



RETURN BIDS TO:
RETOURNER LES SOUMISSIONS À:

Bid Receiving - PWGSC / Réception des
soumissions - TPSGC
11 Laurier St. / 11, rue Laurier
Place du Portage, Phase III
Core 0B2 / Noyau 0B2
Gatineau, Québec K1A 0S5
Bid Fax: (819) 997-9776

REQUEST FOR PROPOSAL
DEMANDE DE PROPOSITION

**Proposal To: Public Works and Government
Services Canada**

We hereby offer to sell to Her Majesty the Queen 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 therefor.

**Proposition aux: Travaux Publics et Services
Gouvernementaux Canada**

Nous offrons par la présente de vendre à Sa Majesté la
Reine 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-annexée, au(x) prix indiqué(s).

Comments - Commentaires

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

Issuing Office - Bureau de distribution
Electrical & Electronics Products Division
L'Esplanade Laurier
East Tower, 4th floor,
Ottawa
Ontario
K1A 0S5

| | |
|---|---|
| Title - Sujet AC Load and Power Supply AC Load and Power Supply | |
| Solicitation No. - N° de l'invitation U6309-232073/A | Date 2022-05-20 |
| Client Reference No. - N° de référence du client U6309-232073 | |
| GETS Reference No. - N° de référence de SEAG PW-\$\$HN-329-81218 | |
| File No. - N° de dossier hn329.U6309-232073 | CCC No./N° CCC - FMS No./N° VME |
| Solicitation Closes - L'invitation prend fin at - à 02:00 PM Eastern Daylight Saving Time EDT on - le 2022-06-23 Heure Avancée de l'Est HAE | |
| F.O.B. - F.A.B. Plant-Usine: <input type="checkbox"/> Destination: <input checked="" type="checkbox"/> Other-Autre: <input type="checkbox"/> | |
| Address Enquiries to: - Adresser toutes questions à: Dumaresq, Steve | Buyer Id - Id de l'acheteur hn329 |
| Telephone No. - N° de téléphone (613) 296-1704 () | FAX No. - N° de FAX () - |
| Destination - of Goods, Services, and Construction: Destination - des biens, services et construction: Specified Herein Précisé dans les présentes | |

Instructions: See Herein

Instructions: Voir aux présentes

| | |
|--|--|
| Delivery Required - Livraison exigée See Herein – Voir ci-inclus | Delivery Offered - Livraison proposée |
| Vendor/Firm Name and Address Raison sociale et adresse du fournisseur/de l'entrepreneur | |
| Telephone No. - N° de téléphone Facsimile No. - N° de télécopieur | |
| 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 |

PART 1 - GENERAL INFORMATION

1.1 Security Requirements

There is no security requirement associated with the requirement.

1.2 Requirement

The contractor must provide the goods and/or services in accordance with the technical requirements and in the quantities stated herein.

1.2.1 Delivery Requirement

The systems are requested to be delivered by no later than 28 October 2022.

Delivery destination: 151 Tunney's Pasture, Ottawa, Ontario K1Y 1G9

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.

1.4 Canada Post Corporation's (CPC) Connect service

This bid solicitation allows bidders to use the Connect service provided by Canada Post Corporation to transmit their bid electronically. Bidders must refer to Part 2 entitled Bidder Instructions, and Part 3 entitled Bid Preparation Instructions, of the bid solicitation, for further information.

1.5 COVID-19 vaccination requirement (includes Annex E)

This requirement is subject to the COVID-19 Vaccination Policy for Supplier Personnel. Failure to complete and provide the COVID-19 Vaccination Requirement Certification as part of the bid will render the bid non-responsive.

PART 2 - BIDDER INSTRUCTIONS

2.1 Standard Instructions, Clauses and Conditions

All instructions, clauses and conditions identified in the bid solicitation by number, date and title are set out in the [Standard Acquisition Clauses and Conditions Manual](https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual) (<https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual>) issued by Public Works and Government Services Canada.

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.

The [2003](#) (2022-03-29) Standard Instructions - Goods or Services - Competitive Requirements, are incorporated by reference into and form part of the bid solicitation.

Subsection 5.4 of [2003](#), Standard Instructions - Goods or Services - Competitive Requirements, is amended as follows:

Delete: 60 days

Insert: 90 days

2.1.1 SACC Manual Clauses

| SACC Reference ID | Title | Date |
|------------------------|-----------------------|------------|
| B1000T | Condition of Material | 2014-06-26 |

2.2 Submission of Bids

In light of the current COVID-19 pandemic, it is recommended that all suppliers submit their bid using the Connect Service:

Given that many people are currently working from home and in an effort to reduce the spread of the Coronavirus disease (COVID-19) within communities, bidders are highly encouraged to transmit their bid electronically using the epost Connect service.

Bids must be submitted only to Public Works and Government Services Canada (PWGSC) Bid Receiving Unit by the date, time and place indicated in the bid solicitation.

Note: For bidders choosing to submit using epost Connect for bids closing at the Bid Receiving Unit in the National Capital Region (NCR) the email address is:

tpsgc.dgareceptiondessoumissions-abbidreceiving.pwgsc@tpsgc-pwgsc.gc.ca

Note: Bids will not be accepted if emailed directly to this email address. This email address is to be used to open a Connect conversation, as detailed in Standard Instructions 2003, or to send bids through a Connect message if the bidder is using its own licensing agreement for the Connect Service.

If you experience difficulties with the epost connect system, you may contact our Bids Receiving Unit at the following address for assistance:

tpsgc.dgareceptiondessoumissions-abbidreceiving.pwgsc@tpsgc-pwgsc.gc.ca

Do not send any bid or offer directly to that email address.

Bids must be submitted only to the Public Works and Government Services Canada (PWGSC) Bid Receiving Unit by the date and time indicated on page 1 of the bid solicitation:

2.3 Enquiries - Bid Solicitation

All enquiries must be submitted in writing to the Contracting Authority no later than 10 calendar days before the bid closing date. Enquiries received after that time may not be answered.

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.

2.4 Applicable Laws

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

2.5 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

- If the Bidder chooses to submit its bid electronically, Canada requests that the Bidder submits its bid in accordance with section 08 of the 2003 standard instructions. The epost Connect system has a limit of 1GB per single message posted and a limit of 20GB per conversation.

The bid must be gathered per section and separated as follows:

Section I: Technical Bid (includes annexes A and B)

Section II: Financial Bid (includes annexes C and F)

Section III: Certifications and Additional Information (includes Part 5 and annexes D and E)

- If the Bidder chooses to submit its bid in hard copies, Canada requests that the Bidder submits its bid in separately bound sections as follows:

Section I: Technical Bid (2 hard copies and 2 soft copies on USB key);

Section II: Financial Bid (1 hard copy and 1 soft copy on USB key);

Section III: Certifications and Additional Information (1 hard copy and 1 soft copy on USB key);

If there is a discrepancy between the wording of the soft copy on electronic media and the hard copy, the wording of the hard copy will have priority over the wording of the soft copy.

