

भारत सरकार/GOVERNMENT OF INDIA  
अंतरिक्ष विभाग/DEPARTMENT OF SPACE  
क्रय यूनिट-III/PURCHASE UNIT-III

विक्रम साराभाई अंतरिक्ष केंद्र/VIKRAM SARABHAI SPACE CENTRE  
तिरुवनंतपुरम/THIRUVANANTHAPURAM - 695 022

विज्ञा. सं. वीएसएससी/एसपीआरई-क्रय/08 दि. 04/02/2025

ADVT. NO. VSSC/SPRE-PUR/08 DT. 04/02/2025

भारत के राष्ट्रपति के लिए तथा उनकी ओर से वरिष्ठ प्रधान, क्रय एवं भंडार, विक्रम साराभाई अंतरिक्ष केंद्र (वीएसएससी), तिरुवनंतपुरम, निम्नलिखित के लिए ई-प्रापण के माध्यम से (क्रम सं. 1के लिए) निविदाएं आमंत्रित करता है:-

For & on behalf of the President of India, the Sr. Head Purchase & Stores, Vikram Sarabhai Space Centre (VSSC), Thiruvananthapuram invites Tenders through e-procurement for Sl. No. 1 for the following :-

क्रम सं. Sl. No.	निविदा सं. Tender No.	वर्णन / Description	मात्रा Qty.	निविदा शुल्क Tender Fee
1	VSSC/PURCHASE UNIT III (SPRE)/VS202400577701 [लोक निविदा - दो भाग / PUBLIC TENDER-TWOPART]	"20kW निम्न तापमान पीईएम ईंधन सेल ऊर्जा प्रणाली की आपूर्ति तथा संस्थापन Supply and Installation of 20kW Low Temperature PEM Fuel Cell Power System	सामग्रियां/ items-1 set	लागून हीं / NA

**विशेष टिप्पणी/Special Note:-**

विदेशी विक्रेताओं को निविदा प्रस्तुत करने की अनुमति नहीं है। मेक इन इंडिया नीति के अनुसार केवल श्रेणी-I और श्रेणी-II के स्थानीय आपूर्तिकार इस बोली में भाग लेने हेतु पात्र हैं। विदेशी ओईएम से सीधे प्राप्त उद्धरणों/या विदेशी ओईएमओं की ओर से उद्धरण प्रस्तुत कर रहे एजेंटों को इस निविदा में भाग लेने की अनुमति नहीं है।

Foreign vendors are not permitted to quote. Only Class-I and Class-II Local suppliers as per Make in India Policy are eligible to participate in the bid. Quotations directly from foreign OEM/ or from agents quoting on behalf of foreign OEMs are not allowed to participate in this tender.

क्रम सं. Sl. No.	बोली प्रस्तुत करने की समय-सीमा Time limit for submission of Bid	बोली खोलने की तिथि Bid Opening date
1.	दिनांक 07/03/2025[14:00 बजे तक]	दिनांक 07/03/2025 [14.01 बजे]

क्रम सं. 01. के लिए, ब्यौरे इसरो ई-प्रापण पोर्टल <https://eproc.vssc.gov.in> पर उपलब्ध हैं।  
For Sl. No. 01 details are available on ISRO e-procurement portal <https://eproc.vssc.gov.in>.

शुद्धिपत्र, यदि कोई हो तो, हमारे वेबसाइट [www.vssc.gov.in](http://www.vssc.gov.in) / [www.isro.gov.in](http://www.isro.gov.in) में मात्र प्रकाशित किया जाएगा।

Corrigendum, if any will be published in our websites : [www.vssc.gov.in](http://www.vssc.gov.in) / [www.isro.gov.in](http://www.isro.gov.in) only.

हस्ताक्षरित/Sd/-

वरि. प्रधान, क्रय एवं भंडार /Sr. Head, Purchase & Stores

Tenders are invited for Supply and Installation of 20kW Low Temperature PEM Fuel Cell Power System (Qty:01 set). The Bids are to be prepared and submitted in specified Templates online, by logging into the portal <https://eproc.vssc.gov.in>. The Vendors are advised to submit the Bids much before the Closing Time to avoid last minute problems. Bid Opening date : 07/03/2025 .

Only online tenders will be accepted. No manual / Postal / e-mail / fax offers will be entertained. No manual tender document will be issued. Parties interested to participate in this e-Tender are required to register themselves as vendors, if not already registered, in our e-procurement portal <https://eproc.vssc.gov.in> by downloading plugins and help demos listed on the home page of the e-procurement link mentioned above to complete the vendor registration process. They can seek help from help desk 0471 2565454 also as provided in the home page of e-procurement portal in case of any problem for registration and subsequent process. Vendors may please note that without registering in our e-procurement portal, they will not be able to quote for this e-tender.

This is a two part tender, Technical & Commercial part (Part I) and Price Part (Part II) shall be submitted separately. The tenderers should not attach any documents containing Price information along with Technical & Commercial Bid (Part I). We do not open PART II (Price Bid), if PART-I (Technical & Commercial offer) does not meet with our technical specification requirements. Cost split up, other price details etc. shall be uploaded as a separate document under COMMERCIAL DOCUMENTS FROM VENDOR tab.

**THE TECHNICAL DOCUMENTS NEED TO BE ATTACHED ONLINE AS A SINGLE PDF FILE WITHOUT ANY PRICE INFORMATION, TECHNICAL BID CONTAINING PRICE DETAILS WILL BE TREATED AS REJECTED.**

**GOVERNMENT OF INDIA  
DEPARTMENT OF SPACE  
VIKRAM SARABHAI SPACE CENTRE (VSSC)  
THIRUVANANTHAPURAM**

## **Tender for 20kW Low Temperature PEM Fuel Cell Power System**

**Bids to be submitted online**

**Tender No.: VSSC/PURCHASE UNIT III (SPRE)/VS202400577701 dated 30-01-2025**

## A. Tender Details

Tender No : **VSSC/PURCHASE UNIT III (SPRE)/VS202400577701**

Tender Date : **30-01-2025**

Tender Classification: **GOODS**

Purchase Entity : **PURCHASE UNIT III (SPRE)**

Centre : **VIKRAM SARABHAI SPACE CENTRE (VSSC)**

### 20kW Low Temperature PEM Fuel Cell Power System

This tender is proposed as a DOMESTIC PUBLIC TENDER. This tender is restricted only to Class-I and Class-II Local Suppliers as defined under DPIIT Order dtd 16/09/2020- Preference to Make in India Order-2017 Revision. Non-Local Suppliers need not quote. Foreign OEMs/Agents quoting on behalf of Foreign OEMs are not permitted to quote. High Sea Sales Quotes not permitted. The bids shall be in INR only.

