



23-58097

RETURN BIDS TO:**RETOURNER LES
SOUMISSIONS À :**

NRC.BidReceiving-
ReceptiondesSoumissions.CNRC@nrc-cnrc.gc.ca

**REQUEST FOR PROPOSAL
DEMANDE DE PROPOSITIONS****Proposal To:** National Research Council Canada

We hereby offer to sell to His Majesty the King in right of Canada, in accordance with the terms and conditions set out herein, referred to herein or attached hereto, the goods, services, and construction listed herein and on any attached sheets at the price(s) set out thereof.

Proposition au : Conseil national de recherches
Canada

Nous offrons par la présente de vendre à Sa Majesté le Roi du chef du Canada, aux conditions énoncées ou incluses par référence dans la présente et aux annexes ci-jointes, les biens, services et construction énumérés ici sur toute feuille ci-annexées, au(x) prix indiqué(s).

Instructions : See Herein**Instructions: Voir aux présentes
Comments - Commentaires**

**Vendor/Firm Name and address
Raison sociale et adresse du
fournisseur/de l'entrepreneur**

**Issuing Office – Bureau de distribution
National Research Council Canada
Conseil national de recherches Canada**

Title – Sujet	
High-profile 100W PEMFC Test Station	
Solicitation No. – N° de l'invitation	Date
23-58097	October 17, 2023
Solicitation Closes – L'invitation prend fin	Time Zone Fuseau horaire
at – à 02 :00 PM on – le November 13, 2023	EST
Delivery Instruction: "See Herein"	
Plant-Usine: <input type="checkbox"/> Destination: <input type="checkbox"/> Other-Autre: <input type="checkbox"/>	
Address Inquiries to : - Adresser toutes questions à:	
Cindy Marshall	
Email address – l'adresse courriel :	
Cindy.marshall@nrc-cnrc.gc.ca	
Destination – of Goods, Services, and Construction: Destination – des biens, services et construction :	
<p style="text-align: center;">National Research Council Canada 4250 Wesbrook Mall Vancouver, BC V6T 1W5 Canada</p>	

Vendor/firm Name and address Raison sociale et adresse du fournisseur/de l'entrepreneur	
Facsimile No. – N° de télécopieur Telephone No. – N° de téléphone	
Name and title of person authorized to sign on behalf of Vendor/firm (type or print)- Nom et titre de la personne autorisée à signer au nom du fournisseur/de l'entrepreneur (taper ou écrire en caractères d'imprimerie)	
Signature	Date

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PART 1 - GENERAL INFORMATION

1.1 Security Requirements

There is no security requirement associated with the requirement.

1.2 Statement of Requirement

The National Research Council Canada (NRC) has a requirement for the supply and delivery of one (1) High-profile 100 W proton exchange membrane fuel cell (PEMFC) test station in accordance with the Annex A - Statement of Requirement.

1.3 Debriefings

Bidders may request a debriefing on the results of the bid solicitation process. Bidders should make the request to the Contracting Authority within 15 working days from receipt of the results of the bid solicitation process. The debriefing may be in writing, by telephone or in person.



PART 2 - BIDDER INSTRUCTIONS

2.1 Standard Instructions, Clauses and Conditions

You are invited to submit one electronic Technical Proposal and one electronic Financial Proposal in two separate attachments to fulfil the following requirement forming part of this Request for Proposal. One attachment must be clearly marked 'Technical Proposal' and the other attachment must be marked 'Financial Proposal'. All financial information must be fully contained in the Financial Proposal, and only in the Financial Proposal. Vendors who provide financial information in the technical proposal will be disqualified. All proposals should include the front page of this RFP duly completed.

2010A (2022-12-01), General Conditions - Goods (Medium Complexity), apply to and form part of the Contract.

Bidders who submit a bid agree to be bound by the instructions, clauses and conditions of the bid solicitation and accept the clauses and conditions of the resulting contract.

Proposals submitted must be valid for not less than sixty (60) calendar days from the closing date of the RFP.

2.1.1 It is the Bidder's responsibility to:

- (a) return a signed copy of the bid solicitation, duly completed, IN THE FORMAT REQUESTED;
- (b) direct its bid ONLY to the Bid Receiving address: NRC.BidReceiving-ReceptiondesSoumissions.CNRC@nrc-cnrc.gc.ca;
- (c) ensure that the Bidder's name, the bid solicitation reference number, and bid solicitation closing date and time are clearly visible;
- (d) provide a comprehensive and sufficiently detailed bid, including all requested pricing details, that will permit a complete evaluation in accordance with the criteria set out in the bid solicitation.

Timely and correct delivery of bids to the specified bid delivery address is the sole responsibility of the Bidder. The National Research Council Canada (NRC) will not assume or have transferred to it those responsibilities. All risks and consequences of incorrect delivery of bids are the responsibility of the Bidder.

2.1.2 Bids may be accepted in whole or in part. The lowest or any bid will not necessarily be accepted. In the case of error in the extension of prices, the unit price will govern. NRC may enter into contract without negotiation.

2.1.3 Bidders who submit a bid agree to be bound by the instructions, clauses and conditions of the bid solicitation and accept the terms and conditions of the resulting contract.

2.1.4 Bids will remain open for acceptance for a period of not less than sixty (60) days from the closing date of the bid solicitation, unless otherwise indicated by NRC in such bid solicitation.

2.1.5 While NRC may enter into contract without negotiation, Canada reserves the right to negotiate with bidders on any procurement.



