Specifications, terms and conditions for Supply, Testing & Commissioning (STC) of 40 nos., of Variable Voltage Variable Frequency Drives (VVVFD) for Air Handling Unit - Blower motors of VAB and SVAB AC plants, SLP, SDSC SHAR

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1.0 General Terms and Conditions

1.1 Instruction to Bidders

- 1.1.1. Bidder shall sign and stamp each page of the tender documents as a token of their acceptance & submit it along with the offer. Document shall be scanned and uploaded in our ISRO e-procurement portal.
- 1.1.2. The proposal shall be completely filled in all respects and shall be submitted together with requisite information. Any offer incomplete in any particulars is liable for rejection.
- 1.1.3. Bidders shall set their quotations in firm figures and without corrections or variations or additions in the terms of the tender documents. Proposal containing qualifying expressions such as "subject to minimum acceptance" or "subject to prior sale" or any other qualifying expressions or incorporating terms and conditions at variance with the terms and conditions incorporated in the Tender documents are liable to be rejected.
- 1.1.4. Price shall include all costs for complete execution of the entire scope of work envisaged in the document. Price quoted shall be firm and fixed.
- 1.1.5. Price shall be quoted in Indian Rupee only.
- 1.1.6. Satish Dhawan Space Centre SHAR (SDSC-SHAR), Sriharikota is declared as prohibited place under official secrets act 1924. Hence during execution of site works necessary security requirements enforced by the department from time to time shall be followed strictly.
- 1.1.7. During the testing and commissioning of equipment at site in Sriharikota, the supplier has to make his own arrangements for boarding, lodging and transportation of his men and materials. However, subjected to availability, hostel accommodation may be provided by the Purchaser (SDSC SHAR) on chargeable basis.
- 1.1.8. Free electricity and water will be provided by the Purchaser at one location close to the site (SDSC SHAR) for the testing and commissioning works.
- 1.1.9. Before starting the site work (at SDSC SHAR), the party shall provide insurance as per Employee compensation act to all his personnel working at site in Sriharikota against accidents. Insurance premium for the same shall be borne by the party. Insurance shall be from the nationalized insurance companies only.
- 1.1.10. While performing the contractual work, the contractor must ensure compliance with all the existing statutory labour enactment/ regulations under Contract Labour (R & A) Act, 1970 & rules framed thereunder.
- 1.1.11. The transfer of title to the Purchaser (SDSC SHAR) will take place only after satisfactory testing and commissioning of the all the equipment by the supplier and full acceptance by the Purchaser (SDSC SHAR).
- 1.1.12. Quote shall be based on F.O.R. Sriharikota.
- 1.1.13. Transportation & Transit Insurance if required are fully in the scope of supplier and the same shall be borne by the party.
- 1.1.14. Necessary care shall be taken during erection and commissioning of equipment at our site. Any damage to the property of Department shall be adequately

compensated by the Party. Also Loss of any materials at site will not be to the purchaser's account. Hence the party shall safely store the items at site till commissioning and handing over.

Taxes and Duties

- 1.1.15. **GST:** Tenderers has to provide applicable GST rate/s as well as HSN/SAC Code for the item/service/s quoted, for evaluation of the offer.
- 1.1.16. **INCOME TAX:** Income tax at the prevailing rate as applicable and if applicable from time to time shall be deducted from the supplier's bills as per Income Tax Act and a certificate issued (TDS Certificate).

MSME clause

1.1.17. Purchase / Price preference to MSEs: Purchase/Price preference will be applicable to the product reservation admissible to the Micro and Small Enterprises. Purchase /Price Preference shall be extended to the MSEs under the Public Procurement Policy for MSEs formulated under the Micro, Small and Medium Enterprises Development Act, 2006. The participating MSEs in a tender, quoting price within the band of L-1 + 15% may also be allowed to supply a portion of the requirement by bringing down their price to the L-1 price, in a situation where L-1 price is from someone other than an MSE. Such MSEs may be allowed to supply up to 25% of the total tendered value. In case of more than one such eligible MSE, the supply will be shared equally. Micro & Small Enterprises which have technical capability to deliver the goods & Services as per prescribed technical & quality specifications and may not be able to meet the qualification criterion relating to prior experience-prior turnover may be relaxed as per guidelines issued by Ministry of MSMEs & as amended from time to time. Interested vendors shall specifically claim the benefit with supporting documents

