2.5 Construction Water

i) Construction water shall be supplied free of cost by the Purchaser to the Contractor at a single point in the NLCIL/NTPL plant premises approximately 300 meters from the battery limit. However, in case of any eventuality leading to non-supply of construction water by the Purchase due to any account, it is the responsibility of the contractor to make his own arrangements for the uninterrupted supply of construction water for the construction activities & labour colony at their own cost. Extra claim on any account by the contractor due to non-supply of water by the Purchaser shall not be considered both for cost & time. Contractor has to make his own arrangement for laying pipelines, distribution lines including all pipes & specials required, pumping, construction of sump/overhead tank as per requirement at his own cost.

ii) The Contractor shall be responsible to store water in sufficient quantity to meet its requirements for at least 2 (two) days in well built covered/protected water storage tanks.

iii) The Contractor shall ensure that there is no wastage of water. He will also be responsible for maintaining the taps, pipe lines etc. in proper condition. The Contractor shall obtain prior approval of the Purchaser of its distribution scheme before laying the pipelines.

2.6 Construction Power

i) The Contractor shall be provided with construction power at 6.6 kV for the purpose of the erection construction under the Contract only at one point in the project "Site" free of charge. Maximum of 0.75 MVA shall be given free of Cost for FGD Package as Construction power. The Contractor shall make his own arrangement for stepping down and further distribution. The Contractor

shall make its own arrangements to lay and maintain necessary supply lines for temporary power. All temporary wiring must comply with local regulations and relevant Indian Electrical Act and will be subject to the Purchaser's inspection and approval before connection to supply and later. Non-availability of power from the Purchaser shall not be an excuse for delay in completion of erection construction. Contractor may at its own cost arrange suitable back-up power, by means of DG sets.

ii) The Contractor will supply and install all distribution cables, wires and switches etc. of rated capacity for the work starting from the source of power at its own cost. It will employ Electricians having valid Electrical Licence for carrying out the installations as well as for the maintenance works.

iii) The Contractor will provide proper facilities to the Purchaser of the Plant concerned or his authorised representative for inspecting his temporary electrical installation as and when required. The Contractor will immediately attend to the defects so pointed out during this inspection including replacement of faulty cables, switches etc.

iv) The Contractor shall not affect any change in the temporary installation unless permission is obtained from the Purchaser or its authorised representative.

v) The Contractor shall be responsible for all damages, losses etc. due to fire or otherwise if it is due to his negligence, improper installation, operation and/or maintenance of his part of installations.

To be given on Letter head of Bidder

Ref: ……. Date: …….

To,

Bharat Heavy Electricals Limited

PEM, PPEI Building,

Plot No 25, Sector -16A

Noida (U.P)-201301

Reference:

Tender Enquiry No-……

Offer No-……..

Name of Package: …….

Order no. F. No. 6/18/2019-PPD dt. 23.07.2020 issued by Ministry of Finance, Department of Expenditure Public Procurement Division.

Dear Sir,

I have read the clause regarding restriction on procurement from a bidder of a country which shares a land border with India. I hereby certify that Company name, is not from such a country and is eligible to be considered.

Thanking You,

Yours faithfully,

(Company director seal and signature)

Letter head of Company

Ref……. Date…….

To,

Bharat Heavy Electricals Limited

PEM, PPEI Building, Plot No 25,

Sector -16A, Noida (U.P)-201301

Subject: - Certification regarding local content

Reference: Tender Enquiry No-……

Name of Package: …….

Dear Sir,

We hereby certify that items offered by us for …… (package name) for……(Project Name) have local content of ……%.

Further, it is also certified that the local content percentage (%) certified above is in line with definition of local content given in point no 2 of Public Procurement (Preference to Make in India), Order 2017-revision, having ref. no. P-45021/2/2017-PP(BE-II) dated 04.06.2020 & 16.09.2020 and we qualify as Class-I supplier.

We further confirm that address of the location at which the local value addition is made will be as follows:

1. ……..
2. ……..

