

PRE QUALIFICATION REQUIREMENTS (PQR) FOR PATRATU PACKAGE-2

1. The firm of Bidder should have in existence in past 3 years as on date of bid opening. Following documents proving the firm is active in past 3 years to be provided.
Last 3 years "Profit & Loss account/Balance Sheet/ GST returns/Any other acceptable document certified by CA".
2. The Bidder/OEM should have supplied any four offered items of enquiry in last 05 years as on date of bid opening which is completed one-year operation in any industry. The self-attested copies of Purchase Orders placed on them by customers & proof of supply should be attached.

TECHNICAL SPECIFICATION**CHEMICAL LAB EQUIPMENTS FOR PATRATU PROJECT****ITEMS:MISC. ITEMS FOR PACKAGE-2**

S.No.	Item Description	Qty.	Specification
1	Balance (Top Loading)	01 No.	Annexure - 1
2	Electronic Analytical Balance	02 Nos.	Annexure - 2
3	Vacuum pump	01 No.	Annexure - 3
4	Oven	01 No.	Annexure - 4
5	Membrane filter holder assembly	03 Nos.	Annexure - 5
6	Hydrometer (all 04 types) i)Range 0.800 to 1.000 - 2 Nos. ii)Range 1.000 to 1.100 - 2 Nos. iii)Range 1.100 to 1.200 - 2 Nos. iv)Range 1.400 to 1.500 - 2 Nos.	08 Nos.	Annexure - 6
7	Thermometers i)Range 0 to 50°C -2 Nos. ii)Range 0 to 100°C -2 Nos. iii)Range 0 to 250°C -2 Nos. iv)Range 0 to 350°C -2 Nos.	08 Nos.	Annexure - 7
8	Magnetic stirrer cum hot plate	01 No.	Annexure - 8
9	Hot Plate	01 No.	Annexure - 9

1.0	Annexure - 1									
Balance (Top Loading)										
A top loading electronic balance with digital display, it should have arrangement for levelling the base and protection for excessive weight. It should have in-built auto calibration facility.										
i) Weighing range - Upto 2000 g										
ii) Standard Deviation or Precision - 0.05 g										
iii) Readability - 0.1 g or better										
iv) Facility for continuous taring										
The balance must be for use at 220 V, 50 Hz, single phase AC supply and should be accompanied by Instruction Manual containing fault finding procedure. It should be supplied with in-use plastic cover, and spare fuses.										
2.0	Annexure - 2									
Electronic Analytical Balance										
This should be a top loading electronic analytical balance having auto calibration facility with built in weights. It should have tare facility and automatic draught shield. Stabilisation time should not be more than 15 seconds and pan size should not be less than 80mm.										
<table><tr><td></td><td>I</td><td>II</td></tr><tr><td>i) Range/capacity :</td><td>220 gm</td><td>220 gm</td></tr><tr><td>ii) Readability :</td><td>0.1 mg</td><td>0.01 mg</td></tr></table>			I	II	i) Range/capacity :	220 gm	220 gm	ii) Readability :	0.1 mg	0.01 mg
	I	II								
i) Range/capacity :	220 gm	220 gm								
ii) Readability :	0.1 mg	0.01 mg								
Complete with all accessories and O&M Manual, it should be suitable for use at 220 V, 50 Hz single phase AC supply.										
3.0	Annexure - 3									
Vacuum pump										
These are of pressure cum vacuum rotary type for general laboratory purpose.										
Technical data										
Free air displacement 20 liters / minute										
Ultimate pressure 30 psig.										
Pumping speed 2000 rpm										
Ultimate vacuum 0.1 micron of mercury										
Motor Horse Power 1/4 HP										
Approximate oil capacity 200 ml										
The motor should have safety cut off to avoid over loading. Pump body and end plates should be made of cast iron.										
Complete with intake oil/filter, exhaust muffler, vacuum and pressure gauges with regulator, rubber feet, and moisture trap.										
This is for use at 220 V AC 50 Hz single phase.										
It should be supplied with 5 meter 3 core cord & 3 prong plug.										
Spares:										
Oil for vacuum pump: 1 litre										

