

CORRIGENDUM - 1 dated 04.09.2020 TO TENDER SPECIFICATION BHEL PSSR SCT 1914 - DT: 18.08.2020

Sub: Package-A (Unit-3) and Package-B (Unit-4) for Erection of Piping and associated equipment that includes Handling, transportation, fabrication, assembly, erection, welding, NDT, inspection & testing of piping and erection of associated equipment along with accessories, structures, insulation for Nuclear and Nuclear auxiliary systems in reactor auxiliary buildings, safety system building, solid radioactive waste reprocessing & storage building and new fuel storage building at 2x 1000 MWe Kudankulam Nuclear Power Project.

A. The following clarifications are provided in response to queries received from bidders.

S No	Clause No	Existing in tender	Bidder's query	BHEL's Reply
1.	Volume II Price Bid - Part C: BOQ, Clause 2.1.1	Pipe size above 80 NB to 300 NB	Please confirm the material and also provide the wall thickness to assess the working cost.	The pipe dimension OD & ID is available in table no 1 of 2.2.4 chapter II Vol IA Part II
2.	Volume II Price Bid - Part C: BOQ, Clause 2.1.2	Pipe size greater than 300 NB	Please confirm the material and also provide the wall thickness to assess the working cost.	The pipe dimension OD & ID is available in table no 1 of 2.2.4 chapter II Vol IA Part II
3.	Volume II Price Bid - Part C: BOQ, Clause 3.2	Ultrasonic examination of weld joints: Development of procedure probes of various configuration, couplants, cleaning consumables like acetone.	As understood from description Ultrasonic testing is by conventional method not the PAUT method and please also confirm UT is recordable/non recordable and percentage of testing.	Ultrasonic testing of conventional is specified in tender. However, PAUT method may be used on approval of NPCIL. UT report to be submitted as mentioned in tender section 2.2.7 chapter II Vol IA Part II <i>"UT FOR NIEP ERECTION PACKAGE WORKS"</i>

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				% of NDE is depends up on category of weld. However, the payment will be made on inch dia of NDE performed.
4.	Volume II Price Bid - Part C: BOQ, Clause 3.4	Vacuum box testing of the welding joints of various configurations: scaffolding, vacuum pump, calibrated vacuum gauge, tools tackles & consumables such as cleaning agents.	Please confirm the percentage of vacuum box testing and probable sizes.	Weld joints shall be subjected to 100% visual, 100% vacuum box testing. welding is measured in RM (Running meter). One running meter of welding includes welding of one meter of panel on both sides (up to 5mm fillet) plus welding of one-meter cover strip on either side (up to 5mm fillet). i.e. total 4meters of welding up to 5mm fillet for measuring 1 Running meter.
5.	Volume II Price Bid - Part C: BOQ, Clause 6.1	<u>Supply</u> and application of epoxy paint on pipe support structures: Supply of epoxy paint such as cotton waste, and preparation of report & submission for BHEL/NPCIL acceptance.	Supply of paints may be omitted from bidder's scope and measurement should be in running meter for different sizes (OD) of pipes/section of other structural material.	Supply & application of Epoxy painting on Pipes & equipment's is not in bidder scope. The scope is limited to painting of pipe supports & metal structures supplied by the bidder Measurement is in MT of pipe support structures.
6.	Volume II Price Bid - Part C: BOQ, Clause 7.1	<u>Supply</u> and application of thermal Insulation of such as	Supply may be omitted from bidders scope, Please confirm.	Supply of thermal insulation shall be in bidder scope.

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		acetone and preparation of reports and submission for acceptance.		
7.	Volume II Price Bid - Part C: BOQ, Clause 7.1.1	Fixed type insulation	<p>Supply of insulation of various thicknesses may be omitted. Thickness of insulation, No. of layers, thickness of cladding sheet. Supply and application of sealing compound etc is not included.</p> <p>Insulation of pipe upto 100mm should be in RM (Running Meter) otherwise measurement method is to be specified whether it is to that of pipe or top of cladding surface. Site wrapping of insulation in glass sheet is additional work.</p> <p>In case insulation material used is like pyrogel/cryogel it will give better results and spacing. Thickness of aluminum cladding need a mention, Please confirm.</p>	<p>Supply of fixed type insulation shall be in bidder scope.</p> <p>Details of Thickness of insulation & supply of sealing material are mentioned in tender section 2.2.17 Chapter II Vol IA Part II SUPPLY AND APPLICATION OF HOT INSULATION USING CERAMIC BLANKET (FIXED & REMOVABLE) ON PIPING SYSTEMS AND EQUIPMENT</p>
8.	Volume II Price Bid - Part C: BOQ, Clause 7.1.3	<u>Supply</u> and application of aluminum foil	Please provide the thickness.	Supply of Aluminum foil 0.1mm thick for required width and length conforming to IS737-2008.
9.	Volume II Price Bid - Part C: BOQ, Clause 7.4	Cold Insulation of Pipeline and equipment: Supply and application of with thermoformed fittings of the same composite covering system.	Supply of cold insulation may be omitted and all insulation of pipe upto 100 mm may be in Running Meters.	Supply of cold insulation shall be in bidder scope. Measurement is in sq.m
10.	Volume II Price Bid - Part C: BOQ, Clause 9.0	Erection and welding of O-let/ thermo well lug:	Please confirm the material of pipe.	Material of construction of these O-lets shall be of carbon steel or stainless steel.

