



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 Hydrogen/ Helium Booster Compressor	
Solicitation No. – N° de l'invitation 23-58087	Date October 17, 2023
Solicitation Closes – L'invitation prend fin at – à 02 :00 PM on – le November 14, 2023	Time Zone Fuseau horaire EST
F.O.B. - F.A.B. Plant-Usine: <input type="checkbox"/> Destination: <input type="checkbox"/> Other-Autre: <input type="checkbox"/>	
Address Inquiries to : - Adresser toutes questions à: Kacendra Dion	
Email address – l'adresse courriel : Kacendra.Dion@cnrc-nrc.gc.ca	
Destination – of Goods, Services, and Construction: Destination – des biens, services et construction :	
National Research Council Canada 4250 Wesbrook Mall Vancouver, BC V6T 1W5	

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

To provide Hydrogen/ Helium Booster Compressor in accordance with the detailed Statement of Requirement attached as Annex "A".

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 specified;
- (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.

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, **Solicitation Closing Date shown on front page**, to the following NRC email address:

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

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 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
Kacendra Dion - Kacendra.Dion@cnrc-nrc.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

If you have any concerns relating to the procurement process, please refer to the [Recourse Mechanisms](#) page on the Buyandsell.gc.ca website. Please note that there are strict deadlines for filing complaints with the Canadian International Trade Tribunal (CITT) or the [Office of the Procurement Ombudsman \(OPO\)](#). Suppliers should therefore act quickly when they want to challenge any aspect of the procurement process.



<https://buyandsell.gc.ca/for-businesses/selling-to-the-government-of-canada/bid-follow-up/bid-challenge-and-recourse-mechanisms>

<https://opo-boa.gc.ca/plaintesurvol-complaintoverview-eng.html>

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

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: Mandatory Technical Bid

In their technical bid, Bidders must explain and demonstrate how they meet the Mandatory Technical requirements at Annex B.

Section II: Financial Bid

Bidders must submit their financial bid in accordance with Annex C Basis of Payment.

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.

Section III: Certifications

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



PART 4 - EVALUATION PROCEDURES AND BASIS OF SELECTION

4.1 Evaluation Procedures

- (a) Bids will be assessed in accordance with the entire requirement of the bid solicitation including Mandatory technical Evaluation Criteria and Financial Evaluation.
- (b) An evaluation team composed of representatives of Canada will evaluate the bids.

4.1.1 Mandatory Technical Evaluation

Bids will be assessed in accordance with the Annex B Mandatory Technical Evaluation Criteria. Failure to meet any of the mandatory criteria will render the bid non-responsive and it will be given no further consideration.

4.1.2 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.

4.1.3 Financial Evaluation

The cost proposal must be a fixed price quotation and Delivered At Place, excluding taxes. The fixed price must include all the materials and services required to fulfil all aspects of the Statement of Requirement. Bidders should identify the currency on which the cost proposal is based.

4.2 Basis of Selection

Lowest evaluated price

A bid must comply with the requirements of the bid solicitation and meet all mandatory technical evaluation criteria to be declared responsive. The responsive bid with the lowest evaluated price will be recommended for award of a contract.

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

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 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 Precedent to Contract Award and Additional Information

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).

<u>SURNAME</u>	<u>GIVEN NAME(S)</u>	<u>TITLE</u>

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 a Hydrogen/ Helium Booster Compressor in accordance with the Requirement at Annex "A" and the Contractor's technical bid entitled _____, dated _____.

6.3 General Conditions

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



6.4 Term of Contract

6.4.1 Period of the Contract

The period of the Contract is from date of Contract to March 20, 2024 inclusive.

6.4.2 Delivery Date

All the deliverables must be received on or before March 20, 2024.

6.4.3 Delivery Points

Delivery of the requirement will be made to delivery point specified at Annex A of the Contract.

6.4.4 Delivery and Unloading

When making deliveries, sufficient personnel must be provided to permit unloading of any type of vehicle without the assistance of federal government personnel.

6.4.5 Shipping Terms and Instructions - Delivered At Place

Goods must be consigned and delivered to the destination specified in the Contract:

Incoterms® 2020 “DAP Delivered At Place”

National Research Council Canada

4250 Wesbrook Mall
Vancouver, BC
V6T 1W5

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.

6.4.6 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: Kacendra Dion
Title: Senior Contracting Officer
National Research Council Canada

Telephone: (438) 324-8125



E-mail address: Kacendra.Dion@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:

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

Name: _____

Title: _____

Address: _____

Telephone: ____ _

E-mail address: _____

6.6 Payment

6.6.1 Basis of Payment

The Contractor will be paid for costs reasonably and properly incurred in the performance of the work under this Contract in accordance with the following:

In consideration of the Contractor satisfactorily completing all of its obligations under the Contract, the Contractor will be paid a firm price, as specified in contract for a cost of \$ _____. 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.

