

TENDER REF. NO. RGIPT/BPCL2402/MK/LAB/2024/01R

TENDER DATE: 11.11.2024



राजीव गांधी पेट्रोलियम प्रौद्योगिकी संस्थान
जायस, अमेठी-229304
उत्तर प्रदेश, भारत

**RAJIV GANDHI INSTITUTE OF PETROLEUM
TECHNOLOGY
JAIS, AMETHI– 229304
UTTAR PRADESH, INDIA**

E-TENDER NOTICE

For

**“Supply & Installation “Fabrication of plug
and use VRFB-system of 5 kW/30kWh”**

Rajiv Gandhi Institute of Petroleum Technology (RGPT), Jais, Amethi, Uttar Pradesh has been established through an Act of the Parliament by the Ministry of Petroleum and Natural Gas (MoPNG), Government of India in 2008.

The Institute has been accorded the eminence of being an Institution of National Importance on the lines of the IITs. The Institute is associating with leading International Universities/ Institutions specializing in Petroleum Technology and Energy.

The Institute invites online bids from authorized Indian suppliers/OEM (Imported equipment/ Indigenous equipment) for the **“Supply & Installation of “Fabrication of plug and use VRFB-system of 5 kW/30kWh”**

CRITICAL DATE AND INFORMATION

Name of Work	“Supply & Installation “Fabrication of plug and use VRFB-system of 5 kW/30kWh”
Tender No.	RGPT/JAIS/BPCL-P-2402/MK/LAB/2024-25/01R, Date: 11.11.2024
Date of Issue/publication of Tender Notice	November 12th 2024, 4:30 PM
Bid Document Download Date & Time	November 12th 2024, 5:00 PM
Pre-Bid Meeting Date, Time & Venue (All queries shall be discussed in the Pre- Bid Meeting.)	November 18th 2024, 3:00 PM (Online mode)
Bid Submission Start Date & Time	November 12th 2024, 5:00 PM
Last Date and time of submission of Bids	December 2nd 2024, 5:00 PM
Date and time of opening of Technical Bids	December 3rd 2024, 5:00 PM.
Date and time of opening of Financial Bids	Shall be indicated separately after technical evaluation/ technical bid opening
Bid Address to the	The Director Rajiv Gandhi Institute of Petroleum Technology, Mubarakpur, Mukhtia, Bahadurpur Post: Harbanshganj, Jais, Amethi – 229304
All queries shall be Contact person & address for communication	Name: Dr. Milan Kumar Associate Professor Department of Chemical & Biochemical Engineering Email: mkumar@rgipt.ac.in Contact Nos. +91 8948818821

Notes:

- 1. Details regarding the tender are available on website of the Institute <https://www.rgipt.ac.in> and CPP Portal.**
- 2. Tender document may be downloaded from above mentioned websites. Bidders are therefore, requested to visit the websites regularly to keep themselves updated. Any Addendum/Corrigendum will be displayed on the aforesaid websites only.**
- 3. For submission of e-Bids, bidders are required to get themselves registered with CPP Portal.**
- 4. The HARD COPY of original Bid documents (Only Technical Bid documents) along with the payment proof pertaining to EMD and Tender processing fee to be sent to the Institute at the address indicated below on or before bid opening date/time as mentioned in critical date sheet.**
- 5. Tender documents received in incomplete shape or beyond the stipulated period shall not be entertained under any circumstances. The authority reserves the right to accept or reject any or all tenders without assigning any reason thereof.**
- 6. Earnest Money Deposit (EMD) of Rs.1,35,000/- (Exempted in case of MSME registered, Udyam certificate to be enclosed) in the form of NEFT/Demand Draft, Fixed Deposit Receipt issued by any Nationalized Bank in favour of “Rajiv Gandhi Institute of Petroleum Technology, payable at Jais”.**

7. Tender Processing Fee: (Non-Refundable Rs. 1000/- (Including GST))

Tender fee is exempted for MSME/UAM registered bidders as per Government of India norms

Bank Account Details of the Institute:

Name: Rajiv Gandhi Institute of Petroleum Technology

Bank: Bank of Baroda

Address: RGIPT Campus, Bahadurpur, Jais, Amethi.

Account No. 59480100000001

IFSC Code: BARB0JAICAM (5th Character is ZERO)

ADDRESS OF THE INSTITUTE:

RAJIV GANDHI INSTITUTE OF PETROLEUM TECHNOLOGY,

MUBARAKPUR, MUKHTIA MORE, BAHADURPUR,

POST: HARBANSHGANJ, JAIS, AMETHI, UTTAR PRADESH 229304,

WEBSITE: WWW.RGIPT.AC.IN

INTRODUCTION

Rajiv Gandhi Institute of Petroleum Technology (RGPT), Jais, Amethi, Uttar Pradesh has been established through an Act of the Parliament by the Ministry of Petroleum and Natural Gas (MoPNG), Government of India in 2008.

The Institute has been accorded the eminence of being an Institution of National Importance on the lines of the IITs. The Institute is associating with leading International Universities/ Institutions specializing in Petroleum Technology and Energy.

The prime objective of the Institute is to provide education, training, and research to roll out efficient human resources, and to meet the growing requirements of the Petroleum and Energy sector.

The main campus of the Institute is located at Jais, Amethi, Uttar Pradesh and B. Tech., M. Tech., MBA and Ph.D. programmes from there. The Institute has set two centers, namely- Assam Energy Institute (AEI), Sivasagar and Energy Institute, Bengaluru (EIB) to offer Diploma and M. Tech. programmes respectively.

INSTRUCTIONS FOR ONLINE BID SUBMISSION (GUIDELINE FOR BIDDER):

The bidders are required to submit soft copies of their bids electronically on the CPP Portal, using valid Digital Signature Certificates. The instructions given below are meant to assist the bidders in registering on the CPP Portal, prepare their bids in accordance with the requirements and submitting their bids online on the CPP Portal.

More information useful for submitting online bids on the CPP Portal may be obtained at: <http://eprocure.gov.in/eprocure/app>.

1. Registration

- (a) Bidders are required to enroll on the e-Procurement module of the Central Public Procurement Portal (URL: <http://eprocure.gov.in/eprocure/app> by clicking on the link "Online bidder Enrollment" on the CPP Portal which is free of charge.
- (b) As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts.
- (c) Bidders are advised to register their valid email address and mobile numbers as part of the registration process. These would be used for any communication from the CPP Portal.
- (d) Upon enrolment, the bidders will be required to register their valid Digital Signature Certificate (Class II or Class III Certificates with signing key usage) issued by any Certifying Authority recognized by CCA India (e.g. Sift/nCode / eMudhra etc.), with their profile.
- (e) Only one valid DSC should be registered by a bidder. Please note that the bidders are responsible to ensure that they do not lend their DSC's to others which may lead to misuse.
- (f) Bidder then logs in to the site through the secured log-in by entering their user ID/Password and the password of the DSC/ e-Token.

2. Searching for Tender Documents

- (a) There is various search option built in the CPP Portal, to facilities bidders to search active tenders by several parameters. These parameters could include Tender ID, Organization Name, location, Date Value, etc. there is also an option of advanced search for tenders, wherein the bidders may combine a number of search parameters such as Organization Name, Form of Contract, Location, Date, Other keywords etc. to search for a tender published on the CPP Portal.
- (b) Once the bidders have selected the tenders they are interested in, they may download the required documents/tender schedules. These tenders can be moved to the respective 'my Tenders' folder. This would enable the CPP Portal to intimate the bidders through SMS/e-mail in case there is any corrigendum issued to the tender document.
- (c) The bidder should make a note of the unique Tender ID assigned to each tender, in case they want to obtain any clarification/help from the Helpdesk.

3. Preparation of Bids

- (a) Bidder should consider any corrigendum published on the tender document before submitted their bids.
- (b) Please go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bid. Please note the number of covers in which the bid documents have to be submitted, the number of documents-including the names and content of each of the document that need to be submitted. Any deviations from these may lead to rejection of the bid.
- (c) Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document/schedule any generally, they can be in PDF/XLS/RAR/DWF/JPG formats. Bid document may be scanned with 100 dpi with black and white option which helps in reducing size of the scanned document.
- (d) To avoid the time and effort required in uploading the same set of standard documents which are required to be submitted as a part of every bid, a provision of uploading such standard documents (e.g. PAN card copy, annual reports, auditor certificate etc.) has been provided to the bidders. Bidders can use "My space" or "Other Important Documents" area available to them to upload such documents. These documents may be directly submitted from the "My space" area while submitting a bid, and need not be upload again and again. This will lead to a reduction in the time required for bid submission process.

