

PANDIT DEENDAYAL ENERGY UNIVERSITY Raisan Gandhinagar – 382426, GUJARAT,INDIA

Tender Notice

Sealed Tender bids are invited from reputed / authorized supplier/ manufacturer for supply installation and commissioning of the following items for PANDIT DEENDAYAL ENERGY UNIVERSITY, Gandhinagar, so as to reach the undersigned at the address given below latest by the date and time specified here in below.

Tender No.	Project Name	EMD(Rs.)	Estimated Cost
PDEU/Shell proj/Pilot plant/22-23/WT/74	Shell Project	Rs.15,000.00	Rs.15,00,000.00

Bid documents containing complete details, specifications, terms and conditions etc can be downloaded from the PDPU website <u>http://www.pdpu.ac.in</u>.The download tender document (PDF Format) comprises:

Part – I	:	Tender Notice
Part – II	:	Technical Specifications (Schedule-'A')
Part – III	:	Commercial Terms & Conditions

The Technical Bids so received, shall be opened, on the date and time specified here in below at the PANDIT DEENDAYAL ENERGY UNIVERSITY, Raisan Village, Gandhinagar in the presence of the bidders or their authorized representatives those wish to be present.

The Financial bids of only eligible Tenderer(s) shall be opened. The date and time of opening the financial bids shall be announced on our website after scrutiny of the Technical bids.

Important Dates:

Last date and time for submission of Bid		02.08.2022 up to 5.00 p.m.
I	mportant Instructions:	

- 1. The offer shall be submitted on downloaded tender document only.
- 2. The Main envelope should contain followed **four envelopes** duly sealed.
 - (a) **EMD Envelope** : This should contain Demand Draft (D.D) for EMD document in favour of PANDIT DEENDAYAL ENERGY UNIVERSITY payable at Ahmedabad.

- (b) Technical Bid : Schedule- 'A'
- (c) General Commercial Terms & Conditions
- (d) **Price Bid** : (Schedule 'B') should contain only Price Bid.

All the four envelopes should be super scribed with tender No., date of opening and Name of the bidder.

- 3. Offer without EMD is liable to be rejected forthwith.
- 4. The Tender, duly completed, should be sent by RPAD or Speed Post or Courier Service (Hand Delivery is not acceptable) so as to reach latest by the date and time specified here in above. Tender received after the due date and time is liable for rejection irrespective of delay due to postal service or any other reasons.
- 5. Any technical query, information clarification pertaining to this tender may be referred to Prof.SS Kachhwaha E Mail: <u>Surendra.singh@sot.pdpu.ac.in</u> or <u>purchase@pdpu.ac.in</u>
- 6. Please mentioned the Equipment name on the Main Envelope.

PDPU reserves right to reject any OR all tenders without assigning any reason.

Sd/-

Registrar PANDIT DEENDAYAL ENERGY UNIVERSITY Raisan Gandhinagar – 382426, GUJARAT,INDIA

<u>PART-II</u>

SCHEDULE-'A'

DETAILS TECHNICAL SPECIFICATION FOR PILOT PLANT

Table 1. Jacketed reactor (Tank 1) design specification

Component Specification			
Name	- NDECILICATION		
Tank 1 (1 nos)	Tank specification: Shape: Cylindrical; Capacity: ~150 L (Dimensions: Height (H)=1.20 m; Internal Diameter (ID)= 0.40 m; Cylinder thickness: min. 3 mm (Inclusive of corrosion allowance) (however specify); Tank should have a conical bottom with an apex angle of ~90° with a cone height of ~0.2 m; The tank will be operated in the temperature range of 20- 150 °C; It should be equipped with a safety relief valve (1 nos) mounted on top Jacket Specification: Tank should have a jacket for heating/cooling or maintaining the temperature of the reactor; Preferably start from just above the bottom cone; Jacket width: 5 cm; Jacket plate thickness: min. 2 mm (however specify); Jacket height: ~0.95 m Thermic oil properties: Fluid in jacket: Thermic oil; Type: Preferably paratherm (should be provided); Thermic oil temperature range: 20-250°C; Thermal conductivity: 0.33 W/m•°C (Quantity: Refer page no. 5) Insulation specification: Tank should be provided with insulation in the area other than jacket to prevent heat losses; Insulation thickness: min. 2.54 cm (1"); Insulation material: Fibreglass; Insulation protection: By metal cladding (MOC: Stainless steel); Thickness of cladding: min 0.5 mm	All stainless steel (AISI 316)	
	Following attachments needed with Tank 1		
Double Diaphragm Pump (2 nos)	Max. Power: 4 kW each; Max. Discharge head: 10 m each; Max. Flowrate: 500 L/min each; Electrical supply: 220-230 V, Frequency: 50 Hz; Phase: 1-Phase	Stainless steel (AISI 316)	
Cavitation device	Orifice plate: 5 nos; Dimensions: As per the requirement of the user Circular Venturi: 2 nos; Dimensions: As per the requirement of the user	Stainless steel (AISI 316)	
Condenser (1 nos)	Overhead condenser; Condenser type: Water-cooled shell and tube condenser; Vapour flow rate: 10 kg/hr; Condenser area: 1.5 m ² ; Tube diameter: 2.54 cm (1"); Shell diameter: 0.1 m (4"); Number of tubes: 10; Tube length: 0.5 m; Type of pitch: Triangular pitch; Reflux condenser with inlet and outlet of water	Stainless steel (AISI 316)	
Nozzle	1 Nozzle on the head with diameter of 2.54 cm (1"); Attached with 2.54 cm (1") ball valve; It should fit with 2.54 cm (1") flexible pipe (MOC: SS); Also provide one funnel with dimension of 150 mm diameter	Stainless steel (AISI 316)	
Sampling point (1 nos)	Sampling point (Ball valve): 2.54 cm (1"); Preferably located near the discharge of double diaphragm pump line	Stainless steel (AISI 316)	