MSMEs shall meet bidder qualification criteria as mentioned in S. No: 2.0

Validity of Offer

- 1.1.18. Bid shall remain valid for acceptance for a <u>period of four months (minimum)</u> from the due date of submission of the Bid.
- 1.1.19. The Bidder shall not be entitled during the said period to revoke or cancel his Bid or to vary the Bid except and to the extent required by Department in writing.
- 1.1.20. Bid shall be revalidated for extended period as required by Department in writing.
- 1.1.21. In such cases, unless otherwise specified, it is understood that validity is sought and provided without varying either the quoted price or any other terms and conditions of Bid finalized till that time.

Cost of Bidding

1.1.22. All direct and indirect costs associated with the preparation and submission of Bid (including clarification meetings and site visit, if any), shall be to Bidder's account and the Department (SDSC SHAR) will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the Bid process.

Applicable Law & Jurisdiction

1.1.23. The contracts shall be interpreted in accordance with the laws of the Union of India. Any legal issue or dispute arising out of the contract are within the jurisdiction of Courts of Andhra Pradesh, India only.

Performance Bank Guarantee (PBG)

1.1.24. PBG at 3% of the value of the Purchase Order shall be submitted through bank guarantee from any of the Scheduled Banks executed on non-judicial stamp paper of appropriate value, and shall be valid for a period of sixty days beyond the date of completion of warranty period.

Liquidated Damage

1.1.25. Time is the essence of this order. If the supplier's defined scope of work is not made by the end of delivery period, liquidated damage will be levied @ 0.5 % per week or part thereof subject to a maximum of 10% of value of undelivered stores.

Security Deposit

- 1.1.26. Party shall submit security deposit, within 10 days of Order Acknowledgement for 3% of the total order value. Security Deposit shall be obtained through Bank Guarantee or fixed deposit receipt from any of the Scheduled Banks executed on non-judicial stamp paper of appropriate value, and shall be valid for a period of sixty days beyond the date for completion of the Purchase Order.
- 1.1.27. In case the vendor fails to furnish the security deposit within the specified date or extended due date, the Purchase Order/Contract shall be cancelled, and the EMD, if any, made earlier shall be forfeited, and, in addition, appropriate penal action will be taken.

Force Majeure

1.1.28. Should a part or whole work covered under this agreement be delayed due to reasons of Force Majeure which shall include legal lockouts, strikes, riots, civil commotion, fire accident, quarantines, epidemic, acts of God and Government, fright embargoes, the completion period for work, plant or equipment referred to in this agreement be extended by a period not in excess of the duration of such Force Majeure. The occurrence shall be notified by either party within reasonable time.

Warranty

1.1.29 The drive and the all the switchgears in the panels shall be warranted for a period of 18 months from date of testing and acceptance at our site. The supplier shall repair / replace the damaged / faulty equipment without any extra cost during the guarantee period.

1.1.30 Payment Terms

Please select the **anyone** of the payment options given below

Option-1: Supply cost

- a. 85% within 30 days on receipt and acceptance of items at our site
- b. 15% within 30 days after successful, testing and commissioning at our site.

Testing and commissioning cost

100% within 30 days after successful testing and commissioning at our site.

Option-2:

Supply Cost

- a. 30 % advance on issue of PO subject to providing BG to this effect valid till 20 months from date of testing and acceptance at our site.
- b. 55 % within 30 days on receipt and acceptance of items at our site
- c. 15 % within 30 days after successful, Testing, commissioning and acceptance.

Testing and commissioning Cost

100% within 30 days after successful testing and commissioning at our site.