Thanking You,

……. (authorized signatory of company)

…… (firm name)

authorized signatory

of company

Annexure-1

INTEGRITY PACT

Between

Bharat Heavy Electricals Ltd. (BHEL), a company registered under the Companies Act 1956 and having its registered office at "BHEL House", Siri Fort, New Delhi - 110049 (India) hereinafter referred to as "The Principal", which expression unless repugnant to the context or meaning hereof shall include its successors or assigns of the ONE PART

and

_____, (description of the party along with address), hereinafter referred to as "The Bidder/ Contractor" which expression unless repugnant to the context or meaning hereof shall include its successors or assigns of the OTHER PART

Preamble

The Principal intends to award, under laid-down organizational procedures, contract/s for _____ _____ _____. The Principal values full compliance with all relevant laws of the land, rules and regulations, and the principles of economic use of resources, and of fairness and transparency in its relations with its Bidder(s)/ Contractor(s).

In order to achieve these goals, the Principal will appoint Independent External Monitor(s), who will monitor the tender process and the execution of the contract for compliance with the principles mentioned above.

Section 1- Commitments of the Principal

1.1 The Principal commits itself to take all measures necessary to prevent corruption and to observe the following principles:-

1.1.1 No employee of the Principal, personally or through family members, will in connection with the tender for, or the execution of a contract, demand, take a promise for or accept, for self or third person, any material or immaterial benefit which the person is not legally entitled to.

1.1.2 The Principal will, during the tender process treat all Bidder(s) with equity and reason. The Principal will in particular, before and during the tender process, provide to all Bidder(s) the same information and will not provide to any Bidder(s) confidential/ additional information through which the Bidder(s) could obtain an advantage in relation to the tender process or the contract execution.

1.1.3 The Principal will exclude from the process all known prejudiced persons.

1.2 If the Principal obtains information on the conduct of any of its employees which is a penal offence under the Indian Penal Code 1860 and Prevention of Corruption Act 1988 or any other statutory penal enactment, or if there be a substantive suspicion in this regard, the Principal will inform its Vigilance Office and in addition can initiate disciplinary actions:

Section 2 - Commitments of the Bidder(s)/ Contractor(s)

2.1 The Bidder(s)/ Contractor(s) commit himself to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the tender process and during the contract execution.

2.1.1 The Bidder(s)/ Contractor(s) will not, directly or through any other person or firm, offer, promise or give to the Principal or to any of the Principal's employees involved in the tender process or the execution of the contract or to any third person any material, immaterial or any other benefit which he/ she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the tender process or during the execution of the contract.

2.1.2 The Bidder(s)/ Contractor(s) will not enter with other Bidder(s) into any illegal or undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelization in the bidding process.

2.1.3 The Bidder(s)/ Contractor(s) will not commit any penal offence under the relevant Indian Penal Code (IPC) and Prevention of Corruption Act; further the Bidder(s)/ Contractor(s) will not use improperly, for purposes of competition or personal gain, or pass on to others, any information or document provided by the Principal as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.

2.1.4 Foreign Bidder(s)/ Contractor(s) shall disclose the name and address of agents and representatives in India and Indian Bidder(s)/ Contractor(s) to disclose their foreign principals or associates. The Bidder(s)/ Contractor(s) will, when presenting his bid, disclose any and all payments he has made, and is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the contract.

2.2 The Bidder(s)/ Contractor(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.

2.3 The Bidder(s)/ Contractor(s) shall not approach the Courts while representing the matters to IEMs and will await their decision in the matter.

Section 3 - Disqualification from tender process and exclusion from future contracts

If the Bidder(s)/ Contractor(s), before award or during execution has committed a transgression through a violation of Section 2 above, or acts in any other manner such as to put his reliability or credibility in question, the Principal is entitled to disqualify the Bidder(s)/ Contractor(s) from the tender process or take action as per the separate "Guidelines on Banning of Business dealings with Suppliers/ Contractors", framed by the Principal.