6.6.2 Limitation of Expenditure

Unless otherwise authorized in writing by the National Research Council of Canada (NRC), NRC's financial liability to the Contractor under this Contract shall not exceed \$ _____. Customs duties are excluded and Applicable Taxes are extra. The Contractor must not perform any work that would cause



the total liability of NRC to exceed this limitation unless authorized in writing by the Contracting Authority through a contract amendment. All work shall be done to the full satisfaction of the Technical Authority named herein before any payment shall become due to the Contractor.

6.6.3 Method of Payment

SACC Manual clause **H1000C** (2008-05-12), 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.

6.6.4 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);

6.7 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.

6.8 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.

6.9 Certifications and Additional Information

6.9.1 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.



6.10 Applicable Laws

The Contract must be interpreted and governed, and the relations between the parties determined, by the laws in force in British Columbia.

6.11 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 general conditions 2010A (2022-12-01), - Goods (Medium Complexity), apply to and form part of the Contract _____
- (c) ANNEX A, Statement of Requirement;
- (d) the Contractor's bid dated _____

6.12 SACC Manual Clauses

SACC Manual clause [B1501C](#) (2018-06-21) Electrical equipment

SACC Manual clause [G1005C](#) (2016-01-28) Insurance – No Specific Requirements

6.13 Dispute Resolution

The Parties agree to make every reasonable effort, in good faith, to settle amicably all disputes or claims relating to the Contract, through negotiations between the Parties' representatives authorized to settle. If the Parties do not reach a settlement within 25 working days after the dispute was initially raised to the other party in writing, either Party may contact the Office of the Procurement Ombudsman (OPO) to request dispute resolution/mediation services. OPO may be contacted by e-mail at boa.opo@boa-opo.gc.ca, by telephone at 1-866-734-5169, or by web at www.opo-boa.gc.ca. For more information on OPO's services, please see the [Procurement Ombudsman Regulations](#) or visit the [OPO website](#).

SOR

ANNEX A

STATEMENT OF REQUIREMENT

1. Background

The National Research Council Canada (NRC) has a requirement for the supply and delivery of a hydrogen/helium booster compressor. The booster compressor will take a 200 psig inlet gas supply of either hydrogen or helium and boost the pressure at the outlet to 6000 psig.

2. Acronyms

NRC	National Research Council Canada
psig	Pounds per square inch gauge
psi	Pounds per square inch
CRN	Canadian Registration Number

3. Requirements

The Contractor must supply and deliver one hydrogen/helium booster compressor in accordance with the technical requirements at Table 1: Technical Requirements for the Hydrogen/Helium Booster Compressor.

Table 1: Technical Requirements for the Hydrogen/Helium Booster Compressor

The Hydrogen/Helium Booster Compressor must meet the following criteria:

1. Gas system:
1a. The unit must be designed to compress both hydrogen and helium dry gas.
1b. The gas inlet and outlet must have 5 micron filters.
1c. There must be an inlet pressure pilot cutoff set at 200 psi to automatically stop and restart the booster when the inlet pressure is below setpoint.
1d. The inlet pressure pilot cutoff must be adjustable with a minimum adjustable range of 150 to 250 psi.
1e. There must be an outlet pressure pilot cutoff valve set at 6000 psi to automatically stop and restart the booster when the outlet pressure exceeds the setpoint.
1f. The outlet pressure pilot cutoff must be adjustable with a minimum adjustable range of 5000 to 6200 psi.
1g. There must be outlet on/off and bleed needle valves
2. Drive system:
2a. This must be an air driven system
2b. Air pressure operating range must be at least: 20-100 PSIG
2c. The air control must include air filter, pressure regulator, pressure gauge and on/off valve.