This is a TWO-PART tender i.e. Techno-Commercial Bid (Part-I) and Price Bid (Part-II) shall be submitted separately. All technical and commercial terms and conditions shall be furnished in the Techno-Commercial Bid while price shall be indicated only in the Price Bid/Price bid related documents template. Uploading price details anywhere else other than the price-bid/Price bid related documents template shall lead to unconditional rejection of the tender. Please make note of the same.

Technical Bids will be opened at the scheduled due date & time. No further intimation will be sent in this regard. The schedule for price bid opening shown is only indicative. Price bids will only be opened in the case of parties who have been techno-commercially accepted, the details of which will be communicated at a later stage

The Class-I/Class-II Local suppliers, at the time of submitting their offer, shall also indicate percentage of local content and provide self-certification that the item (s) offered meets the local content requirement for Class-I/Class-II Local Suppliers as the case may be. They shall also give details of location (s) at which the local value addition is made.

#### A.1 Tender Schedule

Bid Submission Start Date : **31-01-2025 17:20**

Bid Clarification Due Date : **17-02-2025 17:15**

Bid Submission Due Date : **07-03-2025 14:00**

Bid Opening Date : **07-03-2025 14:01**

Price Bid Opening Date : **12-03-2025 14:01**

## **B. Tender Attachments**

NA

### **Instructions To Vendors**

#### **1. PROFORMA FOR INSTRUCTIONS TO TENDERERS AND TERMS & CONDITIONS OF TENDER (IG)**

1. (a) All available technical literature, catalogues and other data in support of the specifications and details of the items should be furnished along with the offer.

(b) Samples, if called for, should be submitted free of all charges by the tenderer and the Purchaser shall not be responsible for any loss or damage thereof due to any reason whatsoever. In the event of nonacceptance of tender, the tenderer will have to remove the samples at his own expense.

(c) Approximate net and gross weight of the items offered shall be indicated in your offer. If dimensional details are available the same should also be indicated in your offer.

(d) Specifications: Stores offered should strictly confirm to our specifications. Deviations, if any, should be clearly indicated by the tenderer in his quotation. The tenderer should also indicate the Make/Type number of the stores offered and provide catalogues, technical literature and samples, wherever necessary, along with the quotations. Test Certificates, wherever necessary, should be forwarded along with supplies. Wherever options have been called for in our specifications, the tenderer should address all such options. Wherever specifically mentioned by us, the tenderer could suggest changes to specifications with appropriate response for the same.

2. (a) All available technical literature, catalogues and other data in support of the specifications and details of the items should be furnished along with the offer.

(b) Samples, if called for, should be submitted free of all charges by the tenderer and the Purchaser shall not be responsible for any loss or damage thereof due to any reason whatsoever. In the event of nonacceptance of tender, the tenderer will have to remove the samples at his own expense.

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#### **3. ACCEPTANCE OF STORES:**

(a) The stores shall be tendered by the Contractor for inspection at such places as may be specified by

the purchaser at the Contractor's own risk, expense and cost.

(b) It is expressly agreed that the acceptance of the stores Contracted for, is subject to final approval by the purchaser, whose decision shall be final.

(c) If, in the opinion of the purchaser, all or any of the stores do not meet the performance or quality requirements specified in the Purchase Order, they may be either rejected or accepted at a price to be fixed by the purchaser and his decision as to rejection and the prices to be fixed shall be final and binding on the Contractor.

(d) If the whole or any part of the stores supplied are rejected in accordance with Clause No. (c) above, the purchaser shall be at liberty, with or without notice to the Contractor, to purchase in the open market at the expense of the Contractor stores meeting the necessary performance and quality Contracted for in place of those rejected, provided that either the purchase, or the agreement to purchase, from another supplier is made within six months from the date of rejection of the stores as aforesaid.

4. As a Government of India Department, this office is exempted from payment of Octroi and similar local levies. Tenderers shall ensure that necessary Exemption Certificates are obtained by them from the Purchase Officer concerned to avoid any payment of such levies.

5. a) Your offer should be valid for 90 days from the date of opening of the tender.

b) Prices are required to be quoted according to the units indicated in the annexed tender form. When quotations are given in terms of units other than those specified in the tender form, relationship between the two sets of units must be furnished.

6. DESPATCH: The Contractor is responsible for obtaining a clear receipt from the Transport Authorities specifying the goods despatched. The consignment should be despatched with clear Railway Receipt/Lorry Receipt. If sent in any other mode, it shall be at the risk of the Contractor. Purchaser will take no responsibility for short deliveries or wrong supply of goods when the same are booked on 'said to contain' basis. Purchaser shall pay for only such stores as are actually received by them in accordance with the Contract.

7. d) The term "Purchase Order" shall mean the communication signed on behalf of the Purchaser by an Officer duly authorised intimating the acceptance on behalf of the Purchaser on the terms and conditions mentioned or referred to in the said communication accepting the tender or offer of the Contractor for supply of stores or plant, machinery or equipment or part thereof.

#### 8. GUARANTEE & REPLACEMENT:

(a) The Contractor shall guarantee that the stores supplied shall comply fully with the specifications laid down, for material, workmanship and performance.

(b) For a period of twelve months after the acceptance of the stores, if any defects are discovered therein or any defects therein found to have developed under proper use, arising from faulty stores design or workmanship, the Contractor shall remedy such defects at his own cost provided he is called

upon to do so within a period of 14 months from the date of acceptance thereof by the purchaser who shall state in writing in what respect the stores or any part thereof are faulty.