Section 4 - Compensation for Damages

4.1 If the Principal has disqualified the Bidder from the tender process prior to the award according to Section 3, the Principal is entitled to demand and recover the damages equivalent Earnest Money Deposit/ Bid Security.

4.2 If the Principal has terminated the contract according to Section 3, or if the Principal is entitled to terminate the contract according to section 3, the Principal shall be entitled to

demand and recover from the Contractor liquidated damages equivalent to 5% of the contract value or the amount equivalent to Security Deposit/ Performance Bank Guarantee, whichever is higher.

Section 5 - Previous Transgression

5.1 The Bidder declares that no previous transgressions occurred in the last 3 years with any other company in any country conforming to the anti-corruption approach or with any other Public Sector Enterprise in India that could justify his exclusion from the tender process.

5.2 If the Bidder makes incorrect statement on this subject, he can be disqualified from the tender process or the contract, if already awarded, can be terminated for such reason.

Section 6 - Equal treatment of all Bidders/ Contractors / Sub-contractors

6.1 The Principal will enter into agreements with identical conditions as this one with all Bidders and Contractors. In case of sub-contracting, the Principal contractor shall be responsible for the adoption of IP by his sub-contractors and shall continue to remain responsible for any default by his sub-contractors.

6.2 The Principal will disqualify from the tender process all bidders who do not sign this pact or violate its provisions.

Section 7 - Criminal Charges against violating Bidders/ Contractors /Subcontractors

If the Principal obtains knowledge of conduct of a Bidder, Contractor or Subcontractor, or of an employee or a representative or an associate of a Bidder, Contractor or Subcontractor which constitutes corruption, or if the Principal has substantive suspicion in this regard, the Principal will inform the Vigilance Office.

Section 8 - Independent External Monitor(s)

8.1 The Principal appoints competent and credible Independent External Monitor for this Pact. The task of the Monitor is to review independently and objectively, whether and to what extent the parties comply with the obligations under this agreement.

8.2 The Monitor is not subject to instructions by the representatives of the parties and performs his functions neutrally and independently. He reports to the CMD, BHEL.

8.3 The Bidder(s)/ Contractor(s) accepts that the Monitor has the right to access without restriction to all contract documentation of the Principal including that provided by the Bidder(s)/ Contractor(s). The Bidder(s)/ Contractor(s) will grant the monitor, upon his request and demonstration of a valid interest, unrestricted and unconditional access to his contract documentation. The same is applicable to Sub-contractor(s). The Monitor is under contractual obligation to treat the information and documents of the Bidder(s)/ Contractor(s) / Sub-contractor(s) with confidentiality in line with Non- disclosure agreement.

8.4 The Principal will provide to the Monitor sufficient information about all meetings among the parties related to the contract provided such meetings could have an impact on the contractual relations between the Principal and the Contractor. The parties offer to the Monitor the option to participate in such meetings.

8.5 The role of IEMs is advisory, would not be legally binding and it is restricted to resolving issues raised by an intending bidder regarding any aspect of the tender which allegedly restricts competition or bias towards some bidders. At the same time, it must be understood that IEMs are not consultants to the Management. Their role is independent in nature and the advice once tendered would not be subject to review at the request of the organization.

8.6 For ensuring the desired transparency and objectivity in dealing with the complaints arising out of any tendering process, the matter should be examined by the full panel of IEMs jointly as far as possible, who would look into the records, conduct an investigation, and submit their joint recommendations to the Management.

8.7 The IEMs would examine all complaints received by them and give their recommendations/ views to CMD, BHEL, at the earliest. They may also send their report directly to the CVO and the Commission, in case of suspicion of serious irregularities requiring legal/ administrative action. IEMs will tender their advice on the complaints within 10 days as far as possible.

8.8 The CMD, BHEL shall decide the compensation to be paid to the Monitor and its terms and conditions.

8.9 IEM should examine the process integrity, they are not expected to concern themselves with fixing of responsibility of officers. Complaints alleging mala fide on the part of any officer of the organization should be looked into by the CVO of the concerned organisation.

