		PRICE FORMAT			
ENQUIR	RY No.:	PE/PG/NK1/E-5492/2016			
NAME O	OF PROJECT:	2x800 MW NTPC KARIMNAGAR TELANGANA SG TPS			
NAME O	OF PACKAGE:	AIR CONDITIONING SYSTEM			
TECHNIC	CAL SPECIFICATION No:				
S. No.	Desc	cription	Qty	Total Amount	Remarks
	Total lump sum firm price inclusive of all prevailing taxes, duties a comprising of design (i.e. preparation and submission of drawing /do manufacture, fabrication, assembly, inspection / testing at vendo applicable), fill of lubricants & consumables, mandatory spares al forwarding, proper packing, shipment and delivery at site, unload assembly, erection & commissioning, final painting at site, minor civil and carrying out Performance guarantee / Functional / Demonstration handover in flawless condition of the package to the end customer contender technical specification as specified above, amendment & agree	1 Lot		Total of 2.1 +2.2+ 2.3	
2	MAJOR BREAK-UP OF PRICES GIVEN IN 1.0 ABOVE.				
2.1	Total lump sum firm price inclusive of all prevailing taxes, duties an submission of drawing /documents including "As Built" drawings inspection / testing at vendor's & sub-vendor's works, painting, mair alongwith spares for erection as required, startup and commissionin at site, preperation of layout drawings 3D (as applicable) for the to specified above, amendment & agreements till placement of order. (E	1 Lot		Total F.O.R. site price as per Annexure-I	
2.2	Total lumpsum firm prices inclusive of all prevailing taxes, duties and handling, transportation & storage at site, in-site transportation, asset trial run at site and carrying out Performance guarantee / Functional O&M staff and handover in flawless condition of the package to the eper BHEL NIT & tender technical specification as specified above, Annexure-I)	1 Lot		Total E&C charges incl. service tax as per Annexure-I	
2.3	Total lumpsum firm price inclusive of all prevailing taxes, duties fabrication, assembly, inspection / testing (as applicable) at vendor's delivery at site & guarantee as per tender technical specification about mandatory spares is to be furnished as per Annexure- II)	1 Lot		Total F.O.R. site price as per Annexure-II	
Note: 1.) Bidde	er to quote Guaranteed Power Consumption for Air Conditining Syste				
Particula	ars of bidder / authorised representative			1	
Name	Designation	Date	Company Seal	Company Seal	

PRICE FORMAT	
ANNEXURE - I	

	ANNEXURE - I													
ENQUIRY NO.:		PE/PG/NK1/E-5492/2016												
_	OF PROJECT:				AR TELANGAN	A SG TPS								
-	DF PACKAGE:			G SYSTEM										
			E-TS-424-553-A001											
						SU	PPLY			ERECTION AND COMMISIONING				
SL NO	DESCRIPTION OF EQUIPMENT/ ITEM	Qty	UNIT	Unit Ex- Works Price duly packed (Rs)	Total Ex- Works Price duly packed (Rs)	Excise Duty incl. Cess @ % (Rs)	CST/VAT @% against Form'C' & 'E1' (Rs)	Freight incl. service tax @% of Total Ex- Works Price (Rs)	(Rs)	Unit Price (Rs)	Total price (Rs)	Service Tax @% (Rs)	Total price incl service tax (Rs)	Total price (Rs) (Supply + E&C)
	AC Plant: AIR COOLED DX SYSTEM													
	DX type, air cooled condensing unit of minimum 40TR (ACTUAL) capacity. The refrigerant compressor shall be Scroll, hermetic / Semi-hermetic type suitable for Refrigerant R-134a / R-407c / R-410a environment friendly HFC refrigerants with drive package, Suction and discharge valves, capacity control system, expansion valve, crank case heater etc. A control panel shall be provided to house all gauges and controls. The panel shall contain all necessary terminal strips to facilitate external wiring. The unit shall be complete with expansion valve, all necessary fittings, accessories, insulated refrigerent piping to and from AHUs, foundation bolts, nuts, washers etc complete in all respect.		NO											
	Sheet metal cabinet type air handling units (double skin as per specification) The draw through horizontal AHUs shall comprise of , Dampers, pre filter, fine filters and HEPA filters (DPS across fine and HEPA filters), DX- cooling coil, Electric heating coil, Electric steam humidifier and Fan section with fan & TEFC sq cage induction motor, VVVFD, drive set, face and bypass damper with modulating motor, condensate drain pan, thermostatic controls and other accessories to meet the AC load of control room area as per specification.		NO											
3	Monsoon reheating / winter heating kit comprising strip heaters, safety controls, air-stat, contactors, frame work, thermostat & humidistat/ sensors etc.	1	LOT											
4	Pan type humidifier for each AHU room.	1	LOT											
	Fresh air fan (axial flow type), complete with motor, inlet cone, air filters (pre and fine), dampers etc.	1	LOT											
В	ITEMS COMMON FOR AC PLANT													
	Fire damper.													
a*	Fire damper with auto resetting, limit switches, indication lamps etc.	6	SQM*											
	Motorized actuator with single phase power supply for the above fire damper.	10	NO*											
	GSS zinc coating 275 gms/ m ² ducting complete with hangers/ supports, dampers, grilles, diffusers (with & without VCD) etc.													
a*	18G.	200	SQM*											
b*	20G.	300	SQM*											