(c) If, in the opinion of the purchaser, it becomes necessary to replace or renew any defective stores such replacement or renewal shall be made by the Contractor free of all costs to the purchaser, provided the notice informing the Contractor of the defect is given by the purchaser in this regard within the said period of 14 months from the date of acceptance thereof.

(d) Should the Contractor fail to rectify the defects, the purchaser shall have the right to reject or repair or replace at the cost of the Contractor the whole or any portion of the defective stores.

(e) The decision of the Purchaser notwithstanding any prior approval or acceptance or inspection thereof on behalf of the Purchaser, as to whether or not the Stores supplied by the Contractor are defective or any defect has developed within the said period of 12 months or any other period or as to whether the nature of defects requires renewal or replacement, shall be final, conclusive and binding on the Contractor.

(f) To fulfill guarantee conditions outlined in (a) to (e) above, the Contractor shall, at the option of the Purchaser, furnish a Bank Guarantee (as prescribed by the Purchaser)

**9. PACKING FORWARDING & INSURANCE:** The Contractor will be held responsible for the stores being sufficiently and properly packed for transport by rail, road, sea or air to withstand transit hazards and ensure safe arrival at the destination. The packing and marking of packages shall be done by and at the expense of the Contractor. The purchaser will not pay separately for transit insurance, all risks in transit being exclusively of the Contractor and the Purchaser shall pay only for such stores as are actually received in good condition in accordance with the Contract.

**10.** Preference will be given to those tenders offering supplies from ready stocks and on the basis of FOR destination/delivery at site.

**11. PRICES:** Tender offering firm prices will be preferred. Where a price variation clause is insisted upon by a tenderer, quotation with a reasonable ceiling should be submitted. Such offers should invariably be supported by the base price taken into account at the time of tendering and also the formula for any such variation/s.

**12. REJECTED STORES:**

Rejected stores will remain at destination at the Contractor's risk and responsibility. If instructions for their disposal are not received from the Contractor within a period of 14 days from the date of receipt of the advice of rejection, the purchaser or his representative has, at his discretion, the right to scrap or sell or consign the rejected stores to Contractor's address at the Contractor's entire risk and expense, freight being payable by the Contractor at actuals.

**13.** Sales Tax and/or other duties/levies legally leviable and intended to be claimed should be mentioned in the price bid template. If nothing is mentioned, then it will be presumed that the rate quoted is inclusive of all taxes/duties.

14. SECURITY DEPOSIT: Wherever, the Purchase Order value is Rs. 5.00 Lakhs or more, on acceptance of the tender, the Contractor shall, at the option of the Purchaser and within the period specified by him, deposit with him, in cash or in any other form as the Purchaser may determine, security deposit not exceeding ten percent of the value of the Contract as the Purchaser shall specify. If the Contractor is called upon by the Purchaser to deposit, 'Security' and the Contractor fails to provide the security within the period specified, such failure shall constitute a breach of the Contract, and the Purchaser shall be entitled to make other arrangements for the re-purchase of the stores Contracted at the risk of the Contractor in terms of Sub-Clause (ii) and (iii) of clause regarding Delivery. (b) hereof and/or to recover from the Contractor, damages arising from such cancellation.

## 15. TERMS & CONDITIONS OF TENDER

16. TEST CERTIFICATE: Wherever required, test certificates should be sent along with the despatch documents.

17. The authority of the person signing the tender, if called for, should be produced.

18. The Purchaser reserves the right to place order on the successful tenderer for additional quantity up to 25% of the quantity offered by them at the rates quoted.

19. The purchaser shall be under no obligation to accept the lowest or any tender and reserves the right of acceptance of the whole or any part of the tender or portions of the quantity offered and the tenderers shall supply the same at the rates quoted.

20. The tenderer should supply along with his tender, the name of his bankers as well as the latest Income-Tax clearance certificate duly countersigned by the Income-Tax Officer of the Circle concerned under the seal of his office, if required by the Purchaser.

21. The term Contractor shall mean, the person, firm or company with whom or with which the order for the supply of Stores is placed and shall be deemed to include the Contractor's successors, representative, heirs, executors and administrators unless excluded by the Contract.

22. The term Purchaser shall mean the President of India or his successors or assigns.

23. The term "Stores" shall mean what the Contractor agrees to supply under the Contract as specified in the Purchase Order including erection of plants & machinery and subsequent testing, should such a condition is included in the Purchase Order.

## 2. Specific Terms and Conditions to Tender (MII Compliant)

1. (I) Please quote applicable GST separately.
2. (II) Our standard delivery term is FOR, VSSC. In case any vendor offers delivery term of Ex-works, Packing and Forwarding charges if any should be indicated separately either as a percentage of the quoted rate or as a Lumpsum amount.
3. (III) Our standard payment term is 100% within 30 days after receipt and acceptance of the items at our site (after installation and commissioning in cases where installation and commissioning is required).
4. (IV) Liquidated Damages: The delivery period quoted should be realistic. The delivery period so quoted and mentioned in the order is the essence of the order/contract. In case of delay in delivery of material as per the delivery schedule, Liquidated Damage @ 0.5% per week or part thereof on the undelivered portion subject to a maximum of 10% of the contract value shall be levied. Wherever, installation and commissioning is also involved, the supply will be deemed to have been completed only when the entire Stores is supplied, installed and accepted.
5. (V) Performance Bank Guarantee: Wherever products offered carry warranty, the warranty should be for one year or as per manufacturers standard warranty term. Against such cases, please confirm submission of Performance Bank Guarantee. The Performance Bank Guarantee should be for 3% of the order value covering the warranty period obtained from any Scheduled Bank on Rs.200/- Non Judicial Stamp Paper and should be valid beyond 2 months from the completion of the warranty period. Alternately vendors can request for withholding 3% payment till completion of the warranty period.
6. (VI) Security Deposit: Wherever the offer value is Rs. 5.00 Lakhs or above, the successful tenderer should submit Security Deposit @ 3% of the order value by way of Bank Guarantee / FD Receipt. The Bank Guarantee shall be obtained from any Scheduled Bank on Rs.200/- Non Judicial Stamp Paper and should be valid beyond 2 months from the completion of all contractual obligations. If the Contractor is called upon by the Purchaser to deposit, Security and the Contractor fails to provide the security within the period specified, such failure shall constitute a breach of the Contract, and the Purchaser shall be entitled to make other arrangements for the re-purchase of the stores Contracted at the risk of the Contractor. In case if Security Deposit is submitted and the contractor fails to execute the order, then the security deposit will be forfeited.
7. (VII) Note: SD, LD and PBG clauses are mandatory and offers of the vendors who have not agreed for the above conditions will be excluded from the procurement process. Micro and Small Vendors are not exempted from the submission of Security Deposit. Only Govt Departments/PSUs/PSEs can submit Indemnity Bond instead of Bank Guarantee towards SD/PBG.
8. (VIII) Please upload the Technical Details / Catalogue / Data Sheets (wherever applicable)

