

PRICE FORMAT FOR INDIAN BIDDERS (Annexure-A)																
NAME OF PROJECT:		PATRATU STPS 3X800MW														
NAME OF PACKAGE:		COMPRESSED AIR SYSTEM														
TECHNICAL SPECIFICATION:		PE-TS-434-555-A001				SUPPLY						E&C			Total Price (Main Supply Mandatory Spares+ Freight+ E&C) Excluding GST INR	
S. No.	Description	HSN CODE	UNIT	QTY	Unit Ex-works duly packed (INR)	Total Ex-works duly packed (INR)	Type of GST (IGST/CGST + SGST/UTGST)	Freight % of Total Ex-works	Freight in INR	Total FOR site price excluding GST (INR)	Unit E&C Price (INR)	Total E&C Price (INR)	Type of GST (IGST/CGS T + SGST/UTG ST)	Total price in words		
1.0	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, commissioning as required, parts/spares required during warranty period (against defects in design, materials, construction and workmanship), 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 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.															
2.0	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 listed at Annexure-III), fill of lubricants & consumables alongwith spares for erection as required, startup and commissioning spares as required, forwarding,parts/spares required during warranty period (against defects in design,materials,construction and workmanship), 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)	8414 40 30	Lot	1							NA					
2.2	Total lumpsum firm prices inclusive of all prevailing taxes, duties and other levies for Services part comprising of 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 (if applicable) 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.	998732	Lot	1		NA										
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)	8414 90 90	Lot	1							NA					

Note:
1. Prices shall be firm .
2. CGST/SGST/UGST/IGST shall be paid at actuals against documentary evidence subjected to the maximum of GST corresponding to above HSN/SAC code.
3. Evaluation shall be done one the basis of total lump sum prices for complete supply and services but excluding GST.
4. Vendor to quote prices in words also.
5. Nature of GST on Services at project site shall not be allowed to change after bidding.
6. Freight percentage (%) with respect to total Ex-Works (Main Supply) will be considered @ 1.002%. If bidder will not quote freight in % or mentioned included / FOC / NIL. In case of included / FOC / NIL freight component @1.002% will be derived from quoted Total Ex-works price.
7) Bidder to quote Guaranteed Power Consumption for Compressed Air System as per Annexure-III F .

Particulars of bidder / authorised representative					
Name	Designation	Signature	Date	Company Seal	

PRICE FORMAT FOR FOREIGN BIDDERS (Annexure-A)																	
NAME OF PROJECT:		PATRATU STPS 3X800MW															
NAME OF PACKAGE:		COMPRESSED AIR SYSTEM															
TECHNICAL SPECIFICATION:		PE-TS-434-555-A001			HSN CODE	UNIT	QTY	Imported content			Indigenous content					E&C	
S. No.	Description	HSN CODE	UNIT	QTY	Total C & F -PRICE (Currency)	Custom Duty INR after availing input tax credit (INR)	Inland Freight (INR)	Total Ex-works duly packed (INR)	Type of GST (IGST/CGST + SGST/UTGST)	Freight % of Total Ex-works	Freight in INR	Total for Indigeno us content (INR)	Total price in words	Total E&C Price (INR)	Type of GST (IGST/CGST + SGST/UTGST)	Total price in words	
1.0	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 sparealongwith spares for erection, startup, commissioning as required, parts/spares required during warranty period (against defects in design, materials, construction and workmanship), 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 siteand carrying out Performance guarantee / Functional / Demonstrationtests 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.																
2.0	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.preparationand 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 listed at Annexure-II), fill of lubricants & consumables alongwith spares for erection as required, startup and commissioning spares as required, forwarding,parts/spares required during warranty period (against defects in design,materials,constructionand workmanship), 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)	8414 40 30	Lot	1											NA		
2.2	Total lumpsum firm prices inclusive of all prevailing taxes, duties and other levies for Services part comprising of 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/clientO&M staff (if applicable)and handover in flawless condition of the package to the end customer complete with all accessoriesfor the total scope defined as per BHEL NIT & tender technical specification as specified above, amendment & agreements till placement of order.	998732	Lot	1	NA												
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)	8414 90 90	Lot	1											NA		
Note: 1. Prices shall be firm . 2. CGST/SGST/UGST/IGST shall be paid at actuals against documentary evidence subjected to the maximum of GST corresponding to above HSN/SAC code. 3. Evaluation shall be done one the basis of total lump sum prices for complete supply and services but excluding GST. 4. Vendor to quote prices in words also. 5. Nature of GST on Services at project site shall not be allowed to change after bidding. 6. Freight percentage (%) with respect to total Ex-Works (Main Supply) will be considered @ 1.002%. If bidder will not quote freight in % or mentioned included / FOC / NIL. In case of included / FOC / NIL freight component @1.002% will be derived from quoted Total Ex-works price. 7) Bidder to quote Guaranteed Power Consumption for Compressed Air System as per Annexure-III F .																	
Particulars of bidder / authorised representative																	
Name	Designation	Signature		Date	Company Seal												