4. **Submission of Bids**

- (a) Bidder should log into the site well in advance for bid submission so that they can upload the bid in time i.e. on or before the bid submission time. Bidder will be responsible for any delay due to other issues.
- (b) The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document.
- (c) Bidders are required to note that they should necessarily submit their financial bids in the format provided and no other format is acceptable. If the price bid has been given as a standard BOQ format with the tender document, then the same is to be download and to be filled by all the bidders. Bidders are required to download the BoQ file, open it and complete the white colored (unprotected) cells with their respective financial quotes and other details (such as name of the bidder). No other cells should be changed. Once the details have been completed, the bidder should save it and submit it online, without changing the filename. If the BoQ file is found to be modified by the bidder, the bid will be rejected.
- (d) The server time (which is displayed on the bidders' dashboard) will be considered as the standard time for referencing the deadlines for submission of the bids by the bidders; opening of bids etc. the bidders should follow this time during bid submission.
- (e) All the documents being submitted by the bidders would be encrypted using PKI encryption techniques to ensure the secrecy of the data. The data entered cannot be viewed by unauthorized persons until the time of bid opening. The confidentiality of the bids is maintained using the secured Socket Layer 128 bit encryption technology. Data storage encryption of sensitive fields is done. Any bid document that is uploaded to the server is subjected to symmetric encryption using a system generated symmetric key. Further this key is subjected to asymmetric encryption using buyers/bid openers public keys. Overall, the uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- (f) The uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- (g) Upon the successful and timely submission of bids (i.e. after Clicking "Freeze Bid Submission" in the portal), the portal will give a successful bid submission message & a bid summary will be displayed with the bid no. and the date & time of submission of the bid with all other relevant details.
- (h) The bid summary has to be printed and kept as an acknowledgement of the submission of the bid, this acknowledgement may be used as an entry pass for any bid opening meetings.

5. **Assistance to Bidders**

- (a) **Any queries relating to the tender document and the terms and conditions contained therein should be addressed to the Tender Inviting Authority for a tender or the relevant contact person indicated in the tender.**
- (b) **Any queries relating to the process of online bid submission or queries relating to CPP Portal in general may be directed to the 24*7 CPP Portal Helpdesk.**

LIST OF DOCUMENTS TO BE UPLOADED

1. Bidder should take into account notifications, corrigendum published, if any on the tender document before submitting their bids.
2. Please go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bid. Any deviations from these may lead to rejection of the bid.
3. The two-bid system will be followed for this tender. In this system, online offer should be submitted under **TWO-BID System** in two separate e-packets i.e. **“Technical eBid”** and **“Financial eBid”**.

Online Envelope No. 1: "Technical Bid" shall contain (Pdf format only)

Sl. No.	Details of Documents	Documents to be Uploaded	File Format
	<p>EMD (Earnest Money Deposit):</p> <p>a) The EMD of Rs. ,1,35,000,-/ (Rupees One Lakh Thirty Five Thousand only) (Exempted in case of MSME registered, certificate to be enclosed) in the form of NEFT/Demand Draft, Fixed Deposit Receipt, Bankers Cheque issued by any Nationalized Bank in favour of “Rajiv Gandhi Institute of Petroleum Technology, payable at Jais”. Bank Account Details of the Institute: Name: Rajiv Gandhi Institute of Petroleum Technology Bank: Bank of Baroda Address: RGIPT Campus, Bahadurpur Jais, Amethi. Account No. 5948010000001 IFSC Code: BARB0JAICAM (5th Character is ZERO)</p> <p>b) If any the firms registered with DGS&D, MSME & NSIC are exempted from payment of EMD provided such registration includes the item they are offering which are manufactured by them and not for selling products manufactured by other companies. (Latest Copy must be submitted online for claiming exemption)</p>	Payment Receipt	.pdf
1	Technical Specification Compliance Statement	Upload Technical Specification Compliance Statement on the letter head of the Company in prescribed format as given in Annexure - I	.pdf
2	Manufacturer's Authorization Form	Upload Manufacturer's Authorization Certificate in prescribed format as given in Annexure - 2 or Self Declaration of Manufacturing Unit	.pdf
3	Price Reasonability Certificate	Upload Price Reasonability Certificate on the letter head of the Company in prescribed format as given in Annexure - 3	.pdf
4	Declaration Certificate (Acceptance of terms & conditions of the tender) – In defined format (On the letter head of the Company) - Annexure - 4 and Declaration Sheet as per Annexure - 4A .	Upload Declaration Certificate (Acceptance of terms & conditions of the tender) & Declaration Sheet on the letter head of the Company in prescribed format as given in Annexure - 4 & 4A	.pdf

5	Non-Blacklisting Declaration - As on date of submission of the proposal, the Bidder is neither blacklisted by Central Government/ State Government or Instrumentalities thereof nor is any criminal case against the Bidder/ its Partners/ Directors/ Agents pending before any court of law. Non- Blacklisting Certificate on Rs. 100.00 non-Judicial Stamp Paper –In defined format - Annexure - 5	Upload Non-Blacklisting Declaration on Rs. 100.00 non- Judicial Stamp Paper in prescribed format as given in Annexure – 5	.pdf
6	Copy of Firm Registration	Upload – Self Attested Copy of Firm Registration Certificate	.pdf
7	Copy of PAN Card & GST No.	Upload – Self Attested Copy of PAN Card & GST No.	.pdf
8	Experience: Bidder should have at least 3 years' of experience in the selling and providing “ Fabrication of plug and use VRFB-system of 5 kW/30kWh” or similar systems of comparable capacity to reputed Central Government Institutes/Universities/Oil Companies/ Research Institutes/ IITs/ NITs/ IISERs/Private entities	Upload List of clients & Purchase Orders of Supply of Fabrication of plug and use VRFB-system of 5 kW/30kWh” or similar systems of comparable capacity to the mentioned institutions.	.pdf
9	ISO Certificate: The Bidder or their OEM should possess any valid standard certification like ISO9001:2008 & 14001:2004.	Upload valid standard certification of the Company like ISO	.pdf
10	Audited Annual Accounts: Bidder should enclose the copies of last 3 years Audited Annual Accounts (Balance Sheet) duly authenticated by Chartered Accountant	Upload the Self Attested Copies of last 3 years Audited Annual Accounts duly authenticated by Chartered Accountant (FY 2022-23, FY 2022-21 & FY 2020-21)	.pdf
11	Annual Turnover: Last three years CA certified turnover certificate (Average Turnover of last three years should be at least Rs. 23.00 Lakhs (Rupees Twenty Three Lakh only))	Upload the Self Attested Copy of CA certified Annual Turnover Certificate (FY 2022-23, FY 2022-21 & FY 2020-21)	.pdf
12	Last 3 year Income Tax Return (ITR)	Upload the Self Attested Copy of last 3 year Income Tax Return (ITR) – (FY 2022-23, FY 2022-21 & FY 2020-21)	.pdf
13	EMD Exemption -In case of exemption of EMD, the scanned copy of the document in support of exemption will have to be uploaded by the bidder during bid submission	Upload Self Attested Copy of MSME or any other valid certificate for EMD exemption	.pdf
14	MOST IMPORTANT: Document related to prior installation and service – At least 3 Academic and R&D National Organizations, Central and State Government Departments/ Institutions/PSU in the last 3 years.	Upload Self Attested Copies of installations in Academic and R&D National Organizations, Central and State Government Departments/ Institutions/ PSU in the last 3 years. – Annexure - 6	.pdf
15	Any other relevant document (e.g., Item brochure, etc.)		.pdf

RGIPT, Jais, Amethi reserves the right to reject the bid if any of the above listed documents is not submitted.