9. (IX) The offer should be valid for a period of minimum 90 days from the date of opening of Tender and 180 Days for PT Two Part (120 Days for Technical Bid and 60 Days for Price Bid from the date of opening).
10. (X) In order to avail of the benefits extended to by Govt. of India to the Micro and Small Sectors, please submit attested copy of the valid Entrepreneur Memorandum Part-II signed by the General Manager, District Industries Centre / Udyog Adhar / NSIC Registration Certification along with your offer.
11. (XI) If any bidder submits forged / false document along with the tender, offer of such vendors will be summarily rejected and such bidders will be blacklisted for all future tenders.
12. (XII) Wherever samples are required to be submitted along with the quotation, offer without sample will not be considered.
13. (XIII) The other attached forms are our standard terms and conditions, which are to be complied with. If any conflict arise between the specific terms and standard terms, then in those cases, the specific terms will prevail over the standard terms.
14. (XIX) Purchase preference to eligible vendors are applicable as per extant notifications issued by the Government of India.
15. (XV) Foreign OEMs/Agents quoting on behalf of Foreign OEMs are not permitted to quote. High Sea Sales Quotes not permitted. The bids shall be in INR only.
16. (XVI) Definitions: A supplier or service provider, whose goods, services or works offered for procurement, has local content: a) Equal to or more than 50% : Class-I local supplier. b) Minimum 20% but less than 50% : Class-II local supplier. c) Less than 20% : Non-local supplier.
17. (XVII) Local content means the amount of value added in India (i.e. indigenous items/services added in the offered products/services/works) be the total value of the item offered (excluding net domestic indirect taxes) minus the value of imported content in the item (including all customs duties/IGST) as a proportion of the total value (excluding net domestic indirect taxes), in percent. Indicate extent of Minimum Local Content in offered product/service and location of such value additions.
18. (XVIII) The Class-I & II local supplier should provide a Self Certification along with your offer in PDF format indicating that the item offered meets the minimum local content as called for in the tender as mentioned above and provide the % of local content along with details of the location(s) at which the local value addition is made. In case of two part tenders, it is mandatory to indicate compliance to MLC(minimum local content) in technical bid itself.

19. (XIX) The Class-I/Class-II Local suppliers, at the time of submitting their offer, shall also indicate percentage of local content and provide self-certification that the item (s) offered meets the local content requirement for Class-I/Class-II Local Suppliers as the case may be. They shall also give details of location (s) at which the local value addition is made.

20. (XX) In cases if the item(s) offered exceed Rs. 10 Crores, the Class-I/Class-II Local Suppliers shall provide a Certificate from the statutory auditor or cost auditor of the company (in case of companies) or from a practicing cost accountant or practicing chartered accountant (in respect of suppliers other than companies) giving the percentage of local content.

21. (XXI) 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.

22. (XXII) Purchase Preference Policy:- Goods/Works which are divisible in nature (required quantity is greater than 1 or not a package basis): i. If L1 is 'Class-1 local supplier', the order/contract for full quantity shall be awarded to L1 bidder. ii. If L1 bid is not from a 'Class-I local supplier', 50% of the order quantity shall be awarded to L1. Thereafter, the lowest bidder among the 'Class-I local supplier' will be invited to match the L1 price for the remaining 50% quantity subject to the Class-I local supplier's quoted price falling within the margin of purchase preference (i.e. 20%) and contract for that quantity shall be awarded to such Class-I local supplier subject to matching the L1 price (inclusive of duties, taxes and freight & insurance). iii. In case such lowest eligible 'Class-I local supplier' fails to match the L1 price or accepts less than the offered quantity, the next higher 'Class-I local supplier' within the margin of purchase preference shall be invited to match the L1 price for remaining quantity and so on, and contract shall be awarded accordingly. In cases where none of the 'Class-I local supplier' within the margin of purchase agree to match L1 price, in such cases 100% quantity shall be ordered on original L1 bidder. iv. In case no offers are received from 'Class-I local supplier' or none of the 'Class-I local supplier' falls within the margin of purchase preference of 20%, the order shall be processed on L1 vendor. v. In case L1 bidder (not a 'Class-I local supplier') is not accepting splitting of order on 50:50 basis, in that case the order/contract shall be awarded to such 'Class-I local supplier' for full quantity subject to matching the L1 price. vi. Regarding MSEs (Indian vendors): a) The following additional aspect as indicated below would be applicable for procurement which are falls under divisible category (i.e., not applicable for indivisible category), in case of participation of MSEs in the tendering who are also complying to the Minimum Local Content (MLC) stipulated in the tender. b) If any Indian vendor satisfies the requirement of MSEs stipulation and also falls within the purchase preference margin as called for in MSME policy (in case of matching L1 price) will be considered for ordering 25% of tendered quantity, the balance quantity / works will be considered for distribution amongst all bidders (including MSEs) as per the purchase preference policy. c) In case no MSEs qualifies for purchase preference or do not match with L1 price then the total tendered quantity will be distributed amongst all bidders as per the purchase preference policy.

