

<b>SUGGESTIVE PRICE FORMAT</b>		Doc No:	PE-PF-475-553-A001		
		Rev No:	0		
<b>NAME OF PROJECT:</b>		<b>KHURJA STPP (2 X 660 MW) TURBINE GENERATOR AND ASSOCIATED PACKAGES</b>			
<b>NAME OF PACKAGE:</b>		<b>AIR CONDITIONING SYSTEM</b>			
<b>TECHNICAL SPECIFICATION No:</b>		<b>PE-TS-475-553-A001</b>			
<b>S. No.</b>	<b>DESCRIPTION</b>	<b>UNIT</b>	<b>QTY</b>		
<b>1</b>	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 including chemicals for softening plant till handing over, mandatory spares along with spares for erection, start-up and commissioning as required, forwarding, proper packing, shipment and delivery at site, unloading, handling, transportation & storage at 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, operation & maintenance of the AC Plant(s) after commissioning till handing over 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.	1 Lot			
<b>2</b>	<b>MAJOR BREAK-UP OF PRICES GIVEN IN 1.0 ABOVE.</b>				
<b>2.1</b>	Total lump sum firm price for Supply part 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 including chemicals for softening plant till handing over 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)	1 Lot			
<b>2.2</b>	Total lumpsum firm prices for Services part comprising of service part for unloading, handling, transportation & storage at 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, operation of the AC Plant(s) after commissioning till handing over 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)	1 Lot			
<b>2.3</b>	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)	1 Lot			
<b>2.4</b>	Total lumpsum firm price for providing OPERATION AND MAINTENANCE SERVICE including manpower, supervision, consumables etc. for operation & maintenance of HVAC System for a duration of 1 Year after commissioning of HVAC system & final handing over to end customer in flawless condition for the scope defined as per technical specification.	1 Lot			
Note: 1) Bidder to quote the Prices in 'figures' along with corresponding 'words'.					
<b>Particulars of bidder / authorised representative</b>					
	<b>Name</b>	<b>Designation</b>	<b>Signature</b>	<b>Date</b>	<b>Company Seal</b>

SUGGESTED PRICE FORMAT ANNEXURE - I						Doc No:	PE-PF-475-553-A001
						Rev No:	0
NAME OF PROJECT:							
NAME OF PACKAGE:							
TECHNICAL SPECIFICATION No:							
SL NO	DESCRIPTION	UNIT	Qty	SUPPLY	ERECTION AND COMMISSIONING		
<b>A</b>	<b>AC-Plant-1: CENTRAL CHILLED WATER SYSTEM FOR MAIN CR AREAS</b>						
<b>1</b>	Water cooled Chilling machine each of minimum 180 TR (actual) capacity consisting of (a) Screw refrigerant compressor complete with motors, control panel, multi drive set, controls & interlocks and 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				
<b>2</b>	Sheet metal cabinet type air handling units (double skin as per specification) consisting of chilled water cooling coil, centrifugal blower, TEFC sq. cage induction motor, non-return damper, motorised volume control damper, filters (pre filter), 3 way motorised mixing valve with thermostatic controls and other accessories to meet the AC load of the main CR areas of Unit I & Unit II at 17 m. Fine Filters and HEPA Filters for AHUs shall be included in discharge of AHU as per specification.	NO	3				
<b>3</b>	Sheet metal cabinet type air handling units (double skin as per specification) consisting of chilled water cooling coil, centrifugal blower, TEFC sq. cage induction motor, non-return damper, motorised volume control damper, filters (pre filter), 3 way motorised mixing valve with thermostatic controls and other accessories to meet the AC load of the UPS of Unit I & Unit II at 8.5 m, SWAS room & CEP VFD Room at 0 m. Fine Filters and HEPA filter shall be in discharge of AHUs as per specification.	NO	3				
<b>4</b>	Fibreglass reinforced plastic (FRP) construction cooling towers complete with fan, motor, FRP basin, nozzles, make-up water & quick fill water connection, instruments, drains, piping, valves, strainers, ladder & structural support and all accessories as specified as per specification.	NO	3				
<b>5</b>	Centrifugal pump sets for condenser water recirculation complete with TEFC motor & all accessories as specified.	NO	3				
<b>6</b>	Centrifugal pump sets for chilled water recirculation complete with TEFC motor drive set & all accessories, as specified	NO	3				