Online Envelope 2: “Financial Bid” shall contain

1. The Financial Bid should be filled properly in the .xls/BoQ uploaded in the CPP portal.
2. Financial bids of the technically qualified bidders only will be opened, through CPP portal.
3. Financial bids must be offered in the format attached as per Specimen BoQ and tender document.
4. In case of any mistake or error in calculations or any discrepancy in the price quoted in word and figures, the LOWEST amount will be considered for comparison. If this lowest price is not acceptable to the bidder, their bid will be rejected. In this case, RGIPT, Jais, Amethi reserves the right to forfeit their EMD.

SECTION-II - INSTRUCTIONS TO THE BIDDERS (ITB)

Tenderers are advised to follow the instructions provided in the **Instructions to the Bidders** for the e-Submission of the bids online.

1. **Location of Supply & Installation of Equipment & Warranty Services:**
Rajiv Gandhi Institute of Petroleum Technology, Mubarakpur, Mukhetia More, Bahadurpur, Post: Harbanshganj, Jais, Amethi – 229304, Uttar Pradesh.
2. All the items covered in the Schedule of Requirements must be supplied within **16 weeks from the date of opening of LC (For Foreign Manufacturer) & 04 months from the date of placement of purchase order (For Indian Manufacturer)**. And after receipt of equipment, the same must be installed within a month's time.
3. **Amendment to Bidding Documents:**
 - a) At any time prior to the deadline for submission of bids, RGIPT, Jais, Amethi may, for any reason, whether on its own initiative or in response to the clarification request by a prospective bidder, modify the bid document.
 - b) The amendments to the tender documents, if any, will be notified by release of Corrigendum Notice on institute website against this tender. The amendments/ modifications will be binding on the bidders.
 - c) RGIPT, Jais, Amethi at its discretion may extend the deadline for the submission of bids if it thinks necessary to do so or if the bid document undergoes changes during the bidding period, in order to give prospective bidders time to take into consideration the amendments while preparing their bids.
4. **Preparation of Bids:**
Bidder should avoid, as far as possible, corrections, overwriting, erasures or postscripts in the bid documents. In case however, any corrections, overwriting, erasures or postscripts have to be made in the bids, they should be supported by dated signatures of the same authorized person signing the bid documents. However, bidder shall not be entitled to amend/ add/ delete/ correct the clauses mentioned in the entire tender document.
5. **Forfeiture of EMD:**
 - a) In case of the bidder whose offer is accepted, the EMD will be returned on submission of Performance Security. b) The successful bidder, on award of contract/ order, must send the contract/ order acceptance in writing, within 20 days of award of contract/ order, failing which the EMD will be forfeited and the order will be cancelled. c) If the bidder withdraws the bid during the period of bid validity specified in the tender
6. **Period of validity of bids:**
 - a) Bids shall be valid for minimum 180 days from the date of submission. A bid valid for a shorter period shall stand rejected.
 - b) RGIPT, Jais, Amethi may ask for the bidder's consent to extend the period of validity. Such request and the response shall be made in writing only. The bidder is free not to accept such request without forfeiting the EMD. A bidder agreeing to the request for extension will not be permitted to modify his bid.
7. **Deadline for Submission of Bids – online only:**
 - a) The Bid documents shall be neatly arranged. They should not contain any terms and conditions, printed or otherwise, which are not applicable to the Bid. ***The conditional bid will be summarily rejected.***
 - b) Bids must be received by RGIPT, Jais, Amethi before the due date and time at the address specified in the tender document.
 - c) RGIPT, Jais, Amethi may extend this deadline for submission of bids by amending the bid documents and the same shall be suitably notified on its website.
 - d) RGIPT, Jais, Amethi shall not be responsible and liable for **the delay in receiving the bid** for whatsoever reason.
8. **Bid Opening & Evaluation of Bids:**
 - a) The technical bids will be evaluated in two step.
 - i. The bids of eligibility bidders only will be evaluable based on eligibility criteria mentioned in the tender document.
 - ii. The technical bids of only the shortlisted eligible bidders shall be evaluated based on technical specifications stipulated in the tender document.
 - b) The bidders whose technical bid is found to meet both the requirements as specified above will qualify for opening of the financial bid.
 - c) The duly constituted Purchase Committee shall evaluate the bids. The Purchase Committee shall be empowered to take appropriate decisions on minor deviations, if any.

d) **MOST IMPORTANT: A point system will be followed for evaluation of bids and the bids scoring a minimum threshold mark will qualify for the price bid.**

e) The bidder's name, bid prices, discounts and such other details considered as appropriate by RGIPT, Jais, Amethi, will be announced at the time of opening of the commercial bids.

9. **Comparison of Bids:**

a) Only the short-listed bids from the technical evaluation shall be considered for financial comparison.

b) The bids shall be evaluated on the basis of the total prices including all taxes and duties as per the details mentioned in the financial bid

10. **Purchase Order:**

RGIPT, Jais, Amethi shall issue purchase order to the eligible bidder whose technical bid has been accepted and determined as the lowest evaluated commercial bid based on the Grand Total. However, RGIPT, Jais, Amethi reserves the right and has sole discretion to reject the lowest evaluated bid.

11. **Institute's Right to amend/cancel:**

a) RGIPT, Jais, Amethi reserves the right to amend the eligibility criteria, commercial terms & conditions, Scope of Supply, technical specifications etc.

b) RGIPT, Jais, Amethi reserves the right to cancel the entire tender without assigning any reasons thereof.

12. **Termination:**

a) The Institute may, without prejudice to any other remedy for breach of contract may terminate the contract in whole or in parts in the event of the following:-

i. If the contractor fails to arrange the supply of any or all of the vehicles within the period(s) specified in the contract or any extension thereof granted by the Campus.

ii. If the contractor fails to perform any other obligation(s) under the contract. **In case the Contract has to be terminated, one-month advance notice in writing shall be given by either side.**

13. **Corrupt or Fraudulent Practices:**

a) It is expected that the bidders who wish to bid for this tender have highest standards of ethics.

b) RGIPT, Jais, Amethi will reject bid if it determines that the bidder recommended for award has engaged in corrupt or fraudulent practices while competing for this contract.

c) RGIPT, Jais, Amethi may declare a vendor ineligible, either indefinitely or for a stated duration, to be awarded a contract if it at any time determines that the vendor has engaged in corrupt and fraudulent practices during the award / execution of contract.

14. **Interpretation of the clauses in the Tender Document/ Contract Document**

a) In case of any ambiguity/ dispute in the interpretation of any of the clauses in this Tender Document, the interpretation of the clauses by Director, RGIPT, Jais, Amethi shall be final and binding on all parties.

Chairman, Purchase Committee

SECTION III- ELIGIBILITY AND QUALIFICATION CRITERIA

The following documents should be submitted for eligibility and qualification in technicalbid-