23. Purchase Preference Policy:- Goods/Works which are not divisible in nature (required quantity is 1 or on a package basis):

(i). If L1 is 'Class-1 local supplier', the order/contract for full quantity shall be awarded to L1 bidder. (ii). If L1 bid is not from a 'Class-I local supplier', then, the lowest bidder among the 'Class-I local supplier' will be invited to match the L1 price subject to the Class-I local supplier's quoted price falling within the margin of purchase preference (i.e. 20%) and contract for that quantity shall be awarded to such Class-I local supplier subject to matching the L1 price (inclusive of duties, taxes and freight & insurance). (iii). In case such lowest eligible 'Class-I local supplier' fails to match the L1 price, the next higher 'Class-I local supplier' within the margin of purchase preference shall be invited to match the L1 price and so on, and contract shall be awarded accordingly. In cases where none of the 'Class-I local supplier' within the margin of purchase agree to match L1 price, in such cases the contract shall be placed on original L1 bidder. (iv). In case no offers are received from 'Class-I local supplier' or none of the 'Class-I local supplier' falls within the margin of purchase preference of 20%, the order shall be processed on L1 vendor.

### **3. PPP Make in India(Non- Divisible Items-Class I & II Local Suppliers Only)**

1. In line with Public Procurement (Preference to Make in India), Order 2017 & its amendments issued by Govt. of India from time to time with a view to support the Indian industries, ISRO has implemented "Purchase Preference Policy". The "Purchase Preference" is applicable for the "Class-I Local Supplier" for the goods/ services/ works covered in this tender, subject to the following terms & conditions:-

2. a) The subject item falls under Non-divisible category. b) The offers sought only from Class-I & Class-II local suppliers

3. Definitions: A supplier or service provider, whose goods, services or works offered for procurement, has local content: a) Equal to or more than 50% : Class-I local supplier. b) Minimum 20% but less than 50% : Class-II local supplier. c) Less than 20% : Non-local supplier.

4. 'Local content' means the amount of value added in India (i.e. indigenous items/services added in the offered products/ services/ works) be the total value of the item offered (excluding net domestic indirect taxes) minus the value of imported content in the item (including all customs duties/IGST) as a proportion of the total value (excluding net domestic indirect taxes), in percent.

5. The margin of Purchase Preference shall be up to 20%.

6. 'Margin of purchase preference' means the maximum extent to which the price quoted by the "Class-I local supplier" above the L1 (landed cost).

7. 'L1' means the lowest technically accepted tender / bid / quotation (i.e. lowest landed cost including duties, taxes and freight & Insurance).

8. Works means all works as per Rule 130 of GFR- 2017, and will also include 'turnkey works'. Works includes Engineering, Procurement and Construction (EPC) contracts and services include System Integrator (SI) contracts.

9. Purchase Preference Policy:- Goods/Works which are not divisible (ie., required quantity is 1 or as a package) and Services:

a) If L1 is from a 'Class-I local supplier', the contract will be awarded to L1 bidder.

b) If L1 is not from a 'Class-I local supplier', the lowest bidder among the 'Class-I local supplier' will be invited to match the L1 price subject to local supplier's quoted price falling within the margin of purchase preference (i.e. 20%) and the contract shall be awarded to such 'Class-I local supplier' subject to matching the L1 price (inclusive of duties, taxes and freight & insurance).

c) In case such lowest eligible 'Class-I local supplier' fails to match the L1 price, the 'Class-I local supplier' with the next higher bid within the margin of purchase preference shall be invited to match the L1 price and so on, and order/contract shall be awarded accordingly. In case where none of the 'Class-I local supplier' within the margin of purchase preference agree to match the L1 price, then the order/contract shall be awarded to the original L1 Bidder.

10. The 'Class-I & II local supplier' should provide a "Self Certification" along with technical offer indicating that the item offered meets the minimum local content [as per Sl. No.(3)] as called for in the tender and provide the percentage of local content along with details of the location(s) at which the local value addition is made. In case of two bid tenders, it is mandatory to indicate compliance to MLC(minimum Local Content) in technical bid zone.

11. The ink-signed certificate shall be provided on vendors letter head along with the offer (in case of online tender, copy of ink-signed certificate shall be uploaded along with your offer under concerned tab. Original in Hard copy shall be produced on request). In case of non-submission of certificate, the purchase preference shall not apply.

12. A committee (with an external expert from a practicing cost accountant or practicing chartered accountant, if required) constituted for independent verification shall verify the self-declarations & auditor's / accountant's certificates on random basis, as per the requirements.

13. In cases the quoted price is in excess of Rs.1000 Lakhs (including duties, taxes and freight & Insurance) the 'Class-I & II local supplier shall provide a certificate from the statutory auditor or cost auditor of the company (in the case of companies) or from a practicing cost accountant or practicing chartered accountant (in case of suppliers other than companies) giving the percentage of local content.

14. In case of a complaint received from any local supplier indicating a need for review / verification of Local content of successful vendor / awarded vendor, for accepting a complaint from such complainant (w.r.t the false declaration given by the successful vendor on the local content), a complaint fee of

Rs.2Lakhs or 1% of the locally manufactured items being procured (subject to a maximum Rs. 5Lakhs), whichever was higher, to be paid by demand draft by the complainant. In case, the complaint is found to be incorrect, the complaint fee shall be forfeited. In case, the complaint is upheld and found to be substantially correct, deposited fee of the complainant would be refunded without any interest.

15. False declarations will be in breach of code of the integrity for which a bidder or its successor's will not be eligible/debarred for purchase preference from further tenders / pending tenders for two years along with other actions as may be applicable.

16. The Public Procurement (Preference to Make in India), Order 2017 issued by Govt. of India indicates that if there are any general or specific restrictive clauses to restrict participation of Indian companies in those countries procurement tenders, reciprocity clause need to be invoked as per the order. Hence, if ISRO or Govt. of India come across that Indian suppliers of an item are not allowed to participate and / or compete in procurement by your government, the bid submitted by you will be not be considered and excluded from eligibility for procurement. Please note this point.

#### **4. Conditions for BIDDER FROM A COUNTRY WHICH SHARES LAND BORDER WITH INDIA**

1. Any bidder from a country which shares a land border with India will be eligible to bid in this tender, only if the bidder is registered with the Competent Authority.

Competent Authority for the purpose of registration shall be the Registration Committee constituted by the Department for Promotion of Industry and Internal Trade (DPIIT).