Visualization	Height ×Width ×Thickness \approx 1×0.05×0.003 m; Also slant	
glass	visualization glass on cone with a width of 0.05 m and slant	Acrylic
(1 nos)	height of 0.3 m	

Table 2. Jacketed phase separator (Tank 2) design specification				
Component Name	Specification	мос		
Tank 2 (1 nos)	Tank specification: Shape: Cylindrical; Capacity: ~200 L (Height (H)= 1 m; Internal Diameter (D) =0.5 m); Cylinder thickness: min. 3 mm (however specify); It should have a conical bottom with an apex angle of ~100° with a cone height of ~0.02 m; The tank will be operated in the temperature range of 20-150 °C; Tank should be equipped with a vacuum relief valve on the head of the tank Jacket Specification: Tank should have a jacket for heating/cooling or maintain the temperature of the reactor; Preferably start from just above the bottom cone; Jacket width: 5 cm; Jacket plate thickness: min. 2 mm (however specify); Jacket height: ~0.85 m Thermic oil properties: Fluid in jacket: Thermic oil; Type: Preferably paratherm (should be provided); Thermic oil temperature range: 20-250°C; Thermal conductivity: 0.33 W/m•°C (Quantity: Refer page no. 5) Insulation specification: Tank should be provided with insulation in the area other than jacket to prevent heat losses; Insulation thickness: min. 2.54 cm (1"); Insulation material: Fibreglass; Insulation protection: By metal cladding (MOC: Stainless steel); Thickness of cladding: min 0.5 mm	Stainless steel (AISI 316)		
	Following attachments needed with Tank 2			
Agitator (1 nos)	Type of impeller: Propeller type; Blades: 45° pitched blade turbine with 4 blades; RPM: Upto 100 RPM; Motor required: 0.373 kW (0.5 hp); Shaft height: 1 m; Shaft diameter: 0.02 m	Stainless steel (AISI 316)		
Vacuum Pump (1 nos)	Capacity: 2 CFM; Max. flow rate: 51 L/min; Power: 0.184 kW (1/4 hp); Type: oil-free /oil-filled (Specify); Electrical supply: 220-230 V, Frequency: 50 Hz; Phase: 1-Phase	Stainless steel (AISI 316)		
Condenser (1 nos)	Theoretical condenser area: 0.2 m^2 ; Condenser area: 0.23 m^2 ; Tube outer diameter: 0.0254 m (1"); Length of tube: 0.5 m ; No. of tube: 6; Type of pitch: Triangular pitch; Tube pitch: 3.18 cm ; Shell outer diameter: 10 cm (4"); Shell and tube heat exchanger with condensate rate of 10 L/hr	Stainless steel (AISI 316)		
Visualization glass (1 nos)	Height ×Width ×Thickness $\approx 0.9 \times 0.05 \times 0.003$ m; Also slant visualization glass on cone with a width of 0.05 m and slant height of 0.3 m	Acrylic		

Table 2. Jacketed phase separator (Tank 2) design specification

Component	nent Specification	
Name		
Pipe	Flexible pipe; Type: Braided SS flexible hoses; Pipe size: 2.54 cm (1") schedule 40; Temperature range: 10 °C to 150 °C; Working pressure: Medium (Upto 15 bar); End fittings: Adapter; End fittings material: SS 316 Stainless steel pipe (wherever required); Pipe size: 2.54 cm	Stainless steel (AISI 304 or 316)

	(1") schedule 40; Temperature range: 10 °C to 150 °C; Working pressure: Medium (Upto 15 bar); End fittings: Adapter; End fittings material: SS 316	
Valve (10 nos)	Quantity: 10 nos; Valve type: Ball valve; End type connection: Threaded; Seal material: Teflon; Size: 2.54 cm (1")	Stainless steel (AISI 316)
Pressure Gauge (5 nos)	For tank 1: Upstream pressure gauge (Qty. 2) and Downstream pressure gauge (Qty. 2); Type: Bourdon Tube Pressure Gauge; Range: 0-16 kg/cm ² ;(~16 bar) (~228 psi); Accuracy: ±1 % FSD; Least count: 0.2 kg/cm ² For tank 2: Vacuum pressure gauge; Range: 0 - 50 mmHg; Accuracy: ±1 % FSD; Least count: 0.5 mmHg	Stainless steel (AISI 304)
Digital temperature sensor (4 nos)	Quantity: 4 nos; Type: RTD PT-100 with digital display; Temperature Display: 3 digits with 1 decimal point; Range: 0- 300 °C; Accuracy: ±0.5 °C; Query time: <750 ms	Full metal probe
Energy meter (5 nos)	Voltage rating: 220 V; Accuracy: Class 1.0 as per IS 13779:1999; Display: LCD; Measured parameters: Voltage, Current phase & Neutral channel, Power in kW & kVA; Frequency: 50 Hz; Material: Aluminium disc	-
Mixing tank (1 nos)	Shape: Cylindrical Height (H)=Diameter (D)= 0.35 m; Type of impeller: Propeller type; Blades: 45° pitched blade turbine with 2 blades; RPM: Upto 500 RPM; Motor required: 0.373 kW (0.5 hp); Shaft height: 0.23 m; Shaft diameter: 0.02 m	All stainless steel (AISI 316)
Centrifugal Pump (3 nos)	Speed (rpm): 840; Type of liquid: Oil, methanol/ethanol, catalyst; Temperature: upto 60 °C; Total head: 5 m; Maximum Power: 0.344 kW; Motor required: 0.5 hp; Electrical supply: 220-230 V, Frequency: 50 Hz; Phase: 1-Phase	Stainless steel (AISI 316)

Table 4. Specifications of storage tanks

Sr No.	Component name	Required capacity (L)	Quantity	мос
1	Main oil storage tank	500	1	Carbon steel (AISI 1020)
2	Measurable oil storage tank*	100	1	Stainless steel (AISI 316)
3	Calibrated measurable methanol tank	25,10,1	1	Carbon steel (AISI 1020)
4	Thermic oil tank for heating purposes in the reactor	150	1	Stainless steel (AISI 316)
5	Thermic oil tank for cooling/maintaining temperature in reactor	150	1	Stainless steel (AISI 316)
6	H_2SO_4 storage tank	10	1	Stainless steel (AISI 316)
7	Glycerol storage tank	20	3	Carbon steel (AISI 1020)
8	Excess methanol recovered tank	20	1	Carbon steel (AISI 1020)
9	Distilled water storage tank	200	1	Polypropylene
10	Waste water storage tank	200	1	Polypropylene

11	Biodiesel storage tank	500	1	Carbon steel (AISI 1020)
12	Tap water storage tank	50	1	Polypropylene

Note: The above-mentioned dimensions are approximate.