<b>7</b>	Soft water/make-up MS (with suitable rubber lining) /FRP Storage tank to cooling towers with instruments, valves and all other accessories as required. Capacity of each tank minimum 8 m3	NO	2				
<b>8</b>	MS/HDPE Expansion Tank (spray galvanised from inside) for chilled water with insulation and all accessories like instruments and valves as required, capacity min 1 m3.	NO	1				
<b>9</b>	Skid mounted softening plant (2 x 100 %) with associated piping, valves, instruments, soft water pumps & regeneration pumps & tanks as applicable with suitable rubber lining & as per tender requirement	LOT	1				
<b>10*</b>	Pumps motor set along with accessories with suitable rubber lining for pumping of softening plant reject and cooling tower blow down to CMB	NO*	2				
<b>11*</b>	HDPE Piping (3" ) 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 CMB (ETP)	mtrs*	1100				
<b>12</b>	Condenser water piping with suitable rubber lining & necessary fittings, strainers, valves including piping from soft water storage tank to cooling tower, chiller, pan humidifiers of AHU room as specified.	LOT	1				
<b>13</b>	Chilled water piping within AC plant room, AHU rooms and from AC plant room to various AHU rooms, complete with valves supports, fittings, strainers, insulation with finish as per specification.	LOT	1				
<b>14</b>	Monsoon reheating/ winter heating kit comprising strip heaters, safety controls, airstat, contactors, frame work, thermostat & humidistat/ sensors etc.	LOT	1				
<b>15</b>	Pan type humidifier for each AHU room.	LOT	1				
<b>16</b>	Fresh air fan (axial flow type), complete with motor, inlet cone, air filters (pre and fine), dampers etc. for each AHU room	LOT	1				
<b>B</b>	<b>AC-Plant-2: CENTRAL CHILLED WATER SYSTEM FOR SERVICE BUILDING</b>						
<b>1</b>	Water cooled Chilling machine each of minimum 180 TR capacity consisting of (a) Screw refrigerant compressor complete with motors, 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. Chiller shall be complete in all respect in compliance to all mandatory requirement of GRIHA.	NO	2				
<b>2</b>	Sheet metal cabinet type air handling units (double skin as per specification) consisting of chilled water cooling coil, centrifugal blower, TEFC sq. cage induction motor, VVVF drive set, non-return damper, motorised volume control damper, filters (pre filter), 3 way motorised mixing valve with thermostatic controls and other accessories to meet the AC load of the all floors of service building. Filters for AHUs shall be included in discharge of AHU as per specification. VVVFD shall be complete in all respect like provision of energy consumption measuring and data storing facility of energy consumption and current in compliance to all mandatory requirement of GRIHA.	NO	5				
<b>3</b>	Fibreglass reinforced plastic (FRP) construction cooling towers complete with fan, motor, VVVFD Drive set, FRP basin, nozzles, make-up water & quick fill water connection, instruments, drains, piping, valves, strainers, ladder & structural support and all accessories as specified as per specification. VVVFD shall be complete in all respect like provision of energy consumption measuring and data storing facility of energy consumption and current in compliance to all mandatory requirement of GRIHA.	NO	2				
<b>4</b>	Centrifugal pump sets for condenser water recirculation complete with TEFC motor & all accessories as specified.	NO	2				

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SL NO	DESCRIPTION	UNIT	Qty	SUPPLY	ERECTION AND COMMISSIONING		
5	Centrifugal pump sets for primary chilled water recirculation complete with TEFC motor drive set & all accessories, as specified.	NO	2				
6	Centrifugal pump sets for Secondary chilled water recirculation complete with TEFC motor with VVVF drive set & all accessories, as specified. VVVFD shall be complete in all respect like provision of energy consumption measuring and data storing facility of energy consumption and current in compliance to all mandatory requirement of GRIHA.	NO	2				
7	Soft water/make-up MS (with suitable rubber lining) /FRP Storage tank to cooling towers with instruments, valves and all other accessories as required. Capacity of each tank 4m3 (minimum)	NO	2				