2. Any false declaration and non-compliance of the above would be a ground for immediate rejection of offer or termination of the contract and further legal action in accordance with the laws.

3.

Validity of Registration: Registration should be valid at the time of submission of bids and should be valid at the time of placement of order.

#### **5. Declaration (In the Letter Head of the Bidder)**

1. As per the provisions of Office Memorandum No. F. No. 6/18/2019- PPD dtd. 23.07.2020 (i.e., Rule No. 144 (xi) of GFR) and its Amendments dtd 23.02.2023, issued by Department of Expenditure, Ministry of Finance. I hereby declare and certify the following.

I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India

2. I certify that this bidder is not from such a country or, if from such a country. I have registered with

the Department for Promotion of Industry and Internal Trade.

" Bidder from a country which shares a land border with India" for the purpose of the Order means:

- 2.1. An entity incorporated, established or registered in such a country: or
- 2.2. A subsidiary of an entity incorporated established or registered in such a country; or
- 2.3. An entity substantially controlled through entities incorporated established or registered in such a country; or
- 2.4. An entity whose beneficial owner is situated in such a country; or
- 2.5. An Indian (or other) agent of such an entity; or
- 2.6. A natural person who is a citizen of such a country; or
- 2.7. A consortium or joint venture where any member of the consortium or joint venture falls under any of the above.

3. I hereby certify that I am not an agent as defined in the order who procures and supplies finished goods from an entity from a country which shares a land border with India, regardless of the nature of legal or commercial relationship with the producer of the goods.

4. I hereby certify that this bidder fulfills all requirements in this regard and is eligible to be considered

#### **6. Local Content Declaration Format (In your Letter Head)**

1. In line with the Government Public Procurement Order No. P/45021/2/2017-BE-II dtd . 15.06.2017 , as amended from time to time, and as applicable on the date of submission of tender, we hereby certify that , we M/s. \_\_\_\_\_ are local supplier meeting the requirement of minimum local content, \_\_\_\_\_%, as defined above in the orders for the material against Tender Enquiry No. \_\_\_\_ dtd. \_\_\_\_ . The HSN No. of the item supplied is \_\_\_\_\_

2. Percentage of Local value addition , involved in the item are:

\_\_\_\_\_

3. This is also certified that the following factors are excluded in the above percentage:  
(strike out which are not applicable)

1. imported item sourced locally from resellers/distributors (value in \_\_\_% including tax, if applicable)
2. The license fee/royalties paid/technical charges paid out of india. (value in\_\_\_% including tax, if applicable)
3. Repackaged/refurbished/rebranded imported products (value in \_\_\_% including tax, if applicable)

4. The details of location at which the value addition will be made is as follows :

\_\_\_\_\_

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5. We also understand that , false declarations will be in breach of 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 3 years under Rule 151 (iii) of the GFR along with such other actions as may be permissible under law.

6. For (company name)

Authorised Signatory.

## C. Bid Templates

### C.1 Technical Bid - 20kW Low Temperature PEM Fuel Cell Power System

#### 1. 20kW Low Temperature PEM Fuel Cell Power System

##### Item specifications for 20kW Low Temperature PEM Fuel Cell Power System

SI No	Specification	Value	Compliance	Offered Specification	Remark
1	Fuel Cell Type	Low Temperature Proton Exchange Membrane based Fuel Cell (LT PEMFC)	Yes / No / Explain		
2	Nominal Power	≥ 20 kW	Yes / No / Explain		
3	Peak Power	≥ 22 kW	Yes / No / Explain		
4	Operating Voltage	≥ 45V & ≤ 120V	Yes / No / Explain		
5	No of cells	The party shall specify the number of cells along with their offer or during the supply of the stack	Yes / No / Explain		
6	Stack Dimension	Party shall provide the dimension details of the stack.	Yes / No / Explain		
7	Stack Length	Party shall specify	Yes / No / Explain		
8	Stack Width	Party shall specify	Yes / No / Explain		
9	Stack Height	Party shall specify	Yes / No / Explain		
10	Stack Weight	The party shall specify the weight of the system	Yes / No / Explain		
11	Stack Power Density (excluding compression hardware)	≥ 1.2 kW/l	Yes / No / Explain		
12	Stack Specific Power (excluding compression hardware)	≥ 1.2 kW/kg	Yes / No / Explain		

13	Voltage efficiency @ Nominal Power	≥ 50%	Yes / No / Explain		
14	Flow field plates	Metallic Bipolar plates	Yes / No / Explain		
15	Stack cooling	Liquid Cooling	Yes / No / Explain		
16	Gas Reactants	Cathode: Air, Anode: Hydrogen	Yes / No / Explain		
17	Anode Gas (H2) Conditions	Party shall specify the H2 gas requirements	Yes / No / Explain		
18	H2 Purity	Party shall specify the required purity of H2 gas.	Yes / No / Explain		
19	Permissible impurity levels of H2 gas	The levels of permissible impurities in the H2 gas shall be specified by the party	Yes / No / Explain		
20	H2 gas Inlet Temperature	Party shall specify the inlet temperature required for H2 gas	Yes / No / Explain		
21	RH (%)	Party shall specify the inlet RH required for H2 gas	Yes / No / Explain		
22	H2 Stoichiometry	Party shall specify	Yes / No / Explain		
23	H2 Pressure Level	Party shall specify	Yes / No / Explain		
24	H2 Pressure drop @ 0.6V	Party shall specify	Yes / No / Explain		
25	Cathode Gas Conditions (Air)	Ambient air will be supplied.	Yes / No / Explain		
26	Air Inlet Temperature	Party shall specify the stack inlet temperature required for air	Yes / No / Explain		
27	Air Outlet Temperature	Party shall specify the stack outlet temperature expected for air	Yes / No / Explain		
28	Air RH (%)	Party shall specify the stack inlet RH required for air	Yes / No / Explain		
29	Air Stoichiometry	Party shall specify	Yes / No / Explain		
30	Air Pressure Level	Party shall specify	Yes / No / Explain		