*The measurable oil storage tank should consist of three filters (MOC: Stainless steel) of size 600 micron, 400 micron, and 200 micron for oil filtration.

- The thermic oil should be provided of quantity 250 Litre. Design and material should be based on the operational process and handling of material. The structure of the system is made up of SS 304/316.
- Temperatures, pressures, flow rate, electricity consumption, and RPM of stirrer data must be recorded and displayed on the control panel. The specifications of the control panel are given in Table 5.

Component Name	Specifications	МОС
Control Panel	Power supply: 230 V (1-Phase) Total display contains: 1. Stirrer RPM indicator (Mixture tank), 2. Stirrer RPM indicator (Phase separator), 3. Oil temperature controller, 4. Flow meter, 5. Energy meter, 6. Temperature of reactor, 7. Temperature of phase separator	Enclosure material: 0.10" aluminium
Switches	1. Main switch on/off, 2. Oil heater on/off (Thermic oil heater 1), 3. Oil heater on/off (Thermic oil heater 2), 4. Stirrer rpm regulator (Mixture tank), 5. Stirrer rpm regulator (Phase separator), 6. Double diaphragm pump on/off, 7. Centrifugal pump on/off	-
Data Acquisition system	1. Touchscreen-based fully automatic system; 2. Automatic Data acquisition w.r.t. Time, interval seconds which should be interchangeable between 1 to 10 seconds. It should be available in EXL format at the end of one mechanical run test (duration configurable by user); 3. Equipped with all safety protections; 4. Different output parameters should be recorded and provision for data transfer	-
Instrumentation and process control	PLC based Instrumentation and process control should be provided for the smooth operation and control of each component and the whole plant	-

Table 5. Control Panel Specifications

General Instructions:

- The Pilot Plant should be created to allow easy transportation
- The manufacturer should have required ISO 9001 certification and the system should comply with international regulatory, safety and electromagnetic compatibility.
- The installation of the system will be carried out by the qualified service engineer deputed by the manufacturer.
- The supplier will also ensure the required technical training to the persons nominated by the university. The installation requirement including the nature of phase and power load will be specified by the supplier well in advance.
- The supplier has also to specify the minimum space required for the installation of the setup.
- System should be supplied with NIST and RTL databases. Data cable needs to be supplied by the supplier as per the requirement of space of the installation.

- All piping and system fabrication in confirmation with the highest quality standards and should be provided as per the above specifications.
- All items should have certified data with calibration data and report.
- Warranty: min. 3 years
- The standard operating procedure should be provided.
- Additional spare parts (such as energy meter (1 nos), temperature sensor (2 nos), gasket (4 nos) should be provided by the supplier.
- The tenderer shall be in a position to provide Annual Maintenance Contract (AMC) for the replacement of all spares, periodical servicing, breakdown service, etc.
- Transportation and unloading up to Pandit Deendayal Energy University, Gandhinagar, Gujarat will be arranged by the supplier.

PART-III

GENERAL COMMERCIAL TERMS AND CONDITIONS

DEFINATIONS:

- Tenderer/Supplier/Bidder: These terms are synonym and mean the firm who intends or who has submitted offer in response to this tender.
- Tender / Bid Document: means this tender document.
- PDPU: PANDIT DEENDAYAL ENERGY UNIVERSITY having it office at Raisan Village, Gandhinagar-382007 and includes it's successors and assignee.
- **1** The tenderer should thoroughly read all the clauses of the tender document before submitting the duly filled in Tender.

Tenderer shall place the following **ANNEXURES as FIRST EIGHT pages** of their Technical Bid in the following sequence.

FIRST PAGE	ANNEXURE –1
SECOND PAGE	ANNEXURE - 2
THIRD PAGE	ANNEXURE - 3
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FOURTH PAGE	ANNEXURE - 4
FIFTH PAGE	ANNEXURE - 5
FIFINPAGE	ANNEAURE - 5
SIXTH PAGE	ANNEXURE – 6
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SEVENTH PAGE	ANNEXURE – 7
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EIGHTH PAGE	ANNEXURE – 8
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² SUBMISSION OF BID DOCUMENT:

PDPU follows two bid systems. Tenderer shall submit two separate bids viz.

- a) Techno Commercial Bid (Technical Bid) and
- b) Price Bid as under.
 - (a) Technical Bid: This shall be in sealed envelope. It shall be super scribed

Technical Bid: Tender No. Name of Bidder:

It shall contain the following

(i) six pages as mentioned in condition 1 above and

TENDERERS SHOULD FURNISH THE FOLLOWING DETAILS:

[1] Technical Specifications(Part-II) and General Term & Conditions(Part –III) of Tender Document Duly Sign on each page by Authorized Signatory as token of his acceptance.

[2] Audited Accounts of last three years of the firm.

[3] Performance reports if any.

[4] Consent letter from their principals to manufacture such items.

- [5] All the testing equipment MUST have been calibrated up to date.
- [6] List of customers

- (ii) All the information and supporting documents for (i) above
- (iii) Details, Documents, Literature, certificates etc. for the equipment / Material offered.

(b) Price Bid: This shall be in sealed envelope.