- 1.1.31 Bank Guarantee for advance payments for equivalent amount to be furnished and advance payment will be recovered and interest will be levied as per the Marginal Cost of Lending Rate (MCLR) of SBI Plus 2% penal interest in case the vendor is not supplying the material within the delivery schedule after drawl of advance This is in-addition to the LD clause.
- 1.1.32 In case of any delay attributable to the supplier/contractor in effecting the supply after the prescribed delivery date, Interest at MCLR of SBI will be charged for the period beyond the specified delivery date on the amount of balance advance payment.
- 1.1.33. Interest will be loaded for advance payments/stage payments as per the lending rate of the bank and will be added to the landed cost for comparison purpose. In case of different milestone submitted by the parties, a standard and transparent methodology like the Net Present Value (NPV) will be adopted for evaluating the offers

Delivery

- 1.1.34 Delivery schedule is essence for this contract. Party shall adhere to the delivery date mentioned in this tender and same shall be confirmed along with the offer. In case Party is unable to meet the delivery schedule, the offer is liable for rejection.
- 1.1.35 Delivery schedule shall be as given below: -

Delivery Schedule

SI. No.	Item Description	Delivery date
i.	Placement of PO	Т
ii.	Submission of drawings, data sheets for Approval as per S. No: 4.3 ###	T+2 weeks
iii.	Approval from department within one week	T+3 weeks

SI. No.	Item Description	Delivery date
iv.	Pre-delivery inspection call from party (intimation shall be given to Department 10 days prior to the date of inspection)	T+15 weeks
V.	Pre-delivery inspection by department CLIP Members within a week from the date of inspection call from party.	T+16 weeks
vi.	Supply of items to SDSC SHAR with all corrections / modifications mentioned during pre-delivery inspection.	T+18 weeks
vii.	Testing & Commissioning	T + 20 weeks
viii.	Total completion of the order	20 weeks

Party shall submit drawings fully meeting the specifications, terms and conditions as per PO. Any delay that occurs in submitting revised drawings based on observations / comments from the Department within the ambit of PO, shall be attributed to the supplier / vendor

The above delivery schedule is the maximum period. Early delivery schedule is preferred.

Packing & Forwarding

1.1.36 The tenderer will be held responsible properly packed for transport by rail, road, sea or air, to withstand transit hazards and ensure safe arrival at the destination. The packing and marking of packages shall be done by and at the expenses of the Contractor.

Material handling support for unloading the items at our site will be provided by Department free of cost subject to availability. However necessary man power support to assist the unloading shall be provided by the supplier.

Exclusion of Tenders

The following tenders shall be summarily rejected from the procurement process

- 1.1.37 Tenders of vendors who have been removed from the vendor list or banned/debarred from having business dealings.
- 1.1.38 The tenders which materially depart from the requirements specified in the tender document or which contain false information.
- 1.1.39 The tenders which are not accompanied by the prescribed Earnest Money Deposit.

Documents Comprising the Bid

This is e-procurement tender. All the documents need to be scanned and attached to the bid under "documents solicited from Vendor" form.

Offers shall be sent online only using standard digital signature certificate of class III with encryption / decryption. The tenders authorized on or before the open authorization date only will be considered as valid tenders even though the bids are submitted online.

The tenderer must authorize bid opening within the time stipulated in the schedule by SDSC SHAR. Otherwise the online bid submitted will not be considered for evaluation.

On-line bids shall consist of the following: -

Part – I Technical and Unpriced Commercial

Technical and un-priced commercial part shall comprise the following documents/information. All the documents shall be scanned and uploaded in the ISRO e-procurement portal.

- 1.1.40. Submission of bid letter along with one set of tender document duly signed and stamped as token of acceptance. Scanned copy shall be uploaded in the e-procurement portal.
- 1.1.41. List and make of the bought-out components as well as imported items considered by bidder for this tender.
- 1.1.42. Any other relevant document, bidder desires to submit.
- 1.1.43. Dully filled Compliance statement as in Annexure- I
- 1.1.44. Party shall submit **unpriced price** bid format as in Annexure- II. Party shall only enter required tax percentages. In place of price columns, party shall mention as "QUOTED". Prices shall not be mentioned in the technical bid.

Note: All the above documents shall be uploaded in the ISRO e-procurement portal.

Part – II Priced Commercial Bid

Priced commercial bid shall contain schedule of prices and shall be filled in the ISRO eprocurement portal. No deviations, terms and conditions, assumptions, discounts etc. shall be stipulated in price bid. Department will not take cognizance of any such statement and may at their discretion reject such bids.

