

To be given on Letter head of Bidder

Ref:

Date:

To,

Bharat Heavy Electricals Limited
PEM, PPEI Building,
Plot No 25, Sector -16A
Noida (U.P)-201301

Reference:

Order no-F6/18/2019-PPD dated 23.07.2020 issued by Ministry of Finance.

Tender Enquiry No-.....

Offer No-.....

Name of Package:

Dear Sir,

I have read the clause regarding restriction on procurement from a bidder of a country which shares a land border with India. I hereby certify that(Company name), is not from such a country and is eligible to be considered.

Thanking You,

Yours faithfully,

(Company director seal and signature)

INTEGRITY PACT

Between

Bharat Heavy Electricals Ltd. (BHEL), a company registered under the Companies Act 1956 and having its registered office at "BHEL House", Siri Fort, New Delhi - 110049 (India) hereinafter referred to as "The Principal", which expression unless repugnant to the context or meaning hereof shall include its successors or assigns of the ONE PART

and

_____, (description of the party along with address), hereinafter referred to as "The Bidder/ Contractor" which expression unless repugnant to the context or meaning hereof shall include its successors or assigns of the OTHER PART

Preamble

The Principal intends to award, under laid-down organizational procedures, contract/s for _____

_____. The Principal values full compliance with all relevant laws of the land, rules and regulations, and the principles of economic use of resources, and of fairness and transparency in its relations with its Bidder(s)/ Contractor(s).

In order to achieve these goals, the Principal will appoint Independent External Monitor(s), who will monitor the tender process and the execution of the contract for compliance with the principles mentioned above.

Section 1- Commitments of the Principal

1.1 The Principal commits itself to take all measures necessary to prevent corruption and to observe the following principles:-

1.1.1 No employee of the Principal, personally or through family members, will in connection with the tender for, or the execution of a contract, demand, take a promise for or accept, for self or third person, any material or immaterial benefit which the person is not legally entitled to.

1.1.2 The Principal will, during the tender process treat all Bidder(s) with equity and reason. The Principal will in particular, before and during the tender process, provide to all Bidder(s) the same information and will not provide to any Bidder(s) confidential/ additional information through which the Bidder(s) could obtain an advantage in relation to the tender process or the contract execution.

1.1.3 The Principal will exclude from the process all known prejudiced persons.

1.2 If the Principal obtains information on the conduct of any of its employees which is a penal offence under the Indian Penal Code 1860 and Prevention of Corruption Act 1988 or any other statutory penal enactment, or if there be a substantive suspicion in this regard, the Principal will inform its Vigilance Office and in addition can initiate disciplinary actions:

Section 2 - Commitments of the Bidder(s)/ Contractor(s)

- 2.1 The Bidder(s)/ Contractor(s) commit himself to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the tender process and during the contract execution.
- 2.1.1 The Bidder(s)/ Contractor(s) will not, directly or through any other person or firm, offer, promise or give to the Principal or to any of the Principal's employees involved in the tender process or the execution of the contract or to any third person any material, immaterial or any other benefit which he/ she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the tender process or during the execution of the contract.
- 2.1.2 The Bidder(s)/ Contractor(s) will not enter with other Bidder(s) into any illegal or undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelization in the bidding process.
- 2.1.3 The Bidder(s)/ Contractor(s) will not commit any penal offence under the relevant Indian Penal Code (IPC) and Prevention of Corruption Act; further the Bidder(s)/ Contractor(s) will not use improperly, for purposes of competition or personal gain, or pass on to others, any information or document provided by the Principal as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.
- 2.1.4 Foreign Bidder(s)/ Contractor(s) shall disclose the name and address of agents and representatives in India and Indian Bidder(s)/ Contractor(s) to disclose their foreign principals or associates. The Bidder(s)/ Contractor(s) 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.
- 2.2 The Bidder(s)/ Contractor(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.
- 2.3 The Bidder(s)/ Contractor(s) shall not approach the Courts while representing the matters to IEMs and will await their decision in the matter.

Section 3 - Disqualification from tender process and exclusion from future contracts

If the Bidder(s)/ Contractor(s), before award or during execution has committed a transgression through a violation of Section 2 above, or acts in any other manner such as to put his reliability or credibility in question, the Principal is entitled to disqualify the Bidder(s)/ Contractor(s) from the tender process or take action as per the separate "Guidelines on Banning of Business dealings with Suppliers/ Contractors", framed by the Principal.

Section 4 - Compensation for Damages

- 4.1 If the Principal has disqualified the Bidder from the tender process prior to the award according to Section 3, the Principal is entitled to demand and recover the damages equivalent Earnest Money Deposit/ Bid Security.
- 4.2 If the Principal has terminated the contract according to Section 3, or if the Principal is entitled to terminate the contract according to section 3, the Principal shall be entitled to

demand and recover from the Contractor liquidated damages equivalent to 5% of the contract value or the amount equivalent to Security Deposit/ Performance Bank Guarantee, whichever is higher.

Section 5 - Previous Transgression

- 5.1 The Bidder declares that no previous transgressions occurred in the last 3 years with any other company in any country conforming to the anti-corruption approach or with any other Public Sector Enterprise in India that could justify his exclusion from the tender process.
- 5.2 If the Bidder makes incorrect statement on this subject, he can be disqualified from the tender process or the contract, if already awarded, can be terminated for such reason.

Section 6 - Equal treatment of all Bidders/ Contractors / Sub-contractors

- 6.1 The Principal will enter into agreements with identical conditions as this one with all Bidders and Contractors. In case of sub-contracting, the Principal contractor shall be responsible for the adoption of IP by his sub-contractors and shall continue to remain responsible for any default by his sub-contractors.
- 6.2 The Principal will disqualify from the tender process all bidders who do not sign this pact or violate its provisions.

Section 7 - Criminal Charges against violating Bidders/ Contractors /Subcontractors

If the Principal obtains knowledge of conduct of a Bidder, Contractor or Subcontractor, or of an employee or a representative or an associate of a Bidder, Contractor or Subcontractor which constitutes corruption, or if the Principal has substantive suspicion in this regard, the Principal will inform the Vigilance Office.