8.10 If the Monitor has reported to the CMD, BHEL, a substantiated suspicion of an offence under relevant Indian Penal Code/ Prevention of Corruption Act, and the CMD, BHEL has not, within reasonable time, taken visible action to proceed against such offence or reported it to the Vigilance Office, the Monitor may also transmit this information directly to the Central Vigilance Commissioner, Government of India.

8.11 The number of Independent External Monitor(s) shall be decided by the CMD, BHEL.

8.12 The word `Monitor' would include both singular and plural.

Section 9 - Pact Duration

9.1 This Pact shall be operative from the date IP is signed by both the parties till the final completion of contract for successful bidder and for all other bidders 6 months after the contract has been awarded. Issues like warranty / guarantee etc. should be outside the purview of IEMs.

9.2 If any claim is made/ lodged during currency of IP, the same shall be binding and continue to be valid despite the lapse of this pact as specified above, unless it is discharged/ determined by the CMD, BHEL.

Section 10 - Other Provisions

10.1 This agreement is subject to Indian Laws and jurisdiction shall be registered office of the Principal, i.e. New Delhi.

10.2 Changes and supplements as well as termination notices need to be made in writing. Side agreements have not been made.

10.3 If the Contractor is a partnership or a consortium, this agreement must be signed by all partners or consortium members.

10.4 Should one or several provisions of this agreement turn out to be invalid, the remainder of this agreement remains valid. In this case, the parties will strive to come to an agreement to their original intentions.

10.5 Only those bidders / contractors who have entered into this agreement with the Principal would be competent to participate in the bidding. In other words, entering into this agreement would be a preliminary qualification.

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For & On behalf of the Principal	For & On behalf of the Bidder/ Contractor
(Office Seal)	(Office Seal)
Place----------	
Date----------	
Witness:_____	Witness:_____
(Name & Address) _____	(Name & Address) _____
_____	_____

NAME OF BIDDER :	
NAME OF PROJECT:	**2 x 500MW TUTICORIN TPP-FGD SYSTEM**
NAME OF PACKAGE:	**HVAC FOR FGD**
TECHNICAL SPECIFICATION:	**PE-TS-483-(571-13000-A)-A001 (REV-0)**
TENDER ENQUIRY NO :	**PE/PG/NTF/E-6776/2021 Dated 28.09.2021**

S. No.	DESCRIPTION	UNIT	QTY	Total Ex-works Price (INR)	Freight in %	Freight in INR	Total FOR Site Price Including Freight but excluding GST (INR)	Total FOR Site Price Including Freight but excluding GST in Words
1.0	Total lump sum firm price for Supply part including Services 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, fill of lubricants & consumables 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 NTPC/BHEL's O&M staff and OPERATION AND MAINTENANCE SERVICE including manpower, supervision, consumables etc. for operation & maintenance of HVAC System for a duration of 12 unit months after commissioning of HVAC System for the scope defined as per technical specification & final handing over 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.	LOT	1					
2.0	**MAJOR BREAK-UP OF PRICES GIVEN IN 1.0 ABOVE.**							
2.1	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 per Appendix-A), fill of lubricants & consumables along with spares for erection (as per Appendix-B), 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**)	LOT	1					
2.2	Total lumpsum firm prices for **Services** 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 NTPC/BHEL personnel for total 15 days (in 3-4 parts of 4-5 days each) covering hands on experience of operation and maintenance of air conditioning and ventilation system. Site personnel shall be trained for operation and maintenance activities covering daily, weekly, monthly, quarterly and yearly maintenance checks 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**)	LOT	1					
2.3	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 12 Months after commissioning of HVAC system & final handing over to end customer in flawless condition for the scope defined as per technical specification.	LOT	1					

Note:
1. For detailed scope of Operation and Maintenance Services, Technical Specification (PE-TS-483-(571-13000-A)-A001) to be referred. Any variation in no. of months shall be exercised based on unit rate arrived from price quoted against Sl.no 2.3 above.