Bid Submission

- 1.1.45. Bid shall be submitted in two parts
 - Part -1 Techno-Commercial Part of the Bid
 - Part -2 Price Part of the Bid
- 1.1.46. Offers should be submitted On-line using standard digital signature of class-3 with encryption/decryption options.
- 1.1.47. Prices shall be mentioned in the space/column provided for such purpose in the

- ISRO e-procurement portal.
- 1.1.48. Prices quoted should be on the basis of Freight On Road (FOR), Sriharikota.
- 1.1.49. The purchaser will not pay separately for transit insurance and same shall be borne by the Bidder.
- 1.1.50. All risks in transit shall be exclusively borne by the contractor and the purchaser shall pay only for such items as are actually received in good condition in accordance with the purchase order.
- 1.1.51. Bids duly filled in by the Bidder should invariably be submitted as stipulated in the ISRO e-procurement portal.
- 1.1.52. Department may open Part I of the bid on the due date of opening at convenience. Price Bid (Part-II) of the bid of the technically and commercially acceptable bids will be opened at a later date.
- 1.1.53. Department reserves the right to reject any or all the Bids without assigning any reasons thereof.

Bid Evaluation

- 1.1.54. The bidder shall provide all the relevant data / details required for evaluating the bid technical and commercially in the specific formats enclosed with the tender. Apart from this, Bidder is free to add any other relevant information.
- 1.1.55. During evaluation, Department may request Bidder for any clarification on the bid/additional documents/ information required. Bidder shall submit all clarifications/additional documents/ information requested in original. If not submitted within the stipulated time department has right to reject such bids.
- 1.1.56. Party is free to ask for clarification with respect to technical and commercial terms before quoting. It is the parties' responsibility to get the clarifications if required well before the bid submission due date. It shall be noted that the bid submission date cannot be extended on this grounds.
- 1.1.57. The complete scope of work is defined in the Tender document. Bidders, who undertake total responsibility for the complete scope of work as defined in the Tender document will only be considered. As the items are interdependent, combined lowest cost shall only be considered to arrive at L1.
- 1.1.58. In case Bid does not fully comply with the requirement of Tender document and the bidder stipulates deviations to the clauses of the proposal, which are unacceptable to the Department, the Bid will be rejected.
- 1.1.59. Performance of Bidder on similar nature of works executed/ under execution shall be taken into consideration before selecting the Bidder for opening his price bid.
- 1.1.60. The time schedule for completion is given in the Tender document. Bidder is required to confirm the completion period unconditionally.
- 1.1.61. Department shall not be obliged to furnish any information / clarification to unsuccessful bidder as regard non-acceptance of their Bids.

2.0 BID QUALIFICATION CRITERIA FOR SUPPLY, TESTING AND COMMISSIONING OF VVVFD PANELS

Bidders who are qualifying / meeting the following Technical and Financial capabilities are eligible to participate in the bid for Supply, Testing and commissioning of VVVFD panels.

Bidder shall furnish all the details with **documentary proof and submit** the same along with quotation. Bids of the parties which are not meeting the following criteria will not be considered for evaluation and will be rejected without seeking any further clarifications. Bidder shall furnish the details of their resources in factory like manpower, machinery, quality system etc., for department to assess their capability.

SI.No.	Criteria / Requirement	Accepted / Not Accepted / Deviation if any from M/s
The bid	der should meet the following qualifying requirement	
1.	The complete scope of work is defined in the tender document. Bidders, who undertake total responsibility for the complete scope of work as defined in the tender document, only will be considered.	
	cal Qualification Requirements der should also meet the following technical qualification red	quirements:
2.	The Bidder should be an organization with previous experience having executed Supply, Testing and commissioning of minimum of 10 nos., of VVVFD / Thyristor controls for heater banks / PLC based automation System for capacity not less than 18.5kW In the last three financial years to GOI / PSU / Reputed private firms. Copies of P.Os in this regard with satisfactory completion certificate from Purchaser shall be submitted.	
3.	Party shall depute OEM engineer for testing and commissioning	
4.	Bidder shall be either OEM of approved make of VVVFDs or Authorized Dealer / System integrator of approved make of VVVFDs. List of approved makes are enclosed as Annexure-III Mention whether OEM or Authorized Dealer of approved make of VVVFDs. In case of Authorized Dealer / System Integrator necessary valid dealership certificate from OEM shall be enclosed.	