Section 8 - Independent External Monitor(s)

- 8.1 The Principal appoints competent and credible Independent External Monitor for this Pact. The task of the Monitor is to review independently and objectively, whether and to what extent the parties comply with the obligations under this agreement.
- 8.2 The Monitor is not subject to instructions by the representatives of the parties and performs his functions neutrally and independently. He reports to the CMD, BHEL.
- 8.3 The Bidder(s)/ Contractor(s) accepts that the Monitor has the right to access without restriction to all contract documentation of the Principal including that provided by the Bidder(s)/ Contractor(s). The Bidder(s)/ Contractor(s) will grant the monitor, upon his request and demonstration of a valid interest, unrestricted and unconditional access to his contract documentation. The same is applicable to Sub-contractor(s). The Monitor is under contractual obligation to treat the information and documents of the Bidder(s)/ Contractor(s) / Sub-contractor(s) with confidentiality in line with Non- disclosure agreement.
- 8.4 The Principal will provide to the Monitor sufficient information about all meetings among the parties related to the contract provided such meetings could have an impact on the contractual relations between the Principal and the Contractor. The parties offer to the Monitor the option to participate in such meetings.

- 8.5 The role of IEMs is advisory, would not be legally binding and it is restricted to resolving issues raised by an intending bidder regarding any aspect of the tender which allegedly restricts competition or bias towards some bidders. At the same time, it must be understood that IEMs are not consultants to the Management. Their role is independent in nature and the advice once tendered would not be subject to review at the request of the organization.
- 8.6 For ensuring the desired transparency and objectivity in dealing with the complaints arising out of any tendering process, the matter should be examined by the full panel of IEMs jointly as far as possible, who would look into the records, conduct an investigation, and submit their joint recommendations to the Management.
- 8.7 The IEMs would examine all complaints received by them and give their recommendations/ views to CMD, BHEL, at the earliest. They may also send their report directly to the CVO and the Commission, in case of suspicion of serious irregularities requiring legal/ administrative action. IEMs will tender their advice on the complaints within 10 days as far as possible.
- 8.8 The CMD, BHEL shall decide the compensation to be paid to the Monitor and its terms and conditions.
- 8.9 IEM should examine the process integrity, they are not expected to concern themselves with fixing of responsibility of officers. Complaints alleging mala fide on the part of any officer of the organization should be looked into by the CVO of the concerned organisation.
- 8.10 If the Monitor has reported to the CMD, BHEL, a substantiated suspicion of an offence under relevant Indian Penal Code/ Prevention of Corruption Act, and the CMD, BHEL has not, within reasonable time, taken visible action to proceed against such offence or reported it to the Vigilance Office, the Monitor may also transmit this information directly to the Central Vigilance Commissioner, Government of India.
- 8.11 The number of Independent External Monitor(s) shall be decided by the CMD, BHEL.
- 8.12 The word 'Monitor' would include both singular and plural.

Section 9 - Pact Duration

- 9.1 This Pact shall be operative from the date IP is signed by both the parties till the final completion of contract for successful bidder and for all other bidders 6 months after the contract has been awarded. Issues like warranty / guarantee etc. should be outside the purview of IEMs.
- 9.2 If any claim is made/ lodged during currency of IP, the same shall be binding and continue to be valid despite the lapse of this pact as specified above, unless it is discharged/ determined by the CMD, BHEL.

Section 10 - Other Provisions

- 10.1 This agreement is subject to Indian Laws and jurisdiction shall be registered office of the Principal, i.e. New Delhi.

10.2 Changes and supplements as well as termination notices need to be made in writing. Side agreements have not been made.

10.3 If the Contractor is a partnership or a consortium, this agreement must be signed by all partners or consortium members.

10.4 Should one or several provisions of this agreement turn out to be invalid, the remainder of this agreement remains valid. In this case, the parties will strive to come to an agreement to their original intentions.

10.5 Only those bidders / contractors who have entered into this agreement with the Principal would be competent to participate in the bidding. In other words, entering into this agreement would be a preliminary qualification.



For & On behalf of the Principal

(Office Seal)

For & On behalf of the Bidder/

Contractor

(Office Seal)