8	MS/HDPE Expansion Tank (spray galvanised from inside) for chilled water with insulation all accessories like instruments and valves as required, capacity 1 m3 (minimum).	NO	1				
9	Skid mounted softening plant (2 x 100 % ) with associated piping, valves, instruments, soft water pumps & regeneration pumps & tanks as applicable with suitable rubber lining & as per tender requirement	LOT	1				
10*	Pumps motor set along with accessories with suitable rubber lining for pumping of softening plant reject and cooling tower blow down to CMB	NO*	2				
11*	HDPE Piping (3 " ) 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 CMB (ETP)	mtrs*	1100				
12	Condenser water piping with suitable rubber lining, necessary fittings, strainers, valves including piping from soft water storage tank to cooling tower, chiller, pan humidifiers of AHU room as specified.	LOT	1				
13	Chilled water piping within AC plant room, AHU rooms and from AC plant room to various AHU rooms, complete with valves supports, fittings, strainers, insulation with finish as per specification.	LOT	1				
14	Monsoon reheating/ winter heating kit comprising strip heaters, safety controls, airstat, contactors, frame work, thermostat & humidistat/ sensors etc.	LOT	1				
15	Pan type humidifier for each AHU room.	LOT	1				
16	Fresh air fan (axial flow type), complete with motor, inlet cone, air filters (pre and fine), modulating dampers etc. as per specification for each AHU room.	LOT	1				
C	ITEMS COMMON TO ALL AC PLANTS						
1*	GSS zinc coating 275 gms/ m <sup>2</sup> ducting complete with hangers/ supports, dampers, grilles, diffusers (with & without VCD) etc.						
(a)*	18G.	SQM*	900				
(b)*	20G.	SQM*	2200				
(c)*	22G.	SQM*	3000				
(d)*	24G.	SQM*	3700				
2*	Fire damper.						
(a)*	Fire damper with auto resetting, limit switches, indication lamps etc.	SQM*	20				
(b)*	Motorized actuator with single phase power supply for the above fire damper.	NO*	25				
3*	Supply air diffuser with VCD (Extruded Aluminium).	SQM*	75				
4*	Return air diffuser without VCD (Extruded Aluminium).	SQM*	90				
5*	GI Volume control dampers for Duct	SQM*	25				
6	Acoustic insulation of ducting from AHU outlets as per specification.	LOT	1				
7*	Thermal insulation of supply air duct & return air duct with finish as specified.	SQM*	9800				
8*	Drain piping upto nearest drain point with and without insulation as per specification						
a*	50mm	Rmt*	50				
b*	40mm	Rmt*	50				
9	Cable tray, conduits, junction box, local control panel for various equipment's. Field instruments i.e., transmitters, switches, gauges, meters for measurement of pressure, temperature, differential pressure and flow switch etc., including necessary control panel for hook up with main DDCMIS as per specifications	LOT	1				
10*	Fibre optic cable.	Rmt*	100				
11*	Fan Coil units						
a*	3 TR	NO*	2				
b*	2TR	NO*	2				
D	AC System for Aux. building as required						
1*	Air Cooled PAC-Unit complete with all accessories as specified The package unit shall be complete with all accessories like filters, acoustic insulation of duct for 5m from PU, drain piping with insulation upto nearest drain, required instrumentation etc.						
(a)*	10 TR net capacity	NO*	1				
(b)*	15 TR net capacity	NO*	1				

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SL NO	DESCRIPTION	UNIT	Qty	SUPPLY	ERECTION AND COMMISSIONING		
2*	MONSOON REHEATING / WINTER HEATING KIT comprising strip heaters, safety controls, air-stat, contactors, frame work, thermostat & humidistat/ sensors etc.						
(a)*	10 TR net capacity	NO*	1				
(b)*	15 TR net capacity	NO*	1				
3*	Electrode 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						
(a)*	10 TR net capacity	NO*	1				
(b)*	15 TR net capacity	NO*	1				
4*	Fresh Air fan for above mentioned package AC						
(a)*	10 TR net capacity	NO*	1				
(b)*	15 TR net capacity	NO*	1				
5*	AIR COOLED SPLIT UNITS consisting of outdoor unit (having compressor condenser coils with fan and motor), indoor unit (having evaporator coil, filter, fan with motor), interconnecting refrigerant piping as per site requirement & fittings with insulation, cordless remote, electrical power cord upto the nearest available point along with isolator / MCB, fixing frame for indoor and outdoor unit, Stabilizer etc.						