ANNEXURE-I

NAME OF PROJECT:	2 x 500MW TUTICORIN TPP-FGD SYSTEM
NAME OF PACKAGE:	HVAC FOR FGD
TECHNICAL SPECIFICATION:	PE-TS-483-(571-13000-A)-A001 (REV-0)

S. N.	Description	UNIT	Quantity	Supply		Services (E&C)	
				Unit Ex-Works (INR)	Total Ex-Works (INR)	Unit Ex-Works (INR)	Total Ex-Works (INR)
A	AC SYSTEM						
1a*	DX type, air cooled condensing unit of **minimum 40 TR (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 refrigerant piping to and from AHUs, foundation bolts, nuts, washers etc complete in all respect.	2	Nos				
1b*	Sheet metal cabinet type air handling units (double skin as per specification) The draw through horizontal AHUs (min. 60 mmWC SP) shall comprise of Dampers, pre filter, fine filters, DX- cooling coil, Fan section with fan & TEFC sq cage induction motor, VFD, drive set, condensate drain pan, thermostatic controls and other accessories, like ladder along with supporting structure for filter and plenum, etc. to meet the AC load of control room area as per specification. Each centrifugal fan shall be provided with VFD driven motor along with VFD (along with starter panel)	2	Nos				
1c*	Monsoon reheating / winter heating kit comprising strip heaters, safety controls, air-stat, contactors, frame work, thermostat etc.	1	LOT				
1d*	Pan type humidifier, comprising geyser stat, for each AHU room.	1	LOT				
1e*	Fresh air fan (axial flow type), complete with motor, inlet cone, air filters (pre and fine), dampers etc.	1	LOT				
2*	Thermal insulation of supply air duct & return air duct with finish as specified.	600	SQM*				
3*	MS medium class drain piping upto nearest drain point with insulation & cladded and without insulation						
a*	50mm with insulation and cladding	12	Rmt*				
b*	40mm with insulation and cladding	15	Rmt*				
c*	50mm without insulation and cladding	12					
d*	40mm without insulation and cladding	15					
4*	Air-cooled split type AC units consisting of condensing unit & evaporating unit including refrigerant						
(a)*	5.0 TR capacity (ductable type, 415 V, 3 phase with isolation switch).	2	Nos*				
(b)*	3.0 TR capacity (non-ductable type, 430 V, 3 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.	4					
(c)*	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.	20	Nos*				
(d)*	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 refrigerant piping to suite actual site condition.	2	Nos*				