Prices must appear in the financial bid only. No prices must be indicated in any other section of the bid

Canada requests that Bidders follow the format instructions described below in the preparation of their bid:

- (a) use 8.5 x 11 inch (216 mm x 279 mm) paper;
- (b) use a numbering system that corresponds to the bid solicitation.

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** (<http://www.tpsgc-pwgsc.gc.ca/ecologisation-greening/achats-procurement/politique-policyeng.html>). To assist Canada in reaching its objectives, Bidders should:

- 1) use 8.5 x 11 inch (216 mm x 279 mm) paper containing fibre certified as originating from a sustainably-managed forest and containing minimum 30% recycled content; and
- 2) use an environmentally-preferable format including black and white printing instead of colour printing, printing double sided/duplex, using staples or clips instead of cerlox, duotangs or binders.

Section I: Technical Bid

In their technical bid, Bidders should demonstrate their understanding of the requirements contained in the bid solicitation and explain how they will meet these requirements. Bidders should demonstrate their capability and describe their approach in a thorough, concise and clear manner for carrying out the work.

The technical bid should address clearly and in sufficient depth the points that are subject to the evaluation criteria against which the bid will be evaluated. Simply repeating the statement contained in the bid solicitation is not sufficient. In order to facilitate the evaluation of the bid, Canada requests that Bidders address and present topics in the order of the evaluation criteria under the same headings. To avoid duplication, Bidders may refer to different sections of their bids by identifying the specific paragraph and page number where the subject topic has already been addressed.

Section II: Financial Bid

Bidders must submit their financial bid in accordance with all pricing requirements presented herein.

3.1.1 Exchange Rate Fluctuation Risk Mitigation

1. The Bidder may request Canada to assume the risks and benefits of exchange rate fluctuations. If the Bidder claims for an exchange rate adjustment, this request must be clearly indicated in the bid at time of bidding. The Bidder must submit form PWGSC-TPSGC 450, Claim for Exchange Rate Adjustments with its bid, indicating the Foreign Currency Component (FCC) in Canadian dollars for each line item for which an exchange rate adjustment is required.
2. The FCC is defined as the portion of the price or rate that will be directly affected by exchange rate fluctuations. The FCC should include all related taxes, duties and other costs paid by the Bidder and which are to be included in the adjustment amount.
3. The total price paid by Canada on each invoice will be adjusted at the time of payment, based on the FCC and the exchange rate fluctuation provision in the contract. The exchange rate adjustment will only be applied where the exchange rate fluctuation is greater than 2% (increase or decrease).
4. At time of bidding, the Bidder must complete columns (1) to (4) on form PWGSC-TPSGC 450, for each line item where they want to invoke the exchange rate fluctuation provision. Where bids are evaluated in Canadian dollars, the dollar values provided in column (3) should also be in Canadian dollars, so that the adjustment amount is in the same currency as the payment.
5. Alternate rates or calculations proposed by the Bidder will not be accepted for the purposes of this exchange rate fluctuation provision.

Section III: Certifications and Additional Information

3.1.2 Certifications

Bidders must submit the certifications and additional information required under Part 5, including annex D and E.

Solicitation No. - N° de l'invitation
U6309-232073/A
Client Ref. No. - N° de réf. du client
U6309-232073/A

Amd. No. - N° de la modif.
File No. - N° du dossier

Buyer ID - Id de l'acheteur
hn329
CCC No./N° CCC - FMS No./N° VME

3.1.3 Additional Information

Contractor's Representative

Name and telephone number of the person responsible for:

General enquiries

Name: _____

Telephone: _____

Facsimile: _____

E-mail: _____

Delivery follow-up

Name: _____

Telephone: _____

Facsimile: _____

Facsimile: _____

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 the technical and financial evaluation criteria.
- (b) An evaluation team composed of representatives of Canada will evaluate the bids.

In their bid, Bidders should demonstrate their understanding of the requirements contained in the bid solicitation and explain how they will meet these requirements. Bidders should demonstrate their capability and describe their approach in a thorough, concise and clear manner for carrying out the work.

4.1.1 Technical Evaluation

The technical bid should be structured in the same format as presented at Annexes A and B, through which the bidder will clearly explain and demonstrate how they propose to meet the requirements and how they will carry out the Work.

Simply repeating the statement contained in the bid solicitation is not sufficient. Simply stating a compliancy to a criteria is not sufficient. Bidders must present a clearly organized proposal that includes all necessary technical and descriptive information, in order to clearly demonstrate their compliancy to all items presented in the Statement of Work and evaluation criteria. Responses will be evaluated on a simple, stringent pass/fail basis. Proposals not meeting each requirement will be considered non-responsive (non-compliant) and given no further consideration.

In order to facilitate the evaluation of the Bid, Canada requests:

- Bidder to include a Table that addresses on a paragraph by paragraph basis the Statement of Work (SOW) by indicating the paragraph and page number where the subject topic is addressed.
- Bidders to address and present topics in the order of the Statement of Work (SOW) under the same headings.
- Bidders to avoid duplication by identifying the specific paragraph and page number where the subject topic has already been addressed in the Bid.

4.1.1.1 Mandatory Technical Criteria

- Technical compliance to the statement of requirement at Annex A (includes A1 and A2).

4.1.1.2 Point Rated Technical Criteria

- Technical compliance to the point rated criteria at Annex B (includes B1 and B2).

The technical bid should be structured in the same format as presented at Annex B (includes B1 and B2), through which the bidder will clearly explain and demonstrate how they meet each criteria to obtain points and where in the proposal the replies can be found.

Total Technical Evaluation Score

For each bidder having successfully passed the mandatory evaluation stage, the total technical evaluation score will be as follows:

Total Technical Evaluation Score = Sum of points obtained at annex B (B1+B2)

4.1.2 Financial Evaluation

Total Evaluated Bid Price = Sum of line items presented at Annex C.

- a) Compliance to all pricing requirements presented herein;
- b) Compliance to Annex C (Pricing Schedule).

4.1.2.1 Pricing Basis

The bidder must quote firm prices on items at annex C.

Firm prices in Canadian dollars, DDP Delivered Duty Paid (destination), with all applicable Custom duties and Excise taxes included. Freight charges to destination extra. Applicable travel and living expenses included. Goods and Services Tax (GST) and/or the Harmonized Sales Tax (HST) not included.

If Bidder is requesting the exchange rate fluctuation protection, a completed Claim for Exchange Rate Adjustments form (PWGSC-TPSGC 450) must be included with submitted bid.

4.2. Basis of Selection

A bid must comply with the requirements of the bid solicitation and meet all evaluation criteria to be declared responsive.