Sl. No.	Description
	<p>EMD (Earnest Money Deposit): a) The EMD of Rs. 1,35,000/- (Rupees One Lakh Thirty Five Thousand only (Exempted in case of MSME registered, certificate to be enclosed) in the form of NEFT/Demand Draft, Fixed Deposit Receipt, Bankers Cheque issued by any Nationalized Bank in favour of “Rajiv Gandhi Institute of Petroleum Technology, payable at Jais”. Bank Account Details of the Institute: Name: Rajiv Gandhi Institute of Petroleum Technology. Bank: Bank of Baroda Address: RGIPT Campus, Bahadurpur Jais, Amethi. Account No. 59480100000001 IFSC Code: BARB0JAICAM (5th Character is ZERO) b) If any the firms registered with DGS&D, MSME & NSIC are exempted from payment of EMD provided such registration includes the item they are offering which are manufactured by them and not for selling products manufactured by other companies. (Latest Copy must be submitted online for claiming exemption).</p>
1	Technical Specification Compliance Statement – (On the letter head of the Company) – Annexure -1
2	Manufacturer’s Authorization Form – In defined format OR Self Declaration of Manufacturing Unit – Annexure – 2
3	Price Reasonability Certificate – In defined format (On the letter head of the Company)- Annexure – 3
4	Declaration Certificate (Acceptance of terms & conditions of the tender) – In defined format (On the letter head of the Company) – Annexure – 4 and Declaration Sheet as per Annexure – 4A .
5	As on date of submission of the proposal, the Bidder is neither blacklisted by Central Government/ State Government or Instrumentalities thereof nor is any criminal case against the Bidder/ its Partners/ Directors/ Agents pending before any court of law. Non-Blacklisting Certificate on Rs.100.00 non-Judicial Stamp Paper – In defined format – Annexure – 5
6	Copy of Firm Registration
7	Copy of PAN Card & GST No.
8	Bidder should have 3 years’ experience in the selling and providing “Fabrication of plug and use VRFB-system of 5 kW/30kWh” or similar systems of comparable capacity to reputed Central Government Institutes/Petroleum Engineering Colleges/ Universities/ Oil Companies/ PSUs/ Research Institutes/ IITs/ NITs/ IISERS/ Private entities (Self Declaration) – List of Clients & Purchase Orders of “Supply & Installation “Fabrication of plug and use VRFB-system of 5 kW/30kWh” to be submitted.
9	The Bidder or their OEM should possess any valid standard certification like ISO9001:2008 & 14001:2004.
10	Bidder should enclose the copies of last 3 years Audited Annual Accounts (Balance Sheet and Profit & Loss A/c) duly authenticated by Chartered Accountant (FY 2022-23, FY 2022-21 & FY 2020-21)
11	Last three years CA certified turnover certificate (Average Turnover of last three years should be at least Rs. 23.00 lakhs (Rupees Ten Lakhs only)) (FY 2022-23, FY 2022-21 & FY 2020-21)
12	Last 3 year Income Tax Return (ITR) (FY 2022-23, FY 2022-21 & FY 2020-21)
13	In case of exemption of EMD, the scanned copy of the document in support of exemption will have to be uploaded by the bidder during bid submission Relaxations/Preference to eligible bidders as per Public Procurement Policy for Micro and Small enterprises (MSEs) order, 2012 would be given.
14	MOST IMPORTANT: Document related to prior installation and service – Atleast 3 Academic and R&D National Organizations, Central and State Government Departments/Institutions/PSUs in the last 3 years. Annexure – 6

MOST IMPORTANT: PLEASE DON’T ADD OR UPLOAD ANY ANNEXURE OF PRICE IN TECHNO-COMMERICAL BID DOCUMENTS, OTHERWISE YOUR BID WILL BE REJECTED.

SECTION IV: GENERAL CONDITIONS OF CONTRACT

1. **Tender filling up and submission**
 - a. Tender offer must refer to the letter/Notice inviting the Tender.
 - b. The bid should be uploaded online mentioning “**Supply & Installation “Fabrication of plug and use VRFB-system of 5 kW/30kWh”** to Rajiv Gandhi Institute of Petroleum Technology, Jais, Amethi.
 - c. Bids must be submitted online against above-mentioned tender.
 - d. The rates quoted should include all the components mentioned in the tender and should be valid for at- least 180 days from the date of opening of the bids. The rates must be quoted both in figures and words and overwriting should be avoided. However, all cuttings/corrections must be duly authenticated.
 - e. The bid submitted must not contain any ambiguity. Any such ambiguity in the quote submitted shall make it liable for rejection.
 - f. The tender document is not transferable.
 - g. No amendment to the bid in any form by the bidder will be permitted after opening of the tender. No conditional offers shall be accepted.
 - h. Submission of bid will bind the bidder to the acceptance of all conditions specified in the tender document.
 - i. Canvassing in any form is forbidden and will be a criterion for disqualification.

2. **EMD (Earnest Money Deposit):**

a) The EMD of Rs. 1,35,000/- (Rupees One Lakh Thirty Five Thousand only) (Exempted in case of MSME registered, certificate to be enclosed) in the form of NEFT/Demand Draft, Fixed Deposit Receipt, Bankers Cheque issued by any Nationalized Bank in favour of “**Rajiv Gandhi Institute of Petroleum Technology, payable at Jais**”.

**Bank Account Details of the Institute: Name: Rajiv Gandhi Institute of Petroleum Technology
Bank: Bank of Baroda
Address: RGIPT Campus, Bahadurpur Jais, Amethi.**

b) If any the firms registered with DGS&D, MSME & NSIC are exempted from payment of EMD provided such registration includes the item they are offering which are manufactured by them and not for selling products manufactured by other companies. (Latest Copy must be submitted online for claiming exemption)

3. **The earnest money deposit (EMD)** shall be submitted in Indian currency only. The bid security should remain valid for a period of 45 days beyond the final bid validity period.
 - a) The EMD of the unsuccessful bidders will be returned after final award of the Job to a successful bidder/ acceptance of the tender and within reasonable time not exceeding six months from the date of opening of Tender. The EMD will carry no interest.
 - b) The EMD will be forfeited if the bidder withdraws his offer before finalization of the tender.
 - c) The EMD of successful bidder will be returned after the submission of Performance Security.
 - d) The firms registered with DGS&D, MSME & NSIC, if any, are exempted from payment of EMD provided such registration includes the item they are offering which are manufactured by them and not for selling products manufactured by other companies. (Latest Copy must be submitted online for claiming exemption).
 - e) Relaxations/Preference to eligible bidders as per Public Procurement Policy for Micro and Small enterprises (MSEs) order, 2012 would be given.

4. **Performance Security:** The successful bidder will provide “Performance Security” for an amount of 5% of the contract value in the form of valid Account payee Demand Draft/ FDR from any of the scheduled bank favouring “Rajiv Gandhi Institute of Petroleum Technology” payable at RGIPT, Jais, Amethi Campus Branch. Performance security should remain valid at least for a period of 60 days beyond the date of completion of all contractual obligations of supplier (Total Period of FDR/Demand Draft – Warranty Period plus 60 days). Thereafter the security will be returned, provided there is no defect in the equipment supplied. (As per notification no. RGIPT/Jais/Admin/46/2021)

The company before the opening of letter of credit (LC) or wire transfer shall submit the performance security. The company shall submit the performance security at the rate of five percent (5%) of contract value in Indian Rupees in the form of demand draft or FDR, issued in the favor of Rajiv Gandhi Institute of Petroleum Technology” payable at Bank of Baroda, RGIPT, Jais campus branch, Amethi from any of the scheduled bank. (As per notification no. RGIPT/Jais/Admin/845/2020)

The performance should remain valid at least for a period of 60 days of beyond the date of completion of all contractual obligations of supplier. (As per notification no. RGIPT/Jais/Admin/845/2020)

5. **Bid Validity:** The bid must be valid for 180 days from the date of submission.
6. **Price bid submission:** In case of imported equipment, price (quote) shall be in two parts – *(a) CIF – (Cost, Insurance, Freight) price upto Airport in Foreign currency, and (b) from Airport to destination (RGIPT, Jais, Amethi) in Indian currency.* The components covered in this schedule consist of custom duty; custom clearance charges; freight charges, & Installation and training charges etc, which will be reimbursed in Indian currency to the Indian counterpart as per actual (Up to the maximum limit quoted in the bid), on submission of the original supporting bills duly certified and stamped by the Chairman Purchase Committee.
7. **Technical Bid Evaluation Criteria:**

The Bid shall be evaluated as per rule-192 of GFR, 2017 by following the Quality and Cost Based Selection (QCBS) system.

Phase-I: Technical Evaluation

Technical evaluation (Marks based evaluation) will be done based on the information given by technical bid submitted by the bidders.

Bid containing partial, incomplete, uncleaned and irrelevant information will be summarily rejected. Technical declaration must be supported with relevant documents. Discrepancy in relevant supporting documents and technical compliance sheet shall lead to rejection of the technical bids.

Phase-II: Financial Evaluation

- a) Financial bids of only technically qualified bidders shall be opened.
- b) Financial evaluation is purely done on the total financial implication.
- c) Any irrelevant, unreasonable assets rate quotes will be summarily rejected.
- d) Relaxations/Preference to eligible bidders as per Public Procurement Policy for Micro and Small enterprises (MSEs) order, 2012 would be given.