ENQUIR	Y NO.:	PE/PG/N	IK1/E-549	2/2016									
	OF PROJECT:		300 MW NTPC KARIMNAGAR TELANGANA SG TPS										
NAME (OF PACKAGE:	AIR CON	DITIONIN	G SYSTEM									
TECHNI	CAL SPECIFICATION No:	PE-TS-42	4-553-A0	01									•
SL NO	DESCRIPTION OF EQUIPMENT/ ITEM	Qty	UNIT	Unit Ex- Works Price duly packed (Rs)	Total Ex- Works Price duly packed (Rs)	Excise Duty incl. Cess @	CST/VAT @% against Form'C' & 'E1' (Rs)	Freight incl. service tax @% of Total Ex- Works Price (Rs)		Unit Price (Rs)	Total price (Rs)	Service Tax @% (Rs)	Total price (Rs) (Supply + E&C)
	22G.	450	SQM*										
	24G.	950	SQM*										
	Supply air diffuser with VCD (Extruded Aluminium).	20	SQM*										
	Return air diffuser without VCD (Extruded Aluminium).	25	SQM*										
	GI Volume control dampers for Duct	3	SQM*		<u> </u>						ļ		
3*	Acoustic insulation of the first 5 of ducting from AHU outlets.	1	LOT										
4*	Thermal insulation of supply air duct & return air duct with finish as specified.	1900	SQM*										
	MS medium class drain piping upto nearest drain point with insulation & cladded and without insulation												
	50mm	20	Rmt*										
b*	40mm	20	Rmt*										
6	Field instruments like pressure gauge, temperature gauge, pressure switch, differential pressure switch, flow switch, differential pressure switch across hepa filters, flow meters, velocity sensor, static pressure sensors and other required instruments as per specifications, including necessary control panel form hook up with main DDCMIS as per specifications.	1	LOT										
7*	Fibre optic cable.	100	Rmt*										
C	AC System for Aux. building for unit # 1 & 2	100	11111										
1*	Air Cooled PAC-Unit complete with all accessories as specified The package unit shall be complete with all accessories like duct hetaers, pan humidifier, filters, acoustic insulation of duct for 5m from PU, drain piping with insulation upto nearest drain, required instrumentation etc												
(a)*	10 TR net capacity	1	No*										
2*	Air-cooled split type AC units consisting of condensing unit & evaporating unit including refrigerant pipes & fittings with insulation etc. (Minimum BEE Rating 5 Star for non ductable units).												
(a)*	5.0 TR capacity (ductable type, 415 V, 3 phase with isolation switch).	1	NO*										
(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 refrigerent piping to suite actual site condition.	8	NO*										
(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.	16	NO*										

