

S. No.	DESCRIPTION	UNIT	Qty	AMOUNT (Ex-Works)
2.10.2	Electronic modules for UPS , Charger, static switch & stabilizer and DC power supply system with each set consisting of atleast one number of each type of electronic module for inverters, chargers, static switch, stabiliser etc.	2 Set		
2.10.3	Battery cells	2 Lot (10%)		
2.10.4	Thyrister without heat sink	2 Lot (10%)		
2.10.5	Semiconductor fuse	2 Lot (10%)		
2.11	LP VALVES			
2.11.1	LP Piping valves & traps - Complete assembly	5% or min. 1 no. (whichever is more) for each size, type & rating for total population		
2.11.2	Steam traps - Complete assembly	5% or min. 1 no. (whichever is more) for each size, type & rating for total population		
2.12	Mandatory Spares for Temperature Elements and Thermowells			
2.12.1	Thermocouple / RTD elements (10% of each type and length of elements , or a minimum of one number, whichever is more.)	2 Lot		
2.12.2	Thermowells for each type of temperature sensors (10% or a minimum of one for each type, whichever is more.)	2 Lot		
2.13	Mandatory Spares for Electronic Transmitters (for pressure, DP, Flow, level, Temperature) and Electrical Transducers.			
2.13.1	Transmitters and Electrical Transducers (10% of total number of offered for each model and type for the project or a minimum of one number, whichever is more)	2 Lot		
2.14	Mandatory spares for local gauges/switch (for Pressure, DP, Temperature, Flow, level , etc.)			
2.14.1	Local gauges/ Switch (for Pressure, DP, Temperature, Flow, level , etc.) (10% of total number of instruments offered for each model and type for the project or a minimum of one number, whichever is more.)	2 Lot		
2.15	CONTROL VALVES	FOR 1 UNIT		
2.15.1	DIAPHRAGM	2 NOS. OF EACH TYPE OF ACTUATOR		
2.15.2	GLAND PACKING	1 SET FOR EACH TYPE OF VALVE		
2.15.3	TRIM	1 SET FOR EACH TYPE OF VALVE		
2.15.4	GASKET	2 SET FOR EACH TYPE OF VALVE		
2.15.5	POSITION TRANSMITTER COMPLETE SET	10 % of total quantity used in the system for each type & model		
2.15.6	complete set of solenoid valve for on/off valve	5 nos.for each type & ratings		
2.15.7	Position limit switch	5 nos.for each type & ratings		
2.16	Electrical Spares for Motors			
2.16.1	Motor bearing set for AHU fan motor	1 set for each type and rating of fan motor		

S. No.	DESCRIPTION	UNIT	Qty	AMOUNT (Ex-Works)	
2.16.2	Motor bearing set for fresh air fan motor	1 set for each type and rating of fan motor			
2.17	Material handling equipment spares as applicable	As specified under Sub Section C-5 of Section-I “TECHNICAL SPECIFICATION (HANDLING ARRANGEMENT PORTION)”.			
NOTE					
1	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.				
2	Unless stated otherwise, a "set" or "Lot" means items required for complete replacement in one equipment of each type / size/ range.				
3	Wherever quantity has been specified as percentage (%), it shall mean percentage (%) of the population of the item required for one unit of 270 MW in the station (project), unless specified otherwise.				
4	In case of Bought Out items, itemised spares list may be vendor specific and may differ from the list of spares mentioned above. In such cases, The quoted price shall be considered for applicable items only without any change in the contract price.				
5	Above mandatory spares shall be supplied as applicable as per system requirement during detail engineering.				
Particulars of bidder / authorised representative					
	Name	Designation	Signature	Date	Company Seal

SUGGESTED PRICE FORMAT ANNEXURE - III Guaranteed Power Consumption For Air Conditioning System					Doc No:	PE-PF-411-553-A001
					Rev No:	0
					Date of issue	31.03.2017
NAME OF PROJECT:		4x270 MW BHADRADRI TPS				
NAME OF PACKAGE:		AIR CONDITIONING SYSTEM				
TECHNICAL SPECIFICATION No:		PE-TS-411-553-A001_Rev 01				
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-1: CENTRAL CHILLED WATER SYSTEM FOR MAIN CR AREAS COMMON FOR UNIT-1&2.					
1.1	Water chilling machine -Screw chiller	1	1		1	
1.2	AHUs for Common control room areas, CER, computer room etc	2	1		1	
1.3	Cooling tower fans for AC plant	1	1		1	
1.4	Condenser water pumps for AC plant	1	1		1	
1.5	Chilled water pumps for AC plant	1	1		1	
1.6	Fresh air fans for above AHU room	1	0		1	
2	AC-Plant-2: CENTRAL CHILLED WATER SYSTEM FOR MAIN CR AREAS COMMON FOR UNIT-3&4.					
2.1	Water chilling machine -Screw chiller	1	1		1	
2.2	AHUs for Common control room areas, CER, computer room etc	2	1		1	
2.3	Cooling tower fans for AC plant	1	1		1	
2.4	Condenser water pumps for AC plant	1	1		1	
2.5	Chilled water pumps for AC plant	1	1		1	
2.6	Fresh air fans for above AHU room	1	0		1	
3	AC Plant -3 (ESP building Common for Unit-1&2)					
3.1	Precision AC for ESP-1	2	1		1	
3.2	Fresh air fans for above PAC room.	1	0		1	
4	AC Plant -4 (ESP building Common for Unit-3&4)					
4.1	Precision AC for ESP-2	2	1		1	
4.2	Fresh air fans for above PAC room.	1	0		1	
5	AC Plant -5 (FGD Control room common for Unit-1, 2, 3 & 4)					
5.1	Precision AC for FGD Control room	2	1		1	
5.2	Fresh air fans for above PAC room.	1	0		1	
				TOTAL (KW)		774
Note:	Estimated power consumption (EPC) figure for the system (for working drives only) has been considered as 774 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 @ Rs 2,52,000/- 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 @ Rs 2,52,000/- per KW shall be levied on vendor.					
Particulars of bidder / authorised representative						
	Name	Designation	Signature	Date	Company Seal	