Evaluation of Technical and Financial Bids:

- a) Selection of the successful bidder shall be based on techno-commercial combined score. Weightage of 60% and 40% shall be given to technical criteria and financial bid respectively. Minimum technical score required is 95 marks out of 100 marks with qualification in each criteria. Any bidder scoring technical score of less than 95 marks out of 100 marks will not be considered for financial evaluation.
 - b) Technical Bids shall be opened first and evaluated for the bidder's eligibility criteria, bid completeness, bid conformity, bid responsiveness, before opening Financial Bid.
 - c) Techno-Commercial Score: The final score shall be calculated for all technically qualified bidders using the formula: [(Technical score/ Highest Technical Score) x 60%] + [(Minimum Financial quote/ quoted price of the Bidder) x 40%].
 - d) The bidder with the highest Overall or Combined Score as computed above will be considered for engagement.
 - e) The decision of RGIPT shall be final and binding on all the Bidders to this document. RGIPT reserves the right to accept or reject an offer without assigning any reason whatsoever.
 - f) The financial bids shall be opened for the firms getting minimum 95 marks out of 100 marks in technical evaluation.
 - g) In case of a tie, preference will be given to the bidders who have secured higher technical score.
8. In order to understand profile of the firm and to have a clear understanding of the areas in which firm is having requisite expertise, RGIPT may at its absolute discretion invite one or more or all the bidders for further presentation.
 9. **Special Instructions:**
 - i) Non-receipt of quote in foreign currency for imported equipment may lead to the rejection of their bid without assigning any reason thereof.

10. **Payment terms:**
- i) **In Indian Currency Payment Terms** - 80% payment will be released against successful supply of equipment at site i.e Rajiv Gandhi Institute of Petroleum Technology, Jais, Amethi and balance 20% after installation & commissioning of the equipment and subject to submission of original Bill/ Invoice as certified by the **Chairman, Purchase Committee.**
 - ii) **In Foreign Currency payment Terms** - 80% payment by an irrevocable letter of credit favouring Principal Company and for compliance of payment term, two weeks prior to dispatch of the equipment on submission of letter from Principal Company confirming that the equipment is ready for dispatch, receipt of documents without any discrepancies & Copy of 110% Insurance and balance 20% will be paid after satisfactory installation and commissioning as certified by the, **Chairman, purchase committee.**
 - iii) **Reimbursement of Expenses in Indian Rupees:** The Institute will reimburse the expenses in Indian Rupees related to custom duty, custom clearance charges, transportation charges upto RGIPT, Jais, Amethi to the Indian Counterpart after the installation and commissioning of equipment at site (Upto maximum limit defined in the bid) i.e Rajiv Gandhi Institute of Petroleum Technology, Jais, Amethi – 229304 and subject to submission of original bill certified by the Indenter.
11. **Clearance and delivery:** On arrival of shipment/consignment, the supplier is required to arrange custom clearance and transportation of the consignment up to RGIPT, Jais, Amethi premises. The Tenderer/ bidder will do all types of clearance work and formalities to deliver/provide the equipment at the site of installation. The expenses incurred will be reimbursed on actual basis not exceeding the quoted amount. Institute will provide all types of documentary support. The custom duty, custom clearance charges, transportation charges etc. will be reimbursed in Indian Rupees on subject of submission of documentary proof. This may be included in your quotation as a separate item. Principals will themselves have to procure any requisite permission from the Govt. of country of origin of equipment.
12. **Part Shipment not allowed:** Part Shipment will NOT be allowed. **Relaxations/Preference to eligible bidders as per Public Procurement Policy for Micro and Small enterprises (MSEs) order, 2012 would be given.**
13. **Insurance:** For delivery of goods at the purchaser's premises, the insurance shall be obtained by the supplier in an amount equal to 110% of the value of the goods from "warehouse to warehouse" (final destinations) on "All Risks" basis including War Risks and Strikes. The insurance shall be valid for a period of not less than 3 months after installation and commissioning. If orders placed on CIF/CIP basis, the insurance should be up to RGIPT, Jais, Amethi.
14. **Bank Charges:** All the bank charges within India will be borne by the Institute and outside India will be borne by the Supplier.
15. **Site Preparation:** The supplier shall inform to the Institute about the site preparation, if any, needed for the installation of equipment, immediately after the receipt of the purchase order. The supplier must provide complete details regarding space and all the other infrastructural requirements needed for the equipment, which the Institute should arrange before the arrival of the equipment to ensure its timely installation and smooth operation thereafter. The supplier shall visit the Institute and see the site where the equipment is to be installed and may offer his advice and render assistance to the Institute in the preparation of the site and other pre-installation requirements.
16. **Resolution of Disputes:** The dispute resolution mechanism to be applied pursuant shall be as follows:
- i. In case of Dispute or difference arising between the Purchaser and a domestic supplier relating to any matter arising out of or connected with this agreement, such disputes or difference shall be settled in accordance with the Indian Arbitration & Conciliation Act, 1996, the rules there under and any statutory modifications or re-enactments thereof shall apply to the arbitration proceedings. The dispute shall be referred to The Director, Rajiv Gandhi Institute of Petroleum Technology, Jais, Amethi and if he is unable or unwilling to act, to the sole arbitration of some other person appointed by him willing to act as such Arbitrator. The award of the arbitrator so appointed shall be final, conclusive and binding on all parties to this order.
 - ii. In the case of a dispute between the purchaser and a Foreign Supplier, the dispute shall be settled by arbitration in accordance with provision of sub-clause (a) above. But if this is not acceptable to the supplier then the dispute shall be settled in accordance with provisions of UNCITRAL (United Nations Commission on International Trade Law) Arbitration Rules.
The venue of the arbitration shall be the place from where the order is issued.
17. Live working product Demo of same or similar item is necessary (at the cost of bidder) for all the bidders, if asked for, within the ONE week of opening the technical bid.
18. **Printed Conditions of the Company – Not Acceptable to the Institute:** RGIPT 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. RGIPT shall accept only unconditional tender.

19. **Technical Deviations – Sole discretion of RGIPT for consideration:** If technical deviations furnished by the Tenderer are not agreeable to RGIPT, the offers may be ignored. However it will be solely at discretion of RGIPT to consider the technical deviations OR not for considering the Tenderer. No correspondences of the Tenderer will be entertained in this matter.
20. **Price Validity:** The price quoted by the bidder shall remain valid till the supply is completed. During the tenure of the supply period, no price increase will be considered, except for change in statutory levies imposed by Centre Govt. / state Govt.or Local authorities.
21. **Warranty: Comprehensive warranty (except electrolytes) of minimum 2 years.**
22. **Delivery:** The timely delivery of “Fabrication of plug and use VRFB-system of 5 kW/30kWh” is the essence of contract.