(a)*	5.0 TR capacity (ductable type, 415 V, 3 phase with isolation switch).	NO*	2				
(b)*	2.0 TR capacity (non-ductable type, 240 V, 1 phase ) with isolation switch , i.e. MCB of suitable rating as specified, voltage stabilizer, cabling, all supporting structure and refrigerant piping to suite actual site condition, drain piping upto nearest drain etc. Split AC shall be of best rating as per latest BEE rating based on ISEER	NO*	25				
(c)*	1.5 TR capacity (non-ductable type, 240 V, 1 phase ) with isolation switch , i.e MCB of suitable rating as specified, voltage stabilizer, cabling, all supporting structure and refrigerent piping to suite actual site condition, drain piping upto nearest drain etc. Split AC shall be of best rating as per latest BEE rating based on ISEER	NO*	12				
6*	Handling arangement						
a*	Manually operated, platform trolley of 1 Ton capacity with base area 2m x 1.5m	NO*	4				
b*	3 Ton capacity electric hoist	No*	2				
c*	1 Ton capacity chain pulley block with travelling trolley	No*	2				
d*	1 T Chain Pulley Block without Travelling trolley with tripod stand.	No*	2				
7*	Variable air volume (VAV) box complete with damper, differential pressure sensor, motorised damper, actuator, cooling / heating thermostat with ON / OFF control, differential pressure sensor, 24 V power supply unit, controller capable of accepting analogue signal from CO2 sensor/ occupancy sensor/ thermostat and output to damper actuator, distribution board floor wise for green building like Service building, suitable for following air flow capacity						
(a)*	50-990 cfm	NO*	2				
(b)*	1000- 1990 cfm	NO*	2				
(c)*	2000 - 2990 cfm	NO*	2				
(d)*	3000 - 4990 cfm	NO*	2				
8*	OCCUPANCY SENSOR	NO*	10				
9*	CO2 SENSOR	NO*	10				
10*	BTU Meter complete in all respect like provision of energy consumption measuring and data storing facility of energy consumption of at least 1 year with sufficient memory space.	NO*	5				
E	Total lumpsum price for special tools & tackles for maintenance inclusive of packing forwarding, transportation up to site, etc. (Refer APPENDIX A).	LOT	1				
F	Total lumpsum price for commissioning spares inclusive of packing forwarding, transportation up to site, etc. (Refer APPENDIX B).	LOT	1				
G*	Total lumpsum cost for FAT of DDCMIS	Mandays*	21				
H	Any other item not indicated above, but required to make the system complete in all respect.	LOT	1				
NOTES							
1	The bidder shall furnish unit rates for variable item (marked *) for necessary adjustment (plus or minus) variation during detailed engg. stage. The unit rates quoted above shall be considered and no separate unit rates shall be quoted. Unit rates shall be valid throughout the contract.						
2	Bidder to note that above BOQ for this tender has to be read in conjunction with tender specification. Any item, if not mentioned in above BOQ but indicated in tender specification and required for completion of the system shall deemed to be included in above price.						
3	Any other item / system required for green building like Service building to make the building green building in compliance to mandatory requirement of GRIHA shall be deemed to be included in quoted prices of respective building.						