4.0	Annexure - 4
	<p>Oven</p> <p>It should be electrically heated and made of double wall construction with stainless steel inner chamber of approximately the following dimensions:</p> <p>(1) 48 cm x 45cm x 38cm(Approx. internal dimension.).</p> <p>(2) 63cm x50cm x49cm (Approx. external dimension.).</p> <p>The chamber should be well insulated to minimize heat losses. It should be provided with 2 removable perforated stainless steel shelves and runner type support for the shelves. The heater element should be made of superior quality nichrome wire and should be easily accessible.</p> <p>i) Temperature Range Ambient to 300°C</p> <p>ii) Temperature control $\pm 0.5^{\circ}\text{C}$</p> <p>iii) Temperature control Electrically operated thermostat / Digital energy regulator controller</p> <p>iv) Temperature uniformity + 2°C maximum</p> <p>Front panel control should include pilot lamp, temperature control knob, (calibrated in deg.C) heater switch and booster heater switch.</p> <p>It should be equipped with an adjustable vent and thermometer holder at the top and efficient arrangement for good circulation of air inside the chamber.</p> <p>The equipment should be accompanied by instruction manual incorporating circuit diagram.</p> <p>For use at 220 V, 50 Hz single phase AC supply.</p> <p>Spares:</p> <p>1. Thermometers :4 Nos.</p> <p>2. Heating Element: 1 Set</p> <p>3. Indicator Bulbs :12 Nos.</p>
5.0	Annexure - 5
	<p>5.0 Membrane filter holder assembly</p> <p>5.0 Stainless Steel Filter Holder</p> <p>This assembly should have stainless steel barrel, base, filter support screen, top cap and tubing adapter with anodized aluminium locking ring, PTFE “O” rings and silicon stopper. It should come with 9.5 mm inlet hose connector for applied air or gas pressure.</p> <p>Capacity 100 ml</p> <p>Filter dia 47 mm</p> <p>Dimensions (approx.) 70 mm dia., 292 mm height.</p> <p>5.1 Stainless Steel Filter Holder</p> <p>This assembly should have stainless steel funnel, base and filter support screen with anodized aluminium locking ring, nylon lock wheels, PTFE gaskets and silicon stopper and suitable 1 litre borosilicate glass filtering flask.</p> <p>Capacity 650 ml.</p> <p>Filter dia. 47 mm</p> <p>Dimensions (approximately) 114 mm dia., 229 mm height.</p> <p>5.2 Glass Filter Holder:</p> <p>These are for the analysis of suspended solids in water. Consisting of borosilicate glass funnel and base, anodized aluminium spring clamp, coarse frit glass filter support and silicon stopper; for mounting on standard 1litre filtering flask.</p> <p>Capacity 300 ml.</p> <p>Filter dia 47 mm</p> <p>Dimensions (appxty.) 76 mm dia., 229 mm height.</p> <p>It should come complete with 1 litre borosilicate filtration flask.</p>
6.0	Annexure - 6
	Hydrometer (all 04 types)

Hydrometer should be made of glass graduated in units of Density Conforming to ASTM Specification E-100 and calibrated at 15°C. Suitable for determination of density of hydrocarbons:-

Sl. No.	Range	Subdivisions	Quantity
1.	0.80 to 1.00	0.001	2 Nos.
2.	1.00 to 1.10	0.001	2 Nos.
3.	1.10 to 1.20	0.001	2 Nos.
4.	1.40 to 1.50	0.001	2 Nos.