31	Air Pressure drop @ 0.6V	Party shall specify	Yes / No / Explain		
32	Air quality	Stack shall work with Ambient air. Party shall specify the level of filtration required & other permitted impurity levels in the air intake.	Yes / No / Explain		
33	Coolant Conditions		-		
34	Coolant material	The stack shall work using DI water as coolant.	Yes / No / Explain		
35	Coolant Inlet Temperature	Party shall specify the inlet temperature required for the coolant.	Yes / No / Explain		
36	Coolant Outlet temperature / $\Delta T$	Party shall specify the expected outlet temperature or increase in coolant temperature during nominal & full power operation of the stack.	Yes / No / Explain		
37	Coolant Pressure drop	Party shall specify	Yes / No / Explain		
38	Max Differential pressure between Anode/Cathode	Party shall specify the maximum permissible differential pressure between anode & cathode	Yes / No / Explain		
39	Operating Environment	20 to 45°C, 30 to 90% RH	Yes / No / Explain		
40	Stack Operating Temperature	60°C – 80°C	Yes / No / Explain		
41	Stack inside Operating Pressure	$\leq 400$ kPa g	Yes / No / Explain		
42	Stack pressure capability	Party shall specify the margin over operating pressure of the stack	Yes / No / Explain		
43	Individual Cell Voltage Monitoring	Party shall provide features for individual cell voltage monitoring and the details of the connectors shall be provided. Suitable mating connectors also to be supplied.	Yes / No / Explain		

44	Gas flow rates for full power operation	Party shall specify the flow rates of the Hydrogen gas and air required for the operation of the system at full power.	Yes / No / Explain		
45	Stack durability	Party shall specify the demonstrated durability in terms of hours or cycles	Yes / No / Explain		
46	Stack leak rate	Party shall specify the leak rate of the stack	Yes / No / Explain		
47	System Configuration	System shall be packaged as single unit with properly designed lifting, mounting & mobility provisions	Yes / No / Explain		
48	System Block Diagram	The party shall submit a block diagram of the system comprising all subsystems like stack, gas modules, coolant modules, control modules, etc.	Yes / No / Explain		
49	Humidification	The party shall provide internal humidification system as part of the Fuel Cell power system	Yes / No / Explain		
50	Mode of Humidification	Party shall specify the mode of humidification provided in the system	Yes / No / Explain		
51	Thermal Management System	The Fuel Cell Power System shall have integrated thermal management system in order to maintain the stack temperature within the desired range. Necessary control logic involving temperature sensors & coolant flow control shall be implemented through the system controller.	Yes / No / Explain		
52	H2 Gas input conditions	As specified	Yes / No / Explain		
53	H2 Temperature	20-45 °C	Yes / No / Explain		

54	H2 Pressure	≤ 15 bar	Yes / No / Explain		
55	H2 Flow rate	Party shall specify	Yes / No / Explain		
56	Air condition	The system shall work with ambient air	Yes / No / Explain		
57	Air Temperature	20-45 °C	Yes / No / Explain		
58	Air Pressure	Ambient	Yes / No / Explain		
59	Air Flow rate	Party shall specify	Yes / No / Explain		
60	Control System	PLC or Embedded controller	Yes / No / Explain		
61	Instrumentation	Sensors for monitoring & acquiring the following system parameters shall form part of the system a. Stack Voltage b. Stack Current c. Individual Cell Voltages d. Coolant Temperature: In & Out e. H2 inlet pressure to stack f. Stack temperature g. Air inlet pressure to stack	Yes / No / Explain		
62	Input Supply Voltage	Party shall specify the input supply voltage and power required for the system startup and operation	Yes / No / Explain		
63	System Dimension	Party shall specify the dimensions.	Yes / No / Explain		
64	System Length	Party shall specify	Yes / No / Explain		
65	System Width	Party shall specify	Yes / No / Explain		
66	System Height	Party shall specify	Yes / No / Explain		

67	Interface details	The party shall provide interface details for electrical power lines, monitoring lines, gas lines, coolant lines, etc.	Yes / No / Explain		
68	System Weight	Party shall specify	Yes / No / Explain		
69	Other Provisions Needed	1. Lifting hooks 2. Tele or remote maintenance 3. Interface connectors for power, monitoring & fluid lines, mounting	Yes / No / Explain		
70	Communication Interface and protocol	CAN / LAN / USB	Yes / No / Explain		
71	Communication Software	The party shall provide free software for monitoring the system parameters in a PC	Yes / No / Explain		

**Document : Technical Specifications**

**Document : Compliance Matrix**

**Common Specifications (Applicable for all items)**

SI No	Specification	Value	Compliance	Offered Specification	Remark
1	Scope of Supply	The party shall supply a Low Temperature PEM Fuel Cell System with minimum 20 kW electrical power.	Yes / No / Explain		
2	System Configuration	The system shall be of fully integrated monoblock configuration with built-in provisions mobility & lifting. No part of the system scope demanded in this tender shall be external to the monoblock assembly.	Yes / No / Explain		

3	Compliance Matrix & Product Datasheets	Party shall enclose a compliance / deviation matrix with respect to each of the specification along with their offer for easy comparison without which the offer will not be considered. Documentary evidence (leaflets/ Catalogues/ Datasheet) shall be submitted to substantiate the conformance statement	Yes / No / Explain		
4	Performance Demonstration	The system operation and performance shall be demonstrated in VSSC by the supplier; essential auxiliary systems / utilities required for the same shall be clearly specified by the party.	Yes / No / Explain		
5	Training	Onsite training must be provided to VSSC personnel on the system for operation and user maintenance.	Yes / No / Explain		
6	Make & Model	The make and model details shall be clearly specified in the offer.	Yes / No / Explain		
7	Track record	Considering the safety aspects associated with H2 gas, offers from OEM or their authorised representatives having proven track record in PEM Fuel Cells only will be considered for evaluation. In case of authorised agents, valid authorisation certificate from the OEM in their letterhead with company seal is necessary to ensure proper authorisation. Third party offers without proper authorisation will NOT be considered for evaluation and will be rejected summarily.	Yes / No / Explain		