Highest Overall Combined Rating of Technical Merit (60%) and Price (40%)

1. To be declared responsive, a bid must:
 - a) comply with all the requirements of the bid solicitation; and
 - b) meet all mandatory criteria.
2. Bids not meeting (a) and (b) will be declared non-responsive.
3. The selection will be based on the highest responsive combined rating of technical merit and price. The ratio will be 60% for the technical merit and 40% for the price.
4. To establish the technical merit score, the overall technical score for each responsive bid will be determined as follows: total number of points obtained / maximum number of points available multiplied by the ratio of 60%.
5. To establish the pricing score, each responsive bid will be prorated against the lowest evaluated price and the ratio of 40%.
6. For each responsive bid, the technical merit score and the pricing score will be added to determine its combined rating.
7. Neither the responsive bid obtaining the highest technical score nor the one with the lowest evaluated price will necessarily be accepted. The responsive bid with the highest combined rating of technical merit and price will be recommended for award of a contract.
8. In the event that two or more Bidders achieve the same total bid score, calculated to two-decimal places, the Bidder with the highest Technical Score will be recommended for award of a contract.

Solicitation No. - N° de l'invitation
U6309-232073/A
Client Ref. No. - N° de réf. du client
U6309-232073/A

Amd. No. - N° de la modif.
File No. - N° du dossier

Buyer ID - Id de l'acheteur
hn329
CCC No./N° CCC - FMS No./N° VME

Example: The combined ranking will be calculated as shown.
In this example bidder 2 has the highest combined rating.

| Highest Overall Combined Rating Technical Merit (60%) and Price (40%) | | | |
|---|------------------------------|------------------------------------|--------------|
| | Bidder 1 | Bidder 2 | Bidder 3 |
| Technical Points (Maximum 100) | 75 | 90 | 70 |
| Total Bid Price | 60,000 | 55,000 | 50,000 |
| | | | |
| Result | Technical Points | Price Points | Total Points |
| Bidder 1 | $(75/100) \times 60 = 45.00$ | $*50,000/60,000 \times 40 = 33.33$ | 78.33 |
| Bidder 2 | $(90/100) \times 60 = 54.00$ | $*50,000/55,000 \times 40 = 36.36$ | 90.36 |
| Bidder 3 | $(70/100) \times 60 = 42.00$ | $*50,000/50,000 \times 40 = 40.00$ | 82.00 |

*Represents the lowest priced responsive proposal.

PART 5 – CERTIFICATIONS AND ADDITIONAL INFORMATION (includes annexes D and E)

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 COVID-19 vaccination requirement certification (Annex E)

In accordance with the COVID-19 Vaccination Policy for Supplier Personnel, all Bidders must provide with their bid, the COVID-19 Vaccination Requirement Certification attached to this bid solicitation, to be given further consideration in this procurement process. This Certification incorporated into the bid solicitation on its closing date is incorporated into, and forms a binding part of any resulting Contract.

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.

5.2.2 General Environmental Criteria Certification

The Bidder must select and complete one of the following two certification statements.

- a) The Bidder certifies that the Bidder is registered or meets ISO 14001.

Bidders' Authorized Representative Signature

Date

or

- b) The Bidder certifies that the Bidder meets and will continue to meet throughout the duration of the contract, a minimum of four (4) out of six (6) criteria identified in the table below.

| Green Practices within the Bidders' organization | Insert a checkmark for each criterion that is met |
|--|---|
| Promotes a paperless environment through directives, procedures and/or programs | |
| All documents are printed double sided and in black and white for day to day business activity unless otherwise specified by your client | |
| Paper used for day to day business activity has a minimum of 30% recycled content and has a sustainable forestry management certification | |
| Utilizes environmentally preferable inks and purchase remanufactured ink cartridges or ink cartridges that can be returned to the manufacturer for reuse and recycling for day to day business activity. | |
| Recycling bins for paper, newsprint, plastic and aluminum containers available and emptied regularly in accordance with local recycling program. | |
| A minimum of 50% of office equipment has an energy efficient certification. | |

Bidders' Authorized Representative Signature

Date

5.2.3 Federal Contractors Program for Employment Equity - Bid Certification (Annex D)

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](https://www.canada.ca/en/employment-social-development/programs/employment-equity/federal-contractor-program.html#) website (<https://www.canada.ca/en/employment-social-development/programs/employment-equity/federal-contractor-program.html#>).

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.

Canada will also have the right to terminate the Contract for default if a Contractor, or any member of the Contractor if the Contractor is a Joint Venture, appears on the "[FCP Limited Eligibility to Bid](#)" list during the period of the Contract.

Solicitation No. - N° de l'invitation
U6309-232073/A
Client Ref. No. - N° de réf. du client
U6309-232073/A

Amd. No. - N° de la modif.
File No. - N° du dossier

Buyer ID - Id de l'acheteur
hn329
CCC No./N° CCC - FMS No./N° VME

The Bidder must provide the Contracting Authority with a completed annex titled Federal Contractors Program for Employment Equity - Certification, before contract award. If the Bidder is a Joint Venture, the Bidder must provide the Contracting Authority with a completed annex Federal Contractors Program for Employment Equity - Certification, for each member of the Joint Venture.

PART 6 - RESULTING CONTRACT CLAUSES

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

1. Security Requirements

There is no security requirement applicable to the Contract.

2. Requirement

The contractor must provide the goods and services in accordance with the technical requirements stated herein.

2.1 Delivery destination

Delivery of the requirement will be made to delivery point specified herein:
151 Tunney's Pasture, Ottawa, Ontario K1Y 1G9

3. Standard Clauses and Conditions

All clauses and conditions identified in the Contract by number, date and title are set out in the [Standard Acquisition Clauses and Conditions Manual](https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual) (<https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual>) issued by Public Works and Government Services Canada.

3.1 General Conditions

[2030 \(2022-05-12\)](#), General Conditions - Higher Complexity - Goods, apply to and form part of the Contract.

3.2 Supplemental General Conditions

4001 (2015-04-01) Hardware Purchase, lease and Maintenance;
4003 (2010-08-16) Licensed Software;

4013 (2021-11-29) Compliance with on-site measures, standing orders, policies, and rules.
The Contractor must comply and ensure that its employees and subcontractors comply with all security measures, standing orders, policies or other rules in force at the site where the Work is performed.

3.3 SACC Manual Clauses

B1501C (2018-06-21) Electrical Equipment
B7500C (2006-06-16) Excess Goods
A9068C (2010-01-11) Site Regulations
A2000C (2006-06-16) Foreign Nationals (Canadian Contractor)
A2001C (2006-06-16) Foreign Nationals (Foreign Contractor)

4. Term of Contract

4.1 Period of contract

The period of the Contract is from award to 28 October 2022.

4.2 Delivery

The systems are requested to be delivered by no later than 28 October 2022.

5. Authorities

5.1 Contracting Authority

Steve Dumaresq
Public Works and Government Services Canada - Acquisitions Branch
Logistics, Electrical, Fuel and Transportation Directorate - "HN" Division
L'Esplanade Laurier (LEL), 140 O'Connor Street, East Tower
Telephone: (613) 296-1704
E-mail address: steve.dumaresq@pwgsc-tpsgc.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.