Financ	Financial Qualification Requirements:					
The bid	The bidder should also meet the following financial qualification requirements:					
Docum	Documentary evidence shall be enclosed with tender against each					
require	ment					
1.	The Bidder should have an average annual turnover of not					
	less than Rs 100 Lakhs per year for last three financial					
	years.					
	Didden about the consequent of and an of similar patrons in					
2.	Bidder should have executed orders of similar nature ie., Supply, Testing and commissioning of VVVFD / Thyristor					
	controls for heater banks / PLC based automation System					
	of values as stipulated below in the last three years					
	a. Single order of value not less than Rs 100 lakhs					
	or					
	b. Two orders each of value not less than Rs 80 lakhs or					
	c. Three orders each of value not less than 50 lakhs					
3.	Bidder should possess a current Solvency Certificate from					
	Nationalized Bank for an amount of not less than Rs. 100					
	Lakh					
	IT/ TDO contilinate about he submitted for the marriage					
4.	IT/ TDS certificate shall be submitted for the previous					
	three financial years (FY21-22, FY22-23, and FY23-24.)					

3.0 Supply, Testing & Commissioning (STC) of 40 nos of VVVF Drives for AHU motors of SVAB AC plant, VAB AC plant at SLP area

3.1 SCOPE& SPECIFICATION

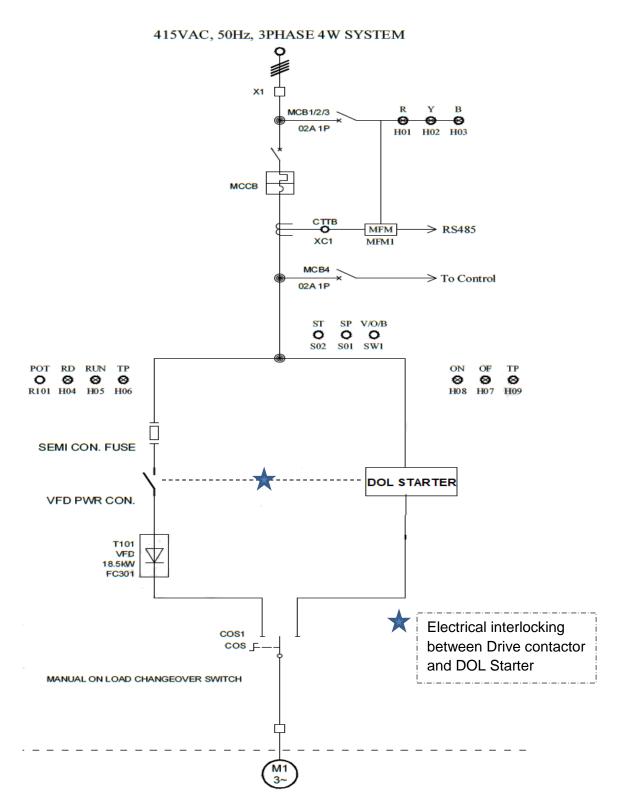
3.1.1 Supply and Commissioning of VVVF Drive cum switchgear panels consist of VVVF Drives, input side Moulded Case Circuit Breaker (MCCB), Four Pole Change Over Switch (COS) and DOL starter with type-2 coordination as per details mentioned in Table 01 with necessary accessories for blowers of Air Handling Units of AC plants

Refer Single Line Diagram (SLD) in 3.1.4

- 3.1.2. Installation is in our (Department) scope.
- 3.1.3 The VVVFD panel shall comprise the following

Table 01: Details of VVVF Drive panels required

#	VVVFD rating (kW)	Quantity (nos.,)	35kA 4P MCCB with rotary operating handle as input switch	4P AC3 Contactor at drive input side to isolate the power supply to drive while running in bypass mode.	4P Change over switch (COS)	DOL starter type-2 coordination (kW)
01	18.5	36	63A	100A	63A	15
02	37	4	100A	100A	100A	30



The above SLD is indicative only. Any additional items required for safe operation of the drive shall also be considered.

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- 3.1.5 Panel shall be dust and vermin proof construction made of sheet steel enclosure and front facia of the panel shall consist the following
 - a. ON/OFF pushbutton control for drive and for DOL starter
 - b. Potentiometer to control the speed of motor
 - c. Communication capable digital multi-function meter with necessary CTs to monitor Voltage, Current, frequency and power factor and etc.
 - d. Shall have indication lamps for R, Y, B, Drive healthy, Drive trip
 - e. Operator panel / HMI to monitor and configure the VVVF drive
 - f. Selector switch for selecting drive mode / bypass mode.
 - g. Contactor at input side of the drive to disconnect the power supply to drive while running on DOL starter.
 - h. Drive OEM recommended semiconductor fuses for drive protection
 - i. Electrical interlock between both the contactors
 - j. The switchgear of DOL starter shall be with type-2 selection chart of the OEM.