It shall contain offer price in the form specified in the tender document as Schedule-'B'. The Printed Price list or price in different format will render the offer liable for rejection. **It shall be super –scribed as:**

Price Bid: Tender No.:	Name of Bidder:	
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c) EMD Envelope: This envelop shall contain the following:

Demand draft or Bank Guarantee, as the case may be, for EMD supporting document, as mentioned hereof, if bidder seeks exemption in EMD **It shall be super – scribed as :**

EMD Envelop:	Tender No.:	Name of Bidder:	
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d) Main Envelope: This envelope shall contain envelop of Technical bid, envelop of EMD and Price Bid. It shall be super – scribed as :

Main Envelop:	Tender No.:	Name of Bidder:
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The entire bid document (Main envelope mentioned above) should be submitted so as to reach this office not later than 02.00 P.M. on due Date as specified in the tender notice through RPAD / Speed post or Courier only

Incomplete bids and amendments and additions to bids after opening of the bids will be ignored out rightly.

The technical scrutiny committee of PDPU shall evaluate the techno-commercial view of the tender. PDPU reserves the right to open or not to open the price bid of the bidders on the basis of their past performance of their supplied materials.

The price bid of those who are techno-commercially acceptable shall only be opened.

3 PRICE EVALUATION:

Normally no price preference shall be given on any account. All tenders will be evaluated on firm price end-cost basis; The parties however shall give the detailed break-up of the end cost. If PDPU feels that there is lack of serious competition or for any other reasons, PDPU may negotiate with the bidder. PDPU's decision to accept any or all tenders shall be final and binding on all the parties. However, the DG of PDPU or the Authorized committee at its sole discretion reserves the right to negotiate with other tenderer in case the technical specification of some or all products are found to be superior.

4 EARNEST MONEY DEPOSIT: (E.M.D.)

E.M.D. is payable @1% of the value of the items offered. The EMD is payable by Demand Draft, of any Nationalized Banks, drawn in favor of the PANDIT DEENDAYAL ENERGY UNIVERSITY, payable at Ahmedabad. If the amount of EMD is more than Rs. 25000/- the same can be paid by an irrecoverable Bank Guarantee from any nationalized Bank in a standard format prescribed by PDPU (Format given in this tender document).

5 DELAYED AND LATE TENDERS:

No Tender shall be accepted / opened in any case which are received after due date and time of the receipt of tender irrespective of delay due to postal services or any other reasons and PDPU shall not assume any responsibility for late receipt of tender. Any correspondence in this matter will not be entertained.

6 PRICES:

The details of the price shall be given in Price Bid (Schedule-B) only and nowhere else. Prices quoted shall be FIRM and on F.O.R. Destination basis (i.e. PDPU,Gandhinagar). However, the Tenderer should indicate in the Price Bid, the break-up of Unit F.O.R. Destination Prices with break-up of Unit Ex-works price ,Excise duty, GST, Custom Duty, average freight, packing charges, and Insurance Charges. Tenderer should quote the Freight as well as Insurance Charges both separately as shown in price bid. Please note that payment of excise duty will be made only on Ex-Work prices. Also, please mention rate of Excise duty. If this is not specifically mentioned then PDPU will have the option to take the prices as exclusive of taxes and duties (at maximum slab rates) for the evaluation of the tenders.

The Tenderer should invariably indicate the total unit end cost price considering all their costs / calculations in the Price bid itself for each item and all sub-items if any. This is mandatory. Cost components hidden / furnished elsewhere will not be considered and will be ignored out-rightly.

Only for Traders - Tender:

[i] In case of a trader-**tender**, if the quotation is furnished for all inclusive rates and the rates of taxes and duties are indicated without indicating the amount, in such cases, the **price** is eligible for statutory variation.

[ii] Where the trader-**tender** quotes all inclusive rates without indicating the rate of Taxes and Duties included in the quoted price, the price is not eligible for any statutory variation.

7 REFUND / FORFIETURE OF E.M.D

EMD will be forfeited if (i) the tender, it covers, is withdrawn during the validity of the offer or (ii) the Tenderer fails to furnish / deposit the Performance Guarantee towards Execution Period (security deposit).

EMD of the unsuccessful tenderer's will be returned without intimation within 60 days of placing of the order to the successful Tenderer subject to the unsuccessful bidder returning the original receipt of the EMD together with the advance stamped receipt, to the Accounts Officer of PDPU.

EMD will be returned to the successful bidders, only on their submission of performance guarantee towards execution period against order released to them.

8 PERFORMANCE GUARANTEE (PG) TOWARDS EXECUTION PERIOD: (i.e. SECURITY DEPOSIT):

Successful tenderers will be required to pay an amount equivalent to 10% (Ten) of the value of the purchase order as Performance Guarantee (Security Deposit) within 10 days from the date of the purchase order failing which the purchase order is liable to be cancelled at the cost and the risk of the successful Tenderer (at the discretion of PDPU).

It can be paid by Demand Draft drawn in favour of PANDIT DEENDAYAL ENERGY UNIVERSITY payable at Ahmedabad or in the form of Bank Guarantee from Nationalized Bank if the amount is more than Rs.35,000/-.

The Bank Guarantee will be executed on the standard form prescribed by PDPU as APENDIX - I.

The Bank Guarantee so furnished should have clear one time validity till the completion of the order in all respects. Bank Guarantee for Interim period will not be acceptable. If by any reasons the supply period is extended then the supplier shall undertake to renew the Bank Guarantee at least one month before the expiry of the validity failing which PDPU will be free to encash the same.

The successful bidder/s shall have also to furnish PG (as specified here of) for the contract value towards warranty / guarantee period separately as applicable as per tender conditions.

Performance Guarantee towards Execution Period (Security Deposit) will be returned on successful completion of the Order and only after the Performance Guarantee towards warrantee/guarantee, as mentioned above, is submitted.

9 VALIDITY OF THE OFFERS:

The offers shall to be kept valid for a period of 120 days from the date of opening of technical bids. In case the finalization of the tender is likely to be delayed, the tenderers will be asked to extend the same without change in the prices or any terms and conditions of the offer. If any change is made, original or during the extended validity period, the offers will be liable for outright rejection without entering into further correspondence in this regard and no reference will also be made.