5.2 Technical Authority

Name: _____
Telephone: _____
Facsimile: _____
E-mail: _____

The Technical Authority named above 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.

5.3 Contractor's Representative

General enquiries

Name: _____
Telephone: _____
Facsimile: _____
E-mail: _____

Delivery follow-up

Name: _____
Telephone: _____
Facsimile: _____
Facsimile: _____

6. Payment

6.1 Basis of Payment

In consideration of the Contractor satisfactorily completing all of its obligations under the Contract, the Contractor will be paid the firm prices as specified in the contract for a cost of \$ ____ (insert the amount at contract award).

Firm prices in Canadian dollars, DDP Delivered Duty Paid (destination), with all applicable Custom duties and Excise taxes included. Freight charges to destination extra. Applicable travel and living expenses included. Goods and Services Tax (GST) and/or the Harmonized Sales Tax (HST) extra.

Claim for Exchange Rate Adjustments form (PWGSC-TPSGC 450) (*attached if applicable*).

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.

6.2 Single Payment

SACC Manual clause [H1000C](#) (2008-05-12) Single Payment

6.3 Invoicing Instructions

1. 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.
2. Invoices must be distributed as follows:
 - (a) The original and one copy must be forwarded to the address shown on page 1 of the Contract for certification and payment.
 - (b) One copy must be emailed to the Contracting Authority identified under the section entitled "Authorities" of the Contract.

6.4 Exchange rate fluctuation adjustment (*deleted if not applicable*)

1. The foreign currency component (FCC) is defined as the portion of the price or rate that will be directly affected by exchange rate fluctuation. The FCC should include all related taxes, duties and other costs paid by the Bidder and which are to be included in the adjustment amount.
2. For each line item where a FCC is identified, Canada assumes the risks and benefits for exchange rate fluctuation, as shown in the Basis of Payment. For such items, the exchange rate fluctuation amount is determined in accordance with the provision of this clause.
3. The total price paid by Canada on each invoice will be adjusted at the time of payment. The exchange rate adjustment amount will be calculated in accordance with the following formula:
$$\text{Exchange rate adjustment} = \text{FCC} \times \text{Qty} \times (i_1 - i_0) / i_0$$

where formula variables correspond to:

 - o **FCC:** Foreign currency component (per unit)
 - o **Qty:** quantity of units
 - o **i_0 :** Initial exchange rate (CAN\$ per unit of foreign currency [for example US\$1]).
The initial exchange rate is set as the Bank of Canada rate on the solicitation closing date. The Bank of Canada publishes its rates each business day by 16:30 Eastern Time.
 - o **i_1 :** Exchange rate for adjustments (ERA) (CAN\$ per unit of foreign currency [for example US\$1]). The Bank of Canada publishes its rates each business day by 16:30 Eastern Time.
 - a. The ERA for goods will be the Bank of Canada rate on the date the goods were delivered.

- b. The ERA for services will be the Bank of Canada rate on the last business day of the month for which the services were performed.
 - c. The ERA for advance payments will be the Bank of Canada rate on the last business day prior to the payment. The last published business day rate will be used for non-business days.
- 4. The Contractor must indicate the total exchange rate adjustment amounts (whether they are upward, downward or present no change) as a separate item on each invoice or claim for payment submitted under the Contract. Where an adjustment applies, the Contractor must submit with their invoice form [PWGSC-TPSGC 450](#), Claim for Exchange Rate Adjustments.
- 5. The exchange rate adjustment will only impact the payment to be made by Canada where the exchange rate fluctuation is greater than 2% (increase or decrease), calculated in accordance with column 8 of form [PWGSC-TPSGC 450](#) (that is $[i_1 - i_0] / i_0$).
- 6. Canada reserves the right to audit any revision to costs and prices under this clause.

7. Certifications

7.1 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.

7.2 Federal Contractors Program for Employment Equity - Default by the Contractor

The Contractor understands and agrees that, when an Agreement to Implement Employment Equity (AIEE) exists between the Contractor and Employment and Social Development Canada (ESDC)-Labour, the AIEE must remain valid during the entire period of the Contract. If the AIEE becomes invalid, the name of the Contractor will be added to the "[FCP Limited Eligibility to Bid](#)" list. The imposition of such a sanction by ESDC will constitute the Contractor in default as per the terms of the Contract.

8. Applicable Laws

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

9. 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:
 - (i) 4001 (2015-04-01) Hardware Purchase, lease and Maintenance;
 - (ii) 4003 (2010-08-16) Licensed Software;
- (c) the general conditions [2030 \(2022-05-12\)](#), General Conditions - Higher Complexity - Goods;
- (d) Annex __, Statement of requirement;
- (e) Annex __, Pricing Schedule;
- (f) the Contractor's bid dated __.

10. Insurance - No Specific Requirement

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

11. SACC Manual Clauses (Delivery)

| | | |
|--------|--------------------------|------------|
| D2000C | Marking | 2007-11-30 |
| D2001C | Labelling | 2007-11-30 |
| D2025C | Wood Packaging Materials | 2017-08-17 |
| D9002C | Incomplete Assemblies | 2007-11-30 |

12. Shipping Instructions - Delivery at Destination

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

Delivered Duty Paid (DDP) (destination) Incoterms 2000 for shipments from a commercial contractor.

13. 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](#)".

| | |
|---------|---|
| ANNEX A | REQUIREMENT and MANDATORY EVALUATION CRITERIA |
| ANNEX B | POINT RATED TECHNICAL EVALUATION CRITERIA |
| ANNEX C | FINANCIAL PROPOSAL (PRICING SCHEDULE) |
| ANNEX D | FEDERAL CONTRACTORS PROGRAM FOR EMPLOYMENT EQUITY CERTIFICATION (PART OF PART 5) |
| ANNEX E | COVID-19 VACCINATION REQUIREMENT CERTIFICATION |
| ANNEX F | CLAIM FOR EXCHANGE RATE ADJUSTMENTS FORM (PWGSC-TPSGC 450) |

ANNEX A
REQUIREMENT and MANDATORY CRITERIA
PROGRAMMABLE AC LOAD and AC POWER SUPPLY

ANNEX A1 PROGRAMMABLE AC LOAD
REQUIREMENT and MANDATORY CRITERIA

Measurement Canada (MC) needs to acquire one programmable alternative current (AC) load, which must meet all of the mandatory technical requirements as specified below. The contractor must provide all equipment, software, operator manual, peripherals, accessories, cables and components necessary for the equipment to work in accordance with the Mandatory Technical Requirements specified herein. This must include all of the following:

- (a) A programmable alternative current (AC) load;
- (b) All equipment, software, cables, components, peripherals and accessories for operation;
- (c) On-site start-up and check-out;
- (d) An operators manual; and
- (e) A one-year Warranty including all Maintenance and Support Services.