Place_____

Date_____

Witness:_____

(Name & Address) _____

Witness:_____

(Name & Address) _____

NAME OF BIDDER :								
NAME OF PROJECT:		1 X 660 MW WBPDCS SAGARDIGHI EXTN V						
NAME OF PACKAGE:		AIR CONDITIONING SYSTEM						
TECHNICAL SPECIFICATION:		PE-TS-445-553-A001						
TENDER ENQUIRY NO :		PE/PG/SG/E-6703/2021 Dated 23.07.2021						
Sl. No.	DESCRIPTION	UNIT	QTY	Total Price excluding GST (INR)	Freight in %	Total Freight	Total FOR Site Price Including Freight but excluding GST (INR)	Total FOR Site Price Including Freight but excluding GST in Words
1.0	Total lump sum firm price for Supply part, Services part and Mandatory spares comprising of design (i.e.preparation and submission of drawing /documents including “As Built” drawings and O&M manuals), engineering, manufacture, fabrication, assembly, inspection / testing at vendor’s & sub-vendor’s works, painting, maintenance tools & tackles (as applicable) fill of lubricants & consumables, mandatory spares alongwith spares for erection, startup and commissioning as required, forwarding, proper packing, shipment and delivery at site, unloading, handling, in-site transportation, assembly, erection & commissioning, final painting at site, minor civil work, trial run at site and carrying out Performance guarantee / Functional / Demonstration tests at site (As applicable), training of customer/client O&M staff, Operation & Maintenance of AC System (24x7) before handing over after commissioning, and handover in flawless condition of the package to the end customer complete with all accessories, for the total scope defined as per BHEL NIT & tender technical specification as specified above, amendment & agreements till placement of order.	Lot	1	0		0	0	-
2.0	MAJOR BREAK-UP OF PRICES GIVEN IN 1.0 ABOVE.							
2.1	Total lumpsum firm price for Design (i.e. Preparation and submission of drawing /documents including “As Built” drawings and O&M manuals) and engineering as per tender technical specification above, amendment & agreements till placement of order. (Refer Note-4 below)	LOT	1		NA		0	-
2.2	Total lump sum firm price for Supply part comprising of manufacture, fabrication, assembly, inspection / testing at vendor’s & sub-vendor’s works, painting, maintenance tools & tackles (as applicable), fill of lubricants & consumables along with spares for erection as required, start-up and commissioning spares as required, forwarding, proper packing, shipment and delivery at site for the total scope defined as per BHEL NIT & tender technical specification as specified above, amendment & agreements till placement of order. (Break-up as per Annexure-I)	Lot	1	0		0	0	-
2.3	Total lumpsum firm prices for Services part comprising for unloading, handling, transporation to site, in-site transportation, assembly, erection & commissioning, final painting at site, minor civil work, trial run at site and carrying out Performance guarantee / Functional / Demonstration tests at site (As applicable), training of customer/client O&M staff and handover in flawless condition of the package to the end customer complete with all accessories, for the total scope defined as per BHEL NIT & tender technical specification as specified above, amendment & agreements till placement of order. (Break-up as per Annexure-I)	Lot	1	0	NA		0	-
2.4	Total lumpsum firm price for Mandatory Spares comprising of manufacture, fabrication, assembly, inspection / testing (as applicable) at vendor’s & sub-vendor’s works, painting, forwarding, proper packing, shipment, delivery at site & guarantee as per tender technical specification above, amendment & agreements till placement of order. (Price break up of mandatory spares is to be furnished as per Annexure- II)	Lot	1	0		0	0	-
2.5	Total lumpsum firm for providing OPERATION AND MAINTENANCE SERVICE (24x7) including manpower, supervision, consumables etc. for operation & maintenance of HVAC System after commissioning of AC system before final handing over to end customer in flawless condition for the scope defined as per technical specification.	Months*	12		NA		0	-
Note: 1) BOP to consider and suitably incorporate taxes, duties and other commercial aspects. 2) Bidder to quote the Prices in ‘figures’ along with corresponding ‘words’. 3) Lumpsum price quoted at Sl.no 1.0 shall be considered for evaluation. 4) The Engineering charges as mentioned above in S.No. 2.1* shall not be more than 2% of the contract value for AC System (including main supply, E&C, Mandatory Spares Etc. i.e Total of Sl.no.2.2, 2.3 & 2.4 only) as per Sl. No. 1.0 of GCC. Further, out of this total 2% amount for Design, 1% shall be payable after submission of basic engineering drawings / documents (as mentioned in relevant chapter of technical specification) whereas remaining 1% shall be payable after approval of basic engineering drawings / documents as per tender specification. 5) For detailed scope of Operation and Maintenance Services, Technical Specification to be referred. Any variation in no. of months shall be exercised based on unit rate arrived from price quoted against Sl.no 2.5 above.								