3.1.6 VVVF Drive specifications

Table 02 : Specifications of VVVFD				
Description	Essential Specification			
Rating and Quantity	Ref Table 01			
Make	Siemens / ABB / L&T / Danfoss / Schneider / Nelco / Yaskawa / Vertiv / Hitachi / Landis & Staefa			
Main voltage	380-480 V, 3 Phase			
Input Frequency	48-63 Hz			
Output Frequency range operation	1 Hz to 50Hz			
Digital inputs	6 Nos., programmable (minimum)			
Analog inputs	2 Nos., programmable (0-10 V, 0-20 mA, and -10 to +10 V) (minimum) *			
Relay outputs	3 Nos., programmable (minimum)*			
Analog outputs	2 Nos., programmable (0-20 mA) (minimum) *			
Safety guidelines	IEC 61800			
Ambient Temperature	Max. 50 Deg C			
Communication	Profinet / Ethernet / Modbus TCP or other Ethernet based protocol with suitable converter			
Input Choke or filter	External Choke / Filter of suitable rating to limit THDi			
Operator Panel	Advanced Operator Panel (AOP) / HMI with start, stop, speed increase, decrease and forward reverse touch / keypad buttons suitable for Local Control, configuration, Programme backup & Local monitoring of all VFD electrical parameters like Speed, current, Voltage, Frequency etc			

Protections	Protection against input / output phase loss / phase short circuit, under / over voltage ,di / dt, inverter protection, semiconductor fuse protection at input side of drive etc.,
Test certification	From UL, CE and ROHS.
Other Features	Features of safety stop

^{*} shall be wired up to terminal block

3.1.7Panel shall have cable entry from Top.

Other terms and Conditions

- 3.1.8 OEM or their authorized dealers / system integrators ONLY are eligible to quote. In case of authorized dealers, necessary valid dealership certificate shall be submitted along with the quote.
- 3.1.9 The party shall **necessarily submit the catalogues with detailed specifications** and ordering code of VVVF drive that is going to be supplied in the technical bid.
- 3.1.10 On receipt of order, the party shall submit detailed GA drawing with bill of materials for approval before taking up the panel fabrication.

3.1.11 **Inspection & testing:**

Pre-delivery inspection at factory

In house (OEM) quality reports shall be submitted for review.

All Functional tests, demonstration of other tender specifications shall be carried out on VVVFDs and panels at factory with suitable induction motors in our presence.

During Commissioning at our site,

Complete parameterization, performance and functional tests shall be carried out on all the VVVFDs at our site.

- 3.1.12 Training: Training shall be given for detailed parameterization for all applications, trouble shooting and various features of VVVFD on commissioning of the VFDs for half day at free of cost at our premises for a team of 15 members.
- 3.1.13 **Documentation:** Party shall submit the two sets of hard copy and one set of soft copy of as built drawings of VVVFD panel, power circuit diagrams, drive manuals, parameterization details, programming and software's related to the VVVFD supplied.
- 3.1.14 The scope of work shall include all transportation of the VVVFD panels and their accessories to the site of work with utmost care. All loading and unloading at the

designated places of different locations. Arrangements shall form part of the part of the scope and all required man power shall also be provided by the agency for unloading.

Material handling equipment like hydra / fork lift shall be spared by Dept, based on then availability at free of cost. However, mobilizing necessary man power required for the above works shall be the responsibility of the supplier.

- 3.1.15 The commissioning work shall be started and completed immediately once the readiness of site is intimated to the agency without any delay.
- 3.1.16 All necessary safety precautions during transit, testing and commissioning of drive panels shall be strictly adhered by the supplier/agency.
- 3.1.17 The tenderer shall provide two hard copies of complete sets of operation and maintenance manuals and one soft copy including all test certificates etc..
- 3.1.18 The department shall reserve right to accept / reject any part of work, which is not acceptable as healthy engineering practice of carrying out such work as the case may be. In case of any failure to carry out the scope of work in time as per the instruction of department, the work shall be carried out / got done by the department at the cost and risk of the agency and the entire amount with supervision charges shall be recovered from the agency.
- 3.1.19 Power cabling to the VVVFD panel and to the motor including earthing is in Departments scope.
- 3.1.20 VVVFDs shall be of Only approved brands as listed in Annexure-III. OEMs or their authorized representative are ONLY eligible to quote. In case of authorized agency necessary certificate from OEM shall be enclosed.