All as detailed herein.

On-site start-up and check-out (Installation/Testing):

The Contractor must send personnel to the site to connect the equipment to the power service, check it, and ensure that it is working as required. Measurement Canada (MC) will coordinate with the Contractor the schedule for "on-site start-up and check-out". The Contractor will not be responsible for installation of the power service.

Delivery destination:

Measurement Canada (MC), 151 Tunney's Pasture, Ottawa, Ontario K1Y 1G9

1. BACKGROUND

Measurement Canada (MC) needs to acquire a programmable alternative current (AC) load that will be used to apply specified loading to the electric vehicle supply equipment (EVSE) during type approval testing. The programmable AC load will allow exposing the EVSE, in laboratory environment, to variate current loading during type approval testing.

The required equipment will be used to test all AC EVSE level 1 and level 2.

2. TECHNICAL REQUIREMENT

- 2.1. The programmable AC load must have kilo watt (kW) output power capacity of 24kW or higher.
- 2.2. The programmable AC load must have kilo volt-ampere (kVA) output power capacity of 48 kVA or higher.
- 2.3. The programmable AC load must be deigned to operate with an efficiency greater than 85%.
- 2.4. The programmable AC load must operate at least at rated sinusoidal fundamental frequency of 60 Hz.
- 2.5. The programmable AC load must handle loading voltage over a minimum range from 100V to 300V RMS (Root Mean Squared).
- 2.6. The programmable AC load must allow drawing controlled current set in the range from 1A to 80A RMS as a minimum.

-
- 2.7. The waveform of the current drawn by the programmable AC load must have a total harmonic distortion percentage (THD %) less than 1% at 60 Hz.
 - 2.8. The programmable AC load must have a communication port through which it can communicate with an external computer.
 - 2.9. The programmable AC load must be able to be operated using a computer connected to the communication port.
 - 2.10. The programmable AC load must support at least the standard NI VISA I/O (National Instrument Virtual Instrument Software Architecture Input and Output) or the standard IEEE 488 (Institute of Electrical and Electronics Engineers) commonly called GPIB (General Purpose Interface Bus).
 - 2.11. The programmable AC load must allow programming and consuming controlled RMS current over a minimum range of 1A to 80 A RMS.
 - 2.12. The programmable AC load must allow programming and consuming current having a waveform shifted from input voltage waveform by any angle between 0° and 359°, with a minimum resolution of 1°.
 - 2.13. The programmable AC load must measure and display the power consumed by the load in Watt (W) or kilo watt (kW) units.
 - 2.14. The programmable AC load must measure and display the energy consumed by the load in Watthour (Wh) or kilo watthour (kWh) units.
 - 2.15. The programmable AC load must allow programming and drawing current with harmonics content as follows:
 - 2.15.1. 60 Hz fundamental component and harmonic components of order from 2 to 40 or higher.
 - 2.15.2. Amplitude of the harmonic components adjustable from 0 to 5% or higher, of the amplitude of the fundamental.
 - 2.15.3. Resolution of the harmonic amplitude of two (2) decimal points or more.
 - 2.15.4. Phase angle of the harmonic adjustable from 0° to 359°, with a minimum resolution of 1°.
 - 2.16. The programmable AC load must be designed to operate in the range of temperature from a minimum of 18°C to 28°C or higher.
 - 2.17. The programmable AC load must have a maximum weight of 500 kilograms (kg).
 - 2.18. The maximum dimensions of the programmable AC load must be 2 meters (m) high x 1.2 meter wide x 1.2 meter deep.
 - 2.19. The programmable AC load must be on wheels or have other means to allow moving it by pushing.
 - 2.20. The programmable AC load must have the following minimum safety requirements:
 - 2.20.1. CSA or UL or equivalent CE certified.
 - 2.20.2. Facility to chassis isolation of 1000V or higher.
 - 2.20.3. Facility to output internal isolation of 2000V or higher.
 - 2.21. The programmable AC load must have input supply voltage of 277V or 480V.

Part 2.1 - MANDATORY TECHNICAL EVALUATION CRITERIA

Bidders are requested to cross reference the mandatory technical criteria in a concise format by using page, paragraph(s) & sub-paragraphs as applicable to their supporting technical documentation. The programmable AC load must meet all of the following mandatory technical evaluation criteria. Bidders must demonstrate their compliance with all of the following mandatory evaluation technical criteria by providing substantial information describing completely and in detail how each requirement is met or addressed. Simply repeating the statement contained in the solicitation is not sufficient:

| Criteria | Where in the bid is the technical documentation located to fully demonstrate compliance to criteria |
|--|---|
| 1. The programmable AC load must have kilo watt (kW) output power capacity of 24kW or higher. | |
| 2. The programmable AC load must have kilo volt-ampere (kVA) output power capacity of 48 kVA or higher. | |
| 3. The programmable AC load must be deigned to operate with an efficiency greater than 85%. | |
| 4. The programmable AC load must operate at least at rated sinusoidal fundamental frequency of 60 Hz. | |
| 5. The programmable AC load must handle loading voltage over a minimum range from 100V to 300V RMS (Root Mean Squared). | |
| 6. The programmable AC load must allow drawing controlled current set in the range from 1A to 80A RMS as a minimum. | |
| 7. The waveform of the current drawn by the programmable AC load must have a total harmonic distortion percentage (THD %) less than 1% at 60 Hz. | |
| 8. The programmable AC load must have a communication port through which it can communicate with an external computer. | |
| 9. The programmable AC load must be able to be operated using a computer connected to the communication port. | |
| 10. The programmable AC load must support at least the standard NI VISA I/O (National Instrument Virtual Instrument Software Architecture Input and Output) or the standard IEEE 488 (Institute of Electrical and Electronics Engineers) commonly called GPIB (General Purpose Interface Bus). | |

| | |
|--|--|
| 11. The programmable AC load must allow programming and outputting controlled loading RMS current over a minimum range of 1A to 80 A RMS. | |
| 12. The programmable AC load must allow programming and consuming current having a waveform shifted from input voltage waveform by any angle between 0° and 359°, with a minimum resolution of 1°. | |
| 13. The programmable AC load must measure the power consumed by the load in Watt (W) or kilo watt (kW) units | |
| 14. The programmable AC load must measure and display the energy consumed by the load in Watthour (Wh) or kilo watthour (kWh) units. | |
| 15. The programmable AC load must allow programming and outputting current waveforms with harmonics content as follows: | |
| a) 60 Hz fundamental component and harmonic components of order from 2 to 40 or higher. | |
| b) Amplitude of the harmonic components adjustable from 0 to 5% ,or higher, of the amplitude of the fundamental. | |
| c) Resolution of the harmonic amplitude of two (2) decimal points or more. | |
| d) Phase angle of the harmonic adjustable from 0° to 359°, with a minimum resolution of 1°. | |
| 16. The programmable AC load must be deigned to operate in the range of temperature from a minimum of 18°C to 28°C or higher. | |
| 17. The programmable AC load must have a maximum weight of 500 kilograms (kg). | |
| 18. The maximum dimensions of the programmable AC load must be 2 meters (m) high x 1.2 meter wide x 1.2 meter deep. | |
| 19. The programmable AC load must be on wheels or have other means to allow moving it by pushing. | |

| | |
|---|--|
| 20. The programmable AC load must have the following minimum safety requirements: | |
| a) Facility to chassis isolation of 1000V or higher. | |
| b) Facility to output internal isolation of 2000V or higher. | |
| 21. The programmable AC load must have input supply voltage of 277V or 480V. | |