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- 2.1.6** Notwithstanding the bid validity period stipulated in this solicitation, Canada reserves the right to seek an extension from all responsive bidders, within a minimum of three (3) days prior to the end of such period. Bidders shall have the option to either accept or reject the extension.
- 2.1.7** If the extension referred to above is accepted, in writing, by all those who submitted responsive bids, then Canada shall continue immediately with the evaluation of the bids and its approval processes.
- 2.1.8** If the extension referred to above is not accepted, in writing, by all those who submitted responsive bids then Canada shall, at its sole discretion: either continue to evaluate the responsive bids of those who have accepted the extension and seek the necessary approvals; or cancel the solicitation; or cancel and reissue the solicitation.

2.2 Late Bids

All risks and consequences of incorrect delivery of electronic bids are the responsibility of the Bidder. The National Research Council Canada will not be responsible for late bids received at destination after the closing date and time, even if it was submitted before. Electronic bids received after the indicated closing time based on NRC servers' received time will be irrevocably rejected. Bidders are urged to send their proposal in sufficient time, in advance of the closing time to reduce any technical issues. The National Research Council Canada will not be held responsible for bids sent before closing time but received by the NRC servers after the closing time.

2.3 Submission of Bids

Technical and Financial Proposals must be **received electronically** no later than 14:00 EDT (NRC's Server Time), **Solicitation Closing Date shown on Front Page** to the following NRC email address:

NRC.BidReceiving-ReceptiondesSoumissions.CNRC@nrc-cnrc.gc.ca

Please note that proposals sent via email to any address other than the one specified above will not be accepted and will result in your proposal being considered non-responsive.

The NRC has restrictions on incoming e-mail messages. **The maximum e-mail message size including all file attachments must not exceed 10MB.** Zip files or links to bid documents will not be accepted. Incoming e-mail messages exceeding the maximum file size and/or containing zip file attachments will be blocked from entering the NRC e-mail system. A bid transmitted by e-mail that gets blocked by the NRC e-mail system will be considered not received.

Proposals must not be sent directly to the Contracting Authority or the Project Authority.

All submitted proposals become the property NRC.

2.4 Enquiries - Bid Solicitation

All enquiries must be submitted in writing to the Contracting Authority no later than five (5) calendar days before the bid closing date. Enquiries received after that time may not be answered.

Contracting Authority, Procurement Services
National Research Council Canada
Cindy.Marshall@nrc-cnrc.gc.ca

For open public tender



To ensure the equality of information among Bidders, responses to general enquiries will be made available to all bidders unless such publications would reveal proprietary information. The bidder who initiates the question will not be identified. Technical questions that are considered proprietary by the bidder must be clearly identified. NRC will respond individually to the bidder if it considers the questions proprietary. If NRC does not consider the question proprietary, the bidder submitting it will be allowed to withdraw the question, or have the question and answer made available through the Open Bidding System (OBS) to all bidders.

Bidders who attempt to obtain information regarding any aspect of this RFP during the solicitation period through any NRC contacts other than the Contracting Authority identified herein, may be disqualified (for that reason alone).

It is the responsibility of the Bidder to obtain clarification of the requirement contained herein, if necessary, prior to submitting its proposal. The Bidder must have written confirmation from the Contracting Authority for any changes, alterations, etc., concerning this RFP.

Bidders should reference as accurately as possible the numbered item of the bid solicitation to which the enquiry relates. Care should be taken by Bidders to explain each question in sufficient detail in order to enable Canada to provide an accurate answer. Technical enquiries that are of a proprietary nature must be clearly marked "proprietary" at each relevant item. Items identified as "proprietary" will be treated as such except where Canada determines that the enquiry is not of a proprietary nature. Canada may edit the question(s) or may request that the Bidder do so, so that the proprietary nature of the question(s) is eliminated, and the enquiry can be answered to all Bidders. Enquiries not submitted in a form that can be distributed to all Bidders may not be answered by Canada.

2.5 Applicable Laws

Any resulting contract must be interpreted and governed, and the relations between the parties determined, by the laws in force in *British Columbia*.

Bidders may, at their discretion, substitute the applicable laws of a Canadian province or territory of their choice without affecting the validity of their bid, by deleting the name of the Canadian province or territory specified and inserting the name of the Canadian province or territory of their choice. If no change is made, it acknowledges that the applicable laws specified are acceptable to the Bidders.

2.6 Bid Challenge and Recourse Mechanisms

(a) Several mechanisms are available to potential suppliers to challenge aspects of the procurement process up to and including contract award.

(b) Canada encourages suppliers to first bring their concerns to the attention of the Contracting Authority. Canada's Buy and Sell website, under the heading "[Bid Challenge and Recourse Mechanisms](#)" contains information on potential complaint bodies such as:

- [Office of the Procurement Ombudsman \(OPO\)](#)
- [Canadian International Trade Tribunal \(CITT\)](#)

(c) Suppliers should note that there are strict deadlines for filing complaints, and the time periods vary depending on the complaint body in question. Suppliers should therefore act quickly when they want to challenge any aspect of the procurement process



PART 3 - BID PREPARATION INSTRUCTIONS

3.1 Bid Preparation Instructions

Canada requests that the Bidder submits its bid in separate attachment sections (when applicable) as follows:

- Section I: Technical Bid
- Section II: Financial Bid
- Section III: Certifications and Additional Information

There shall be no payment by the National Research Council for costs incurred in the preparation and submission of proposals in response to this request. No payment shall be made for costs incurred for clarification(s) and/or demonstration(s) that may be required by NRC. The National Research Council reserves the right to reject any or all proposals submitted, or to accept any proposal in whole or in part without negotiation. A contract will not necessarily be issued as a result of this competition. NRC reserves the right to amend, cancel or reissue this requirement at any time.