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		Identification of pipe spools material, preparation of reports and submission for acceptance.		
11.	Volume II Price Bid - Part C: BOQ, Clause 10.1	<u>Supply</u> , fabrication and erection of carbon steel Metal structures : Supply of structural steel plant and machineries, welding electrodes , other consumables and preparation of reports and submission form acceptance.	Supply may be omitted from bidders scope, Please confirm.	Supply of structural steel shall be in bidder scope.
12.	Volume II Price Bid - Part C: BOQ, Clause 10.2.2	<u>Supply</u> , fabrication and erection of stainless-steel structural work: Supply of stainless steel scaffolding and other consumables preparation of reports and submission for acceptance.	Supply may be omitted from bidders scope, Please confirm.	Supply of structural steel shall be in bidder scope.

B. The following clauses in the tender are revised as below: -

S.No	Chapter Ref	Existing Clause	Revised as
1	Volume I Book I NIT Clause 32.0	For this procurement, Public Procurement (Preference to Make in India), Order 2017 dated 15.06.2017, 28.05.2018, 29.05.2019 & 04.06.2020 and subsequent Orders issued by the respective Nodal Ministry shall be applicable even if issued after issue of this NIT but before finalization of contract/ PO/ WO against this NIT.	For this procurement, the local content to categorize a supplier as a Class I local supplier/ Class II local supplier/ Non- Local supplier and purchase preference to Class I local supplier, is as defined in Public Procurement (Preference to Make in India), Order 2017 dated 04.06.2020 issued by DPIT. In case of subsequent Orders issued by the Nodal Ministry, changing the definition of local content for the items of the

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		In the event of any Nodal Ministry prescribing higher or lower percentage of purchase preference and/ or local content in respect of this procurement, same shall be applicable.	NIT, the same shall be applicable even if issued after issue of this NIT, but before opening of Part-II bids against this NIT.
2	Tender Specification Volume I and Volume II	BHEL-PSSR address mentioned in certain clauses of the tender specification - Bharat Heavy Electricals Limited, Power Sector Southern Region, 690, Anna Salai, Nandanam, Chennai - 600035	BHEL PSSR address may be read as - Bharat Heavy Electricals Limited, Power Sector Southern Region, Tek Towers, No.11, Old Mahabalipuram Road, Okkiyam Thoraipakkam, Chennai - 600097
3	Volume IA TCC: Part I Chapter II - Scope of works and Volume IA TCC: Part I Chapter XV - Supply of material by NPCIL & contractor	<u>Fixing of anchor fasteners</u> VOLUME-IA PART-I CHAPTER – II Clause no: 1.2.3.1.9: Supply and fixing of Hilti make anchor fastener wherever embedded fastener/plates are not available as per approved drawings. VOLUME - IA PART – I CHAPTER – XV Clause no: 1.15.3.4.2: Hilti make anchor fasteners shall be supplied & installed by the contractor. Clause no: 1.15.7: MATERIAL SUPPLY FROM CONTRACTOR: 1.15.7.4: Hilti make anchor fasteners of various type and sizes.	Supply of Hilti fasteners is not in bidder's scope. scope is limited to only fixing of Anchor fasteners (Hilti fasteners will be supplied by NPCIL at free of cost); because scope is not envisaged as per BOQ.
4	Volume IA TCC: Part I Chapter VII - Terms of Payment	BOQ Item no 11.1.1, 11.1.2, 11.1.3, 11.2.1, 11.2.2, 11.2.3"	Supply and fixing of anchor fasteners is modified as Fixing of anchor fasteners.
5	Volume IA TCC: Part I Chapter II - Scope of works and	Volume IA Part II Chapter II - Technical Specification and scope of work	Supply & application of Epoxy painting on Pipes & equipment's is not in bidder scope. The scope is

S.No	Chapter Ref	Existing Clause	Revised as
	Volume IA Part II Chapter II - Technical Specification and scope of work detailed	<p>detailed</p> <p>3.4 Application of high temperature paint (OC51-03):</p> <p>3.4 Application of high temperature paint (OC51-03):</p> <p>2. Scope:</p> <p>Point:</p> <p>iv & v</p> <p>Supply of high temperature radiation resistance paint OC51-03 and application of KO921 varnish.</p> <p>viii. Application of epoxy paint and high temperature radiation resistance paint with varnish as per the requirement over pipe supports, metal structure and various equipment to required thickness.</p> <p>VOLUME-IA PART-I CHAPTER – II</p> <p>1.2.3.1.13:</p> <p>Supply and application of Epoxy/special purpose high temperature & radiation resistant paint on various equipments, pipelines and support and metal structures</p>	<p>limited to painting of pipe supports & metal structures supplied by the bidder</p> <p>Supply & application of high temperature radiation resistance paint OC51-03 and application of KO921 varnish on equipments & Pipe are not in bidder's scope; because scope is not envisaged as per BOQ.</p>

NOTE:

1. ALL OTHER CONDITIONS REMAIN UNCHANGED.
2. BIDDERS ARE REQUESTED TO CONSIDER THIS CORRIGENDUM AS PART OF TENDER SPECIFICATION AND QUOTE ACCORDINGLY.