ANNEX A2 AC POWER SUPPLY REQUIREMENT and MANDATORY EVALUATION CRITERIA

Measurement Canada (MC) needs to acquire a programmable alternative current (AC) power supply, which must meet all of the mandatory technical requirements as specified below. The contractor must provide all equipment, software, operator manual, peripherals, accessories, cables and components necessary for the equipment to work in accordance with the Mandatory Technical Requirements specified herein. This must include all of the following:

- (f) A programmable alternative current (AC) power supply;
- (g) All equipment, software, cables, components, peripherals and accessories for operation;
- (h) On-site start-up and check-out (Installation/Testing);
- (i) An operators manual; and
- (j) A one-year Warranty including all Maintenance and Support Services.

All as detailed herein.

On-site start-up and check-out (Installation/Testing):

The Contractor must send personnel to the site to connect the equipment to the power service, check it, and ensure that it is working as required. Measurement Canada (MC) will coordinate with the Contractor the schedule for "on-site start-up and check-out". The Contractor will not be responsible for installation of the power service.

Delivery destination:

Measurement Canada (MC), 151 Tunney's Pasture, Ottawa, Ontario K1Y 1G9

1. BACKGROUND

Measurement Canada (MC) needs to acquire a programmable alternative current (AC) power supply that will be used to feed electric vehicle supply equipment (EVSE) during type approval testing. The programmable AC power supply will allow to feed EVSE while the later is charging an AC load. The power supply will also allow exposing the EVSE, in laboratory environment, to some power disturbance conditions, that can be present on the power grid where the EVSE is connected to.

The required equipment will be used to test all AC EVSE level 1 and level 2.

2. TECHNICAL REQUIREMENT

- 2.1. The programmable AC power supply must have kilo watt (kW) output power capacity of 24kW or higher.
- 2.2. The programmable AC power supply must have kilo volt-ampere (kVA) output power capacity of 48 kVA or higher.
- 2.3. The programmable AC power supply must be designed to operate with an efficiency greater than 85%.
- 2.4. The programmable AC power supply must be designed to operate with power factor greater than 0.9.
- 2.5. The programmable AC power supply must operate at least at rated sinusoidal fundamental frequency of 60 Hz.
- 2.6. The programmable AC power supply must have a minimum controlled output voltage range from 100V to 300V RMS (Root Mean Squared).
- 2.7. The programmable AC power supply must have a minimum controlled output current range from 1A to 80A RMS.
- 2.8. The programmable AC power supply must have a current output waveform with a maximum total harmonic distortion percentage (THD %) of 1% at 60Hz (with full power output applied to resistive load).
- 2.9. The programmable AC power supply must have a voltage output waveform with a maximum total harmonic distortion percentage (THD %) of 1% at 60Hz (with full power output applied to resistive load).
- 2.10. The programmable AC power supply must have a communication port through which it can communicate with an external computer.
- 2.11. The programmable AC power supply must be able to be operated using a computer connected to the communication port.
- 2.12. The programmable AC power supply must support at least the standard NI VISA I/O (National Instrument Virtual Instrument Software Architecture Input and Output) or the standard IEEE 488 (Institute of Electrical and Electronics Engineers) commonly called GPIB (General Purpose Interface Bus).
- 2.13. The programmable AC power supply must allow programming and outputting controlled RMS current over a minimum range of 1A to 80 A RMS.
- 2.14. The programmable AC power supply must allow programming and outputting controlled RMS voltage over a minimum range of 100V to 300V RMS.
- 2.15. The programmable AC power supply must allow programming and outputting controlled phase shift angle between current and voltage, from 0° to 359°, with a minimum resolution of 1°.
- 2.16. The programmable AC power supply must measure and display the output power in Watt (W) or kilo watt (kW) units.
- 2.17. The programmable AC power supply must measure and display the output energy in Watthour (Wh) or kilo watthour (kWh) units.
- 2.18. The programmable AC power supply must display the AC power factor.
- 2.19. The programmable AC power supply must allow programming and outputting voltage waveforms with harmonics content as follows:
 - 2.19.1. 60 Hz fundamental component and harmonic components of order from 2 to 40 or higher.
 - 2.19.2. Amplitude of the harmonic components adjustable from 0 to 5% ,or higher, of the amplitude of the fundamental.
 - 2.19.3. Resolution of the harmonic amplitude of two decimal points or more.
- 2.20. The programmable AC power supply must allow programming and outputting current waveforms with harmonics content as follows:
 - 2.20.1. 60 Hz fundamental component and harmonic components of order from 2 to 40 or higher.

- 2.20.2. Amplitude of the harmonic components adjustable from 0 to 5% ,or higher, of the amplitude of the fundamental.
- 2.20.3. Resolution of the harmonic amplitude of two (2) decimal points or more.
- 2.20.4. Phase angle of the harmonic adjustable from 0° to 359°, with a minimum resolution of 1°.
- 2.21. The programmable AC power supply must be deigned to operate in the range of temperature from a minimum of 18°C to 28°C or higher.
- 2.22. The programmable AC power supply must have a maximum weight of 500 kilograms (kg).
- 2.23. The maximum dimensions of the programmable AC power supply must be 2 meters (m) high x 1.2 meter wide x 1.2 meter deep.
- 2.24. The programmable AC power supply must be on wheels or have other means to allow moving it by pushing.
- 2.25. The programmable AC power supply must have the following minimum safety requirements:
 - 2.25.1. CSA or UL or equivalent CE certified.
 - 2.25.2. Facility to chassis isolation of 1000V or higher.
 - 2.25.3. Facility to output internal isolation of 2000V or higher.
- 2.26. The programmable AC power supply must have input voltage of 277V or 480V.