In April 2006, Canada issued a policy directing federal departments and agencies to take the necessary steps to incorporate environmental considerations into the procurement process [Policy on Green Procurement](https://www.tbs-sct.gc.ca/pol/doc-eng.aspx?id=32573) (<https://www.tbs-sct.gc.ca/pol/doc-eng.aspx?id=32573>). To assist Canada in reaching its objectives, bidders should:

- 1) Include all environmental certification(s) relevant to your organization (e.g., ISO 14001, Leadership in Energy and Environmental Design (LEED), Carbon Disclosure Project, etc.)
- 2) Include all environmental certification(s) or Environmental Product Declaration(s) (EPD) specific to your product/service (e.g., Forest Stewardship Council (FSC), ENERGYSTAR, etc.)

Canada is committed to greening its supply chain. Environmentally preferable goods and services are those that have a lesser or reduced impact on the environment over the life cycle of the good or service, when compared with competing goods or services serving the same purpose. Environmental performance considerations include, among other things: the reduction of greenhouse gas emissions and air contaminants; improved energy and water efficiency; reduced waste and support reuse and recycling; the use of renewable resources; reduced hazardous waste; and reduced toxic and hazardous substances. In accordance with the [Policy on Green Procurement](https://www.tbs-sct.gc.ca/pol/doc-eng.aspx?id=32573) (<https://www.tbs-sct.gc.ca/pol/doc-eng.aspx?id=32573>), for this solicitation:

- Bidders are encouraged to offer or suggest green solutions whenever possible.
- Bidders are requested to provide all correspondence including (but not limited to) documents, reports and invoices in electronic format unless otherwise specified by the Contracting Authority or Project Authority, thereby reducing printed material.
- Bidders should recycle (shred) unneeded copies of non-classified/secure documents (taking into consideration the Security Requirements).
- Product components used in performing the services should be recyclable and/or reusable, whenever possible.
- Bidders are encouraged to offer goods and/or services certified to a reputable eco-label.
- Bidders should use equipment that has high energy efficiency or produces low air emissions.
- Bidders are encouraged to offer environmentally preferred products which supports a sustainable environment for nature and wildlife.
- Bidders are encouraged to offer environmentally preferred products which ensure the comfort and air quality of building occupants.



Bidders are encouraged to consult the following websites:

<https://www.tpsgc-pwgsc.gc.ca/app-acq/ae-gp/index-eng.html>

<https://www.tpsgc-pwgsc.gc.ca/app-acq/ae-gp/rle-glr-eng.html>

Section I: Technical Bid

In their technical bid, Bidders should explain and demonstrate how they propose to complete the work and that they meet all the Mandatory Technical Criteria at Annex C.

Section II: Financial Bid

Bidders must submit their financial bid in accordance with the Basis of Payment at Annex B, a price must be provided for both the firm and optional requirements.

Section III: Certifications and Additional Information

Bidders must submit the certifications and additional information required under Part 5.

3.1.1 Electronic Payment of Invoices – Bid

Payments from the National Research Council Canada (NRC) are made by electronic payment. Direct deposit payments will be made in Canadian dollars and can only be deposited into Canadian bank accounts.

Only bank accounts outside of Canada are eligible to enroll as a Wire transfer payment method.

3.1.2 Exchange Rate Fluctuation

Bids will be evaluated in Canadian currency, therefore, for evaluation purposes, the exchange rate quoted by the Bank of Canada as being in effect on date of bid closing, shall be applied as the conversion factor for foreign currency. Prices quoted shall not be subject to, or conditional upon, fluctuations in commercial or other interest rates during either the evaluation or contract period.



PART 4 - EVALUATION PROCEDURES AND BASIS OF SELECTION

4.1 Evaluation Procedures

- (a) Proposals will be assessed in accordance with the entire requirement of the bid solicitation including Mandatory Technical Criteria, Certifications, and Financial Evaluation Criteria.
- (b) An evaluation team composed of representatives of Canada will evaluate the proposals.

4.1.1 Technical Evaluation

Proposals will be assessed in accordance with the Technical Requirements. Bidders shall provide a detailed response to each criterion. NRC reserves the right to verify any and all information provided by the bidder in their proposal.

4.1.1.1 Mandatory Technical Criteria

Failure to meet the Mandatory Technical Criteria will render the proposal as non-responsive and no further evaluation will be carried out. The Mandatory Criteria listed in Mandatory Technical Criteria - Annex C will be evaluated on a simple pass/fail basis.

4.1.1.2 Certification Form

Bidder must complete, sign and submit the Certification Form at Part 5, 5.1.3 Compliance Certification - B1501C (2018-06-21) Electrical Equipment with their proposal, as required.

4.1.1.3 Financial Evaluation

The Bidder must provide a price for both the **FIRM and OPTIONAL REQUIREMENTS** of the Basis of Payment provided in Annex B and include it as a separate attachment in their proposal submission. Applicable Sales Tax: The GST, PST, QST or HST, whichever is applicable, shall be considered an applicable tax for the purposes of this RFP and extra to the price herein. The amount of applicable sales tax shall be disclosed and shown as a separate item.

4.2 Basis of Selection - Lowest evaluated price

A proposal must comply with the requirements of the bid solicitation and meet all Technical Requirements to be declared responsive. Proposals not meeting (4.1.1.1), (4.1.1.2) and (4.1.1.3) will be declared non-responsive. The responsive proposal with the lowest evaluated price will be recommended for award of a contract.



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PART 5 – CERTIFICATIONS AND ADDITIONAL INFORMATION

Bidders must provide the required certifications and additional information to be awarded a contract.