ANNEXURE-I							
NAME OF PROJECT:		1 X 660 MW WBDCL SAGARDIGHI EXTN V					
NAME OF PACKAGE:		AIR CONDITIONING SYSTEM					
TECHNICAL SPECIFICATION:		PE-TS-445-553-A001					
TENDER ENQUIRY NO :		PE/PG/SGI/E-6703/2021 Dated 23.07.2021					
Sl. No.	DESCRIPTION	Unit	QTY	SUPPLY		SERVICES	
				Unit Ex-works duly packed (INR)	Total Ex-works duly packed (INR)	Unit E&C Price (INR)	Total E&C Price (INR)
2.1	BREAK-UP OF ITEMS MENTIONED AT S. NO. 2.2 OF MAIN SHEET						
A	AC Plant-1: CENTRAL CHILLED WATER SYSTEM FOR MAIN CR AREAS FOR UNIT-5.						
1	Water cooled Chilling machine each of minimum 110 TR (actual) capacity consisting of (a) Screw refrigerant compressor(s) complete with motors, micro-processor control panel, multi drive set, controls and interlocks other accessories as specified; (b) Water cooled condenser adequately sized with suitable anti corrosive paint coating for tube and shell part coming in contact with soft water & other accessories and (c) Shell & tube type water chiller & other accessories, as specified.	NO	3		0		0
2	Sheet metal cabinet type air handling units (double skin as per specification) consisting of chilled water cooling coil, centrifugal blower(s), TEFC sq. cage induction motor, pre-filters, 3-way motorised mixing valve with thermostatic controls, NRD, and other accessories to meet the AC load of the main CR area of Unit # 5 at 17.0M . High Efficiency Filters shall be provided at discharge of AHUs as per specification.	NO	3		0		0
3	Sheet metal cabinet type air handling units (double skin as per specification) consisting of chilled water cooling coil, centrifugal blower(s), TEFC sq. cage induction motor, pre-filters, 3-way motorised mixing valve with thermostatic controls, NRD and other accessories to meet the AC load of the main CR area of Unit # 5 at 8.5m . High Efficiency Filters shall be provided at discharge of AHUs as per specification.	NO	3		0		0
4*	Ceiling suspended AHU consisting of chilled water cooling coil, blower, motor, driveset, filters (prefilter), 3-way motorised mixing valve with thermostatic controls, NRD and other accessories to meet the AC load of different areas. High Efficiency Filters (if required) shall be provided at discharge of AHUs as per specification.						
a*	10 TR	NO*	2		0		0
b*	7 TR	NO*	2		0		0
c*	5 TR	NO*	2		0		0
5	Fibreglass reinforced plastic (FRP) construction cooling towers (common for AC Plant-1 & AC Plant-2) complete with fan, motor, FRP basin, nozzles, make-up water, quick fill, equalising and drain water connection. instruments, piping, valves, strainers, ladder & structural support and all accessories as specified as per specification.	NO	2		0		0
6	Centrifugal pump sets for condenser water recirculation (common for AC Plant-1 & AC Plant-2) complete with TEFC motor & all accessories as specified.	NO	3		0		0
7	Centrifugal pump sets for chilled water recirculation complete with TEFC motor drive set & all accessories, as specified.	NO	3		0		0
8*	FRP Make up water Tank (common for AC Plant-1 & AC Plant-2) of Min. 4m3 capacity with make up water line with float valve, quick fill line with ball valve, drain line with ball valve, overflow & vent line, instruments, valves and all other accessories as per specification.	Nos*	1		0		0
9*	FRP Make up (soft water) water cum storage tank (common for AC Plant-1 & AC Plant-2) of Min 8m3 capacity for cooling towers with make up water line with float valve, quick fill line with ball valve, drain line with ball valve, overflow & vent line,instruments, valves and all other accessories as per specification .	Nos*	2		0		0
10	FRP Expansion Tank of min 2 m3 capacity for chilled water with insulation, Make up water line with float valve, quick fill line with ball valve, drain line with ball valve, overflow & vent line, instruments and valves as per specification.	NO	1		0		0
11	Skid mounted softening plant (2 x 100 %) (common for AC Plant-1 & AC Plant-2) with associated piping, valves, instruments, pumps for make up, regeneration pumps & vessels, buffer tank as applicable with suitable rubber lining & as per tender requirement , Along with chemicals for dosing and with all accessories to meet system requirements and as specification.	Sets	1		0		0
12*	HDPE Piping (as per requirement) complying to IS 4984, PN 10, PE80 carbon black, UV rating) along with valves for transferring softening plant reject and cooling tower blow down to nearest ETP sump.	mtrs*	100		0		0
13*	Pumps with motor set of suitable material along with accessories for pumping of softening plant reject and cooling tower blow down as per specification to nearest ETP sump located at approx 100 mtrs distance.	Nos*	2		0		0
14	Condenser water piping (Common for AC Plant 1 and AC Plant 2) with necessary fittings like tee, reducer, expander, elbow, flange, strainer with flange, air vent, all types of valves with flanges, valves including piping from soft water storage tank to pan humidifiers of AHU room & PAC room.	LOT	1		0		0
15	Complete Insulated Chilled water piping with necessary fittings like tees, reducers, expanders, elbows, flanges, all types of valves with flanges, strainers with flanges, air vents etc with supports as per specifications.	LOT	1		0		0
16	Monsoon reheating / winter heating kit comprising strip heaters, safety controls, air-stat, contactors, frame work, thermostat & humidistat/ sensors etc.	LOT	1		0		0
17	HUMIDIFIER for each AHU room complete with humidistat, safety controls, make up water piping from make up tank / nearest source of water, valves fittings etc	LOT	1		0		0
18	Fresh air fan (axial flow type), complete with motor, inlet cone, air filters (pre and fine), dampers etc. along with support structure and other accessories for each AHU room	LOT	1		0		0
19	Smoke exhaust fan complete with flame proof motor & mounting frame, motorized isolating dampers with cowl & bird screen alongwith support structure and other accessories for each AHU room	LOT	1		0		0
B	AC Plant -2, (For ESP CUM FGD control room) for Unit-5						
1*	Water cooled precision package unit of min. 20 TR actual capacity consisting of compressor, water cooled condenser, evaporator with blower and motor, expansion valve, filter, etc & all other accessories as specified.	Nos*	8		0		0
2	Fresh air fan (axial flow type), complete with motor, inlet cone, air filters (pre and fine), dampers etc. along with support structure and other accessories for PAC room	LOT	1		0		0
3	Smoke exhaust fan complete with flame proof motor & mounting frame, motorized isolating dampers with cowl & bird screen alongwith support structure and other accessories for PAC room	LOT	1		0		0
C	ITEMS COMMON TO ALL AC PLANTS						
1*	GI ducting (finished), diffusers/ grills, volume control dampers etc. complete with all accessories as required to complete ducting system.						
1.1*	Galvanised steel sheets (finished) having zinc coating of atleast 180 gms/ sqm ducting complete with accessories like flanges, bracings, nuts, bolts, washers, gasket, locknut, hilti, threaded hanging rods, supports, vanes, splitter dampers, sealant, adhesive etc. required to make the installation complete in all respect.						
(a)*	18G.	SQM*	450		0		0
(b)*	20G.	SQM*	450		0		0
(c)*	22G.	SQM*	1200		0		0
(d)*	24G.	SQM*	2000		0		0
1.2*	SUPPLY AIR DIFFUSERS / GRILLS with VCD (Extruded Aluminium powder coated) complete with fixing frames, nuts, bolts, gaskets, washers etc	SQM*	35		0		0
1.3*	RETURN AIR DIFFUSERS / GRILLS without VCD (Extruded Aluminium powder coated) complete with fixing frames, nuts, bolts, gaskets, washers etc	SQM*	55		0		0
1.4*	VOLUME CONTROL DAMPERS in GI construction as per specifications for supply / return ducts complete with fixing arrangement.	SQM*	8		0		0
1.5*	Fire damper.						
(a)*	Fire damper with auto resetting, limit switches, indication lamps etc.	SQM*	12		0		0
(b)*	Motorized actuator with single phase power supply for the above fire damper / MD / VCD.	NO*	15		0		0
2	Acoustic insulation of ducting from AHU, Precision AC, Package AC etc outlets with material and finish as per specifications.	LOT	1		0		0
3*	Thermal insulation of supply air duct & return air duct with finish as specified.	SQM*	4300		0		0