7.0	Annexure - 7			
Thermometers Thermometers used for general laboratory purpose should have etched stem with permanent filler and partial immersion. The stem should have 6-7 mm OD. The thermometers should be nitrogen filled above mercury. It should be provided with top suspension ring.				
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S.No.	Range (deg C)	Division in deg.C.	Length in mm	Quantity in Nos.
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1.	0 to 50	0.5	300	2
2.	0 to 100	1.0	300	2
3.	0 to 250	1.0	350	2
4.	0 to 350	1.0	450	2
8.0	Annexure - 8			
MAGNETIC STIRRER-CUM-HOT PLATE It should be a hot plate & magnetic stirrer combination which permits stirring of samples at identical speeds under similar and differing temperature conditions.				
Technical data Speed - Up to 1500 rpm variable. Top plate size - Circular 16 cm diameter. Heater Wattage - 1000 W Hot plate control - Thermostatic The unit should have ON/OFF switch, a pilot indicator lamp, speed and heat control separate for hot plate and magnetic stirrer. For use at 220 V AC 50 Hz single phase. It should be supplied with 3 meter 3 core chord & 3 prong plug.				
9.0	Annexure - 9			
HOT PLATE Rectangular hot plate should be made of cast iron/Ceramic/suitable material top with smooth corrosion resistant finish with a maximum operating temperature of 500°C. It should have continuously variable thermostat control with pilot lamp & a nickle-chromium alloy heating element. The lower steel case should preferably be perforated to allow ventilation for the controls and lower section with protective rubber feet. Complete with 5 feet, 3 wire cord and 3 prong plug. Wattage-1000 Watts. Approximate Size - 30 cm x 20 cm				

Other Terms & Conditions

Document:

Conditions Document: Hard copy of O&M Manual in English language giving complete technical information for operation and maintenance of the equipment..

Installation and Commissioning: The supplier shall install & commission the equipment at site. Supplier should demonstrate the performance of the Equipment and all its accessories to ensure compliance with complete specifications & parameters quoted by them to the satisfaction of BHEL/end user.

Warranty: The equipment shall be warranted for satisfactory performance for a period of 12 months from the date of installation or 18 months from date of dispatch, whichever is earlier.

Packing & Dispatch: The equipment / accessories shall be packed in a suitable water proof/ vibration proof packing box capable of bearing air and road transit hazards. Packing box shall be properly identified and marked with BHEL's (India) Purchase Order Number. Also, "PCRI HWR" should be written in bold letters on all four sides of the packing box.

Buyer Specific ATC document for Misc. Lab Items of Patratu Project (Package-2)

1.	<p>MDCC (Material dispatch clearance certificate) Clause:</p> <p>Please note that material shall be dispatched only after issue of Material dispatch clearance certificate (MDCC) by BHEL. For issue of MDCC, you are required to submit the set of documents (i.e. Packing list, Guarantee certificate, Complete test reports & Calibration certificate).</p> <p>BHEL will release MDCC within 07 days from the date of receipt of complete documents as detailed above.</p> <p>The delivery period of 120 days is inclusive of 07 days taken by BHEL to issue MDCC.</p>
2.	<p>Pre-Qualification Requirement (PQR):</p> <p>The Pre-Qualification Requirements have been made part of bid. All the bidders should ensure submission of complete details and documents as called for in the same. The offers submitted by the bidders would be scrutinized with respect to Pre-Qualification Requirements first.</p> <p>Techno-Commercial offer of only those bidders shall be evaluated who meet the Pre-Qualification Requirements.</p>
3.	<p>Technical Specification Requirement:</p> <p>1. Please quote your valuable offer as per BHEL Specification enclosed with bid documents.</p> <p>2. Bidders are requested to upload point-wise compliance of BHEL Specification along with the offer as token of acceptance.</p>
4.	<p>Payment Terms:</p> <ul style="list-style-type: none">• 90% payment after receipt of material at site against submission of PBG @ 10% of Order value valid till entire Guarantee / Warranty period. The PBG will be in BHEL format and from one of the BHEL consortium banks. For name of BHEL consortium bank, please visit our website hwr.bhel.com.• Balance 10% payment after installation and commissioning at site.• Payment will be released by BHEL within:<ul style="list-style-type: none">- 45 days for Micro and Small enterprises- 60 days for Medium enterprises- 90 days for Non MSME enterprises
5.	<p>Delivery Period:</p> <p>The delivery shall be 120 days from the date of PO placement. This period is inclusive of 7 days for BHEL to arrange dispatch clearance (provided MDCC related documents are complete in all respect).</p>
6.	<p>Evaluation criteria:</p> <p>Evaluation will be done on the basis of Total Landed cost up to Patratu project site considering all items together (Total value wise evaluation).</p> <p>Bidders are requested to quote for all 09 items as per BHEL specification. Offer of bidders not quoting for all items covered in tender specification will be rejected straightaway.</p> <p>In case, a bidder has quoted for all 09 items, however, their offer is technically not accepted even for one (01) item, in such scenario, complete offer of the bidder will be rejected by BHEL.</p>