The certifications provided by Bidders to Canada are subject to verification by Canada at all times. Unless specified otherwise, Canada will declare a bid non-responsive, or will declare a contractor in default if any certification made by the Bidder is found to be untrue whether made knowingly or unknowingly, during the bid evaluation period or during the contract period.

The Contracting Authority will have the right to ask for additional information to verify the Bidder's certifications. Failure to comply and to cooperate with any request or requirement imposed by the Contracting Authority will render the bid non-responsive or constitute a default under the Contract.

5.1 Certifications Required with the Bid

Bidders must submit the following duly completed certifications as part of their bid.

5.1.1 Integrity Provisions - Declaration of Convicted Offences

In accordance with the Integrity Provisions of the Standard Instructions, all bidders must provide with their bid, **if applicable**, the declaration form available on the [Forms for the Integrity Regime](http://www.tpsgc-pwgsc.gc.ca/ci-if/declaration-eng.html) website (<http://www.tpsgc-pwgsc.gc.ca/ci-if/declaration-eng.html>), to be given further consideration in the procurement process.

5.1.2 Additional Certifications Required with the Bid**5.1.3 Compliance Certification - **B1501C (2018-06-21) Electrical Equipment****

Compliance with the certifications bidders provide to Canada is subject to verification by Canada during the bid evaluation period (before award of a contract) and after contract award. The Contracting Authority will have the right to ask for additional information to verify bidders' compliance with the certifications before award of a contract. The bid will be declared non-responsive if any certification made by the Bidder is untrue, whether made knowingly or unknowingly. Failure to comply with the certifications or to comply with the request of the Contracting Authority for additional information will also render the bid non-responsive.

By submitting a bid in response to this bid solicitation, the Bidder certifies that:

- a. it has read and understands the obligations under certification of SACC Manual Clauses B1501C Electrical Equipment, below;
- b. it understands that all electrical equipment supplied under the Contract must be certified or approved for use in accordance with the Canadian Electrical Code, Part 1, before delivery, by a certification organization accredited by the Standards Council of Canada.
- c. The electrical equipment certification must be complied with or the bid may be declared non-responsive, or Canada may terminate any resulting contract for default.

I _____ (name of business) certify that the information provided is true as of the date indicated below and will continue to be true for the duration of the Contract. I understand that the certifications provided to Canada are subject to verification at all times. I also understand that Canada will declare a contractor in default, if a certification is found to be untrue, whether made knowingly or unknowingly, during the bid or contract period. Canada reserves the right to ask for additional information to verify the certifications. Failure to comply



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with any request or requirement imposed by Canada will constitute a default under the Contract.

Name: _____ has certified to their compliance with this requirement.

Signature: _____ Date: _____

5.2 Certifications and Additional Information Precedent to Contract Award

The certifications and additional information listed below should be submitted with the bid but may be submitted afterwards. If any of these required certifications or additional information is not completed and submitted as requested, the Contracting Authority will inform the Bidder of a time frame within which to provide the information. Failure to provide the certifications or the additional information listed below within the time frame provided will render the bid non-responsive.

5.2.1 Integrity Provisions – Required Documentation

In accordance with the section titled Information to be provided when bidding, contracting or entering into a real property agreement of the [Ineligibility and Suspension Policy](http://www.tpsgc-pwgsc.gc.ca/ci-if/politique-policy-eng.html) (<http://www.tpsgc-pwgsc.gc.ca/ci-if/politique-policy-eng.html>), the Bidder must provide the required documentation, as applicable, to be given further consideration in the procurement process.

In addition to all other information required in the procurement process, the Bidder **must** provide the following:

- Bidders who are incorporated, including those bidding as a joint venture, must provide a complete list of names of all individuals who are currently directors of the Bidder or, in the case of a private company, the owners of the company.
- Bidders bidding as sole proprietorship, as well as those bidding as a joint venture, must provide the name of the owner(s).

BUSINESS NUMBER:		
SURNAME	GIVEN NAME(S)	TITLE

5.2.2 Federal Contractors Program for Employment Equity - Bid Certification

By submitting a bid, the Bidder certifies that the Bidder, and any of the Bidder's members if the Bidder is a Joint Venture, is not named on the Federal Contractors Program (FCP) for employment equity "FCP Limited Eligibility to Bid" list available at the bottom of the page of the [Employment and Social Development Canada \(ESDC\) - Labour's](#) website.

Canada will have the right to declare a bid non-responsive if the Bidder, or any member of the Bidder if the Bidder is a Joint Venture, appears on the "FCP Limited Eligibility to Bid" list at the time of contract award.



PART 6 - RESULTING CONTRACT CLAUSES

The following clauses and conditions apply to and form part of any contract resulting from the bid solicitation.

6.1 Security Requirements

6.1.1 There is no security requirement applicable to the Contract.

6.2 Statement of Requirement

The Contractor must provide one (1) High-profile 100 W proton exchange membrane fuel cell (PEMFC) test station in accordance with the Statement of Requirement at Annex "A". Delivery Date must be received on or before **March 29, 2024**.

6.3 General Conditions

2010A (2022-12-01), General Conditions - Goods (Medium Complexity), apply to and form part of the Contract.

6.3.2 Supplemental General Conditions

4001 (2015-04-01) Hardware Purchase, Lease and Maintenance

4003 (2010-08-16), Licensed Software;

4004 (2013-04-25), Maintenance and Support Services for Licensed Software

6.4 Term of Contract

6.4.1 Delivery Date

All the deliverables must be received on or before **March 29, 2024**.