APPENDIX-A (Special Tools & Tackles for maintenance)					
NAME OF PROJECT:		1 X 660 MW WBPDCCL SAGARDIGHI EXTN V			
NAME OF PACKAGE:		AIR CONDITIONING SYSTEM			
TECHNICAL SPECIFICATION:		PE-TS-445-553-A001			
TENDER ENQUIRY NO :		PE/PG/SGI/E-6703/2021 Dated 23.07.2021			
Sl. No.	DESCRIPTION	UNIT	QTY	Unit Ex-works duly packed (INR)	Total Ex-works duly packed (INR)
1	FLAT D WRENCH - 6 MM TO 32 MM (12 Pcs)	SET	1		0
2	BOX WRENCHES - 6 MM TO 22 MM (14 Pcs)	SET	1		0
3	RING SPANNER - 6 MM TO 32 MM (12 Pcs)	SET	1		0
4	ALLEN KEYS - 2 MM TO 10 MM	SET	1		0
5	CRESCENT SCREW SPANNER	NO.	1		0
6	SCREW DRIVER	NO.	1		0
7	OFFSET SCREW DRIVER	NO.	1		0
8	INSULATED PLIER	NO.	1		0
9	TORCH LIGHT FOR 2 CELL	NO.	1		0
10	HAMMER 1 LB	NO.	1		0
11	OIL CAN	NO.	1		0
12	POCKET THERMOMETER - 0 TO 50 DEG. C)	NO.	1		0
13	INSULATION TAPE ROLL	NO.	1		0
14	STEEL FOOT RULE - 12"	NO.	1		0
15	FEELER GAUGE 9 BLADES	NO.	1		0
16	PIPE WRENCH	NO.	1		0
17	FLARE NUT (1/4")	NOS.	6		0
18	FLARING TOOL	NO.	1		0
19	TUBE CUTTER	NO.	1		0
20	GAS CHARGING PIPE	NO.	1		0
21	NITROGEN CHARGING ADAPTER	NO.	1		0
22	FREON PRESSURE GAUGE (2 1/2" DIA DIAL)) 0 - 300 MM PSI	NO.	1		0
23	FREON PRESSURE GAUGE (2 1/2" DIA DIAL)) 30 - 150 MM PSI	NO.	1		0

APPENDIX-A (Special Tools & Tackles for maintenance)					
NAME OF PROJECT:		1 X 660 MW WBPDCS SAGARDIGHI EXTN V			
NAME OF PACKAGE:		AIR CONDITIONING SYSTEM			
TECHNICAL SPECIFICATION:		PE-TS-445-553-A001			
TENDER ENQUIRY NO :		PE/PG/SGI/E-6703/2021 Dated 23.07.2021			
Sl. No.	DESCRIPTION	UNIT	QTY	Unit Ex-works duly packed (INR)	Total Ex-works duly packed (INR)
24	PSYCHRO METER	NO.	1		0
25	LOCK WITH KEY FOR TOOL BOX	NO.	1		0
26	RATCHET 1/4"	NO.	1		0
27	MS TOOL BOX	NO.	1		0
	Total				0
NOTES:-					
1	Above is the minimum list. Any other Tools and tackles required for AC system w.r.t. Mechanical, Electrical and C&I part shall also be provided by the Bidder as per system / customer requirement without any commercial & Delivery implication to BHEL.				
2	Supply of special tools and tackle including toolbox required for operation, maintenance and overhauling of the system is in the scope of the bidder.				

NAME OF PROJECT:		1 X 660 MW WBPDCCL SAGARDIGHI EXTN V			
NAME OF PACKAGE:		AIR CONDITIONING SYSTEM			
TECHNICAL SPECIFICATION:		PE-TS-445-553-A001			
TENDER ENQUIRY NO :		PE/PG/SGI/E-6703/2021 Dated 23.07.2021			
SI. No.	DESCRIPTION	UNIT	QTY	Unit Ex-works duly packed (INR)	Total Ex-works duly packed (INR)
1	Fan Belts (each type & size)	Set	1		0
2	Pressure Gauge (for each type and range)	No.	1		0
3	Temprature Gauge (for each type and range)	No.	1		0
4	Filter (each size)	Set	1		0
5	Compressor Oil	Ltr. (Lot)	1		0
6	Refrigerant gas of each type in a non- returnable cylinders	Kg (Lot)	1		0
	Total				0
NOTES:-					
1	Above is the minimum list. Any other commissioning spare required for AC system w.r.t. Mechanical, Electrical and C&I part shall also be provided by the Bidder as per system / customer requirement without any commercial & Delivery implication to BHEL.				

ANNEXURE-II (Mandatory Spares)			
NAME OF PROJECT:		1 X 660 MW WBPDCS SAGARDIGHI EXTN V	
NAME OF PACKAGE:		AIR CONDITIONING SYSTEM	
TECHNICAL SPECIFICATION:		PE-TS-445-553-A001	
TENDER ENQUIRY NO :		PE/PG/SGI/E-6703/2021 Dated 23.07.2021	
Sl. No.	DESCRIPTION	QTY	Total Ex-works duly packed (INR)
6.07.00	Air Conditioning System		
6.07.01 (A)	Reciprocating Compressors of all categories		
(i)	Piston Ring	1Set for each categories	
(ii)	Piston	1Set for each categories	
(iii)	Complete Set of Bearing	1Set for each categories	
(iv)	Complete Set of Seal and other wear out parts	1Set for each categories	
(v)	Complete set of Valve Head Assembly	2Sets for each categories	
(vi)	Crank Shaft complete set	1Set for each categories	
(vii)	Connecting Rod	1Set for each categories	
6.07.01 (B)	Screw Compressors of all categories		
(i)	O' rings & oil seals - screw compressors	2 sets for each	
(ii)	Suction filter elements - screw compressors	1 Set for each rating of compressors	
(iii)	Bearings - screw compressors	4 sets for each rating of compressors	
(iv)	Gaskets - screw compressors	1 Set for each rating of compressors	
(v)	Complete set of suction Valves and Discharge Valves - screw compressors.	2 set of bearings for each	
(vi)	crane case heater - screw compressors	1 Set for each rating of compressors	
(vii)	Oil pressure failure safety switch - screw compressors	2 Set for each rating of compressors	
6.07.02	Centrifugal pumps of all categories		
(i)	Impeller	1Set for each categories	
(ii)	Wearing Rings	1Set for each categories	
(iii)	Complete Set of Bearing	1Set for each categories	
(iv)	Complete Set of Seal and other wear out parts	1Set for each categories	
(v)	Strainer Basket	1Set for each categories	
6.07.03	Centrifugal Blowers of All AHU		
(i)	Rotating Assembly	1Set for each categories	
(ii)	Complete Set of Bearing	1Set for each categories	