10 TRUCK RECEIPT (T.R) / AIRWAY BILL (A.B)

All the Goods should be dispatched freight paid and the A.B / T.R should be forwarded directly to PDPU Office at Raisan Village, Gandhinagar. The demurrage charges, if any, paid by the PDPU due to delay in informing PDPU or any other reason attributable to supplier, will be deducted from his bill. It is essential that packing notes and invoices are furnished in respect of every consignment.

The supplier will be responsible for any damages / shortage claim rejected by the respective Authorities for want of a clear A.B / T.R.

Materials may be dispatched by any convenient mode of transport and up to PDPU i.e. F.O.R Destination.

11 PACKING AND FORWARDING CHARGES:

The prices shall be inclusive of packing & forwarding charges. The Materials should be strongly and adequately packed to ensure safe arrival at destination. The materials dispatched from overseas by Air / Shipping should be packed such that it can withstand rough handling and possible corrosion due to exposure to salt laden atmosphere, salt spray or open storage. All packing must be clearly marked with order Number and consignee's name and address.

12 TRANSIT INSURANCE:

All the materials will be required to be supplied up to Destination against all transit risks, such as damage, loss, theft, fire, etc. The insurance period shall cover 15 days after the date of receipt of materials at site to enable PDPU to check up stores fully. The suppliers will be responsible for free replacement of such stores which have been received short, damaged or broken within 15 days.

The cost of damaged, defective stores materials will however be deducted from the bills of the suppliers and will be refunded only after replacement thereof. It will be the

responsibility of the supplier to lodge claim against the insurance on receiving necessary advice from PDPU.

13 ACCEPTANCE OF STORES:

The equipments/ materials to be supplied against this tender are subject to their acceptance by PDPU or any other Officer deputed for this purpose.

14 UNLOADING:

Unless specified otherwise in the purchase order, Unloading of the materials shall be arranged by PDPU.

15 STATUTORY VARIATION:

Any statutory increase or decrease in the taxes and duties subsequent to the offer under this tender if it takes place within the original contractual delivery date will be to PDPU account subject to the claim being supported by documentary evidence. No increase due to such variation shall be allowed for the portion of the delivery after the original contractual delivery date. However, if any decrease takes place after the contractual delivery date, the advantage will have to be passed on to PDPU.

16 PAYMENT TERMS :

A. In case of Domestic(i.e. Indian) Supplier the payment Terms as Under :-

- 70% of Payment only after proper verification of the delivered equipments by the vender.
- Remaining 20% Payment of invoice value within one month on successful installation, Commissioning and training and remaining 10% after submission of PBG.

OR

- 100 % through Wire Transfer within 15 (fifteen) Working Days after the date of Successful Commissioning and Installation of the System.
- B. In case of Foreign Supplier the Payment Terms is as Under :-
 - 90 % payment through Irrevocable Letter of Credit.
 - 10 % payment through Wire Transfer within 5 (five) Working Days after the date of Successful Commissioning and Installation of the System.
 OR
 - 90% payment will be released through wire Transfer within 5 (five) Working Days after receipt of the material.
 - 10% payment will be released through Wire Transfer within 5 (five) Working Days after the date of Successful Commissioning and Installation of the System.
 OR
 - 100 % through Wire Transfer within 5 (five) Working Days after the date of Successful Commissioning and Installation of the System.
 - **Installation:** The PDPU will be responsible to prepare the site for installation of equipment. The vendor has to arrange for technician, other manpower, tools etc for installation and commissioning of the goods supplied by him.

17 REPEAT/ADDITIONAL ORDERS:

PDPU reserves the right to place repeat order / additional order on the successful tenderers up to 25% of the original quantity of the P O at the same prices, terms and conditions stipulated in the original contract during three months from the date of Purchase Order.

18 DELIVERY PERIOD:

The Tenderers will have to quote a firm delivery period subject to the force Majeure conditions as accepted by PDPU. Tenderer should mention their delivery period. Time being the essence of this tender, delivery period shall be strictly adhered to. Delay in execution of order on account of any reasons will be subject to levy of penalty.

19 PENALTY FOR LATE DELIVERY:

In case, the materials are not delivered within the period stipulated in the order, penalty shall be levied at ½% per week on the prices (End cost excluding taxes) subject to maximum 10% reckoned on the value of late delivered supplies.

Due consideration will be given to waive levy of penalty for the reasons absolutely beyond suppliers control for which documentary evidence will have to be provided. The request for extension in delivery giving reasons and supporting documents shall have to be made available within one month on completion of the supply, and no request to waive levy of penalty will be entertained / reviewed during the execution of order.

20 EXTENSION IN CONTRACTUAL DELIVERY DATE:

It will be supplier's responsibility to ensure that goods are delivered within the stipulated delivery period. However, if PDPU may consider extension of delivery period with or without statutory variations, for the reasons beyond the control of the tenderer and subject to the Penalty as mention hereof.

Such extension will be subject to the following conditions.

[a] No increase in price on account of any statutory increase in or fresh imposition of customs duty, excise duty, sales tax or on account of any other tax or duty shall be admissible on the material delivered after the original contractual delivery date.

[b] Notwithstanding any stipulation in the contract for increase in price on any other ground, no such increase which has become effective on or after the contractual delivery date shall be admissible on material delivered after the original contractual delivery date.

[c] Nevertheless, PDPU shall be entitled to the benefit of any decrease in price on account of reduction in or remission of customs duty, excise duty, sales tax or on account of any other tax or duty or on any other ground as stipulated in the P.O., which takes place on or after the contractual delivery date of the said P.O. for the material delivered after the original contractual delivery date.

21 REPLACEMENTS OF GOODS BROKEN, DAMAGED OR SHORT:

In the event of any material or part thereof found broken or damaged or received short during transit or during installation or Commissioning or testing at site, before commissioning in service the suppliers shall replace the same free of cost. However, PDPU will recover amount equivalent to the cost of such damaged / broken / short supplied materials and will repay when actual replacement is given.