The supply should be completed with the specified delivery. **Delivery shall be completed must be supplied within 16 weeks from the date of opening of LC (For Foreign Manufacturer) & 04 months from the date of placement of purchase order (For Indian Manufacturer).**
23. **Bid Acceptance and Rejection:**
 - a. RGIPT reserves the right to reject the bid without assigning any reason what soever.
 - b. RGIPT does not bind itself to accept the lowest or any quotation and reserves theright to reject any or all without assigning any reason.
24. **Late Receipt of Bids:** No bids will be accepted or considered after the due date and time.
25. **Liquidity Damage Clause:** RGIPT, Jais reserves the right to levy penalty @ of 1 % of order value per week of delay in supply and/or installation, beyond the schedule as mentioned in this tender document subject to maximum of 5% of the order value. RGIPT, Jais reserves the right to cancel the order in case the delay is more than 6 weeks. The delay in delivery and/or installation not attributed to supplier viz. delay in site preparation, delay in submission of required documents etc. and the conditions arising out of Force Majeure will not be considered for the purpose of calculating penalties.
26. **Ship to**
Dr. Milan Kumar
Associate Professor
Department of Chemical & Biochemical Engineering
Rajiv Gandhi Institute of Petroleum Technology
Ground Floor, Academic Building -2, Mubarakpur
Mukhetia More, Bahdupur, Post: Harbanshanj,
Jais, Amethi – 229304, Uttar Pradesh
27. **Withdrawal of Tender:** The Institute reserves the right to withdraw the tender at any stage of tendering process with the approval of the Competent Authority.
28. **Replacements of Goods Broken, Damaged or Short:** If whole or part of the goods/ equipment supplied against the order is found defective/non-functional or without specification the supplier will have to replace the defective goods/equipment to make equipment operational within a reasonable time (not exceeding two months from the date of intimation to the supplier or the Indian Agent), failure to which the supplier will have to refund the full cost of the equipment including freight, Insurance etc.
29. **Force Majeure:** RGIPT, Jais may consider relaxing the penalty and delivery requirements, as specified in this document, if and to the extent that, the delay in performance or other failure to perform its obligations under the contract is the result of a Force Majeure. Force Majeure is defined as an event of effect that cannot reasonably be anticipated such as acts of God (like earthquakes, floods, storms etc.), acts of states / state agencies, the direct and indirect consequences of wars (declared or undeclared), hostilities, national emergencies, civil commotion and strikes at successful Bidder's premises or any other act beyond control of the bidder.
30. **Arbitration:** All disputes/clams of any kind arising out of supply, commissioning, acceptance, warranty maintenance etc. under this Contract, shall be referred by either party (RGIPT, Jais or the bidder) after issuance of 30 days' notice in writing to the other party clearly mentioning the nature of dispute to the Sole Arbitrator appointed by RGIPT, Jais. The arbitration proceedings shall be conducting in English and as per the provisions of Indian Arbitration and Conciliation Act, 1996. The decision of the Arbitrator shall be final and binding on both the parties.
31. **Jurisdiction:** The disputes, legal matters, court matters, if any shall be subject to Raebareli/ Amethi jurisdiction only.
32. A bid submitted with false information will not only be rejected but the vendor may also be debarred for participation in future tendering processes.
33. Authorized representative may choose to be present at the time of opening of quotation at their own cost.
34. **Only one PRICE BID should be submitted for the above equipment. A bidder who submits more than one PRICE BID, shall be disqualified and considered non- responsive.**

Chairman, Purchase Committee

Specifications for “Fabrication of plug and use VRFB-system of 5 kW/30kWh”

Sr. No.	Particulars	Specifications
1.	One cell specifications	<p>Cell should be able to incorporate electrodes of minimum area = 625 cm² (25x25 cm²)</p> <p>Electrodes: Graphite felt of 6 – 6.5 mm mm thickness, which must be replaceable by in-house developed electrodes Minimum number of graphite felts = minimum 56, minimum area = 625 cm² (25 x 25 cm²) Electrodes will be held inside the gaskets.</p> <p>Flow channels on bipolar plates (graphite): serpentine or interdigitated flow channel which will be later replaced by in-house developed design of flow channels. Area of flow channels = 25 x 25 cm² Thickness of bipolar plate = 10 - 12 mm. Minimum number of graphite plates = 29, minimum area = 900 cm² (30 x 30 cm²) Inner plates will have channels on both side, whereas outer plates will have channels one side. Three different designs of in-house flow channels will be provided. These channels will be machined on graphite bipolar plates of thickness 10 - 12 mm. Minimum number of graphite plates for one design = 29, minimum area = 900 cm² (30 x 30 cm²)</p> <p>Other details of graphite bipolar plates: Pyrolytic Sealed Bipolar Plates Corrosion and chemical resistant Grain size < 5 microns Apparent density = 1.78 g/c Flexural strength >= 85 MPa Compressive strength > 140 MPa Electrical resistivity <= 1470 μΩ-cm Coefficient of thermal expansion = 7.9 μm/m°C or better Shore hardness >= 74 Purity >= 99.99995%</p> <p>Current collectors: Copper plates with gold plating</p> <p>Membrane: proton conducting Nafion 117 or equivalent Minimum number of membrane pieces = 120, minimum area = 900 cm² (30 x 30 cm²)</p> <p>Gaskets: silicon gaskets (minimum 60 pieces of minimum area of 30 x 30 cm²) Thickness of gaskets = 5 to 6 mm</p>
2.	Battery stack	<p>Number of cells = 28 Electrolyte flow in series Electrolyte flow rate = 3-4 L/ min There should be provision of electrical connection leads from each cell</p>
3.	Electrolyte tanks	<p>Number of tanks = 2 Minimum capacity of one tank = 1000 L Concentration of vanadium = 1.0 – 1.5 M Purity of VOSO₄.xH₂O salt > 97% Concentration of sulphuric acid = 3.5 – 4.5 M Purity of Sulphuric acid > 99% Amount of electrolyte = appropriate for 6 h operation. Material of construction for tank: Plastic or metal suitable for acidic medium. Provision of nitrogen blanketing.</p>
4.	Pumps	<p>Number of pumps = 2 Peristaltic pumps of varying flow rate 0 to 5 L/min. If not peristaltic, similar pumps may be considered compatible for acidic environment of electrolyte</p>

5.	Measurement and Control systems	Electrolyte flow measurement and control, flow rate: 0 -5 L/min Temperature measurement equipment, temperature: 10 - 55°C. Pressure measurement and control systems for tanks, pressure: 1.0 - 1.1 atm.
6.	Power electronics	It should work for charging and discharging mode Both voltage and current controlled Power rating: 12 kW Current range: 0 – 200 A Voltage range: 0 – 60 V Computer controlled or monitored
7.	Computer system	One with following minimum specifications. CPU: Intel Core i7 or equivalent AMD processor or better RAM: 16 GB or higher HDD: 1TB or higher GPU DirectX 9.0c compliant display adapter with 1GB RAM DVD combo drive TFT Monitor: 21" or higher Windows operating system
8.	Interface	The whole battery system must be controlled by computer using suitable software and hardware interface.
9.	Accessories	Above specifications are minimum. All other necessary accessories such as End plates, O-ring, swagelock fittings, pipings, electrical and mechanical fittings, etc must be provided for plug and use operation of the battery. There should not be any leakage during operation.
10.	Spares	One set of spares for smooth operation of the battery set up.
11.	Warranty	Comprehensive warranty (except electrolytes) of minimum 2 years.

Some other salient features

1. A three-party MoU will be signed after awarding the purchase order.
2. A complete design of system will be provided after signing the MoU.
3. Methodology for electrode preparation using research grade graphite felts will be shared. At least three times required set (28x2) of electrodes will be developed.
4. Complete system should be operational in plug and use mode.
5. The system should be capable of and convenient to employ in-house developed electrode and developed flow channel.
6. All safety features should be incorporated.
7. Materials of construction should be compatible with acidic medium. Warranty for 2 years.
8. The complete electrical and electronics should be supplied along with computer system to control and monitor the various operating parameters, such as flow rate of electrolyte, temperature of individual cell, etc., for performance testing of the battery.
9. Performance of one cell will be performance at the site of manufacturer before proceeding for stacking of cells
10. Assembly of the stack using different designs and electrodes should be completed at our site (RGIPT). Boarding and lodging will be provided. Three visits to RGIPT after 1st installation will be desired.
11. The complete training of the equipment to students and faculty.
12. Performance testing of stack at RGIPT.
13. One time assembly and disassembly at the site of India Energy Week 2025 at New Delhi.

Note: An NDA will be signed between RGIPT and supplier before sharing the design information.

General Instructions/Requirements:

- **Bidder/supplier shall be responsible for successful onsite installation/commissioning and satisfactory demonstration of its features, operation and application, routine and preventive maintenance aspects of the equipment within thirty (30) days from the delivery.**
- Model name along with catalog/brochure of the quoted item to be provided.
- Supplier must provide all related accessories/spare parts for smooth laboratory testing of samples.
- Supplier must provide hard and soft copies of instruction manuals (in English) for both instrument and application software.
- The firm must provide a 'Technical Compliance Report' against each technical specification.
- All technical details should be supported by documentary evidence in form of technical brochures.