B	**VENTILATION SYSTEM**						
1*	Roof extractor units (axial flow type) with hood, disconnect switch and all accessories as specified. **Following fan shall have 15 mmwc static pressure.**						
a)*	Capacity 40,000 CMH with Motor rating 5.5 KW	2	**Nos.***				
b)*	Capacity 20,000 CMH with Motor rating 2.2 KW	2	**Nos.***				
2*	Axial flow supply fans with pre and fine filter (wall mounted) complete with casing, TEFC sq cage induction motors & mounting frame, MS rain protection cowl, bird screen along with support structure and all other accessories (suitable for 415V/3-phase supply). **Following fan shall have 30 mmwc static pressure.**						
a)*	Capacity 10,000 CMH with Motor rating 2.2 KW	42	**Nos.***				
b)*	Capacity 7,500 CMH with Motor rating 1.5 KW	12	**Nos.***				
c)*	Capacity 6,000 CMH with Motor rating 1.1 KW	2	**Nos.***				
d)*	Capacity 4,000 CMH with Motor rating 0.75 KW	2	**Nos.***				
3*	Axial flow supply fans with pre filter (wall mounted) complete with casing, TEFC sq cage induction motors & mounting frame, MS rain protection cowl, bird screen along with support structure and all other accessories (suitable for 415V/3-phase supply) as specified. **Following fan shall have 20 mmwc static pressure.**						
a)*	Capacity 10,000 CMH with Motor rating 1.5 KW	2	**Nos.***				
b)*	Capacity 7,500 CMH with Motor rating 1.1 KW	2	**Nos.***				
c)*	Capacity 6,000 CMH with Motor rating 1.1 KW	4	**Nos.***				
d)*	Capacity 4,000 CMH with Motor rating 0.75 KW	4	**Nos.***				
4*	Axial flow exhaust fans (Bifurcated type, spark proof construction, wall mounted) complete with casing, flame proof motor & mounting frame, MS rain protection cowl, bird screen along with support structure and all other accessories epoxy painted (suitable for 415V/3-phase supply) as specified. **Following fan shall have 15 mmwc static pressure.**						
a)*	Capacity 15,000 CMH with Motor rating 1.5 KW	4	**Nos.***				
b)*	Capacity 10,000 CMH with Motor rating 1.5 KW	10	**Nos.***				
c)*	Capacity 7,500 CMH with Motor rating 1.1 KW	2	**Nos.***				
d)*	Capacity 5,000 CMH with Motor rating 0.75 KW	2	**Nos.***				
e)*	Capacity 4,000 CMH with Motor rating 0.75 KW	6	**Nos.***				
	Capacity 2,000 CMH with Motor rating 0.55 KW	4	**Nos.***				
5*	Axial flow exhaust fans (Wall mounted) complete with casing,TEFC sq cage induction motor & mounting frame, MS rain protection cowl, bird screen along with support structure and all other accessories epoxy painted (suitable for 415V/3-phase supply) as specified. **Following fan shall have 10 mmwc static pressure.**						
a)*	Capacity 15,000 CMH with Motor rating 1.1 KW	30	**Nos.***				
b)*	Capacity 10,000 CMH with Motor rating 0.75 KW	65	**Nos.***				
c)*	Capacity 7,500 CMH with Motor rating 0.55 KW	12	**Nos.***				
d)*	Capacity 6,000 CMH with Motor rating 0.55 KW	4	**Nos.***				

e)*	Capacity 4,000 CMH with Motor rating 0.55 KW	5	**Nos.***				
f)*	Capacity 2,000 CMH with Motor rating 0.37 KW	5	**Nos.***				
6*	Exhaust fan (propeller type) completes with induction motor & mounting frame MS rain protection cowl, bird screen and all other accessories as specified (suitable for 240V/ 1 phase). **Following fan shall have 5 mmwc static pressure.**						
a)*	Capacity 1000 CMH with Motor rating 100 watts	24	**Nos.***				
C	**COMMON FOR AC AND VENTILATION SYSTEM**						
1*	Supply air ducting (finished) for above area complete with dampers, grills (with VCD & without VCD), supports (painted) and all accessories as specified.						
1.1*	Finished (Actual quantity of duct erected at site, excluding the scrap) GSS (zinc coating 180 **gms/sq.m min.**) Ducting with support structure etc.						
a)*	18 G	250	**SQM***				
b)*	20 G	450	**SQM***				
1.2*	Supply air Grill/diffuser with VCD (Extruded Aluminium).	**20**	**SQM***				
1.3*	Return air Grill/diffuser without VCD (Extruded Aluminium).	**22**	**SQM***				
1.4*	Supply air Grill/diffuser with VCD (MS, POWDER COATED).	**18**	**SQM***				
1.5*	Return air Grill/diffuser without VCD (MS, POWDER COATED).	**6**	**SQM***				
1.6*	Volume control damper in GI construction as per specification	8	**SQM***				
1.7*	Wall mounted dampers (gravity operated) for different areas.	8	**SQM***				
1.8*	Inlet Louvres	4	**SQM***				
1.9*	MS Duct With Epoxy paint for battery room.	5	**SQM***				
2*	ACOUSTIC INSULATION (AS PER THE SPECIFICATION)	200	**SQM***				
3*	FIRE DAMPER						
a)*	Fire damper	35	**SQM***				
b*)	Fusible Link type Fire Damper	2	**Nos***				
4*	Motorized Actuator with single phase power supply for the above Fire damper and Volume control	45	**Nos***				
5*	Handling arrangement for ventilation equipment's						
a)*	Manually operated, platform trolley of 1Ton capacity	1	Nos*				
b)*	1T Chain pulley block with travelling trolley	**1**	Nos*				
c)*	1T chain pulley block without travelling trolley	**1**	Nos*				
6	Cable tray, conduits, junction box, lugs and glands, Local control panel and Field instruments like pressure gauge, temperature gauge, switches and transmitters for pressure, flow and temperature measurement, differential pressure switch across filters, flow meters, RH and Temperature sensor and other required instruments as per specifications, including necessary control panel form hook up with main DDCMIS as per specifications	1	**LOT**				
7*	Providing full support during FAT of DDCMIS, preparation of control scheme, and commissioning of DDCMIS as per relevant specification.	20	Mandays*				

