

| PRICE FORMAT | | | | | |
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| ENQUIRY No.: | | PE/PG/NK1/E-5492/2016 | | | |
| NAME OF PROJECT: | | 2x800 MW NTPC KARIMNAGAR TELANGANA SG TPS | | | |
| NAME OF PACKAGE: | | AIR CONDITIONING SYSTEM | | | |
| TECHNICAL SPECIFICATION No: | | PE-TS-424-553-A001 | | | |
| S. No. | Description | Qty | Total Amount | Remarks | |
| 1 | Total lump sum firm price inclusive of all prevailing taxes, duties and other levies 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, transportation & storage at site, in-site transportation, assembly, erection & commissioning, final painting at site, minor civil work, trial run at site, preperation of layout drawings 3D (as applicable) 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. | 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 and other levies 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 alongwith spares for erection as required, startup and commissioning spares as required, forwarding, proper packing, shipment and delivery at site, preperation of layout drawings 3D (as applicable) 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 | | Total F.O.R. site price as per Annexure-I | |
| 2.2 | Total lumpsum firm prices inclusive of all prevailing taxes, duties and other levies 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 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 | | Total E&C charges incl. service tax as per Annexure-I | |
| 2.3 | Total lumpsum firm price inclusive of all prevailing taxes, duties and other levies 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 | | Total F.O.R. site price as per Annexure-II | |
| Note: 1.) Bidder to quote Guaranteed Power Consumption for Air Conditining System as per Annexure-III . | | | | | |
| Particulars of bidder / authorised representative | | | | | |
| | | | | | |
| Name | Designation | Signature | Date | Company Seal | Company Seal |

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[illegible]

| ENQUIRY NO.: | | | | PE/PG/NK1/E-5492/2016 | | | | | | | | | | |
|---------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------|-------------------------------------------|---------------------------------------|-----------------------------------|-------------------------------------------|--------------------------------------------------------------|------------------------------|---------------------------|------------------|------------------------|-----------------------------------|---------------------------------|
| NAME OF PROJECT: | | | | 2x800 MW NTPC KARIMNAGAR TELANGANA SG TPS | | | | | | | | | | |
| NAME OF PACKAGE: | | | | AIR CONDITIONING SYSTEM | | | | | | | | | | |
| TECHNICAL SPECIFICATION No: | | | | PE-TS-424-553-A001 | | | | | | | | | | |
| SL NO | DESCRIPTION OF EQUIPMENT/ ITEM | Qty | UNIT | SUPPLY | | | | | | ERECTION AND COMMISIONING | | | | Total price (Rs) (Supply + E&C) |
| | | | | 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) | Unit Price (Rs) | Total price (Rs) | Service Tax @ __% (Rs) | Total price incl service tax (Rs) | |
| 3* | 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). | | | | | | | | | | | | | |
| (a)* | 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* | | | | | | | | | | | |
| (b)* | 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 | | | | | | | | | | | | | |
| (a)* | Manually operated, platform trolley of 1 Ton capacity with base area 2m x 1.5m | 2 | NO* | | | | | | | | | | | |
| (b)* | 1T Chain pulley block with travelling trolley | 2 | NO* | | | | | | | | | | | |
| D | 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 | |
| E | 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 | |
| F | Any other item not indicated above, but required to make the system complete in all respects. | 1 | LOT | | | | | | | | | | | |
| | TOTAL ABOVE | | | | | | | | | | | | | |
| 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. | | | | | | | | | | | | | |
| Particulars of bidder / authorised representative | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| Name | Designation | Signature | | | | | | | | | | | Date | Company Seal |