7.	<p>Document:</p> <p>O&M manual in English language giving complete technical information for operation and maintenance of the equipment is required to be supplied along with the instrument(s).</p>
8.	<p>Price Basis:</p> <p>Please confirm that prices have been quoted on F.O.R. Patratu site basis.</p>
9.	<p>Installation and Commissioning:</p> <p>The supplier shall install & commission the equipment at site. Supplier should demonstrate the performance of the Equipment and all its accessories to ensure compliance with complete specifications & parameters quoted by them to the satisfaction of BHEL / End User.</p> <p><i>Cost of Installation and Commissioning should be inclusive in the quoted prices.</i></p> <p>Installation and Commissioning will be done at following address:</p> <p>GENERAL MANAGER (PROJ.), PATRATU STPP (3X800 MW), PATRATU VIDYUT UTPADAN NIGAM LTD. P.O.-PTPS, DIST- RAMGARH, JHARKHAND - 829119</p> <p><i>Failing to comply to the Installation and Commissioning clause, the offer will be rejected straightaway.</i></p>
10.	<p>Warranty:</p> <p>The equipment shall be warranted for satisfactory performance for a period of 18 months from the date of dispatch or 12 months from the date of installation, whichever is earlier.</p> <p><i>Failing to comply to the Guarantee / Warranty clause, the offer will be rejected straightaway.</i></p>
11.	<p>Packing & Dispatch:</p> <p>1. The equipment / accessories shall be packed in a suitable water proof / vibration proof packing boxes capable of bearing air and road transit hazards.</p> <p>2. Packing box shall be properly identified and marked with BHEL's (India) Purchase Order Number. Also, "PCRI HWR" and Name of the Item/Items should be written in bold letters on all four sides of Packing box.</p>
12.	<p>Arbitration Clause:</p> <p>In case of any dispute arising out of as in connection with this contract, the same shall be referred to arbitration under Arbitration & Conciliation Act 1996 of a sole arbitrator who shall be appointed by mutual consent of the parties. The seat & venue of arbitration shall be Haridwar.</p> <p>The proceedings shall be conducted in English. The Governing law of contract shall be the substantive law of India.</p>
13.	<p>General Clause:</p> <p>All other commercial terms and conditions will be governed by General Terms and Conditions (GTC) GeM_GTC_4.0 v_1.9_31Mar23.</p>

14. Risk Purchase:

In case of abnormal delays (beyond the maximum late delivery period as per LD clause) in supplies / defective supplies or non-fulfillment of any other terms and conditions given in Purchase Order, BHEL may cancel the Purchase Order in full or part thereof, and may also make the purchase of such material from elsewhere / alternative source at the risk and cost of the supplier. BHEL will take all reasonable steps to get the material from alternate source at optimum cost. If bidder does not agree to the above Risk Purchase Clause, BHEL reserves the right to reject the offer. In case for compelling reasons BHEL accepts the offer without acceptance of this clause by the bidder and in the eventuality of Risk Purchase, appropriate action will be taken as per BHEL extant rules. This will be without prejudice to any other right of BHEL under the contract or under General Law.

Action against Bidders / vendor / supplier / contractor in case of default:

In order to protect the commercial interests of BHEL, BHEL shall take action against supplies / contractors by way of suspension of business dealings, who either fail to perform or are in default without any reasonable cause, cause loss of business/ money/ reputation, indulge in malpractices, cheating, bribery, fraud or any other misconduct or formation of cartels so as to influence the bidding process or influence the price etc.

Suspension of Business Dealings could be in the form of “Hold” or “Banning” a supplier/ contractor or a bidder and shall be as per “Guidelines for Suspension of Business Dealings with Suppliers/ Contractors” available at BHEL’s website “<https://www.bhel.com/guidelines-suspension-business-dealings-supplierscontractors>”.