8	Total lumpsum price for special tools & tackles for maintenance inclusive of packing forwarding, transportation up to site, etc. **(Break up of to be furnished as per Appendix- A)**	1	**LOT**				
9	Total lumpsum price for commissioning spares inclusive of packing forwarding, transportation up to site, etc. **(Break up of to be furnished as per Appendix- B)**	1	**LOT**				
GRAND TOTAL							

Note :

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.

ANNEXURE-A [Maintenance tools & tackles]				
NAME OF PROJECT:		**2 x 500MW TUTICORIN TPP-FGD SYSTEM**		
NAME OF PACKAGE:		**HVAC FOR FGD**		
TECHNICAL SPECIFICATION:		**PE-TS-483-(571-13000-A)-A001 (REV-0)**		
S. N.	**Description**	**UNIT**	**Quantity**	**Total Ex-Works (INR)**
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	SCREW DRIVER	NO.	1	
7	OFFSET SCREW DRIVER	NO.	1	
8	INSULATED PLIER	NO.	1	
9	TORCH LIGHT (SUITABLE 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")	NOS.	6	
18	FLARING TOOL	NO.	1	
19	TUBE CUTTER	NO.	1	
20	GAS CHARGING PIPE	NO.	1	
21	NITROGEN CHARGING ADAPTER	NO.	1	
22	PRESSURE GAUGE (2 1/2" DIA DIAL) 0 - 300 PSI	NO.	1	
23	PRESSURE GAUGE (2 1/2" DIA DIAL) 0 - 500 PSI	NO.	1	
24	COMPOUND GAUGE (2 1/2" DIA DIAL) (-)30” to 150 PSI	NO.	1	
25	PSYCHRO METER	NO.	1	
26	LOCK WITH KEY FOR TOOL BOX	NO.	1	
27	RATCHET 1/4"	NO.	1	
28	MS TOOL BOX	NO.	1	
29	Measuring tape	NO	1	
30	Tachometer	NO	1	
31	Double ended spanner	SET	1	
32	Gasket punch	NO.	1	
33	Centre punch	NO.	1	
34	Scissors for sheet metal cutting	NO.	1	
35	Multimeter	NO.	1	
36	Anemometer	NO.	1	
37	Slide wrench 8”	NO.	1	
38	Slide wrench 10”	NO.	1	
39	Slide wrench 6”	NO.	1	
40	Box spanner set	SET	1	

GRAND TOTAL	

Note : ABOVE IS THE MINIMUM LIST. ANY OTHER TOOL / TACKEL REQUIRED FOR THE SYSTEM SHALL ALSO BE PROVIDED BY THE VENDOR WITHOUT ANY COST IMPLICATION.