3. Control Panel:	
3a. All control valves and gauges must be panel mounted.	
4. Certification:	
4a. The Bidder/Contractor agrees that the System delivered will meet:	
<ol style="list-style-type: none"> 1- The relevant sections of the CAN/BNQ 1784-000/2022, Canadian Hydrogen Installation Code (section 7.7 for compressor and compressor packages). 2- The compressor must be certified or field evaluated to applicable Canadian standards for hydrogen compressors (e.g., equivalent standard to the API STD 618, Reciprocating Compressors for Petroleum, Chemical, and Gas Industry Services). 3- If the compressor has an electrical system (e.g., monitoring system) it 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. 4- If a certification standard does not exist, or if the company does not manufacture large volumes, the system must be field evaluated to the SPE 1000. All certifications and field evaluations must be performed by a third-party certification agency accredited by the Standards Council of Canada (e.g., CSA, UL, ETL, etc.). 5- The compressor and high-pressure systems must comply with applicable sections of the pressure vessels code (CSA B51) and have respective CRN numbers 	
<p>X _____ (signature is required from bidder). NRC reserves the right to request to request proof of compliance at any point during the contracting process.</p>	
5. Hazards:	
5a. The compressor manufacturer must provide a letter of attestation and confirm they have <u>10 or more years of experience manufacturing hydrogen compressors</u> .	
5b. The manufacturer must provide evidence/ report that a Risk Assessment (e.g., HAZOP or FMEA) compliant with an applicable standard (from the list of standards below, or an equivalent standard) was completed.	
standard	Title
IEC 61882	Hazard and operability studies (HAZOP studies) - Application guide
CSA ISO 31000	Risk management – Guidelines (Adopted ISO 31000:2018, second edition, 2018-02)
IEC 60812	Failure modes and effects analysis (FMEA and FMECA)
IEC 61025	Fault tree analysis (FTA)
ISO 12100	Safety of machinery - General principles for design - Risk assessment and risk reduction
SAE J1739	Potential failure mode and effects analysis (FMEA) including design FMEA, supplemental FMEA-MSR, and process FMEA

IEC 60079-10-1:2020	Explosive atmospheres - Part 10-1: Classification of areas - Explosive gas atmospheres
5c. The vendor must provide the required documentation and training for a safe operation.	

4. Deliverables

4.1 One hydrogen/helium booster compressor must be received on or before **March 20, 2024** and in accordance with best commercial standards. The Contractor must deliver the system to ground level loading dock in satisfaction of the contract requirements to:

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

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 CD or DVD.

4.3 **Training**

The Contractor must provide training to the Client in English for the up to 5 End Users. Training must include operation, manipulation and maintenance of the equipment. The training should include but not be limited to product functionality, product features and limitations. The Contractor must deliver the training within 14 calendar days of installation.

4.4 **Warranty**

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

ANNEX B

MANDATORY EVALUATION 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 hydrogen/helium booster compressor must meet the following criteria:

	SUBSTANTIATION Please Cross Reference to Specific pages in your proposal [Completed by Bidder]	ASSESSMENT [Completed by NRC Evaluator]
M1. Gas system:		
M1a. The unit must designed to compress both hydrogen and helium dry gas.		
M1b. The gas inlet and outlet must have 5 micron filters.		
M1c. There must be an inlet pressure pilot cutoff set at 200 psi to automatically stop and restart the booster when the inlet pressure is below setpoint.		
M1d. The inlet pressure pilot cutoff must be adjustable with a minimum adjustable range of 150 to 300 psi.		
M1e. There must be an outlet pressure pilot cutoff valve set at 6000 psi to automatically stop and restart the booster when the outlet pressure exceeds the setpoint.		
M1f. The outlet pressure pilot cutoff must be adjustable with a minimum adjustable range of 5000 to 6200 psi.		
M1g. There must be outlet on/off and bleed needle valves		
M2. Drive system:		
M2a. This must be an air driven system		
M2b. Air pressure operating range must be at least: 20-100 PSIG		
M2c. The air control must include air filter, pressure regulator, pressure gauge and on/off valve.		
M3. Control Panel:		
M3a. All control valves and gauges must be panel mounted.		

M4. Certification:																		
<p>M4a. The Bidder/Contractor agrees that the System delivered will meet:</p> <ol style="list-style-type: none"> 1- The relevant sections of the CAN/BNQ 1784-000/2022, Canadian Hydrogen Installation Code (section 7.7 for compressor and compressor packages). 2- The compressor must be certified or field evaluated to applicable Canadian standards for hydrogen compressors (e.g., equivalent standard to the API STD 618, Reciprocating Compressors for Petroleum, Chemical, and Gas Industry Services). 3- If the compressor has an electrical system (e.g., monitoring system) it 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. 4- If a certification standard does not exist, or if the company does not manufacture large volumes, the system must be field evaluated to the SPE 1000. All certifications and field evaluations must be performed by a third-party certification agency accredited by the Standards Council of Canada (e.g., CSA, UL, ETL, etc.). 5- The compressor and high-pressure systems must comply with applicable sections of the pressure vessels code (CSA B51) and have respective CRN numbers <p>X _____ (signature is required from bidder). NRC reserves the right to request to request proof of compliance at any point during the contracting process.</p>																		
M5. Hazards:																		
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ANNEX C

BASIS OF PAYMENT

The Contractor will be paid fix lump sum amount 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.

Item	Description	Number of Units	Unit of Issue	Extended Fixed Price (CND)
1	Hydrogen/helium booster compressor, Manuals, Training, and 1 year warranty.	1	Lump sum	\$_____