| PRICE FORMAT APPENDIX - A (Special tools & Tackles) | | | | | | | | | |
|-----------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|-----------|-------------------------------------------|-----------------------------------------|------------------------------------------|--------------------------------------|-------------------------------------------------|--------------------------------------------------------------------|------------------------------|
| ENQUIRY NO.: | | | PE/PG/NK1/E-5492/2016 | | | | | | |
| NAME OF PROJECT: | | | 2x800 MW NTPC KARIMNAGAR TELANGANA SG TPS | | | | | | |
| NAME OF PACKAGE: | | | AIR CONDITIONING SYSTEM | | | | | | |
| TECHNICAL SPECIFICATION No: | | | PE-TS-424-553-A001 | | | | | | |
| SL NO | DESCRIPTION OF EQUIPMENT/ ITEM | Qty | UNIT | SUPPLY | | | | | |
| | | | | 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 | | | | | | |
| 3 | RING SPANNER - 6 MM TO 32 MM (12 Pcs) | 1 | SET | | | | | | |
| 4 | ALLEN KEYS - 2 MM TO 10 MM | 1 | SET | | | | | | |
| 5 | CRESCENT SCREW SPANNER | 1 | NO. | | | | | | |
| 6 | SCREW DRIVER | 1 | NO. | | | | | | |
| 7 | OFFSET SCREW DRIVER | 1 | NO. | | | | | | |
| 8 | INSULATED PLIER | 1 | NO. | | | | | | |
| 9 | TORCH LIGHT FOR 2 CELL | 1 | NO. | | | | | | |
| 10 | HAMMER 1 LB | 1 | NO. | | | | | | |
| 11 | OIL CAN | 1 | NO. | | | | | | |
| 12 | POCKET THERMOMETER - 0 TO 50 DEG. C) | 1 | NO. | | | | | | |
| 13 | INSULATION TAPE ROLL | 1 | NO. | | | | | | |
| 14 | STEEL FOOT RULE - 12" | 1 | NO. | | | | | | |
| 15 | 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. | | | | | | |
| 20 | GAS CHARGING PIPE | 1 | NO. | | | | | | |
| 21 | NITROGEN CHARGING ADAPTER | 1 | NO. | | | | | | |
| 22 | FREON PRESSURE GAUGE (2 1/2" DIA DIAL) 0 - 300 MM PSI | 1 | NO. | | | | | | |
| 23 | FREON PRESSURE GAUGE (2 1/2" DIA DIAL) 30 - 150 MM PSI | 1 | NO. | | | | | | |
| 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 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 | | | | | |

PRICE FORMAT
APPENDIX - B
(Commissioning spares)

| ENQUIRY NO.: | | PE/PG/NK1/E-5492/2016 | | | | | | | |
|----------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|-------------|--------------------------------------|---------------------------------------|-----------------------------------|--------------------------------------------|--------------------------------------------------------------|------------------------------|
| NAME OF PROJECT: | | 2x800 MW NTPC KARIMNAGAR TELANGANA SG TPS | | | | | | | |
| NAME OF PACKAGE: | | AIR CONDITIONING SYSTEM | | | | | | | |
| TECHNICAL SPECIFICATION No: | | PE-TS-424-553-A001 | | | | | | | |
| SL NO | DESCRIPTION OF EQUIPMENT/ ITEM | Qty | UNIT | SUPPLY | | | | | |
| | | | | 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 | 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 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 | | | | | |