22 POST TENDER CORRESPONDENCE / ENQUIRIES:

The Tenderer will refrain from pursuing / canvassing the matter, directly or indirectly with any Office of PDPU as otherwise the same would amount to disqualification of the tender.

23 PDPU shall have the right to make any changes, additions / deletions or modifications in any terms / conditions or quantity of the tender and / or specifications as may be deemed necessary by PDPU at its sole discretion at any time before the due date of opening of the tender.

- **24** PDPU does not accept the printed conditions of any Tenderer. It will be ignored without any reference; hence tenderers should withdraw such printed conditions if they have any. PDPU shall accept only unconditional tender.
- **25** If technical deviations furnished by the Tenderer are not agreeable to PDPU, the offers may be ignored. However it will be solely at discretion of PDPU to consider the technical deviations OR not for considering the Tenderer. No correspondences of the Tenderer will be entertained in this matter.
- **26** Please indicate whether the goods offered are first sale or second sale so as to determine the payment of sales tax.
- **27** Revision of prices or any commercial terms affecting the price after opening of technical bids shall not be considered and will be ignored.
- **28** Tenderers shall indicate the name of their partners of their manufacturing firm.
- **29** Tenderer should specifically mention in the offers the name of the Partners / Proprietor / Directors who is / are the signing authority.

30 GUARANTEE:

If the goods, stores and equipments found defective due to bad design or workmanship the same should be repaired or replaced by the tenderer free of charge if reported 24 months from the date of commissioning of equipments whichever is earlier. Tenderer will be responsible for the proper performance of the equipments / materials for the respective guarantee period.

31 APPROVAL:

The goods shall be subject to the approval of PDPU after receipt of the Material at site.

32 PDPU would prefer the offers from manufacturers directly. All the manufacturers should quote for those items, which are actually manufactured at / rolled by their plants. This should be strictly adhered.

PDPU reserves the right to inspect, suppliers factory at any time during the currency of the contract in case order is placed on supplier and also to inspect manufactured material before testing / packing / dispatch.

33 If in any company, the interest of any employee of the PDPU. or his relative as defined in Section VI of the Company's Act. 1956, is 10% or more, PDPU will not deal with such company at all. Tenderer therefore, must specifically disclose this fact in his technical Bid. Non-disclosure of such facts would disqualify the Tenderer for further dealing with PDPU.

34 TERMINATION OF CONTRACT:

In case, the supplier fails to deliver the stores / materials / equipments or any consignment thereof within contractual period of delivery or in case the stores are found not in accordance with prescribed specification and/or the approved sample, PDPU shall exercise its discretionary power as under:

[a] To recover, from the supplier as agreed, by way of penalty clause above,

or

[b] To purchase from elsewhere, after giving notice of 15 days to the supplier, on his account and his risk

or

[c] To cancel the contract.

or

[d] PDPU at any time terminate the contract by giving written notice to the qualified Bidders/Tenderer without compensation to the qualified tenderer, if he become bankrupt or otherwise, insolvent or in case of dissolution of firm or winding up of company provided that such termination will not prejudice or effect any right of action or remedy which has thereafter to the University.

In the event of the risk purchase of stores of similar description, the opinion of PDPU shall be final. In the event of action taken under clause (a) or (b) above, the supplier shall be liable to pay for any loss which PDPU may sustain on this account

Further, "PDPU" reserves the right to terminate the Contract (i.e. Purchase order) at any time, without assigning any reasons, whatsoever, by giving a notice or not less than period of ONE month. Suppliers will not be entitled for any compensations / damages / losses, refund by PG whatsoever, on account of such termination of the Contract."

35 ARBITRATION:

All questions, disputes or differences whatsoever which may at any time arise between the parties to this agreement touching the agreement or subject matter thereof, arising out of or in relation to there and whether as to construction or otherwise shall be referred to the decision of the Sole Arbitrator, appointed by the PDPU, for that purpose, who shall be a retired High Court Judge or retired District and Sessions Judge, and the decision of the said Arbitrator shall be final and binding upon the parties. Reference to the arbitration shall be governed by the provisions of Indian Arbitration & Conciliation Act. 1996 as amended from time to time and the rules made there under.

36 JURISDICTION:

All questions, disputes or differences arising under, out of or in connection with the Tender / Contract shall be subject to the exclusive jurisdiction of Ahmedabad court.

- **37** If the tenderer is an Agent, he will have to give information and declare the name of the principal from which he will source the materials along with company's written confirmation about quality and backup performance guarantee. Only on getting complete information from Agent, such offer, if found suitable, shall be considered.
- **38** PDPU reserves the right to cancel any or all the offers / bids or to accept any offer without assigning any reasons.

In case PDPU finds that there is an attempt of cartel in the prices, PDPU reserves the right to consider or reject any or all the parties offers without assigning any reasons thereof.

- **39** PDPU reserves the right to increase or decrease the quantity against each item/s while placing the order.
- **40** The names of the Partners / Directors / Sole Proprietors and responsible person and his updated Address / Telephone, Fax Numbers etc. should be invariably mentioned in the Annexure provided for this purpose in this document.
- **41** The Tenderer should give in his offer, the full name and address with phone, Fax & mobile numbers of the Authorized Representative to do liaison work with PDPU on their behalf.
- **42** The tenderers should invariably write the name and address of the Company, both on sealed covers of EMD, Technical & Price Bids. The tender covers without the name and address will not be opened.
- **43** The tenderers are required to furnish the technical information and the Guaranteed technical particulars (GTP) along with company seal and signature of the Tenderer on each and every page / papers of the tender documents.

- **44** Tenderer should invariably fill up all the details of all the Annexure/s including the prices in the Price Bid Annexure of this tender document and should be duly signed by authorized signatories with their rubber stamp and along with Company's seal / stamp affixed on each paper.
- **45** If the Tenderer fails to pay the Security Deposit or defaults in execution of the orders placed or if PDPU suffers any financial loss due to this, then PDPU will be at liberty to adjust the amount from other orders of the same firm or by encashing the Bank Guarantee.
- **46** All the tenderers must ensure that all the relevant documents / papers submitted with the tender should be serially numbered, properly bounded / tied together and properly documented.
- **47** All the above points should be complied by the Tenderers. If not, tenders are likely to be ignored without making any further reference.