ANNEXURE-II (Mandatory Spares)			
NAME OF PROJECT:		1 X 660 MW WBPDCCL SAGARDIGHI EXTN V	
NAME OF PACKAGE:		AIR CONDITIONING SYSTEM	
TECHNICAL SPECIFICATION:		PE-TS-445-553-A001	
TENDER ENQUIRY NO :		PE/PG/SGI/E-6703/2021 Dated 23.07.2021	
Sl. No.	DESCRIPTION	QTY	Total Ex-works duly packed (INR)
6.07.04	Heat Exchangers		
(i)	Plug for condenser Tube	10Nos.	
(ii)	Sight Glass	2Nos. each type	
(iii)	Safety Relief valves	1No. each type	
6.07.05	Cooling Tower		
(i)	Spray nozzles	1Set (one set means complete replacement for one cooling tower)	
(ii)	Set of fills	10% (ronded off to the next higher integer) of total quantity used one Tower	
6.07.06	Valves	1No. for each type, Class and size	
6.07.07	Electrical Spares as applicable as per the Electrical List	Applicable Item & Quantity same as indicated in Electrical list Sl. No.7.12.00, 7.13.00 & 7.21.00	
6.07.08	Field Instruments & Others as applicable as per the C&I List	Applicable Item & Quantity same as indicated in C&I list Sl. No. 8.04.00 & 8.10.00	
B	Electrical spares		
7.12.00	Control Panel/Desk Mounted Items		
7.12.01	Push Button Complete assembly	10Nos for each colour	
7.12.02	Push Button Contact Element (1NO + 1NC) Block	20Nos.	
7.12.03	Selector Switch	10Nos. for each type and rating	
7.12.04	Meter (Analog and Digital)		
(i)	Ammeter	2Nos. for each type and range	
(ii)	Voltmeter	2Nos. for each type and range	
(iii)	Frequency	2Nos. for each type and range	
(iv)	MW	2Nos. for each type and range	
(v)	MVAR	2Nos. for each type and range	
(vi)	Power Factor	2Nos. for each type and range	
(vii)	Synchroscope	1No. for each type and range	
(viii)	Synchrocheck Relay complete set	1No. for each type and range	
(ix)	Transducer	1No. for each type and range	
7.12.05	Indicating Lamps complete assembly	20Nos. for each Colour and type	
7.12.06	Mimic Lamps	10Nos. for each Colour and type	
7.12.07	MCB	5Nos. for each type and rating	

ANNEXURE-II (Mandatory Spares)			
NAME OF PROJECT:		1 X 660 MW WBPDCS SAGARDIGHI EXTN V	
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TECHNICAL SPECIFICATION:		PE-TS-445-553-A001	
TENDER ENQUIRY NO :		PE/PG/SGI/E-6703/2021 Dated 23.07.2021	
Sl. No.	DESCRIPTION	QTY	Total Ex-works duly packed (INR)
7.12.08	Door Limit Switch	5Nos.	
7.12.09	Annunciation system		
(i)	Lamp Box with Facia & Lamps (LED type)	25Nos.	
(ii)	Hooter	1No.	
(iii)	Each type of PCB (for non-PLC driven system)	1(one) no.	
7.13.00	Actuator		
7.13.01	Complete set of Actuator	2Nos. for each type, make and rating, 1 no. for H2 cooler Temperature controller and 1 no. for stator water temperature controller	
7.13.02	Power Unit for Modulating Actuator	4Nos. of each type	
7.13.03	DC-DC Power Pack Unit	4Nos. of each type	
7.13.04	Electronic cards	4Nos. of each type	
7.13.05	Position Feed Back Transmitters	4Nos. of each type	
7.13.06	Control Unit	4Nos. of each type	
7.13.07	Limit Switch Assembly	2 Nos each type and rating	
7.13.08	Torque Switch Assembly	2 Nos each type and rating	
7.13.09	Power Contactor	5Nos. for each type and rating	
7.13.10	Auxiliary Contactor	5Nos. for each type and rating	
7.13.11	Thermal Over Load Relay	2Nos. for each type and rating	
7.13.12	Motor	1No. each type and rating	
7.13.13	Complete Seal kit	2Sets for each type and rating	
7.13.14	Complete O-Ring Set	2Sets for each type and rating	
7.21.00	Motor		
7.21.02	415 Volt Motor		
(i)	Motor of each type and rating (Note : motors covered in mechanical spare items need not to be included here again) 10% of the installed quantity or minimum 1 number whichever be higher	10% of the installed quantity or minimum 1 number whichever be higher	
(ii)	End Shield Cover Driving & Non-Driving End	1 set for each type and rating of Motor	
(iii)	Heaters	2 sets for each type and rating of motor	
(iv)	Bearings (DE and NDE) for each type and rating of motor	2 sets	

