pradesh,
2.5.4.20=4edbc62da83d0774fdb01
d4fac79e7722130a9f8e68309a4c30b
11cea5b1ed,
serialNumber=b30240406e83ce42d5
102de3e9313352dbc73bc5041eff90c
e0d94aa87e1b9a2, cn=Ashutosh
Sharma
Date: 2021.09.10 17:31:18 +05'30'