15. Price Break-up:

All bidders are requested to provide item-wise price break-up (including everything such as Packing, Forwarding, Freight, GST or other taxes, Installation and commissioning etc.) in percentage (%) of total quote value in below table:

Sr. No.	Name of Item	Qty (No)	Item price for total quantities in percentage (%) of total quoted value
1	Balance (Top Loading)	1%
2	Electronic Analytical Balance	2%
3	Vacuum pump	1%
4	Oven	1%
5	Membrane filter holder assembly	3%
6	Hydrometer (all 04 types) i) Range 0.800 to 1.000 - 2 Nos. ii) Range 1.000 to 1.100 - 2 Nos. iii) Range 1.100 to 1.200 - 2 Nos. iv) Range 1.400 to 1.500 - 2 Nos.	8%
7	Thermometers i) Range 0 to 50°C -2 Nos. ii) Range 0 to 100°C -2 Nos. iii) Range 0 to 250°C -2 Nos. iv) Range 0 to 350°C -2 Nos.	8%
8	Magnetic stirrer cum hot plate	1%
9	Hot Plate	1%
Total Quoted value in percentage (%)			100%

Note: This price break-up will not be used for price evaluation purpose. Evaluation will be done on the basis of total quoted value.

16. **Conflict of Interest among Bidders/ Agents:**

"A bidder shall not have conflict of interest with other bidders. Such conflict of interest can lead to anti-competitive practices to the detriment of Procuring Entity's interests. **The bidder, found to have a conflict of interest shall be disqualified.** A bidder may be considered to have a conflict of interest with one or more parties in this bidding process, if:

a) they have controlling partner (s) in common; **or**

b) they receive or have received any direct or indirect subsidy/ financial stake from any of them; **or**

c) they have the same legal representative/agent for purposes of this bid; **or**

d) they have relationship with each other, directly or through common third parties, that puts them in a position to have access to information about or influence on the bid of another Bidder; **or**

e) Bidder participates in more than one bid in this bidding process. Participation by a Bidder in more than one Bid will result in the disqualification of all bids in which the parties are involved. However, this does not limit the inclusion of the components/ sub-assembly/Assemblies from. one bidding manufacturer in more than one bid; **or**

f) In cases of agents quoting in offshore procurements, on behalf of their principal manufacturers, one agent cannot represent two manufacturers or quote on their behalf in a particular tender enquiry. One manufacturer can also authorize only one agent/dealer. There can be only one bid from the following:

1. The principal manufacturer directly or through one Indian agent on his behalf; and
2. Indian/foreign agent on behalf of only one principal, **or**

g) A Bidder or any of its affiliates participated as a consultant in the preparation of the design or technical specifications of the contract that is the subject of the Bid; **or**

h) In case of a holding company having more **than** one independently manufacturing units, or more than one unit having common business ownership/management, only one unit should quote. Similar restrictions would apply to closely related sister companies. Bidders must proactively declare such sister/ common business/ management units in same/ similar line of business. "

17. **E-invoicing:**

E-invoicing under GST has been implemented w.e.f. 01.10.2022 for all the taxable persons having turnover more than Rs. 10 cr. it has been specified by the govt that it is mandatory to mention a valid unique invoice reference no. (IRN) and QR code as generated from govt. portal on a tax invoice. Based on such information, GST ITC as claimed by BHEL in GST returns shall be matched with the corresponding details uploaded by supplier in E-invoicing system.

In case the vendor / contractor delays or fails to provide all the documents as per the purchase order / work order at the time of submitting tax invoice to BHEL, any subsequent financial loss to BHEL on account of vendor/contractor shall be to vendor's / contractor's account. BHEL has further right to take necessary steps to protect its interest at the time of release of payment. this further requires inclusion of IRN and QR code on tax invoice as announced by govt. of india w.e.f. 01.10.2022.

Certificate

In line with Government Public Procurement Order No. P-45021/2/2017-BE-II dt. 15.06.2017 & P-45021/2/2017-PP (BE-II) dated 28.05.2018, we hereby certify that we M/s _____(supplier name) are local supplier meeting the requirement of minimum local content (50%) as defined in above orders for the material against Enquiry No. _____

Details of location at which local value addition will be made is as follows:

We also understand, false declarations will be in breach of the Code of Integrity under Rule 175(1)(i)(h) of the General Financial Rules for which a bidder or its successors can be debarred for up to two years as per Rule 151 (iii) of the General Financial Rules along with such other actions as may be permissible under law.

Seal and Signature of Supplier