Place:

Date:

Signature and seal of the Manufacturer/ Bidder

Technical Specifications Compliance Statement of Fabrication of plug and use VRFB-system of 5 kW/30kWh be submitted as per format given in Annexure – I

(On the Company's Letter Head)

TECHNICAL SPECIFICATIONS COMPLIANCE STATEMENT

Online Tenders from authorized Indian suppliers/OEM (Imported equipment/ Indigenous equipment) for supply & Installation of “Fabrication of plug and use VRFB-system of 5 kW/30kWh” are invited by the Rajiv Gandhi Institute of Petroleum Technology, Amethi- 229304 in **Two-Part Bid System** as per specifications mentioned below:

Specifications for “Fabrication of plug and use VRFB-system of 5 kW/30kWh”

Sr. No.	Particulars	Specifications	Bidder's Specification	Compliance/ Deviation
1.	One cell specifications	<p>Cell should be able to incorporate electrodes of minimum area = 625 cm² (25x25 cm²)</p> <p>Electrodes: Graphite felt of 6 – 6.5 mm mm thickness, which must be replaceable by in-house developed electrodes Minimum number of graphite felts = minimum 56, minimum area = 625 cm² (25 x 25 cm²) Electrodes will be held inside the gaskets.</p> <p>Flow channels on bipolar plates (graphite): serpentine or interdigitated flow channel which will be later replaced by in-house developed design of flow channels. Area of flow channels = 25 x 25 cm² Thickness of bipolar plate = 10 - 12 mm. Minimum number of graphite plates = 29, minimum area = 900 cm² (30 x 30 cm²) Inner plates will have channels on both side, whereas outer plates will have channels one side. Three different designs of in-house flow channels will be provided. These channels will be machined on graphite bipolar plates of thickness 10 - 12 mm. Minimum number of graphite plates for one design = 29, minimum area = 900 cm² (30 x 30 cm²)</p> <p>Other details of graphite bipolar plates: Pyrolytic Sealed Bipolar Plates Corrosion and chemical resistant Grain size < 5 microns Apparent density = 1.78 g/c Flexural strength >= 85 MPa Compressive strength > 140 MPa Electrical resistivity <= 1470 μΩ-cm Coefficient of thermal expansion = 7.9 μm/m°C or better Shore hardness >= 74 Purity >= 99.99995%</p> <p>Current collectors: Copper plates with gold plating</p> <p>Membrane: proton conducting Nafion 117 or equivalent Minimum number of membrane pieces = 120, minimum area = 900 cm² (30 x 30 cm²)</p> <p>Gaskets: silicon gaskets (minimum 60 pieces of minimum area of 30 x 30 cm²) Thickness of gaskets = 5 to 6 mm</p>		
2.	Battery stack	<p>Number of cells = 28 Electrolyte flow in series Electrolyte flow rate = 3-4 L/ min There should be provision of electrical connection leads from each cell</p>		
3.	Electrolyte tanks	<p>Number of tanks = 2 Minimum capacity of one tank = 1000 L Concentration of vanadium = 1.0 – 1.5 M Purity of VOSO₄.xH₂O salt > 97% Concentration of sulphuric acid = 3.5 – 4.5 M Purity of Sulphuric acid > 99% Amount of electrolyte = appropriate for 6 h operation. Material of construction for tank: Plastic or metal suitable for acidic medium. Provision of nitrogen blanketing.</p>		

4.	Pumps	Number of pumps = 2 Peristaltic pumps of varying flow rate 0 to 5 L/min. If not peristaltic, similar pumps may be considered compatible for acidic environment of electrolyte		
5.	Measurement and Control systems	Electrolyte flow measurement and control, flow rate: 0 -5 L/min Temperature measurement equipment, temperature: 10 - 55°C. Pressure measurement and control systems for tanks, pressure: 1.0 - 1.1 atm.		
6.	Power electronics	It should work for charging and discharging mode Both voltage and current controlled Power rating: 12 kW Current range: 0 – 200 A Voltage range: 0 – 60 V Computer controlled or monitored		
7.	Computer system	One with following minimum specifications. CPU: Intel Core i7 or equivalent AMD processor or better RAM: 16 GB or higher HDD: 1TB or higher GPU DirectX 9.0c compliant display adapter with 1GB RAM DVD combo drive TFT Monitor: 21" or higher Windows operating system		
8.	Interface	The whole battery system must be controlled by computer using suitable software and hardware interface.		
9.	Accessories	Above specifications are minimum. All other necessary accessories such as End plates, O-ring, swagelock fittings, pipings, electrical and mechanical fittings, etc must be provided for plug and use operation of the battery. There should not be any leakage during operation.		
10.	Spares	One set of spares for smooth operation of the battery set up.		
11.	Warranty	Comprehensive warranty (except electrolytes) of minimum 2 years.		

Some other salient features

1. A three-party MoU will be signed after awarding the purchase order.
2. A complete design of system will be provided after signing the MoU.
3. Methodology for electrode preparation using research grade graphite felts will be shared. At least three times required set (28x2) of electrodes will be developed.
4. Complete system should be operational in plug and use mode.
6. The system should be capable of and convenient to employ in-house developed electrode and developed flow channel.
7. All safety features should be incorporated.
8. Materials of construction should be compatible with acidic medium. Warranty for 2 years.
9. The complete electrical and electronics should be supplied along with computer system to control and monitor the various operating parameters, such as flow rate of electrolyte, temperature of individual cell, etc., for performance testing of the battery.
10. Performance of one cell will be performance at the site of manufacturer before proceeding for stacking of cells
11. Assembly of the stack using different designs and electrodes should be completed at our site (RGIPT). Boarding and lodging will be provided. Three visits to RGIPT after 1st installation will be desired.
12. The complete training of the equipment to students and faculty.
13. Performance testing of stack at RGIPT.
14. One time assembly and disassembly at the site of India Energy Week 2025 at New Delhi.

Note: An NDA will be signed between RGIPT and supplier before sharing the design information.

Place:

Date:

Signature and seal of the Manufacturer/Bidder

Technical Specifications Compliance Statement of Supply & Installation of "Fabrication of plug and use VRFB-system of 5 kW/30kWh" should be submitted as per format given in Annexure – I
(On the Company's Letter Head)

**MANUFACTURERS' AUTHORIZATION FORM (MAF)
(ON THE LETTER HEAD OF THE COMPANY)**

[NOTE: The Bidder shall require the Manufacturer to fill in this Form in accordance with the instructions indicated. This letter of authorization should be **on the letterhead of the Manufacturer** and should be signed by a person with the proper authority to sign documents that are binding on the Manufacturer. It should be included by the Bidder in its bid]

No. Dated

Date: **[insert date (as day, month and year) of Bid Submission]** Tender No.:

[insert number from Invitation for Bids]

To,
The Director
Rajiv Gandhi Institute of Petroleum Technology,
Mubarakpur, Mukhtia, Bahadurpur
POST: Harbanshganj, Jais, Amethi - 229304

WHEREAS

We **[insert complete name of Manufacturer]**, who are official manufacturers of **[insert type of goods manufactured]**, having factories at **[insert full address of Manufacturers factories]**, do hereby authorize **[insert complete name of Bidder]** to submit a bid the purpose of which is to provide the following Goods, manufactured by us **[insert name and or brief description of the Goods]**, and to subsequently negotiate and sign the Contract.

We hereby extend our full guarantee and warranty in accordance with the General Conditions of Contract, with respect to the Goods offered by the above firm.

Signed: **[insert signature(s) of authorized representative(s) of the Manufacturer]** **Name:** **[insert complete name(s) of authorized representative(s) of the Manufacturer]** **Title/Designation:** **[insert title]**

Duly authorized to sign this Authorization on behalf of: **[insert complete name of Bidder]**

Dated on _____ day of _____, _____ **[insert date of signing]**

Yours faithfully,

(Name of manufacturers)

OR

SELF DECLARATION OF MANUFACTURING UNIT

PRICE REASONABILITY CERTIFICATE

(ON THE LETTER HEAD OF THE COMPANY)

It is certified that the rates quoted against Tender No. Datedfor the items vide our bid No. datedare exclusively for supply to ACADEMIC and RESEARCH Institutions and are not more than as charged to other Govt./PSU"s for similar supplies made in recent past. If they have been approved by the Director, RGIPT and if at any stage it has been found that the quoted rates are higher than the rates applicable to supply to Government then in such condition RGIPT, Amethi, will have the right to cancel the approved rates and to take legal action against the tenderer.