6.4.2 Delivery Points

Delivery of the requirement will be made to delivery point:

National Research Council Canada
4250 Wesbrook Mall
Vancouver, BC
V6T 1W5
Canada

6.4.3 Delivery and Unloading

D0018C (2007-11-30), Delivery and Unloading

6.4.4 Shipping Terms and Instructions - Free On-Board Destination and Delivered At Place

Goods must be consigned and delivered to the destination specified in the Contract: Incoterms® 2020 "DAP Delivered At Place" **See 6.4.2 Delivery Point**.

NRC Customs contacts for any Customs and Transportation Logistics enquiries:

- Daniel Frampton: (613) 993-9113 / daniel.frampton@nrc-cnrc.gc.ca
- Christian Latreille: (613) 993-2259 / christian.latreille@nrc-cnrc.gc.ca

As part of NRC's commitment to Greening Government Operations, the Contractor is encouraged to minimize, include recycled content, re-use, or reduce/eliminate toxics in packaging, when possible.



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6.4.5 Packaging

The methods used for preservation and packaging must be in conformity with the Contractor's normal standard for domestic shipment or, if necessary, with standards for overseas shipment as below deck cargo.

6.5 Authorities**6.5.1 Contracting Authority**

The Contracting Authority for the Contract is:

Name: Cindy Marshall

Title: Special Projects Team Leader

National Research Council Canada

Directorate: Finance and Procurement Services, Office of Facilities Renewal Management (OFRM)

E-mail address: Cindy.Marshall@nrc-cnrc.gc.ca

The Contracting Authority is responsible for the management of the Contract and any changes to the Contract must be authorized in writing by the Contracting Authority. The Contractor must not perform work in excess of or outside the scope of the Contract based on verbal or written requests or instructions from anybody other than the Contracting Authority.

6.5.2 Technical Authority

The Technical Authority for the Contract is: *[to be inserted at contract award]*

Name: _____

Title: _____

Organization: _____

Address: _____

Telephone: ____ _

E-mail address: _____

The Technical Authority is the representative of the department or agency for whom the Work is being carried out under the Contract and is responsible for all matters concerning the technical content of the Work under the Contract. Technical matters may be discussed with the Technical Authority; however, the Technical Authority has no authority to authorize changes to the scope of the Work. Changes to the scope of the Work can only be made through a contract amendment issued by the Contracting Authority.

6.5.3 Contractor's Representative *[to be inserted at contract award]*

Name: _____

Title: _____

Address: _____

Telephone: ____ _

E-mail address: _____

6.6 Proactive Disclosure of Contracts with Former Public Servants

By providing information on its status, with respect to being a former public servant in receipt of a Public Service Superannuation Act (PSSA) pension, the Contractor has agreed that this information will be reported on departmental websites as part of the published proactive disclosure reports, in accordance with Contracting Policy Notice: 2012-2 of the Treasury Board Secretariat of Canada.

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6.7 Payment

6.7.1 Basis of Payment

In consideration of the Contractor satisfactorily completing its obligations under the Contract, the Contractor will be paid fixed price(s) as specified in Annex B - Basis of Payment for a cost of \$_____ (*insert the amount at contract award*). Customs duties are excluded and Applicable Taxes are extra.

Canada will not pay the Contractor for any design changes, modifications or interpretations of the Work unless they have been approved, in writing, by the Contracting Authority before their incorporation into the Work.

6.7.2 Method of Payment – Single Payment

Canada will pay the Contractor upon completion and delivery of the Work in accordance with the payment provisions of the Contract if:

- a. an accurate and complete invoice and any other documents required by the Contract have been submitted in accordance with the invoicing instructions provided in the Contract;
- b. all such documents have been verified by Canada;
- c. the Work delivered has been accepted by Canada.

6.7.3 SACC Manual Clauses

SACC Manual clause C2000C (2007-11-30), Taxes - Foreign-based Contractor

SACC Manual clause C2605C (2008-05-12), Canadian Customs Duties and Sales Tax - Foreign-based Contractor

6.7.4 Electronic Payment of Invoices – Contract

The Contractor accepts to be paid using any of the following Electronic Payment Instrument(s):

- a. Direct Deposit (Domestic Only);
- b. Wire Transfer (International Only);

6.8 Inspection and Acceptance

The Technical Authority is the Inspection Authority. All reports, deliverable items, documents, good and all services rendered under the Contract are subject to inspection by the Inspection Authority or representative. Should any report, document, good or service not be in accordance with the Statement of Requirement and to the satisfaction of the Inspection Authority, as submitted, the Inspection Authority will have the right to reject it or require its correction at the sole expense of the Contractor before recommending payment.

6.9 Invoicing Instructions

The Contractor must submit invoices in accordance with the section entitled "Invoice Submission" of the general conditions. Invoices cannot be submitted until all work identified in the invoice is completed.

Invoices **must** be sent to: nrc.invoice-facture.cnrc@nrc-cnrc.gc.ca

PLEASE QUOTE CONTRACT NO. [to be inserted at contract award] ON ALL DOCUMENTATION AND INVOICES.



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6.10 Certifications and Additional Information

6.10.1 Compliance

Unless specified otherwise, the continuous compliance with the certifications provided by the Contractor in its bid or precedent to contract award, and the ongoing cooperation in providing additional information are conditions of the Contract and failure to comply will constitute the Contractor in default. Certifications are subject to verification by Canada during the entire period of the Contract.

6.11 Applicable Laws

The Contract must be interpreted and governed, and the relations between the parties determined, by the laws in force in _____ (*insert the name of the province or territory as specified by the Bidder in its bid, if applicable*).

6.12 Priority of Documents

If there is a discrepancy between the wording of any documents that appear on the list, the wording of the document that first appears on the list has priority over the wording of any document that subsequently appears on the list.