E. M. D. BANK GUARANTEE FORMAT

FOR TENDER NO. PDPU / _____

<u>APPENDIX – I</u>

(BANK GUARANTEE ON NON-JUDICIAL STAMP PAPER OF Rs.100/-)

Messer's WHEREAS	(Name & Address of the Firm) having
their registered office at	(Address of the firms Registered
office) (Hereinafter called the 'Tenderer') wish to	p participate in the tender No for
of (Sup	pply/Erection/Supply & Erection Work) (Name
of the material/equipment/Work) for	PANDIT DEENDAYAL ENERGY
UNIVERSITY and WHEREAS a Bank Guarante	e for (Hereinafter called the "Beneficiary")
Rs(Amount of EMD) valid till	(Mention here date of validity of this
guarantee which will be 4 (FOUR) months beyo	nd initial validity of Tender's offer) is required
to be submitted by the tenderer along with the	<u>e tender.</u>

We, _____

(Name of the Bank and address of the Branch giving the Bank Guarantee) having our registered office at _______(Address of Bank's registered office) hereby give this Bank Guarantee No.______dated _____ and hereby agree unequivocally and Unconditionally to pay within 48 hours on demand in writing from the PANDIT DEENDAYAL ENERGY UNIVERSITY or any officer authorized by it in this behalf any amount not exceeding Rs.______(Amount of E.M.D.), (Rupees_______ ____(In words) to the said PANDIT DEENDAYAL ENERGY UNIVERSITY on behalf of the Tenderer.

We______(Name of the Bank) also agree that withdrawal of the tender or part thereof by the tenderer within its validity or Non submission of Security Deposit by the Tenderer within one month from the date tender or a part thereof has been accepted by the PANDIT DEENDAYAL ENERGY UNIVERSITY would constitute a default on the part of the Tenderer and that this Bank Guarantee is liable to be invoked and encashed within its validity by the Beneficiary in case of any occurrence of a default on the part of the Tenderer and that the encashed amount is liable to be forfeited by the Beneficiary.

This agreement shall be valid and binding on this Bank upto and inclusive of ______(Mention here the date of validity of Bank) and shall not be terminable by notice or by Guarantee) change in the constitution of the Bank or the firm of Tenderer Or by any reason whatsoever and our liability hereunder shall not be impaired or discharged by any extension of time or variations or alternations made, given, conceded with or without our knowledge or consent by or between the tenderer and the PDPU.

NOT WITH STANDING anything contained hereinbefore our liability under this guarantee is restricted to Rs._____(Amt. of E.M.D.) (Rupees _______) (In words). Our Guarantee shall remain in force till_____(Date of validity of the Guarantee). Place: Date:

Please Mention here Complete Postal Address of the Bank with Branch Code, Telephone and Fax Nos.

SIGNATURE OF THE BANK'S AUTHORISED SIGNATORY WITH OFFICIAL SEAL

ON STAMP PAPER OF RS.100/-

FORM OF BANKER'S UNDERTAKING [For Performance Guarantees (PG) as per clause no.8 of commercial terms and conditions]

We, Bank of _______hereby agree unequivocally and unconditionally to pay within 48 hours on demand in writing from the **PANDIT DEENDAYAL ENERGY UNIVERSITY**. or any Officer authorized by it in this behalf any amount up to and not exceeding Rs.______ (in words) Rupees______ to the said **PANDIT DEENDAYAL ENERGY UNIVERSITY** on behalf

on M/s._____

______who have entered into a contract for the supply/works specified below:

P.O. (A/T) No._____dated_____

This agreement shall be valid and binding on this Bank upto and inclusive of ______ and shall not be terminable by notice or by change in the constitution of the Bank or the firm of Contractors / Suppliers or by any other reasons whatsoever and our liability hereunder shall not be impaired or discharged by any extension of time or variations or alterations made, given conceded or agreed, with or without our knowledge or consent, by or between parties to the said within written contract.

"NOTWITHSTANDING" anything contained herein before our liability under this guarantee is restricted to Rs.______

(Rupees______ only). Our guarantee shall remain in force until

Place: Date:

Please Mention here Complete Postal	SIGNATURE OF THE BANK'S
Address of the Bank with Branch Code,	AUTHORISED SIGNATORY WITH OFFICIAL
Telephone and Fax Nos.	ROUND SEAL

<u>ANNEXURE – 1</u>

I / WE, confirm that following documents are attached with the technical bid of the offer and should be placed as a <u>First page</u> of offer.

Sr. No	Details	Confirmation (Tick√any one)
1	Firm's details as per "Annexure –2"	YES / NO
2	"Annexure –3"	YES / NO
3	Delivery schedule as per "Annexure- 4"	YES / NO
4	Past experience details as per "Annexure-7"	YES / NO
5	PDPU technical specification duly signed and with seal of firm.	YES / NO
6	Technical & Commercial Deviation- "Annexure-6"	YES / NO
7	Experience Certificate-"Annexure-7"	YES / NO
8	Conformation of Tender Condition-"Annexure-8"	YES / NO

Signature of the Tenderer

A<u>NNEXURE - 2</u> DETAILS OF THE FIRM

Tenderer shall provide all the details in this form_and shall be placed as a <u>Second Page</u> of the bid.