| PRICE FORMAT ANNEXURE-II (LIST OF MANDATORY SPARES) | | | | | | | | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|---------------------------------------|------------------------------------|---------------------------------------------|---------------------------------------------------------------|------------------------------|
| ENQUIRY NO.: PE/PG/NK1/E-5492/2016 | | | | | | | | |
| NAME OF PROJECT: 2x800 MW NTPC KARIMNAGAR TELANGANA SG TPS | | | | | | | | |
| NAME OF PACKAGE: AIR CONDITIONING SYSTEM | | | | | | | | |
| TECHNICAL SPECIFICATION: PE-TS-424-553-A001 | | | | | | | | |
| Customer S. No. | Description | QTY | 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) |
| 2.00.00 | AIR CONDITIONING SYSTEM | | | | | | | |
| 1.0 | Air handling unit (for each model) | | | | | | | |
| 1.1 | V-belts for AHU blower | 2 stes | | | | | | |
| 1.2 | AHU blower bearings | 1 set | | | | | | |
| 1.3 | Blower motor bearing | 1 set | | | | | | |
| 1.4 | Filter at suction and discharge of all AHUs | 25 % of installed population | | | | | | |
| 3 | CONTROL AND INSTRUMENTATION | | | | | | | |
| i) | Air-Conditioning System | | | | | | | |
| 3.1 | Electronics transmitters | | | | | | | |
| 3.1.1 | Transmitters of all types and model no.(for the measurement of pressure, differential pressure, flow, level temp etc.) | 5% or 1 no of each type and model whichever is more (to be divided into various ranges in proportion to main population | | | | | | |
| 3.2 | Temp. elements | | | | | | | |
| 3.2.1 | RTD's * | 5% or 1 no whichever is more ** | | | | | | |
| 3.2.2 | Thermo well *(with head assembly terminal block and nipple) | 5% or 1 no whichever is more ** ** (to be divided into verious insertion lengths in proportion to main population) | | | | | | |
| 3.3 | All type 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 main population of all make, model and type) | | | | | | |
| 3.4 | Process actuated switch devices include all types of pressure, differential pressure, flow temp. and differential temp., level switch devices. | 5 % or 1 no of each type and model whichever is more | | | | | | |
| 3.5 | Relative humidity sensors | 1 nos | | | | | | |
| 3.6 | Geysersstats | 1 nos | | | | | | |
| 3.7 | Local humidity / temperature indicators | 2 nos each | | | | | | |
| 4 | PROCESS CONNECTION PIPING (FOR IMPULSE PIPING/TUBING SAMPLING PIPING / TUBING AND AIR SUPPLY PIPING AS APPLICABLE) | | | | | | | |
| 4.1 | Valves | 10 % or 1 no of each 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 | | | | | | |
| 4.3 | Fittings | 10 % or 1 no of each type class size and model whichever is more | | | | | | |
| 5 | Variable Frequency Drive (VFD) | | | | | | | |
| 5.1 | Complete VFD derive | 1 No of each type & rating | | | | | | |
| 5.2 | Complete Converter & Inverter unit | 1 No of each type & rating | | | | | | |
| 5.3 | Set of Cards | 1 No of each type & rating | | | | | | |
| 5.4 | Set of fuses | 2 Nos of each type & rating | | | | | | |
| 5.5 | Input & Output Chokes (If applicable) | 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 | | | | | | | | |
| Name | Designation | Signature | Date | Company Seal | | | | |

PRICE FORMAT
ANNEXURE - III
(Guaranteed Power Consumption For Air Conditioning System)

| ENQUIRY NO.: | | PE/PG/NK1/E-5492/2016 | | | | |
|----------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|-------------|------------------------------------------------------------------------------------------------------------------------|-------------|-----------------|
| NAME OF PROJECT: | | 2x800 MW NTPC KARIMNAGAR TELANGANA SG TPS | | | | |
| NAME OF PACKAGE: | | AIR CONDITIONING SYSTEM | | | | |
| TECHNICAL SPECIFICATION No: | | PE-TS-424-553-A001 | | | | |
| S.NO. | DESCRIPTION OF EQUIPMENT | NO OF EQUIPMENT | | TOTAL GUARANTEED POWER CONSUMPTION FOR EACH EQUIPMENT AT MOTOR INPUT TERMINAL AND CONTROL PANEL (IN KW) | DUTY FACTOR | TOTAL 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 |
| Note: | <p>Estimated power consumption (EPC) figure for the system (for working drives only) has been considered as 115 KW. So long bidder's quoted 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.</p> <p>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.</p> <p>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.</p> | | | | | |
| Particulars of bidder / authorised representative | | | | | | |
| | | | | | | |
| Name | Designation | Signature | DATE | Company Seal | | |



ANNEXURE-CIF

2x800 MW NTPC KARIMNAGAR TELANGANA SG TPS

LIST OF CIF CONTENTS FOR AIR CONDITIONING SYSTEM

Applicable for Indian Bidders

Country of Import :

| Sl. No. | Description of items to be imported. | Unit of Measure ment | Qty. | Currency | Unit rate in foreign currency | Total CIF Contents |
|-------------|--------------------------------------|----------------------------|------|----------|-------------------------------------|--------------------|
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| GRAND TOTAL | | | | | | |