4.0 Compliance statement which shall be necessarily filled and submitted without fail failing which the offers will be summarily rejected

ш	without fail failing which the offers will be summarily			
#	DESCRIPTION	Compliance Yes/ No		
	Technical			
1.0	Scope as per tender document			
2.0	VVVFD panels as per tender specifications			
3.0	VVVFD specifications as per table 02. S.No. 3.1.6			
4.0	VVVFD make and ordering code along with data sheets of VVVFD: Enclose / Upload			
5.0	OEM or their authorized dealers are eligible to quote. In case of authorized dealers, necessary valid dealership certificate shall be submitted along with the quote			
6.0	Terms and conditions as per tender document			
7.0	Delivery period as per tender document			
8.0	Pre-delivery inspection as per tender document			
9.0	Commissioning as per tender document			
10.0	Training and documentation as per document			
11.0	Deviations if any from the tender specifications Attach separate sheet if required. Otherwise mention as "NIL"			
	Commercial			
12.0	Warranty as per tender document			
13.0	Payment terms as per tender document (either one) Option-1: Supply cost 85% within 30 days on receipt and acceptance of items at our site 15% within 30 days after successful, testing and commissioning at our site. Testing and commissioning cost 100% within 30 days after successful testing, commissioning and acceptance at our site. Option-2: Supply Cost a. 30 % advance on issue of PO subject to providing PBG to this effect			

	 b. 55 % within 30 days on receipt and acceptance of items at our site c. 15 % within 30 days after successful, Testing and commissioning Testing and commissioning Cost 100% within 30 days after successful testing, commissioning and acceptance at our site. Please mention the anyone of the payment options given above 	
14.0	Performance Bank Guarantee and Security Deposit as per Tender Document	

5.0 Price Bid Format

- 1. Fill up separately and upload as price bid format. Never indicate the cost in the technical bid. If indicated the bid will be summarily rejected.
- 2. Fill up indicating as "quoted" and the % of Taxes applicable along with technical bid.

#	DESCRIPTION	Qty.	Rate / Unit	Total cost
Α	VVVF Drive panels 18.5 KW			
1.0	Cost towards supply of VVVFD panel	36 nos.,		
2.0	Taxes @ %			
3.0	Subtotal 1.0 + 2.0			
4.0	Cost towards Testing and commissioning and training			
5.0	Taxes @ %			
6.0	Sub total s.no 4.0 to 5.0			
7.0	Transportation Charges			
8.0	Taxes @			
9.0	Subtotal S No.7.0 + 8.0			
10.0	Grand Total s.no. 3.0 + 6.0+9.0			
В	VVVF Drive panels 37 KW			
1.0	Cost towards supply of VVVFD panels 37 KW	04 nos.,		
2.0	Taxes @ %			
3.0	Subtotal 1.0 + 2.0			

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4.0	Cost towards Testing and commissioning and training		
5.0	Taxes @ %		
6.0	Sub total s.no 4.0 to 5.0		
7.0	Transportation Charges		
8.0	Taxes @		
9.0	Subtotal S No.7.0 + 8.0		
10.0	Grand Total s.no. 3.0 + 6.0+9.0		

LOWEST OFFER WILL BE DECIDED ON THE TOTAL COST FOR 18.5 KW AND FOR 37 KW DRIVES INDEPENDENTLY.

6.0 Approved Makes / Brands of VVVFD

01.	Siemens

- 02. ABB
- 03. L&T
- 04. Danfoss
- 05. Schneider
- 06. Nelco
- 07. Yaskawa
- 08. Vertiv
- 09. Hitachi
- 10. Landis & Staefa

Drives shall be of Only approved makes / brands above.

OEMs or their authorized representative are ONLY eligible to quote. In case of authorized agency necessary valid certificate from OEM shall be enclosed.