NQUIR		PE/PG/NK1/E-5492/2016												
		2x800 MW NTPC KARIMNAGAR TELANGANA SG TPS AIR CONDITIONING SYSTEM												
ECHINIC	AL SPECIFICATION No:	PE-15-42	4-553-A00)1		CLU	DDLV		1	-	DECTION AND	CONANAICIONIN		
SL NO	DESCRIPTION OF EQUIPMENT/ ITEM	Qty	UNIT		Total Ex- Works Price duly packed (Rs)	Excise Duty incl. Cess @	CST/VAT @% against Form'C' & 'E1' (Rs)	Freight incl. service tax @% of Total Ex- Works Price (Rs)	Total F.O.R. Site price (Rs)	Unit Price (Rs)	Total price (Rs)	Service Tax @% (Rs)		Total price (Rs) (Supply + E&C)
	Air-cooled cassette type AC units consisting of condensing unit & evaporating unit including refrigerant pipes & fittings with insulation etc. Indoor unit of ceiling mounted casstte type unit (multi flow type) should have same decorative panel size regardless of their differece in capacity. (Minimum BEE Rating 5 Star for non ductable units).													
	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 refrigerent piping to suite actual site condition.	2	NO*											
	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.	2	NO*											
4*	Handling arrangement for AC equipments													
	Manually operated, platform trolley of 1 Ton capacity with base area 2m $\scriptstyle x$ 1.5m	2	NO*											
(b)*	1T Chain pulley block with travelling trolley	2	NO*											
	Total lumpsum price for special tools & tackles for maintenance inclusive of packing forwarding, transportation up to site, etc. (Bidder shall submit item-wise price break-up as per Appendix-A).	1	LOT							NA	NA	NA	NA	
	Total lumpsum price for commissioning spares inclusive of packing forwarding, transportation up to site, etc. (Bidder shall submit item-wise price break-up as per Appendix-B).	1	LOT							NA	NA	NA	NA	
	Any other item not indicated above, but required to make the system complete in all respects.	1	LOT											
	TOTAL ABOVE													
1	The bidder shall furnish unit rates for variable item (marked *) for necessar throughout the contract.	y adjustm	nent (plus	or minus) va	ariation during	detailed engg	g. stage. The u	nit rates quote	ed above shall	be considered	l and no separa	ate unit rates sh	nall be quoted.	Unit rates shall be valid
Particula	rs of bidder / authorised representative											· · · · · · · · · · · · · · · · · · ·		
Name	Designation		Signature								Date	Company Seal		

				PRICE FOR	RMAT								
				APPENDI									
		•		(Special tools 8	& Tackles)								
ENQUIR	Y NO.:	PE/PG/NK1/E-5492/2016											
NAME O	F PROJECT:	2x800 MW NTPC KARIMNAGAR TELANGANA SG TPS											
NAME O	F PACKAGE:	AIR CON	IDITIONIN	G SYSTEM									
TECHNIC	CAL SPECIFICATION No:	PE-TS-42	24-553-A0	01									
			SUPPLY										
SL NO	DESCRIPTION OF EQUIPMENT/ ITEM	Qty	UNIT	Unit Ex- Works Price duly packed (Rs)	Total Ex-Works Price duly packed (Rs)	Excise Duty incl. Cess @% (Rs)	CST/VAT @% against Form'C' & 'E1' (Rs)	Freight incl. service tax @% of Total Ex-Works Price (Rs)	Total F.O.R. Site price (Rs)				
							` ,	` ,					
1	FLAT D WRENCH - 6 MM TO 32 MM (12 Pcs)	1	SET										
2	BOX WRENCHES - 6 MM TO 22 MM (14 Pcs)	1	SET										
	RING SPANNER - 6 MM TO 32 MM (12 Pcs)	1	SET										
	ALLEN KEYS - 2 MM TO 10 MM	1	SET										
	CRESCENT SCREW SPANNER	1	NO.										
	SCREW DRIVER	1	NO.										
	OFFSET SCREW DRIVER	1	NO.										
	INSULATED PLIER	1	NO.										
	TORCH LIGHT FOR 2 CELL HAMMER 1 LB	1	NO.										
	OIL CAN	1	NO.										
	POCKET THERMOMETER - 0 TO 50 DEG. C)	1	NO.										
	INSULATION TAPE ROLL	1	NO.										
	STEEL FOOT RULE - 12"	1	NO.										
	FEELER GAUGE 9 BLADES	1	NO.										
16	PIPE WRENCH	1	NO.										
17	FLARE NUT (1/4")	6	NOS.										
18	FLARING TOOL	1	NO.										
19	TUBE CUTTER	1	NO.										
	GAS CHARGING PIPE	1	NO.										
	NITROGEN CHARGING ADAPTER	1	NO.										
"	FREON PRESSURE GAUGE (2 1/2" DIA DIAL)) 0 - 300 MM PSI	1	NO.										
73 1	FREON PRESSURE GAUGE (2 1/2" DIA DIAL)) 30 - 150 MM PSI	1	NO.						1				
24	PSYCHRO METER	1	NO.										
25	LOCK WITH KEY FOR TOOL BOX	1	NO.										
26	RATCHET 1/4"	1	NO.										
27	MS TOOL BOX	1	NO.										
	TOTAL ABOVE												
NOTES													
1	ABOVE IS THE MINIMUM LIST. ANY OTHER TOOL	/ TACKEL	. REQUIRE	D FOR THE SYST	TEM SHALL ALSO B	E PROVIDED BY TH	E VENDOR WITH	OUT ANY COST I	MPLICATION.				
Particula	ars of bidder / authorised representative							-	-				
Name	Designation	Sign	ature	DATE	Company Seal								