BREAK UP OF SUPPLY ANNEXURE-I									
NAME OF PROJECT:		PATRATU STPS 3X800MW							
NAME OF PACKAGE:		COMPRESSED AIR SYSTEM							
TECHNICAL SPECIFICATION:		PE-TS-434-555-A001							
S. No.	DESCRIPTION	UNIT	QTY	SUPPLY					
				INDIAN BIDDERS		FOREIGN BIDDERS			
				Unit Ex-works duly packed (INR)	Total Ex-works duly packed (INR)	Imported content		Indigenous content	
	BREAK-UP OF SUPPLY PRICES GIVEN IN 2.1 OF MAIN SHEET.					Unit C & F - PRICE (Currency)	Total C & F - PRICE (Currency)	Unit Ex-works duly packed (INR)	Total Ex-works duly packed (INR)
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, parts/spares required during warranty period (against defects in design,materials,construction and workmanship), 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 prices for items covered in clause 2.1 above.								
2.1.1	Instrument Air Compressor (oil free Screw) Each of 65 NM3/Minute capacity at 8.0 kg/cm2 (g) with accessories, Suction filter and silencer, Inter Cooler, After Cooler with moisture separators, automatic drain traps, instruments, Control panel etc. (Electric motor to drive the compressor is excluded from bidders scope).	Nos.	3						
2.1.2	Air Dryer (HOC Type) Air Drying Plant of 65 NM3/min and to match instrument air compressor with all instruments and controls including Electronic Dew point meter as specified.	Nos.	3						
2.1.3	Service Air Compressor (oil free Screw) Each of 65 NM3/Minute capacity at 8.0 kg/cm2 (g) with accessories, Suction filter and silencer, Inter Cooler, After Cooler with moisture separators, automatic drain traps, instruments, Control panel etc. (Electric motor to drive the compressor is excluded from bidders scope)	Nos.	2						
2.1.4	Compressor house outdoor Air recievers including unit air receivers (in BC bay of TG Hall): Air receiver of 10M3, near compressor house with each having Pressure gauges, Temperature gauges, Relief valve, Drain connection with zero purge type automatic trap stations and other accessories as specified.	Nos.	8						
2.1.5	DM Plant Air reciever Air receiver of 2M3, near DM plant with each having Pressure gauges, Temperature gauges, Relief valve, Drain connection with zero purge type automatic trap stations and other accessories as specified.	Nos.	1						
2.1.6	Pipes , fittings and valves Inter connecting cooling water, compressed air piping & Drain piping up to the nearest common drain point outside compressor house as specified including fittings and valves, etc. for complete compressed air system.	Lot	1						
2.1.7	Field instruments as specified including temperature scanners, Flow meter, Flow transmitter & other instruments as specified.	Lot	1						
2.1.8	Cable, Cable lugs, glands, junction box, etc for Compressed Air System equipment as required.	Lot	1						
2.1.9	Total lump sum prices for Start-Up, commissioning spares, maintenance tools & tackles and parts/spares required during warranty period etc. As per annexure-IV & V.	Lot	1						
2.2.0	Sequencial panel for equal running hours of air compressors and interface module for establishing communication with DDCMIS	Lot	1						
Note: 1.) Bidder to quote Guaranteed Power Consumption for Compressed Air System as per Annexure-IIIF.									
Name	Designation	Signature	Date	Company Seal					