- (a) the Articles of Agreement;
- (b) the supplemental general conditions:
 - 4001 (2015-04-01) Hardware Purchase, Lease and Maintenance
 - 4003 (2010-08-16), Licensed Software;
 - 4004 (2013-04-25), Maintenance and Support Services for Licensed Software;
- (c) 2010A (2022-12-01), General Conditions - Goods (Medium Complexity), apply to and form part of the Contract;
- (d) ANNEX A, Statement of Requirement;
- (e) ANNEX B, Basis of Payment; and;
- (f) the Contractor's bid dated _____ (*insert date of bid*) (*If the bid was clarified or amended, insert at the time of contract award: “, as clarified on _____” or “, as amended on _____” and insert date(s) of clarification(s) or amendment(s)*).

6.13 SACC Manual Clauses

- SACC Manual clause A9068C (2010-01-11) Government Site Regulations
- SACC Manual clause B1501C (2018-06-21) Electrical equipment
- SACC Manual clause B7500C (2006-06-16) Excess Goods
- SACC Manual clause G1005C (2016-01-28) Insurance – No Specific Requirements

6.14 Dispute Resolution

- (a) The parties agree to maintain open and honest communication about the Work throughout and after the performance of the contract.
- (b) The parties agree to consult and co-operate with each other in the furtherance of the contract and promptly notify the other party or parties and attempt to resolve problems or differences that may arise.
- (c) If the parties cannot resolve a dispute through consultation and cooperation, the parties agree to consult a neutral third party offering alternative dispute resolution services to attempt to address the dispute.
- (d) Options of alternative dispute resolution services can be found on Canada's Buy and Sell website under the heading "Dispute Resolution".

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6.15 Non-Permanent Resident (Foreign Company)

The Contractor shall ensure that non-permanent residents intending to work in Canada on a temporary basis in fulfilment of the Contract, who are neither Canadian citizens nor United States nationals, receive all appropriate documents and instructions relating to Canadian immigration requirements and secure all required employment authorizations prior to their arrival at the Canadian port of entry. The Contractor shall ensure that United States nationals having such intentions receive all appropriate documents and instructions in that regard prior to their arrival at the Canadian port of entry. Such documents may be obtained at the appropriate Canadian Embassy/Consulate in the Contractor's country. The Contractor shall be responsible for all costs incurred as a result of non-compliance with immigration requirements.

6.16 Government Smoking Policy

Where the performance of the work requires the presence of the Contractor's personnel on government premises, the Contractor shall ensure that its personnel shall comply with the policy of the Government of Canada which prohibits smoking on any government premises.

6.17 Access to Government Facilities/Equipment

Access to the facilities and equipment necessary to the performance of the work shall be provided through arrangements to be made by the Technical Authority named herein. There will be however, no day-to-day supervision of the Contractor's activities, nor control of the Contractor's hours of work by the Technical Authority.

The Contractor undertakes and agrees to comply with all Standing Orders and Regulations in force on the site where the work is to be performed, relating to the safety of persons on the site or the protection of property against loss or damage from any and all causes including fires.



ANNEX A - STATEMENT OF REQUIREMENT

1. Background

The National Research Council Canada (NRC) has a requirement for the supply and delivery one high-profile 100W proton exchange membrane fuel cell (PEMFC) test station.

The station evaluates the performance and durability for PEMFCs under different test conditions.

Quantity: 1

The High-profile 100 W PEMFC test station which includes the following options: a fully Integrated EIS (Gamry Interface 5000E), Cyclic and Linear Voltammetry, online water conductivity meter, and Consumables Kit.

2. Acronyms

NRC	National Research Council Canada
W	Watts
V	Volts
mV	Millivolts
A	Amperes
m	Meter
d	Day (24 hours)
PID	Proportional-Integral-Derivative
ISO	International Organization for Standard
R.H.	Relative Humidity
AC	Alternating Current
Hz	Hertz
MPa	Megapascal
PEMFC	Proton exchange membrane fuel cell
SLPM	Standard liter per minute
psi	Pounds per square inch
psig	Pounds per square inch gauge
EIS	Electrochemical impedance spectroscopy
lpm	Liter per minute
NLPM	Normal litre per minute
RAM	Random-access memory

3. Requirements

The Contractor must supply and deliver one 100 W PEMFC test station which meets the technical requirements including all the options listed herein in accordance with Annex A - Statement of Work.



Table 1: Technical Requirements for the high-profile 100 W PEMFC test station

The PEMFC test station must meet the following technical requirements:

1. Electronic Load Bank:
1a. The testing power of this unit must be a minimum 100 W or greater.
1b. The unit must provide minimum 120 A or greater current with the accuracy of 0.05% full scale or better.
1c. The maximum current of the unit must be available when the voltage is down to 0 volts.
1d. The unit must provide 20V voltage maximum.
1e. The voltage of the unit can reach -1.5 V minimum for degradation testing using current interrupt methods.
2. Cell Voltage Measurements:
2a. The quantity of cell voltage monitors must be minimum 1 or greater.
2b. The voltage measurement must be minimum range of -2V and +2V or wider range, and the accuracy of the voltage measurement must be in the range of -1 mV to +1 mV or better.
3. Gas Flow Control:
3a. The unit must have the software-controlled mass flow controllers that allows users to tune PID settings.
3b. The unit must have two mass flow controllers for hydrogen gas and nitrogen gas at anode. The flow rate of each mass flow controller must be able to operate in the range between 0.4 SLPM to 4 SLPM.
3c. The unit must have two mass flow controllers for air and nitrogen gas at cathode. The flow rate of each mass flow controller must be able to operate in the range between 0.1 SLPM to 10 SLPM.
3d. The unit must have the automatic N2 purge valves with rotameters for anode and cathode.
3e. The unit must have humidifiers for anode and cathode with automatic refill function and must be able to reach 85°C dew point temperature, or higher relative humidity.
3f. The unit must have automated humidifier bypass valves.
3g. The unit must have a hydrogen gas detector integrated with safety E-stop.
4. Temperature Control:
4a. The temperature instruments of the unit must have National Institute of Standards and Technology (NIST) traceable certificates.
4b. The unit must have two stack heaters and two inlet gas connections for software controlled setpoints.