				PRI	CE FORMAT					
					PENDIX - B					
				(Commi	ssioning spares)				
ENGLUDY	NO -	DE /DC /A	W4/F F40	2/2016						
ENQUIRY			NK1/E-549							
NAME OF PROJECT: 2x800 MW NTPC KARIMNAGAR TELANGANA SG TPS NAME OF PACKAGE: AIR CONDITIONING SYSTEM										
TECHNICA	AL SPECIFICATION No:	PE-TS-42	24-553-A0	01						
					1		PPLY			
				Unit Ex-	Total Ex-	Excise Duty	CST/VAT	Freight incl.	Total F.O.R.	
	DESCRIPTION OF		UNIT	Works Price	Works Price	incl. Cess @	@% against	service tax	Site price (Rs)	
SL NO	EQUIPMENT/ ITEM	Qty		duly packed	duly packed	% (Rs)	Form'C' & 'E1'	@% of		
	,			(Rs)	(Rs)		(Rs)	Total Ex-		
								Works Price		
								(Rs)		
1	AHU FAN BELTS	1	SET							
2	PRESSURE GAUGE	1	NO.							
3	TEMPERATURE GAUGE	1	NO.							
4	FILTER	1	SET							
5	COMPRESSOR OIL	1 Lot	Ltr.							
6	REFRIGERANT	1 Lot	Kg							
	TOTAL ABOVE									
NOTES										
1	ABOVE IS THE MINIMUM	LIST. ANY	OTHER CO	OMMISSIONING	SPARE REQUIRE	D FOR THE SYST	TEM SHALL ALSO B	E PROVIDED BY	THE VENDOR	
	WITHOUT ANY COST IMP	LICATION.								
Particular	rs of bidder / authorised r	epresenta	tive							
		-							-	
Name	Designation	Sign	ature	DATE	Company Seal					

PRICE FORMAT ANNEXURE-II (LIST OF MANDATORY SPARES)