ANNEXURE-II
LIST OF MANDATORY SPARES

NAME OF PROJECT: PATRATU STPS 3X800MW

NAME OF PACKAGE: COMPRESSED AIR SYSTEM

TECHNICAL SPECIFICATION: PE-TS-434-555-A001		UNIT	Indian Bidders	Foreign Bidders	
S. No.	DESCRIPTION			Total C & F - PRICE (Currency)	Total Ex-works duly packed (INR)
2.00.00	Oil free Screw Air Compressor (As applicable)		Total Ex-works duly packed (INR)		
2.01.00	H. P. Stage Complete HP Stage assembly consisting of high pressure element, Bearing for male and female rotors (drive end), Bearing for male and female rotors (non-drive end), Timing gears, Graphite ring shaft for compressor chamber seals or white metal labyrinth, suction valve, discharge valve, packing set, Axial thrust bearing, Labyrinth oil seal or radial seals or double acting seals for drive shafts.	1 Set of each type/rating			
2.01.01	L. P. Stage Complete LP Stage assembly consisting of high pressure element, Bearing for male and female rotors (drive end), Bearing for male and female rotors (non-drive end), Timing gears, Graphite ring shaft for compressor chamber seals or white metal labyrinth, suction valve, discharge valve, packing set, Axial thrust bearing, Labyrinth oil seal or radial seals or double acting seals for drive shafts.	1 Set of each type/rating			
2.01.02	LP stage Gear and Pinion	1 Set			
2.01.04	HP stage Gear and Pinion	1 Set			
2.01.05	Air Intake Filter Element With Gaskets	4 Sets			
2.01.06	Oil Filter Element With Gaskets & Seals	4 Sets			
2.01.07	Safety Valve Springs and Gaskets for HP stage	1 Set			
2.01.08	Safety Valve Springs and Gaskets for LP stage	1 Set			
2.01.09	Valves (within the compressor house with actuators	2 nos of each type/ratings/ size.			
2.01.10	Oil Pump/Motor				
2.01.11	Oil Pump and Motor complete assembly	1 Set			
2.01.11.1	Pump impeller/rotor with shaft	1 Set			
2.01.11.2	Set of bearings	2 Set			
2.01.11.3	Set of Seals	2 Set			
2.01.11.4	Drain / Moisture Trap	2 Set of each type/size.			
2.01.12	Oil Cooler Gaskets & Seals	2 sets			
	OR				
2.01.13	Centrifugal Compressor (as applicable)				
2.02.00	Pinion Shaft Journal Bearing Assembly	2 Sets			
2.02.01	Thrust Bearing Assembly	2 Sets			
2.02.02	Shaft Seals for Air-Oil (All stages)	2 Sets			
2.02.03	Gasket / O rings	3 Sets each type/size			
2.02.04	Air Filter Elements	4 Sets each type/size			
2.02.05	Lub Oil System				
2.02.06	Main oil pump complete	1 No			
2.02.06.1	Aux. oil pump complete	1 No			
2.02.06.2	Complete coupling for Main & Aux. oil pump , spacer	1 No			
2.02.06.3	Cartridge filter elements with gaskets and seals	4 Sets			

2.02.06.4	Drain / Moisture Trap	2 Set of each type/size.			
2.02.07	Oil Cooler Gaskets & Seals	2 sets			
2.02.08	AIR DRYING PLANT (Twin tower type) FOR IA SYSTEM (As applicable)				
2.03.00	Pre filter element(Ceramic candle or as applicable)	2 sets			
2.03.01	After filter element(Ceramic candle or as applicable)	2 sets			
2.03.02	Heater element(if applicable)	1 sets			
2.03.03	Blower bearing(if applicable)	1 sets			
2.03.04	Blower motor bearing(if applicable)	2 sets			
2.03.05	Valves & Valve Actuators (pneumatic/hydraulic)	2 sets			
2.03.06	Heater coil for temperature stabilization (for HOC type)(as applicable)	2 sets			
	OR				
	Rotary drum type Air drying plant for Instrument Air system (As applicable)				
2.07.00	Drive assembly consisting of motor, gear boxes, drive shaft & coupling	1 set			
2.03.07	MEASURING INSTRUMENTS				
2.05.00	Electronic Transmitters				
1	Transmitters of all types, ranges and model no. (for the measurement of Pressure, differential pressure flow, level, etc.)	10% or 1 No. of each type and model, whichever is more			
(i)	Temperature elements				
2	Thermocouples of each type like K-type, R-type, metal etc. and length *	10% or 2 Nos. of each type and length Which ever is more			
ii)	Thermowell	10% or 2 Nos. of each type and length Which ever is more			
(iii)	Temperature transmitters	10% or 02 nos whichever is more			
3	Local Indicators like temperature gauges, pressure gauges, differential pressure gauges, flow gauges flow meters etc.,	model and type whichever is more (to be divided to various ranges in proportion to main of all make,			
4	Process Actuated Switch Devices Includes all types of Pressure, differential pressure, flow, temperature, differential temperature, level switch Devices	10% or 1 No. of each type and model whichever is more			
5	Dew Point meters	5% or 1 No. of each type and model whichever is more			
	MICROPROCESSOR BASED/PLC BASED CONTROL/ELECTRONIC BASED CONTRAL PANEL (IF APPLICABLE)				
2.06.00	Fully programmed controller of electronic modules of each type (as applicable)	10% or 1 no. whichever is more			
1	Power supply module (if applicable)	10% or 1 no. whichever is more			

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) If any item is not applicable, bidder to quote equivalent spares within quoted price.