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4c. The temperature control range for this unit must be from Ambient to 110°C or higher.
4d. The accuracy of the temperature control for this unit must be within the range of -1°C to +1°C, or better.
5. Back Pressure Control:
5a. The unit must have back pressure controls for both anode and cathode, with software-controlled setpoint.
5b. The pressure for the back pressure control must be operated in the range of 0 psig to 40 psig, or higher.
5c. The accuracy of the back pressure control must be within -0.5 psi to +0.5 psi.
6. Power supply Requirements:
6a. The electrical supply must be either 120V AC or 208V AC at 60Hz.
7. Certification:
7a. All electrical equipment supplied under the Contract must be certified or approved for use in accordance with the Canadian Electrical Code, Part 1, before delivery, by a certification organization accredited by the Standards Council of Canada.
8. Computer controlled software
8a. The unit must include computer-controlled software for test operation, data acquisition and analysis, and test sequence programming.
8b. The unit must include one computer with minimum specifications of Windows 10 operating system, 16 gigabyte RAM, 500 gigabyte hard drive, and monitor included.
8c. The computer and software must have 10 Hz or faster data acquisition rate for voltage and current.
8d. The computer and software of the unit must have the functions of automation and unattended operation, real-time graphing, and automated scripting and pre-written techniques for hydrogen cross over leak rate.
8e. The vendor must provide free software fixes and minor upgrades at no additional charge for at least 5 years.

4. Deliverables

- 4.1 The 100W PEMFC test stations must be received on or before **March 31, 2024** and in accordance with Annex A – Statement of Requirement. The Contractor must deliver the system to ground level loading dock.

Delivery Point:
National Research Council Canada
4250 Wesbrook Mall
Vancouver, BC V6T 1W5
Canada



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4.2 Manuals and documentation

The Contractor must deliver 1 complete set of Documentation, in English with the deliverables in both hard and soft copy. This documentation must include all publications pertaining to technical specifications, installation requirements and operating instructions. All electronic copies must be in Adobe PDF format delivered on USB drive, CD or DVD.

4.3 Installation

The Contractor must deliver, install, integrate, and configure all deliverables at the location specified in the Contract.

The Contractor must unpack, assemble, and install the deliverables at the site. If applicable, this includes but is not limited to the provision of required moving and installation resources, packing material, vehicles, cranes, personnel, and floor protection panels.

The Contractor must supply all associated materials required to effect complete installation, integration and configuration of the deliverables at the site. This must include but not be limited to such things as all the required power connectors, cables, and any other accessories required to install, integrate and configure the deliverables.

Upon successful completion and acceptance of the installation, integration and configuration of the deliverables, the Contractor must provide the Technical Authority with written notification that the deliverables are ready for testing.

The Contractor must maintain all work areas at the installation site(s) in a clean and tidy condition on completion of each day's work and on completion of acceptance, including the removal and disposal of all related packing material.

The Contractor must begin installation within 14 calendar days of delivery and must complete the installation within 5 calendar days from the installation start date. The Contractor must provide a 48-hour notice to NRC to schedule an on-site date by contacting the Technical Authority

4.4 Training

The Contractor must provide onsite training to the Client in both official languages: English (and French if required by the client) for the up to 10 End Users. Training must include operation and manipulation of the equipment. The training should include but not be limited to product functionality, product features and limitations. The Contractor must deliver the onsite training within 5 calendar days of installation.

4.5 Warranty

The warranty coverage of the unit must include a minimum 1-year manufacturer's warranty which includes all parts and labor, and shipping.

5. Security

The Contractor on site PERSONNEL must hold a valid Security Screening Level Clearance in accordance with the Security Requirements Checklist (SRCL).

6. Intellectual Property (IP) Ownership

- Not applicable
- Canada to Own Intellectual Property Rights in Foreground Information
- Contractor to Own Intellectual Property Rights in Foreground Information

7. Controlled Goods

- Not applicable
- Applicable

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8. Technical Authority Information (provided at time of contract)

Name: _____
Title/Section:
National Research Council Canada
Telephone: _____
Email address: _____

9. Constraints**9.1 Equipment Compliance**

- 9.1.1 All electrical equipment supplied under the Contract must be certified or approved for use in accordance with the Canadian Electrical Code, Part 1, before delivery, by a certification organization accredited by the Standards Council of Canada.
- 9.1.2 All electrical equipment must be delivered with label.

9.2 Quality Assurance and Verification of Certification

The Contractor is required to provide evidence of certification (a Certificate of Compliance or field evaluation report) for each electrical equipment item they are delivering under the Contract prior to delivery. This evidence must be from the appropriate certification organization accredited by the Standards Council of Canada (refer to [Recognized Canadian Electrical Product or Equipment Approval Marks | Standards Council of Canada - Conseil canadien des normes \(scc.ca\)](#) for more details).

In the event that any electrical equipment fails to meet the required certification standards, the Contractor may be provided with a reasonable period to rectify the non-compliance at the contractor's expense. If, within this specified period, the Contractor is unable to rectify the non-compliance, the equipment will be rejected upon delivery and returned back to the Contractor's address at their own expense. The electrical equipment certification must be fully complied with, as failure to do so may result in Canada terminating the contract due to default.