Part 2.1 MANDATORY TECHNICAL EVALUATION CRITERIA

Bidders are requested to cross reference the mandatory technical criteria in a concise format by using page, paragraph(s) & sub-paragraphs as applicable to their supporting technical documentation. The programmable AC power supply must meet all of the following mandatory technical evaluation criteria. Bidders must demonstrate their compliance with all of the following mandatory evaluation technical criteria by providing substantial information describing completely and in detail how each requirement is met or addressed. Simply repeating the statement contained in the solicitation is not sufficient:

| Criteria | Where in the bid is the technical documentation located to fully demonstrate compliance to criteria |
|---|---|
| 1. The programmable AC power supply must have kilo watt (kW) output power capacity of 24kW or higher. | |
| 2. The programmable AC power supply must have kilo volt-ampere (kVA) output power capacity of 48 kVA or higher. | |
| 3. The programmable AC power supply must be deigned to operate with an efficiency greater than 85%. | |
| 4. The programmable AC power supply must designed to operate with power factor greater than 0.9. | |
| 5. The programmable AC power supply must operate at least at rated sinusoidal fundamental frequency of 60 Hz. | |

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|--|--|
| 6. The programmable AC power supply must have a minimum controlled output voltage range from 100V to 300V RMS (Root Mean Squared). | |
| 7. The programmable AC power supply must have a minimum controlled output current range from 1A to 80A RMS. | |
| 8. The programmable AC power supply must have a current output waveform with a maximum total harmonic distortion percentage (THD %) of 1% at 60Hz (with full power output applied to resistive load). | |
| 9. The programmable AC power supply must have a voltage output waveform with a maximum total harmonic distortion percentage (THD %) of 1% at 60Hz (with full power output applied to resistive load). | |
| 10. The programmable AC power source must have a communication port through which it can communicate with an external computer. | |
| 11. The programmable AC power source must be able to be operated using a computer connected to the communication port. | |
| 12. The programmable AC power source must support at least the standard NI VISA I/O (National Instrument Virtual Instrument Software Architecture Input and Output) or the standard IEEE 488 (Institute of Electrical and Electronics Engineers) commonly called GPIB (General Purpose Interface Bus). | |
| 13. The programmable AC power supply must allow programming and outputting controlled RMS current over a minimum range of 1A to 80 A RMS. | |
| 14. The programmable AC power supply must allow programming and outputting controlled RMS voltage over a minimum range of 100V to 300V RMS. | |
| 15. The programmable AC power supply must allow programming and outputting controlled phase shift angle, between current and voltage, from 0° to 359°, with a minimum resolution of 1°. | |

| | |
|---|--|
| 16. The programmable AC power supply must measure and display the output power in Watt (W) or kilo watt (kW) units. | |
| 17. The programmable AC power supply must measure and display the output energy in Watthour (Wh) or kilo watthour (kWh) units. | |
| 18. The programmable AC power supply must display the AC power factor. | |
| 19. The programmable AC power supply must allow programming and outputting voltage waveforms with harmonics content as follows: | |
| a) 60 Hz fundamental component and harmonic components of order from 2 to 40 or higher. | |
| b) Amplitude of the harmonic components adjustable from 0 to 5% ,or higher, of the amplitude of the fundamental. | |
| c) Resolution of the harmonic amplitude of two decimal points or more. | |
| 20. The programmable AC power supply must allow programming and outputting current waveforms with harmonics content as follows: | |
| a) 60 Hz fundamental component and harmonic components of order from 2 to 40 or higher. | |
| b) Amplitude of the harmonic components adjustable from 0 to 5% ,or higher, of the amplitude of the fundamental. | |
| c) Resolution of the harmonic amplitude of two (2) decimal points or more. | |
| d) Phase angle of the harmonic adjustable from 0° to 359°, with a minimum resolution of 1°. | |
| 21. The programmable AC power supply must be deigned to operate in the range of temperature from a minimum of 18°C to 28°C or higher. | |
| 22. The programmable AC power supply must have a maximum weight of 500 kilograms (kg). | |
| 23. The maximum dimensions of the programmable AC power supply must be 2 meters (m) high x 1.2 meter wide x 1.2 meter deep. | |

Solicitation No. - N° de l'invitation
U6309-232073/A
Client Ref. No. - N° de réf. du client
U6309-232073/A

Amd. No. - N° de la modif.
File No. - N° du dossier

Buyer ID - Id de l'acheteur
hn329
CCC No./N° CCC - FMS No./N° VME

| | |
|---|--|
| 24. The programmable AC power supply must be on wheels or have other means to allow moving it by pushing. | |
| 25. The programmable AC power supply must have the following minimum safety requirements: | |
| a) Facility to chassis isolation of 1000V or higher. | |
| b) Facility to output internal isolation of 2000V or higher. | |
| 26. The programmable AC power supply must have input voltage of 277V or 480V. | |

ANNEX B
POINT RATED TECHNICAL EVALUATION CRITERIA
PROGRAMMABLE AC LOAD and AC POWER SUPPLY

ANNEX B1 PROGRAMMABLE AC LOAD
POINT RATED TECHNICAL REQUIREMENT (Maximum 10 points)

| Criteria | Point(s) | Where in the bid is the technical documentation located to fully demonstrate compliance to criteria |
|--|----------|---|
| 1. Regenerative capability that allows the equipment both to act as load and recirculating the power from the load back to the grid. | 5 | |
| 2. Capability of delivering both alternative current (A.C) and direct current (D.C). | 3 | |
| 3. Capability of acting as load to a three phase equipment. | 2 | |

ANNEX B2 POWER SUPPLY
POINT RATED TECHNICAL REQUIREMENT (Maximum 10 points)

| Criteria | Point(s) | Where in the bid is the technical documentation located to fully demonstrate compliance to criteria |
|--|----------|---|
| 1. Regenerative capability that allows the power supply both sourcing the load and recirculating the power from the load back to the grid. | 4 | |
| 2. Capability of delivering both alternative current (A.C) and direct current (D.C). | 3 | |
| 3. Capability of delivering power to a three phase equipment. | 2 | |
| 4. Capability of receiving the power from a three phase equipment. | 1 | |

TOTAL TECHNICAL EVALUATION SCORE = SUM OF POINTS OBTAINED (B1 + B2)
(Maximum 20 points)

ANNEX C
PRICING SCHEDULE (FINANCIAL PROPOSAL)

Firm prices in Canadian dollars, DDP Delivered Duty Paid (destination), with all applicable Custom duties and Excise taxes included. Freight charges to destination extra. Applicable travel and living expenses included. Goods and Services Tax (GST) and/or the Harmonized Sales Tax (HST) not included.

If Bidder is requesting the exchange rate fluctuation protection, a completed Claim for Exchange Rate Adjustments form (PWGSC-TPSGC 450) must be included with submitted bid.

| Description | Quantity | Price |
|---|----------|-----------|
| Programmable AC Load | 1 | \$ |
| On-site start-up and check-out (Installation/Testing) (travel/living expenses included) | 1 | \$ |
| Freight/Shipping to destination | 1 | \$ |
| Power Supply | 1 | \$ |
| On-site start-up and check-out (Installation/Testing) (travel/living expenses included) | 1 | \$ |
| Freight/Shipping to destination | 1 | \$ |
| Total Evaluated Bid Price (sum of line items above) | | \$ |

**ANNEX D to PART 5 OF THE BID SOLICITATION
FEDERAL CONTRACTORS PROGRAM FOR EMPLOYMENT EQUITY CERTIFICATION**

I, the Bidder, by submitting the present information to the Contracting Authority, certify that the information provided is true as of the date indicated below. The certifications provided to Canada are subject to verification at all times. I understand that Canada will declare a bid non-responsive, or will declare a contractor in default, if a certification is found to be untrue, whether during the bid evaluation period or during the contract period. Canada will have the right to ask for additional information to verify the Bidder's certifications. Failure to comply with any request or requirement imposed by Canada may render the bid non-responsive or constitute a default under the Contract.