8	Product certification	Product certifications like CE or equivalent shall be submitted by the party to ensure the safe design & operation of the system	Yes / No / Explain		
9	Expertise	As a proof of expertise, it is preferred that the party shall submit the list of customers with their contact details to whom similar systems ( $\geq 10\text{kW}$ ) are supplied in last 5 years.	Yes / No / Explain		
10	Warranty	System shall be warranted for a minimum period of 1 year from the date of demonstration of the system at VSSC.	Yes / No / Explain		
11	AMC	The party shall be ready to undertake AMC for the system after expiry of the warranty period.	Yes / No / Explain		
12	Separate quote for AMC for five years	Separate quote for AMC for five years after the warranty period shall be submitted by the party. AMC cost will be considered for grading the vendor to decide L1 offer, along with system cost. Number of AMC visits per year: One preventive maintenance visit & one breakdown maintenance visit. In case of no breakdown, it shall be converted into preventive maintenance visit.	Yes / No / Explain		
13	Separate Quote for Tele/Remote Maintenance	Tele maintenance and remote trouble shooting shall be provided during the operation life of the system in VSSC, if necessary. Party shall also submit a quote for tele/remote maintenance cost per hour.	Yes / No / Explain		

14	Service Network	The party shall have local service network within India in order to attend any breakdown within 3 working days. The details of local service network shall be submitted along with the offer.	Yes / No / Explain		
15	Pre-Delivery Inspection	Once the system is ready for shipment, the party shall offer the system for online/offline pre-delivery inspection at the party's site. Compliance to the PO terms & conditions & requirements, shall be demonstrated by the party during the PDI.	Yes / No / Explain		
16	Responsibility Matrix	Responsibility matrix shall be submitted by the party detailing the scopes of party & VSSC in order to operate the system as per specifications	Yes / No / Explain		

### Supporting Documents required from Vendor

1. Remote maintenance charges/hour (Price Bid Related)
2. Any other relevant document
3. Product certification
4. Data Sheets of offered System
5. Compliance Matrix
6. Quote for AMC for five years (1PM+1BM) (Price Bid Related)
7. Quote for the system (Price Bid Related)

5 additional documents can be uploaded by the vendor

## C.2 Commercial Terms / Bid

Sl. No.	Description	Compliance	Vendor Terms
1	System shall be packaged properly to avoid any kind of damage during transportation	Yes / No / Explain	
2	The system shall be supplied in fully integrated, ready-to-use condition along with all necessary documentation like user manual, parts manual, and maintenance manual with troubleshooting guide and bill of materials.	Yes / No / Explain	
3	Warranty	Yes / No / Explain	
4	Training	Yes / No / Explain	
5	Taxes and other costs,	Yes / No / Explain	
6	Security Deposit (Applicable if Offer Value is Rs. 5 Lakhs or above. MSME/NSIC Units are NOT EXEMPTED from the payment of SD. Bank Guarantee @ 3% of Order Value valid till 60 days from the date of supply to be submitted. Mandatory compliance required. Only Government Bodies/PSUs/PSEs can submit Indentity Bond in lieu of BG. In the event of non-performance of contractual obligations, SD will be forfeited).	Yes / No / Explain	
7	Delivery Terms.	Yes / No / Explain	
8	Delivery Period	Yes / No / Explain	
9	Liquidated Damages (Applicable beyond the delivery period mentioned in this tender @ 0.5% per week or part thereof on the undelivered portion subject to a maximum of 10% of the contract value. Mandatory compliance required).	Yes / No / Explain	
10	Warranty(1 year)	Yes / No / Explain	

11	Performance Bank Guarantee (PBG) Bank Guarantee @ 3% of Order Value valid till the completion of warranty period plus 2 months claim period to be submitted. Mandatory compliance required. Only Government Bodies/PSUs/PSEs can submit Indemnity Bond in lieu of BG. In the event of non-performance of warranty obligations, PBG will be forfeited).	Yes / No / Explain	
12	Payment Term: (Our Default payment term: For indigenous orders: 100% within 30 days after receipt and acceptance of item at our site. NOTE: CONSEQUENT TO COVID 19 PANDEMIC AND AS PER EXTANT GUIDELINES FROM DEPARTMENT OF SPACE, NO ADVANCE PAYMENT IS PAYABLE TO THIS TENDER).	Yes / No / Explain	
13	Definitions: A supplier or service provider, whose goods, services or works offered for procurement, has local content: a) Equal to or more than 50% : Class-I local supplier. b) More than 20% but less than 50% : Class-II local supplier. c) Less than or equal to 20% : Non-local supplier. Mention your category.	Yes / No / Explain	
14	Local content means the amount of value added in India (i.e. indigenous items/services added in the offered products/services/works) be the total value of the item offered (excluding net domestic indirect taxes) minus the value of imported content in the item (including all customs duties/IGST) as a proportion of the total value (excluding net domestic indirect taxes), in percent. Indicate extent of Minimum Local Content in offered product/service and location of such value additions.	Yes / No / Explain	

15	The Class-I & II local supplier should provide a Self Certification along with your offer in PDF format indicating that the item offered meets the minimum local content as called for in the tender as mentioned above and provide the % of local content along with details of the location(s) at which the local value addition is made. In case of two part tenders, it is mandatory to indicate compliance to MLC(minimum local content) in technical bid itself. Confirm attachment of Self declaration along with the offer.	Yes / No / Explain	
16	PO Placement Address (with Name and Contact Details of sales person concerned).	Yes / No / Explain	
17	Any Other Terms	Yes / No / Explain	
18	Offer Validity	Yes / No / Explain	
19	Bank Account details	Yes / No / Explain	

### C.3 Price Bid

Sl. No.	Item	Quantity	Unit Price	Currency	Total Price	Remark
1	20kW Low Temperature PEM Fuel Cell Power System	1.00 Sets		-		

### Common charges (Applicable for all items)

<b>P&amp;F Charges</b>	
<b>Freight charge</b>	
<b>AMC Charges for 1st Year after warranty period</b>	
<b>AMC Charges for 2nd Year after warranty period</b>	
<b>AMC Charges for 3rd Year after warranty period</b>	
<b>AMC Charges for 4th Year after warranty period</b>	

<b>AMC Charges for 5th Year after warranty period</b>	
<b>Any Other Charges</b>	
<b>Other Charges (If any)</b>	