(3) Applicability of the item will be decided during detailed Engg. by BHEL/Customer without any commercial implications.

Name	Designation	Signature	DATE			

PATRATU STPS 3X660MW- Compressed Air System					
Break up price for Maintenance tools and tackles				ANNEXURE-IV	
Sl. no	Description of Item	Qty.	Unit	Unit price (Ex works in INR)/ UNIT C&F	Total Ex- Works Prices in INR/TOTAL C&F duly packed
1	D Spanner set (6mm to 32 mm) - set of 10 nos	1	set		
2	Ring Spanner set (6mm to 32 mm) - set of 10 nos	1	set		
3	Box Spanner set (6mm to 32 mm) - set of 10 nos	1	set		
4	Slide Wrench- 6"	1	set		
5	Slide Wrench- 12"	1	set		
6	Screw driver - 6"	1	set		
7	Screw driver - 12"	1	set		
8	Ball Pin Hammer (2.0 lbs)	1	set		
9	Plastic Mallet	1	set		
10	Cutting Plier	1	set		
11	Nose Plier	1	set		
12	Allen Key Set	1	set		
13	Empty Tool Box	1	set		
14	Multimeter with tong tester (600 Amps, Digital Clamp with ACV, DCV, Resistance , ACA, Frequency Functions) Test, CALIBRATION & National Traceability certificate required.	1	set		
15	Any other tool not mentioned above but required for CAS package	1	Set		
NOTE -					
Bidder shall furnish unit price of Maintenance tools and tackles in above format alongwith the Bid.					

PATRATU STPS 3X660MW- Compressed Air System
LIST OF RECOMMENDED SPARES FOR 3 YEARS OF NORMAL OPERATION
(Optional Items)

Break up price for Erection, start-up & COMMISSIONING SPARE
ANNEXURE-V

Sl.no	Description of Item	Qty.	Unit	Unit price INR	Total Ex- Works INR
1	Start-up and commissioning spare- OIL	1	Lot		
2	Any other item required for commissioning of CAS Package equipment.	1	Lot		

NOTE -					
Bidder shall furnish unit price of Erection, start-up & Commissioning spares in above format alongwith the Bid.					

SUGGESTED PRICE FORMAT ANNEXURE-IIIIF Guaranteed Power Consumption For Air Compressor System				Doc No:	PE-PF-434-555-A001	
				Rev No:		
				Date of issue		
NAME OF PROJECT:		PATRATU STPS 3X800MW				
NAME OF PACKAGE:		COMPRESSED AIR SYSTEM				
TECHNICAL SPECIFICATION:		PE-TS-434-555-A001				
S.No. (1)	Description of Equipments (2)	Nos. of Equipment to be considered for guaranteed power consumption		Total Guaranteed Power Consumption for Each Equipment at Motor Input Terminals & control Panel (4)	Duty Factor (5)	Total (KW) (6) = (3A)*(4)*(5)
		Working	Standby			
		A	B			
1	Air Compressors for Service air application (Oil free Screw type / Centrifugal type) of capacity 65 Nm3/minute	2	0		0.33	
2	Air Compressors for Instrument air application (Oil free Screw type / Centrifugal type) of capacity 65 Nm3/minute	2	1		0.60	
3	Air Dyrer	2	1		0.50	
					TOTAL	1120.00
Note :						(Say 1120 KW)
1	Estimated Power Consumption Figure for the compressed air system (For Working Drives Only) considered is 1120 KW.					
2	Bidders Guaranteed power consumption at motor input terminals (Not Shaft Power) considering motor efficiency of 95% including power for control panel as furnished in guaranteed schedule shall be demonstrated by the successful bidder during performance testing at works/site.					
3	The price quoted by the bidder shall be loaded @ US \$ 3025 for every additional kW increase in consumption from the base figure indicated at Note no. 1.0 above.					
4	In case the successful bidder fails to establish / prove the guaranteed values of power consumption (base figure of auxiliary power consumption) on actual performance testing at the manufacturing works / site, penalty @ US \$ 3025 per kW increase in power consumption figure shall be levied.					
5	If the contract currency is other than US \$, then the liquidated damages shall be in equivalent amount in contract currency based on billing selling exchange rate of State Bank of India prevailing in the date of Award of Contract i.e. 08.03.2018.					
6	Guaranteed Power Consumption Format shall be submitted in open along with techno commercial offer only.					
Particulars of bidder / authorised representative						
Name	Designation	Signature	Date	Company Seal		