ANNEXURE-II (Mandatory Spares)			
NAME OF PROJECT:		1 X 660 MW WBPDCS SAGARDIGHI EXTN V	
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TENDER ENQUIRY NO :		PE/PG/SGI/E-6703/2021 Dated 23.07.2021	
Sl. No.	DESCRIPTION	QTY	Total Ex-works duly packed (INR)
(v)	Cooling Fan for all type and rating of LT motors	One (1) set	
(vi)	Dust seals and gaskets for each type of motors	1 Set	
(vii)	Motor Terminal Block	1 no. for each type and rating of Motor	
(viii)	Complete Set of Coupling	1 set for each type and rating	
7.21.04	DC Motor		
(i)	Motor of each type and rating (Note : motors covered in mechanical spare items need not to be included here again)	10% of the installed quantity or minimum 1 number whichever be higher	
(ii)	Carbon brushes	2 sets for each type and rating of Motor	
(iii)	Brush assemblies	2 sets for each type and rating of Motor	
(iv)	Terminal blocks	1 set for each type and rating of Motor	
(v)	Heaters	1 set for each type and rating of Motor	
(vi)	Complete Set of Coupling	1 set for each type and rating of Motor	
(vii)	Bearings (DE and NDE) for each type and rating of motor	1 set for each type and rating of Motor	
(viii)	Cooling Fan	1 set for each type and rating of Motor	
C	C&I Spares		
8.04.00	Field Instrument		
8.04.01	Electronic Transmitters		
(i)	Pressure	1(One) no. complete set for each type and model/range used in the system	
(ii)	Differential Pressure	1(One) no. complete set for each type and model/range used in the system	
(iii)	Level	1(One) no. complete set for each type and model/range used in the system	
(iv)	Speed	1(One) no. complete set for each type and model/range used in the system	
(v)	Flow Transmitter	1(One) no. complete set for each type and model/range used in the system	
(vi)	3-D Ultrasonic level Transmitter	1(One) no. complete set for each type and model/range used in the system	
8.04.02	Different type of Switches		
(i)	Pressure Switch	2(two)no. of each type & model/range used in the system	
(ii)	Differential Pressure Switch	2(two)no. of each type & model/range used in the system	
(iii)	Level Switch	2(two)no. of each type & model/range used in the system	
(iv)	Flow Switch	2(two)no. of each type & model/range used in the system	

ANNEXURE-II (Mandatory Spares)			
NAME OF PROJECT:		1 X 660 MW WBPDCS SAGARDIGHI EXTN V	
NAME OF PACKAGE:		AIR CONDITIONING SYSTEM	
TECHNICAL SPECIFICATION:		PE-TS-445-553-A001	
TENDER ENQUIRY NO :		PE/PG/SGI/E-6703/2021 Dated 23.07.2021	
SI. No.	DESCRIPTION	QTY	Total Ex-works duly packed (INR)
(v)	Temperature Switch	2(two)no. of each type & model/range used in the system	
(vi)	Dust Detector	1(one)no. of each type & model used in the system	
8.04.03	Thermocouple	10% of each type and length used in one unit	
8.04.04	RTD	10% of each type and length used in one unit	
8.04.05	Thermo-well for both TC and RTD	2(Two) nos. for each type and rating/length used in the system	
8.04.06	Solenoid Valve		
(i)	Complete Solenoid Valve Assembly	2Nos. for each type and rating used in the system	
(ii)	Coil (single or double coil type)	10% of total nos. used in the system or minimum 5(five) Nos. whichever is more for each type and rating.	
8.04.07	Different types of Gauge		
(i)	Pressure Gauge	10% of total nos. used in the system or minimum 1(one) no. whichever is more for each type and range.	
(ii)	Differential Pressure Gauge	10% of total nos. used in the system or minimum 1(one) no. whichever is more for each type and range.	
(iii)	Temperature Gauge	10% of total nos. used in the system or minimum 1(one) no. whichever is more for each type and range.	
(iv)	Magnetic Level Gauge	10% of total nos. used in the system or minimum 1(one) no. whichever is more for each type and range.	
8.04.08	Air Filter Regulator including moisture separator complete set with pressure gauges	10Nos.	
8.04.09	Rotameter	10% of total nos. used in the system or minimum 2(Two) nos. whichever is more for each type, rating,/model and size used in the system.	
8.04.10	Gauge Glass	1No. for each type and size	
8.04.11	Erection Hardware		
(i)	Transmitter's Manifold	10% of total nos. used in the system or minimum 2(Two) nos. whichever is more for each type, rating,/model and size used in the system.	
(ii)	Impulse Line Root/Source valve	10% of total nos. used in the system or minimum 4(four) nos. whichever is more for each type, rating,/model and size used in the system.	
(iii)	Impulse Line Isolation valve	10% of total nos. used in the system or minimum 4(four) nos. whichever is more for each type, rating,/model and size used in the system.	
(iv)	Impulse Line Drain valve	10% of total nos. used in the system or minimum 4(four) nos. whichever is more for each type, rating,/model and size used in the system.	
(v)	Impulse Line fittings	Each type/size 25Nos.	

ANNEXURE-II (Mandatory Spares)			
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TENDER ENQUIRY NO :		PE/PG/SGI/E-6703/2021 Dated 23.07.2021	
Sl. No.	DESCRIPTION	QTY	Total Ex-works duly packed (INR)
(vi)	Impulse Pipe	Each type/size 100Mtrs.	
(vii)	Copper/SS Tube	Each type/size 100Mtrs.	
(viii)	Fittings for Copper/SS Tube	Each type/size 100Nos.	
8.04.13	Conductivity Type Level Switch		
(i)	Conductivity Ttype level Probes	10% of total nos. used in the system or minimum 4(four) nos. whichever is more.	
(ii)	Complete Electronics unit	1Set	
(iii)	Isolating/Root Valve	2Nos.	
8.04.14	Cable This particular items shall be common for BTG , CHP and AHP areas.		
(i)	Thermocouple Cable	3(three)Kms. of each type, size & rating of Cables	
(ii)	Control & Instrumentation Cable	3(three)Kms. of each type, size & rating of Cables	
8.04.15	Cold Junction Compensation Boxes	10% of total nos. used in the system or minimum 2(two) nos. for each type/size whichever is more.	
8.04.16	Current/Voltage Transducers	1(one) no. each type/rating used in the system	
8.04.17	MWatt/MVAR Transducer	1(one) no. each type/rating used in the system	
8.04.18	Chlorine Leak Detector System		
(i)	Sensor Unit (complete)	2No.	
(ii)	Transmitter/Processing Unit (complete)	2No.	
8.10.00	Control Panel And Local/Remote Control Desk		
8.10.01	Mosaic/Conventional Type Push button Station	10% of total quantity used in the system or minimum 2(two) nos. whichever is more for each type and model.	
8.10.02	Mosaic Type Push button Station with LED Indication	10% of total quantity used in the system or minimum 2(two) nos. whichever is more for each type and model.	
8.10.03	Mosaic Type LED Indication Station	10% of total quantity used in the system or minimum 2(two) nos. whichever is more for each type and model.	
8.10.04	Simaphore Indicator	2(two)Nos. each type	
8.10.05	Annunciation System		
(i)	Each type of PCB (for non-PLC driven system)	1(one) No. each	
(ii)	Lamp Box with Facia & Lamps (LED type)	10(ten)Nos.	
(iii)	Hooter	1(one) No.	