For further information on the Federal Contractors Program for Employment Equity visit [Employment and Social Development Canada \(ESDC\)-Labour's](#) website.

Date: _____ (YYYY/MM/DD) (If left blank, the date will be deemed to be the bid solicitation closing date.)

Complete both A and B.

A. Check only one of the following:

- ☐ A1. The Bidder certifies having no work force in Canada.
- ☐ A2. The Bidder certifies being a public sector employer.
- ☐ A3. The Bidder certifies being a [federally regulated employer](#) being subject to the [Employment Equity Act](#).
- ☐ A4. The Bidder certifies having a combined work force in Canada of less than 100 permanent full-time and/or permanent part-time employees.

A5. The Bidder has a combined workforce in Canada of 100 or more employees; and

- ☐ A5.1. The Bidder certifies already having a valid and current [Agreement to Implement Employment Equity](#) (AIEE) in place with ESDC-Labour.

OR

- ☐ A5.2. The Bidder certifies having submitted the [Agreement to Implement Employment Equity](#) (LAB1168) to ESDC-Labour. As this is a condition to contract award, proceed to completing the form Agreement to Implement Employment Equity (LAB1168), duly signing it, and transmit it to ESDC-Labour.

B. Check only one of the following:

- ☐ B1. The Bidder is not a Joint Venture.

OR

- ☐ B2. The Bidder is a Joint Venture and each member of the Joint Venture must provide the Contracting Authority with a completed annex Federal Contractors Program for Employment Equity - Certification. (Refer to the Joint Venture section of the Standard Instructions)

**ANNEX E to PART 5 OF THE BID SOLICITATION
COVID-19 VACCINATION REQUIREMENT CERTIFICATION**

COVID-19 Vaccination Requirement Certification

I, _____ (first and last name), as the representative of
_____ (name of business) pursuant to
_____ (insert solicitation number), warrant and certify that all
personnel that _____ (name of business) will provide on the
resulting Contract who access federal government workplaces where they may come into contact with
public servants will be:

- (a) fully vaccinated against COVID-19;
- (b) for personnel that are unable to be vaccinated due to a certified medical contraindication, religion or other prohibited grounds of discrimination under the *Canadian Human Rights Act*, subject to accommodation and mitigation measures that have been presented to and approved by Canada; or
- (c) partially vaccinated against COVID-19 for a period of up to 10 weeks from the date of their first dose and subject to temporary measures that have been presented to and approved by Canada, immediately after which period the personnel will meet the conditions of (a) or (b) or will no longer access federal government workplaces where they may come into contact with public servants under this Contract;

until such time that Canada indicates that the vaccination requirements of the COVID-19 Vaccination Policy for Supplier Personnel are no longer in effect.

I certify that all personnel provided by _____ (name of business) have been notified of the vaccination requirements of the Government of Canada's COVID-19 Vaccination Policy for Supplier Personnel, and that the _____ (name of business) has certified to their compliance with this requirement.

I 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.

Signature: _____

Date: _____

Optional

For data purposes only, initial below if your business already has its own mandatory vaccination policy or requirements for employees in place. Initialing below **is not** a substitute for completing the mandatory certification above.

Initials: _____

Information you provide on this Certification Form and in accordance with the Government of Canada's COVID-19 Vaccination Policy for Supplier Personnel will be protected, used, stored and disclosed in accordance with the Privacy Act. Please note that you have a right to access and correct any information on your file, and you have a right to file a complaint with the Office of the Privacy Commissioner regarding the handling of your personal information. These rights also apply to all individuals who are deemed to be personnel for the purpose for the Contract and who require access to federal government workplaces where they may come into contact with public servants.



Claim for Exchange Rate Adjustments

Total Exchange Rate Adjustment
Rajustement total du taux de change

Instructions

Where:

i_0 = initial exchange rate (CAN\$ per unit of foreign currency [e.g. US\$1])

i_1 = exchange rate for adjustment purposes (CAN\$ per unit of foreign currency [e.g. US\$1])

Instructions to bidders:

1. Bidders must complete columns (1) to (4) at time of bidding, for each line item where they want to invoke the exchange rate fluctuation provisions.

2. Where bids are evaluated in Canadian dollars, the dollar values provided in column (3) should also be in Canadian dollars, so that the adjustment amount is in the same currency as the payment.

Instructions for Payment:

1. This form must be submitted with the invoice for payment with respect to all items with an FCC. Complete columns (1) through (7). Columns (8) and (9) will auto complete.

2. Suppliers should submit a separate calculation sheet for each invoice submitted showing the exchange rate adjustment for all line items with an FCC.

3. This form must be provided with all invoices where the exchange rate fluctuates more than 2% (increase or decrease), (i.e. $\text{abs}[(i_1 - i_0) / i_0] > .02$), unless otherwise stated in the contract.

Étant entendu que :

i_0 = Facteur de conversion du taux de change initial (\$ CA par unité de devise étrangère [p. ex. 1 \$ US])

i_1 = Taux de change aux fins du rajustement (\$ CA par unité de devise étrangère [p. ex. 1 \$ US])

Instructions aux soumissionnaires :

1. Les soumissionnaires doivent remplir les colonnes (1) à (4) au moment de présenter leur soumission, pour chacun des produits pour lesquels ils veulent se prévaloir des dispositions relatives à la fluctuation du taux de change.

2. Lorsque les soumissions sont évaluées en dollars canadiens, les montants en dollars indiqués dans la colonne (3) doivent également être en dollars canadiens, de sorte que le montant du rajustement soit indiqué dans la même devise que pour le paiement.

Instructions relatives au paiement :

1. Le présent formulaire doit accompagner la facture en vue du paiement pour chaque article comportant un montant en monnaie étrangère. Il faut remplir les colonnes (1) à (7). Les colonnes (8) et (9) seront remplies automatiquement.

2. Les fournisseurs doivent présenter une feuille de calcul séparée pour chaque facture et indiquer le rajustement du taux de change pour chaque article comportant un montant en monnaie étrangère.

3. Le présent formulaire doit accompagner toutes les factures pour lesquelles la fluctuation du taux de change est supérieure à 2% (augmentation ou diminution), (c. -à-d. $\text{abs}[(i_1 - i_0) / i_0] > .02$), à moins d'indication contraire dans le contrat.