ENQUIRY NO.: PE/PG/NK1/E-5492/2016

Name

Designation

Signature

Date

Company Seal

NAME OF PROJECT: 2x800 MW NTPC KARIMNAGAR TELANGANA SG TPS NAME OF PACKAGE: AIR CONDITIONING SYSTEM TECHNICAL SPECIFICATION: PE-TS-424-553-A001 QTY Unit Ex-Works Total Ex-Works **Excise Duty** CST/VAT Freight incl. Total F.O.R. Site S. No. Price duly Price duly incl. Cess @ @___% service tax price (Rs) packed (Rs) packed (Rs) __% (Rs) against @__% of Total Form'C' & 'E1 Ex-Works Price (Rs) (Rs) 2.00.00 AIR CONDITIONING SYSTEM 1.0 Air handling unit (for each model) 1.1 V-belts for AHU blower 2 stes AHU blower bearings set 1.3 Blower motor bearing 1 set Filter at suction and discharge of all AHUs 1.4 25 % of installed population CONTROL AND INSTRUMENTATION 3 Air-Conditioning System i) Electronics transmitters Transmitters of all types and model no.(for 3.1.1 5% or 1 no of each type the measurement of pressure, differential and model whichever is pressure, flow, level temp etc.) more (to be devided into various ranges in proportion to main population Temp. elements 3.2.1 RTD's 5% or 1 no whichever is more Thermo well 5% or 1 no whichever is more ** *{with head assembly terminal block and * (to be devided into verious insertion lengths in proportion to main population) All type of local indicators 5% or 1 no of each make model and type whichever is more (to be devided to various ranges in proportion to main main population of all make, model and type) Process actuated switch devices include all 5 % or 1 no of each type types of pressure, differential pressure, flow and model whichever is temp. and differential temp., level switch more devices. 3.5 Relative humidity sensors 1 nos 3.6 Geyserstats l nos 3.7 Local humidity / temperature indicators 2 nos each PROCESS CONNECTION PIPING (FOR IMPULSE PIPING/TUBING SAMPLING PIPING / TUBING AND AIR SUPPLY PIPING AS APPLICABLE) 10 % or 1 no of each 4.1 Valves type, class, size and model whichever is more 4.2 2 way / 3 way / 5 way valve manifolds 10 % or 1 no of each type, class, size and model whichever is more 10 % or 1 no of each type 4.3 Fittings class size and model whichever is more Variable Frequency Derive (VFD) No of each type & 5.1 Complete VFD derive ating 5.2 Complete Converter & Inverter unit 1 No of each type & ating 5.3 Set of Cards 1 No of each type & ating 2 Nos of each type & 5.4 Set of fuses rating Input & Output Chokes (If applicable) 5.5 1 Set TOTAL ABOVE Note: Mandatory spares listed above is bare minimum requirement. In case any additional mandatory spares requirement is covered elsewhere in the tender specification as specified Particulars of bidder / authorised representative

PRICE FORMAT **ANNEXURE - III** (Guaranteed Power Consumption For Air Conditioning System) ENQUIRY NO.: PE/PG/NK1/E-5492/2016 2x800 MW NTPC KARIMNAGAR TELANGANA SG TPS NAME OF PROJECT: NAME OF PACKAGE: AIR CONDITIONING SYSTEM TECHNICAL SPECIFICATION No: PE-TS-424-553-A001 S.NO. **DESCRIPTION OF EQUIPMENT DUTY FACTOR** NO OF EQUIPMENT **TOTAL GUARANTEED TOTAL KW** POWER CONSUMPTION FOR EACH EQUIPMENT AT MOTOR INPUT TERMINAL AND CONTROL PANEL (IN KW) WORKING **STANDBY** 3A 3B 4 5 6=3Ax4x5 1 AC PLANT for ESP Building- UNIT- 1. 1.1 Air cooled DX condensing machine 1 1 1 1.2 AHUs for ESP control room 1 1 1 2 AC PLANT for ESP Building- UNIT- 2. 2.1 Air cooled DX condensing machine 1 1 1 2.2 AHUs for ESP control room 1 1 1 TOTAL (KW) 115 Estimated power consumption (EPC) figure for the system (for working drives only) has been considered as 115 KW. So long bidder's quoted Note: guaranteed power consumption (GPC) above remains within this EPC, there will be no technical loading of bid on power consumption for evaluation. However, if bidder's quoted GPC exceeds EPC, there shall be technical loading of bid for evaluation @ US \$ 4314 per KW of additional power over EPC. Bidder's guaranteed power consumption at motor input terminals (not shaft power) as furnished in relevant schedule shall be demonstrated by the successful bidder during performance testing at works/ site. In case power consumption is noted higher than EPC / bidder's quoted GPC whichever is higher, during inspection/ PG test, penalty @ US \$ 4314 per KW shall be levied on vendor. If the contract currency is other than US \$, then the liquidated damages shall be in equivalent amount in contract currency based on bill selling exchange rate of State Bank of India prevailing in the date of Award of Contract i.e. 05.02.2016. Particulars of bidder / authorised representative

Signature

DATE

Company Seal

Name

Designation

बीएच ई एल												
HHE	2x800 MW NTPC K	ARIMNAG	AR TEL	ANGANA SC	G TPS							
	LIST OF CIF CONTENTS FOR AIR CONDITIONING SYSTEM											
	Appl	icable for In	dian Bid	ders								
Country	y of Import:											
Sl. No.	Sl. No. Description of items to be imported. Unit of Measure Qty. Currency foreign currency Total CIF Contents											
			·									
	GRAND	ΓΟΤΑL										