Yours faithfully,

(Name of manufacturers)

(Signature with date)

(Name and designation)

Duly authorized to sign tender for and on behalf of

DECLARATION (ACCEPTANCE OF TERMS & CONDITIONS)
(ON THE LETTER HEAD OF THE COMPANY)

1. I,Son/Daughter of ShriProprietor/
Partner/CEO/MD/Director/Authorized Signatory of M/s..... am competent to sign this
tender document.
2. I have carefully read and understood all the terms and conditions of the tender and hereby convey my
acceptance of the same.
3. The information/ documents furnished along with the above application are true and authentic to the best of my
knowledge and belief.
4. I/ we/ am are well aware of the fact that furnishing of any false information/ fabricated document would lead to
rejection of my tender at any stage besides liabilities towards prosecution under appropriate law.
5. Each page of the tender document and papers submitted by my Company is authenticated, sealed and
signed, and I take full responsibility for the entire documents submitted.

Date: -----

Place: -----

Signature of the Authorized Person

Full Name: -----

Company Seal: -----

DECLARATION SHEET

We, _____ hereby certify that all the information and data furnished by our organization with regard to this tender specification are true and complete to the best of our knowledge. I have gone through the specification, conditions and stipulations in details and agree to comply with the requirements and intent of specification.

This is certified that our organization has been authorized (Copy attached) by the OEM to participate in Tender. We further certified that our organization meets all the conditions of eligibility criteria laid down in this tender document. Moreover, OEM has agreed to support on regular basis with technology / product updates and extend support for the warranty.

The prices quoted in the financial bids are subsidized due to academic discount given to RGIPT, Jais, Amethi.

We, further specifically certify that our organization has not been Black-Listed/ De Listed or put to any Holiday by any Institutional Agency/ Govt. Department/Public Sector Undertaking in the last three years.	
1. Phone	
2. Fax	
3. E-mail	
4. Contact Person Name	
5. Mobile Number	
6. TIN Number	
7. PAN Number	
8. (In case of on-line payment of Tender Fees) UTR No. (For Tender Fee)	
9. (In case of on-line payment of EMD) UTR No. (For EMD)	
10. Kindly provide bank details of the bidder in the following format: a) Name of the Bank	
b) Account Number	
c) Kindly attach scanned copy of one Cheque book page to enable us to return the EMD to unsuccessful bidder	

(Signature of the Tenderer) Name:

Seal of the Company

NON-BLACKLISTING DECLARATION

It has been certified that all information provided in tender form is true and correct to the best of my knowledge and belief. No forged / tampered document(s) are produced with tender form for gaining unlawful advantage. We understand that RGIPT, Amethi is authorized to make enquiry to establish the facts claimed and obtain confidential reports from clients.

In case it is established that any information provided by us is false / misleading or in the circumstances where it is found that we have made any wrong claims, we are liable for forfeiture of EMD and or any penal action and other damages including withdrawal of all work/purchase orders being executed by us. **Further RGIPT, Amethi is also authorized to blacklist our firm/company/agency and debar us in participating in any tender/bid in future.**

I / We assure the Institute that neither I / We nor any of my / our workers will do any act/s which is improper / illegal during the execution in case the tender is awarded to us.

Neither I/We nor anybody on my/our behalf will indulge in any corrupt activities/practices in my/our dealing with the Institute.

Our Firm/Company/Agency is not been blacklisted or banned by any Central Government Department/ State Government Department, PSU, University, Autonomous Institute or Any other Govt. Organization.

Date

Signature of the Tenderer

Place
Stamp

Note: This certificate should be executed on duly notarized ` 100/- Non Judicial Stamp Paper.

List of Govt. Organization/Department/Institutes

List of Government Organization/Department/Institutes for whom the Bidder has undertaken such work during last three years (must be supported with work orders)		
Name of the Organization	Name of Contact Person	Contact No.

(Signature of the Tenderer)

Name:

Seal of the Company

FINANCIAL BID – Supply & Installation of “Fabrication of plug and use VRFB-system of 5 kW/30kWh”
(To be filled in BoQ Format on CPP Portal)

Financial Bid in Indian Currency (For indigenous equipment) :

- I. Name of the Bidder/Tenderer: Name & Model No of offered goods: Tender No.:**

Sl. No.	Details	Total Amount (In INR)
1	Basic Cost of “ Fabrication of plug and use VRFB-system of 5 kW/30kWh ” defined in Technical Specifications Statement of the Tender	
2	Comprehensive Cost of Warranty	
3	Add: Packing & Forwarding Charges, If any	
4	Add: Installation & Commissioning Charges, if any	
5	Add: Transportation Charges up to RGIPT, Jais, Amethi, if any	
6	Add: GST (Taxes)	
Total Price (Sum of Sl. No 1 to 6) F.O.R RGIPT, Jais, Amethi Price		

II. For Local Supplies -

Sl. No.	Details	Total Amount (In INR)
1	Cost of Local Supplies defined in Technical Specifications Statement of the Tender Document (Please mention the items)	
2	Add: Packing & Forwarding Charges, If any	
3	Add: Installation & Commissioning Charges, if any	
4	Add: Transportation Charges up to RGIPT, Jais, Amethi, if any	
5	Add: Cost of Warranty	
6	Add: GST (Taxes)	
Total Price (Sum of Sl. No 1 to 6) F.O.R RGIPT, Jais, Amethi Price		

Note: The Institute will provide DSIR & GST Exemption Certificate.

- I. Total Bid price in Indian Currency (Equipment Cost with accessories):
In words.....
- II. Total Bid price in Indian currency (Local Supplies):
 In words:.....

Grand Total (I + II) =
In words:

- a) Indian Agents Name & Address
- b) The cost of optional items shall be indicated separately

Date
 Place

Signature of the Tenderer
 Stamp

FINANCIAL BID – “Fabrication of plug and use VRFB-system of 5 kW/30kWh”

(To be filled in BoQ Format on CPP Portal)

Financial Bid in Foreign Currency (For Imported Equipment)

**Price Schedule Form: Price schedule for goods being offered from abroad
In currency other than INR (Indian Rupees)**

I. Name of the Bidder/Tenderer:

Name & Model No of offered goods:

Tender No.:

(Separate Prices should be defined for each instrument)

No.	Details (Basic Cost of Equipment with accessories)	Price per unit in (---)
A.	Country of origin	
	Payment in Foreign Currency	
1	FOB (named port of shipment)-Ex-Works Price	
2	Freight and Insurance up to Indian Airport/port	
3	Total Price at Indian Airport /port (CIP/CIF) (1+2)	
B.	Reimbursement of Expenses (in Indian Rupees)	
4	**Custom Duty against DSIR certificate (Please mentioned % also)	
5	Custom clearance and other charges, if any (with breakup)	
6	Inland Charges for Insurance & transportation to RGIPT Jais, Amethi	
7	Installation, commissioning and training Charges, if any	
8	Cost of Comprehensive Warranty	
Total Price F.O.R RGIPT, Jais, Amethi Price (A + B) (Sum of Sl. No 1 to 8)		

**** RGIPT, Jais, Amethi have Custom/Excise Exemption Certificate.**

II. . For Local Supplies –

No.	Details	Total Amount (In INR)
1	Cost of Local Supplies defined in Technical Specifications Statement of the Tender Document (Please mention the items)	
2	Add: Packing & Forwarding Charges, If any	
3	Add: Installation & Commissioning Charges, if any	
4	Add: Transportation Charges up to RGIPT, Jais, Amethi, if any	
5	Add: Cost of Warranty	
6	Add: GST (Taxes)	
Total Price (Sum of Sl. No 1 to 6) F.O.R RGIPT, Jais, Amethi Price		

- I. Total Bid price in Foreign Currency (Equipment Cost with accessories): In words.....
- II. Total Bid price in Indian currency (Local Supplies):..... In Words:.....

Optional Item:

AMC for 3 years after the warranty period may be separately quoted and AMC must include Spares, Consumables and Service Engineer charges.

THE BIDDER MAY ADD ROWS AS PER REQUIREMENT TO INCLUDE THE PRICES OF ALL COMPONENTS/ PARTS, WARRANTIES, INSTALLATION ETC. WHICHEVER APPLICABLE.

a) Indian Agents Name & Address

b) The cost of optional items shall be indicated separately 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 Financial Bid will be considered.

Date
Place

Signature of the Tenderer
Stamp