**ANNEX B - BASIS OF PAYMENT**

The Contractor will be paid fix lump sum amount for A. Firm Requirement in Canadian funds for the supply and delivery of the goods and services in accordance with Annex A – Statement of Requirement, Delivered at Place (DAP) at destination including all delivery charges. Customs duties are excluded and applicable taxes are extra.

Financial Evaluation : Bidders must provide a price for both A. Firm Requirements and B. Optional Requirements for Evaluation purposes only. Italic text will be removed at contract award.

A. Firm Requirement

Item	Description	Number of Units	Unit of Issue	Extended Fixed Price (CND)
1	- One 100W PEMFC test station, - Software, - Manuals, - Installation, - Training, and - Extended warranty.	1	Lump Sum A	\$ _____

B. Optional Requirement

Item	Description	Number of Units	Unit of Issue	Extended Fixed Price (CND)
1	A fully Integrated EIS (Gamry Interface 5000E)	1	each	\$ _____
2.	Cyclic and Linear Voltammetry	1	each	\$ _____
3.	Online water conductivity meter with measurement range to 100 µS/cm/, or higher.	1	each	\$ _____
4.	Consumables Kit including the parts used in the test station, such as thermocouples, filters, seals, fuses, insulation etc.	1	each	\$ _____
	Sum of all line Items		Total Sum B:	\$ _____

TOTAL EVALUATED PRICE is the Aggregate the Total of Sum A. Firm Requirement and Sum B. Optional Requirement

1.	<i>Price used in Evaluation: Aggregate Total (Aggregate of Sum A + Sum B)</i>		<i>Total Evaluated Price</i>	\$ _____
2.	<i>Applicable Taxes extra</i>		<i>HST 13%</i>	\$ _____

**ANNEX C – MANDATORY TECHNICAL CRITERIA**

Bidders must demonstrate that they meet each mandatory technical criteria by providing a response to each of the mandatory technical criteria. Bidders must provide evidence including, but not limited to, specifications, brochures, or documented data to show their file folders meets each of the mandatory technical criteria. Simply stating that all of the mandatory criteria are met is not sufficient. Failure to meet any of the mandatory criteria will render the bid non-responsive and it will be given no further consideration.

The high-profile 100W PEMFC test station must meet the following Mandatory Technical criteria:

M1. Electronic Load Bank:
M1a. The testing power of this unit must be a minimum 100 W or greater.
M1b. The unit must provide minimum 120 A or greater current with the accuracy of 0.05% full scale or better.
M1c. The maximum current of the unit must be available when the voltage is down to 0 volts.
M1d. The unit must provide 20V voltage maximum.
M1e. The voltage of the unit can reach -1.5 V minimum for degradation testing using current interrupt methods.
M2. Cell Voltage Measurements:
M2a. The quantity of cell voltage monitors must be minimum 1 or greater.
M2b. The voltage measurement must be minimum range of -2V and +2V or wider range, and the accuracy of the voltage measurement must be in the range of -1 mV to +1 mV or better.
M3. Gas Flow Control:
M3a. The unit must have the software-controlled mass flow controllers that allows users to tune PID settings.
M3b. The unit must have two mass flow controllers for hydrogen gas and nitrogen gas at anode. The flow rate of each mass flow controller must be able to operate in the range between 0.4 SLPM to 4 SLPM.
M3c. The unit must have two mass flow controllers for air and nitrogen gas at cathode. The flow rate of each mass flow controller must be able to operate in the range between 0.1 SLPM to 10 SLPM.
M3d. The unit must have the automatic N2 purge valves with rotameters for anode and cathode.
M3e. The unit must have humidifiers for anode and cathode with automatic refill function and must be able to reach 85°C dew point temperature, or higher relative humidity.
M3f. The unit must have automated humidifier bypass valves.



M3g. The unit must have a hydrogen gas detector integrated with safety E-stop.
M4. Temperature Control:
M4a. The temperature instruments of the unit must have National Institute of Standards and Technology (NIST) traceable certificates.
M4b. The unit must have two stack heaters and two inlet gas connections for software controlled setpoints.
M4c. The temperature control range for this unit must be from Ambient to 110°C or higher.
M4d. The accuracy of the temperature control for this unit must be within the range of -1°C to +1°C, or better.
M5. Back Pressure Control:
M5a. The unit must have back pressure controls for both anode and cathode, with software-controlled setpoint.
M5b. The pressure for the back pressure control must be operated in the range of 0 psig to 40 psig, or higher.
M5c. The accuracy of the back pressure control must be within -0.5 psi to +0.5 psi.
M6. Power supply Requirements:
M6a. The electrical supply must be either 120V AC or 208V AC at 60Hz.
M7. Certification:
M7a. The Bidder must submit a duly signed Compliance Certification - B1501C (2018-06-21) for Electrical Equipment in Part 5 with their bid. Bidder's that do not include this certification will be deemed non-compliant.
M8. Computer controlled software
M8a. The unit must include computer-controlled software for test operation, data acquisition and analysis, and test sequence programming.
M8b. The unit must include one computer with minimum specifications of Windows 10 operating system, 16 gigabyte RAM, 500 gigabyte hard drive, and monitor included.
M8c. The computer and software must have 10 Hz or faster data acquisition rate for voltage and current.
M8d. The computer and software of the unit must have the functions of automation and unattended operation, real-time graphing, and automated scripting and pre-written techniques for hydrogen cross over leak rate.
M8e. The vendor must provide free software updates for a minimum 5 years.