Particulars of bidder / authorised representative							
	Name	Designation	Signature	Date	Company Seal		

<b>SUGGESTED PRICE FORMAT</b> <b>APPENDIX - A</b> <b>Special tools &amp; tackles for maintenance</b>				Doc No:	PE-PF-475-553-A001
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NAME OF PROJECT:		KHURJA STPP (2 X 660 MW) TURBINE GENERATOR AND ASSOCIATED PACKAGES			
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TECHNICAL SPECIFICATION No:		PE-TS-475-553-A001			
SL NO	DESCRIPTION	UNIT	Qty		
1	FLAT D WRENCH -6 MM TO 32 MM (12 Pcs)	SET	1		
2	BOX WRENCHES -6 MM TO 22 MM (14 Pcs)	SET	1		
3	RING SPANNER -6 MM TO 32 MM (12 Pcs)	SET	1		
4	ALLEN KEYS -2 MM TO 10 MM	SET	1		
5	CRESCENT SCREW SPANNER	NO.	1		
6	COMPLETE SET OF SCREW DRIVER	SET	1		
7	OFFSET SCREW DRIVER	NO.	1		
8	INSULATED PLIER	NO.	1		
9	TORCH LIGHT FOR 2 CELL	NO.	1		
10	HAMMER 1 LB	NO.	1		
11	OIL CAN	NO.	1		
12	POCKET THERMOMETER -0 TO 50 DEG. C)	NO.	1		
13	INSULATION TAPE ROLL	NO.	1		
14	STEEL FOOT RULE -12"	NO.	1		
15	FEELER GAUGE 9 BLADES	NO.	1		
16	PIPE WRENCH	NO.	1		
17	FLARE NUT (1/4")	NO.	6		
18	FLARING TOOL	NO.	1		
19	TUBE CUTTER	NO.	1		
20	GAS CHARGING PIPE	NO.	1		
21	NITROGEN CHARGING ADAPTER	NO.	1		
22	FREON PRESSURE GAUGE (2 1/2" DIA DIAL) ) 0 -300 MM	NO.	1		
23	FREON PRESSURE GAUGE (2 1/2" DIA DIAL) ) 30 -150	NO.	1		
24	PSYCHRO METER	NO.	1		
25	LOCK WITH KEY FOR TOOL BOX	NO.	1		
26	RATCHET 1/4"	NO.	1		
27	MS TOOL BOX	NO.	1		
28	WRENCH SPANNER	NO.	1		
29	GREASE GUN	NO.	1		
30	OIL GUN	NO.	1		
31	HAND LAMP	NO.	1		
32	LINE TESTER	NO.	1		
NOTES					
1	ABOVE IS THE MINIMUM LIST. ANY OTHER TOOL / TACKEL REQUIRED FOR THE SYSTEM SHALL ALSO BE PROVIDED BY THE VENDOR WITHOUT ANY COST IMPLICATION.				
<b>Particulars of bidder / authorised representative</b>					
	<b>Name</b>	<b>Designation</b>	<b>Signature</b>	<b>Date</b>	<b>Company Seal</b>

<div>SUGGESTED PRICE FORMAT</div> <div>APPENDIX - B</div> <div>Commissioning spares</div>				Doc No:		PE-PF-475-553-A001	
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TECHNICAL SPECIFICATION No:				PE-TS-475-553-A001			
SL NO	DESCRIPTION	UNIT	Qty				
1	AHU FAN BELTS	SET	1				
2	PRESSURE GAUGE	NO.	1				
3	TEMPERATURE GAUGE	NO.	1				
4	FILTER	SET	1				
5	COMPRESSOR OIL	LOT	1				
6	REFRIGERANT	LOT	1				
NOTES							
1		ABOVE IS THE MINIMUM LIST. ANY OTHER COMMISSIONING SPARE REQUIRED FOR THE SYSTEM SHALL ALSO BE PROVIDED BY THE VENDOR WITHOUT ANY COST IMPLICATION.					
Particulars of bidder / authorised representative							
	Name	Designation	Signature	Date	Company Seal		

<b>SUGGESTED PRICE FORMAT ANNEXURE-II LIST OF MANDATORY SPARES</b>		Doc No:	PE-PF-475-553-A001
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<b>TECHNICAL SPECIFICATION:</b>		<b>PE-TS-475-553-A001</b>	