ANNEXURE-II (Mandatory Spares)			
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TECHNICAL SPECIFICATION:		PE-TS-445-553-A001	
TENDER ENQUIRY NO :		PE/PG/SGI/E-6703/2021 Dated 23.07.2021	
Sl. No.	DESCRIPTION	QTY	Total Ex-works duly packed (INR)
D	MANDATORY SPARES FOR MATERIAL HANDLING EQUIPMENT (AS APPLICABLE)		
6.02.00	Electrical Hoist		
6.02.01	Bearings for Long Travel Wheels [Bearing of each type and size used in motors]	1 Set for each type & capacity of Hoist	
6.02.02	Bearings for Cross Travel Wheels [Bearing of each type and size used in motors]	1 Set for each type & capacity of Hoist	
6.02.03	Bearings for each type of Gear Boxes of the Hoist	1 Set for each type & capacity of Hoist	
6.02.04	Brake Liner for all the Brakes of the Hoist	100% for each type & capacity of Hoist	
6.02.05	Hydraulic Thruster for Brakes	1 No. for each type & capacity of Hoist	
6.02.06	Oil Seals for all types of the Hoist	100% for each type & capacity of Hoist	
6.02.07	Brake Springs for all Brakes	100% for each type & capacity of Hoist	
6.02.08	Wire Rope for Aux. Hook	100% of one Hoist for each type & capacity of Hoist	
6.02.09	Electrical		
(i)	Other Electrical Spares as applicable as per the Electrical List	Applicable Item & Quantity same as indicated in Electrical list Sl. No.7.08.00,7.12.00 & 7.21.00	
(ii)	Limit Switches for:		
(a)	Hoist	1Set. for each type & capacity of Hoist	
(b)	Cross Travel	1Set. for each type & capacity of Hoist	
(c)	Long Travel	1Set. for each type & capacity of Hoist	
(iii)	Control Trailing Cable for Electrical Hoist	100% of one Hoist for each type & capacity of Hoist	
(iv)	Power Trailing Cable for Electrical Hoist	100% of one Hoist for each type & capacity of Hoist	
	Total		0
NOTES:-			
a)	Mandatory spares listed in Price Schedule are bare minimum requirement. In case any additional mandatory spares requirement is covered elsewhere in the tender specification apart from specified above, same shall be deemed to have been covered in bidder's scope of supply.		
b)	Wherever "set" is indicated, it shall mean complete replacement for one main equipment of similar size & capacity.		

ANNEXURE-II DEVIATION SHEET (COST OF WITHDRAWAL)									
PROJECT:-						1 X 660 MW WBPDCS SAGARDIGHI EXTN V			
PACKAGE :-						AIR CONDITIONING SYSTEM			
TENDER ENQUIRY :-						PE/PG/SGI/E-6703/2021 dtd.23.07.2021			
NAME OF THE BIDDER									
Sl. No.	Volume/Section	Page No.	Clause No.	Technical Specification/Tender Document No	Complete Description of Deviation	Cost of withdrawal of deviation to be entered by the bidder in	Reference of price Schedule of which Cost of Withdrawal of Deviation is applicable	Nature of cost of withdrawal of deviation (Positive/Negative)	Reasons for quoting deviation
1	TECHNICAL DEVIATION								
1.01									
1.02									
1.03									
1.04									
1.05									
1.06									
1.07									
1.08									
2	COMMERCIAL DEVIATION								
2.01									
2.02									
2.03									
2.04									
2.05									
2.06									
2.07									
2.08									

NOTES:

1. Cost of Withdrawal of deviation will be applicable on the basic price (i.e. excluding taxes, duties & freight) only.

2. All the bidders have to list out all their technical & commercial deviations (if any) in details in the above format.

3. Any deviation not mentioned above and shown separately or found hidden in offer, will not be taken cognizance of.

4. Bidder shall submit duly filled unpriced copy of above format indicating "quoted" in "cost of withdrawal of deviation" column of the schedule above along with their Techno-commercial offer, wherever applicable. In absence of same, such deviation(s) shall not be considered and offer shall be considered in total compliance to NIT.

5. Bidder shall furnish price copy of above format along with price bid.

6. The final decision of acceptance/ rejection of the deviations quoted by the bidder shall be at discretion of the Purchaser.

7. Bidders to note that any deviation (technical/commercial) not listed in above and asked after Part-I opening shall not be considered.

8. For deviations w.r.t. Credit Period, Liquidated damages, Firm prices if a bidder chooses not to give any cost of withdrawal of deviation loading as per Annexure-VII of GCC, Rev-07 will apply. For any other deviation mentioned in un-priced copy of this format submitted with Part-I bid but not mentioned in priced copy of this format submitted with Priced bid, the cost of withdrawal of deviation shall be taken as NIL.

9. Any deviation mentioned in priced copy of this format, but not mentioned in the un-priced copy, shall not be accepted.

10. All techno-commercial terms and conditions of NIT shall be deemed to have been accepted by the bidder, other than those listed in unpriced copy of this format.

11. Cost of withdrawal is to be given separately for each deviation. In no event bidder should club cost of withdrawal of more than one deviation else cost of withdrawal of such deviations which have been clubbed together shall be considered as NIL.

12. In case nature of cost of withdrawal (positive/negative) is not specified it shall be assumed as positive.

13. In case of discrepancy in the nature of impact (positive/ negative), positive will be considered for evaluation and negative for ordering.

VENDOR'S CREDENTIALS

PROJECT:

PACKAGE:

VENDOR NAME:

CREDENTIAL BOOKLET

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