ANNEXURE-B [Commissioning Spares]				
NAME OF PROJECT:		**2 x 500MW TUTICORIN TPP-FGD SYSTEM**		
NAME OF PACKAGE:		**HVAC FOR FGD**		
TECHNICAL SPECIFICATION:		**PE-TS-483-(571-13000-A)-A001 (REV-0)**		
S. N.	**Description**	**Unit**	**Qty**	**Total Ex-Works (INR)**
1	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	
7	LUBRICANT (EACH TYPE)	Lot	1	
GRAND TOTAL				

NOTE :ABOVE IS THE MINIMUM LIST. ANY OTHER COMMISSIONING SPARE REQUIRED FOR THE SYSTEM SHALL ALSO BE PROVIDED BY THE VENDOR WITHOUT ANY COST IMPLICATION.

ANNEXURE-II DEVIATION SHEET (COST OF WITHDRAWAL)									
PROJECT:-						2 x 500MW TUTICORIN TPP-FGD SYSTEM			
PACKAGE :-						HVAC FOR FGD			
TENDER ENQUIRY :-						PE/PG/NTF/E-6776/2021 Dated 28.09.2021			
NAME OF THE BIDDER									
Sl. No.	Volume/Section	Page No.	Clause No.	Technical Specification/Tender Document No	Complete Description of Deviation	Cost of withdrawal of deviation to be entered by the bidder in	Reference of price Schedule of which Cost of Withdrawal of Deviation is applicable	Nature of cost of withdrawal of deviation (Positive/Negative)	Reasons for quoting deviation
1	TECHNICAL DEVIATION								
1.01									
1.02									
1.03									
1.04									
1.05									
1.06									
1.07									
1.08									
2	COMMERCIAL DEVIATION								
2.01									
2.02									
2.03									
2.04									
2.05									
2.06									
2.07									
2.08									

NOTES:
1. Cost of Withdrawal of deviation will be applicable on the basic price (i.e. excluding taxes, duties & freight) only.
2. All the bidders have to list out all their technical & commercial deviations (if any) in details in the above format.
3.Any deviation not mentioned above and shown separately or found hidden in offer, will not be taken cognizance of.
4.Bidder shall submit duly filled unpriced copy of above format indicating "quoted" in "cost of withdrawl of deviation" column of the schedule above along with their Techno-commercial offer, wherever applicable. In absence of same, such deviation(s) shall not be considered and offer shall be considered in total compliance to NIT.
5. Bidder shall furnish price copy of above format along with price bid.
6.The final decision of acceptance/ rejection of the deviations quoted by the bidder shall be at discretion of the Purchaser.
7.Bidders to note that any deviation (technical/commercial) not listed in above and asked after Part-I opening shall not be considered.
8. For deviations w.r.t. Credit Period, Liquidated damages, Firm prices if a bidder chooses not to give any cost of withdrawl of deviation loading as per Annexure-VII of GCC, Rev-07 will apply. For any other deviation mentioned in un-priced copy of this format submitted with Part-I bid but not mentioned in priced copy of this format submitted with Priced bid, the cost of withdrawl of deviation shall be taken as NIL.
9. Any deviation mentioned in priced copy of this format, but not mentioned in the un-priced copy, shall not be accepted.
10. All techno-commercial terms and conditions of NIT shall be deemed to have been accepted by the bidder, other than those listed in unpriced copy of this format.
11. Cost of withdrawl is to be given seperately for each deviation. In no event bidder should club cost of withdrawl of more than one deviation else cost of withdrawl of such deviations which have been clubbed together shall be considered as NIL.
12. In case nature of cost of withdrawl (positive/negative) is not specified it shall be assumed as positive.
13. In case of descrepancy in the nature of impact (positive/ negative), positive will be considered for evaluation and negative for ordering.

VENDOR'S CREDENTIALS

PROJECT:

PACKAGE:

VENDOR NAME:

CREDENTIAL BOOKLET

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CHAPTER 2

QUALIFICATION DETAILS

CHAPTER 3

REFERENCE LIST INDICATING PURCHASE ORDER, CUSTOMER NAME, PO DATE, EXECUTION DATE

CHAPTER 4

FEW NOTEWORTHY PERFORMANCE CERTIFICATE, PURCHASE ORDER ISSUED BY CLIENT