S. No.	DESCRIPTION	Quantity	
<b>1</b>	<b>Screw Compressor Chilling Machine for each type/rating / model</b>		
1.1	Oil filter - O ring	1 Set	
1.2	Refrigerant filter	1 Set	
1.3	Master solenoid valve	1 No.	
1.4	Master solenoid valve coil	1 Set	
<b>2</b>	<b>Pumps ( For Each Model)</b>		
2.1	Pump Bearing	1 Set	
2.2	Pump Motor Bearing	1 Set	
2.3	Shaft Sleeve	2 set	
<b>3</b>	<b>Air handling unit (for each model)</b>		
3.1	V-belts for AHU Blower	2 Sets	
3.2	AHU Blower bearing	1 Set	
3.3	Blower motor bearing	1 Set	
3.4	Filters at suction and discharge of all AHUs	25% of installed population	
<b>4</b>	<b>Cooling Tower (for each model)</b>		
4.1	Nozzles for cooling towers	20 Nos.	
4.2	Float valve assembly	1 No.	
4.3	Fan Bearings	1 Set	
4.4	Motor bearings	1 Set	
<b>5.0</b>	<b>Electrical Actuators</b>		
5.1	Actuators	10% or 1 No. of each type, model and rating, whichever is more.	
<b>5.2</b>	<b>Variable Frequency Drive (VFD)</b>		
5.2.1	Complete VFD derive	1 No of each type & rating	
5.2.2	Complete Converter & Inverter unit	1 No of each type & rating	
5.2.3	Set of Cards	1 No of each type & rating	
5.2.4	Set of fuses	2 Nos of each type & rating	
5.2.5	Input & Output Chokes (If applicable)	1 Set	
<b>6</b>	<b>Control &amp; Instrumentation</b>		
6.1	Electronic Transmitters		
6.1.1	Transmitters of all types and model no. (for the measurement of Pressure, differential pressure flow, level, temperature etc.)	5% or 1 No. of each type and model whichever is more. (to be divided into various ranges in proportion to main population)	
6.2	Temperature elements		
6.2.1	RTD's*	5% or 1 No. whichever is more **	
6.2.2	Thermo well  * (With head assembly, terminal block and nipple)	5% or 1 No. whichever is more **  ** (to be divided into various insertion lengths in proportion to main population)	
6.3	All types of Local Indicators	5% or 1 No. of each make, model and type whichever is more (to be divided to various ranges in proportion to main population of all make, model and type)	
6.4	Process Actuated Switch Devices Includes all types of Pressure, differential pressure, flow, temperature, and differential temperature, level switch Devices.	5% or 1No. of each type and model whichever is more.	
6.5	Relative Humidity Sensors	2 Nos.	
6.6	Geyserstat	2 Nos.	
6.7	Local Humidity/Temperature indicators	2 Nos. each	
<b>7</b>	<b>Process Connection Piping (for Impulse Piping / Tubing, Sampling Piping / Tubing and Air Supply Piping as Applicable)</b>		
7.1	Valves	10% or 1 No. of each type, class, size and model whichever is more.	

S. No.	DESCRIPTION	Quantity	
7.2	2 way, 3way, 5way valve manifolds	10% or 1 No. of each type, class, size and model whichever is more.	
7.3	Fittings	10% or 1 No. of each type, class, size and model whichever is more.	
<p>Notes</p> <p>a) Mandatory spares listed above is 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 bidders scope of supply.</p> <p>b) Wherever "set" is indicated, it shall mean complete replacement for one main equipment.</p> <p>c) All mandatory spares shall be supplied as per the requirement of the specifications. In case any spare indicated in the specification is "not applicable" for particular equipment, then suitable applicable alternate spare has been offered / shall be supplied by the bidder without any financial implication."</p> <p>d) Any item which is quoted as "not applicable" by the bidder in the above list and is found to be "applicable" at a later date shall be supplied by the bidder without any commercial and delivery implication.</p> <p>e) Any cell left blank in the unpriced schedule shall be treated as "Quoted" and is included in total price.</p> <p>f) Each spare shall be clearly marked and labeled on the outside of the packing with its description. When more than one spare part is packed in single case, a general description of the contents shall be shown on the outside of such case and a detailed list enclosed. All cases, containers and other packages must be suitably marked and numbered for the purpose of identification.</p> <p>g) All spares supplied under this contract shall be strictly interchangeable with parts for which they are intended for replacements. These spares should include all mounted accessories like components, boards, add or items, fitting, connectors etc. and be complete in all respects so that the replacement of the main items by these spares does not require any additional item. The vendors must conform the pair to pair compatibility of each electrical spares modules with the modules should be supplied in the original package. The spare shall be traeted and propoerly packaed for long term storage.</p>			
<b>Particulars of bidder / authorised representative</b>			
	<b>Name</b>	<b>Designation</b>	<b>Signature</b>
			<b>Date</b>