Supplier Name							
Within Gujarat / Outside							
Pvt. Firm / Public Ltd. / State Govt. Under taking / Central Govt. undertaking GST No. and GST Date		(Indicate the relevant status)					
CST No. and CST Date Excise No. and Excise Date							
Financial Turnover for Past 3 Years (Rupees in Lacs (10 ⁵)		1 st Year	2 ^r	nd Year	3 rd Year		
Custom No. and Date (If	applicable)						
Address of	Address of Registered Office		Vorks	Authorized Representative			
Contact person name							
Designation							
Address							
City & Pin code							
State							
Country							
Phone Nos.(Off.)							
Phone Nos.(Res.)							
Fax Nos.							
STD Code.							
Mobile No.							
Web site address							
Email-id							
Specimen signature							

ANNEXURE-3

Tenderer shall fill up following details and shall be **<u>Third page</u>** of the Technical Bid

1	PRICES: [FIRM ONLY] (Please Specify YES / NO.)	
2	EXCISE DUTY: [SINGLE SLAB ONLY] (Please Specify INCUSIVE / EXCLUSIVE / EXEMPTED)	%
3	SALES TAX: [IN PERCENTAGE] (Please Specify INCUSIVE / EXCLUSIVE / EXEMPTED)	%
	Please quote your Sales Tax Registration No. & Date.	
4	PENALTY TERMS AGREED : (Please Specify YES / NO.)	
5	PERFORMANCE GUARANTEE TO COVER EXECUTION PERIOD (SECURITY) TERMS : AGREED: (Cl.no.8) (Please Specify YES / NO.)	
6	PERFORMANCE GUARNTEE TO COVER WARRANTY PERIOD TERMS AGREED: (Wherever applicable):(Please Specify YES / NO.)	
7	VALIDITY OF THE OFFER AGREED: (Please Specify YES / NO.)	
8	PAYMENT TERMS AGREED: (Please Specify YES / NO.)	
9	ITEMS OFFERED :(Yes/No)	

Signature of the Tenderer

<u>ANNEXURE – 4</u>

Details of the Items and Qty.offered as a <u>Fourth Page</u> of offer.

Sr.	Details of the Items / Equipments Offered	Quantity Offered	Status:
No.	Offered	Offered	Supplier/Manufacturer

Signature of the Tenderer

<u>ANNEXURE – 5</u> TECHNICAL AND COMMERCIAL DEVIATIONS IF ANY TO BE FURNISHED IN THIS ANNEXURE ONLY AND TO BE SUBMITTED WITH TECHNICAL BID.

We confirm that the product offered under this tender complies with all the Technical Specifications, except the deviations mentioned above. We also confirm that there are no commercial deviations other than mentioned above

Signature of the Tenderer

PDEU/Shell proj/Pilot plant/22-23/WT/74

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ANNEXURE-6

DETAILS OF THE EXPERIENCE FOR SUPPLY OF SIMILAR TYPE OF ITEMS IN LAST THREE YEARS FROM THE DUE DATE OF TENDER:

Sr. No	ITEMS SUPPLIED TO	ORDER REFERENCE No. & DATE	ITEMS	Qty.	ORDER FULLY EXECUTED. YES/NO	STATUS, IF ORDER UNDER EXECUTION	REMARKS
1)							
2)							
3)							
4)							
5)							

Signature of the Tenderer

ANNEXURE - 7

Subject: Supply of _____

Reference:Tender enquiry No. PDPU/
Due on date:/200.

In connection with the above subject and reference I/ We confirm the following:

- 1. I / We, the undersigned have read and examined the Tender Specifications and commercial terms and conditions of tender under reference.
- 2. I / We, declare that our Technical Bid is strictly in line with the Tender specifications (except the deviations shown in Annexure No.7.
- 3. Further, I / We also agree that additional conditions / deviations, if any, found in the Commercial terms & conditions (except mentioned in the Annexure-7), our offer shall be outrightly rejected without assigning any reason thereof.

Seal of the Firm

Signature of the Authorised Representatives of the firm

Date:

Name:

Status:

Name of the Tendering Firm / Agency:

PANDIT DEENDAYAL ENERGY UNIVERSITY

Raisan village, Koba-Gandhinagar High-way, Gandhinagar – 382007, GUJARAT, INDIA

<u>SCHEDULE - 'B'</u> (Price Bid Format)

Description of materials with details of specification	PDPU Bid. qty.	Qty. offered by tenderer	Unit Ex- works In #.	Unit insurance charges in #.	Unit Freight & Packing charges in #.	Unit Custom Duty in #.	Unit Excise Duty in #.	Unit Sale Tax in #.	Unit End Cost price in #.
2	3	4	5	6	7	8	9	10	11
	of materials with details of specification	of materials with details of specification	of materials with details of specification	of materials with details of specification	of materials with details of specificationPDPO Bid. qty.Qty.Onit of by tendererOnit Ex- works In #.Onit insurance charges in #.	of materials with details of specificationPDPO Bid. qty.Qty.Onit of Ex- worksOnit onit Ex- worksOnit onit chargesOnit onit Freight & Packing in #.of specificationgty.by tendererIn #.onit onit chargesPacking on #.	of materials with details of specificationPDPO Bid. qty.Qty.Offic Offered by tendererOffic Ex- In #.Offic insurance in #.Offic Freight & Packing in #.Unit Custom Duty in #.	of materials with details of specificationPDF0 Bid. qty.Qty. offered by tendererOnit Ex- insurance charges in #.Onit onit tinsurance charges in #.Unit Custom Duty in #.Unit Excise Duty in #.	of materials with details of specificationPDF0 Bid. qty.Qty.Offit Ex- worksOffit insurance charges in #.Offit Freight & Packing in #.Unit Unit Excise Duty in #.Unit Excise Duty in #.Unit Sale Tax in #.

<u>Note :-</u>

- *'#'* Tenderer shall mention the Currency.
- In case the price quoted in Foreign Currency (Other than INR), for the purpose of comparison the Exchange Rate prevailing on the date of opening of Price Bid as notified by Custom Department, Government of India will be considered.

<u>Remarks:</u>

I / We agree to supply the articles mentioned above at the rates herein tendered by me / us subject to the condition of this tender which I/We have carefully read, understood and agree.

I / We here by agree to keep this offer open for 120 days after the returnable date of the tenders and shall be bound by communication of acceptance dispatched within the prescribed time.

Date:

Yours sincerely,

(Signature of Tenderer) (With Company's Round Seal)