



## RETURN BIDS TO:

## RETOURNER LES SOUMISSIONS À:

Bid Receiving Public Works and Government  
Services Canada/Réception des soumissions Travaux  
publics et Services gouvernementaux Canada  
Pacific Region

## SOLICITATION AMENDMENT MODIFICATION DE L'INVITATION

The referenced document is hereby revised; unless otherwise  
indicated, all other terms and conditions of the Solicitation  
remain the same.

Ce document est par la présente révisé; sauf indication contraire,  
les modalités de l'invitation demeurent les mêmes.

### Comments - Commentaires

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

Issuing Office - Bureau de distribution  
Public Works and Government Services Canada - Pacific  
Region  
219 - 800 Burrard Street  
800, rue Burrard, pièce 219  
Vancouver, BC V6Z 0B9

<b>Title - Sujet</b> Potentiostats	
<b>Solicitation No. - N° de l'invitation</b> 31019-208280/A	<b>Amendment No. - N° modif.</b> 001
<b>Client Reference No. - N° de référence du client</b> 31019-208280	<b>Date</b> 2020-05-15
<b>GETS Reference No. - N° de référence de SEAG</b> PW-\$VAN-524-8770	
<b>File No. - N° de dossier</b> VAN-9-42257 (524)	<b>CCC No./N° CCC - FMS No./N° VME</b>
<b>Solicitation Closes - L'invitation prend fin</b> <b>at - à 02:00 PM</b> <b>on - le 2020-05-22</b>	<b>Time Zone</b> <b>Fuseau horaire</b> Pacific Daylight Saving Time PDT
<b>F.O.B. - F.A.B.</b> <b>Plant-Usine:</b> <input type="checkbox"/> <b>Destination:</b> <input checked="" type="checkbox"/> <b>Other-Autre:</b> <input type="checkbox"/>	
<b>Address Enquiries to: - Adresser toutes questions à:</b> Yamamoto, Albert	<b>Buyer Id - Id de l'acheteur</b> van524
<b>Telephone No. - N° de téléphone</b> (604) 562-8773 ( )	<b>FAX No. - N° de FAX</b> ( ) -
<b>Destination - of Goods, Services, and Construction:</b> <b>Destination - des biens, services et construction:</b>	

Instructions: See Herein

Instructions: Voir aux présentes

<b>Delivery Required - Livraison exigée</b>	<b>Delivery Offered - Livraison proposée</b>
<b>Vendor/Firm Name and Address</b> <b>Raison sociale et adresse du fournisseur/de l'entrepreneur</b>	
<b>Telephone No. - N° de téléphone</b> <b>Facsimile No. - N° de télécopieur</b>	
<b>Name and title of person authorized to sign on behalf of Vendor/Firm</b> <b>(type or print)</b> <b>Nom et titre de la personne autorisée à signer au nom du fournisseur/</b> <b>de l'entrepreneur (taper ou écrire en caractères d'imprimerie)</b>	
<b>Signature</b>	<b>Date</b>

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This document is raised to extend the closing date, to update Annex A, Annex B, Form B and to answer bidders' questions.

### **Amendment #001**

#### **Closing date**

Delete: May 19, 2020 at 2pm PDT

**Insert: May 22, 2020 at 2pm PDT**

#### **Annex A, Requirement**

Delete: Entirely

**Insert: See attached**

#### **Annex B, Basis of Payment**

Delete: Entirely

**Insert: See attached**

#### **Form B – Substantiation of Technical Compliance Form**

Delete: Entirely

**Insert: See attached**

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#### **Question #1**

I saw that the RFP was posted today. I wanted to ask for clarification on one specification. The voltage (12 volts) they are citing, is that the applied voltage or the compliance voltage? Our instruments all have an applied voltage of 10 volts but depending on the model have higher compliance voltages: 12 V,

#### **Answer #1**

Both, applied and compliance

#### **Question #2**

Regarding to Mandatory Specifications line item A2: "Minimum potential and current operating window of +/- 12V and +/- 1A or +/- 6V and +/- 5A." Is this the compliance voltage or the measurement voltage?

#### **Answer #2**

compliance and measurement voltage.

- We have asked for at least +/-12V on the first device,
- And for at least +/-6V on the second device.

#### **Question #3**

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Regarding to Mandatory Specifications line item A2:"Minimum potential and current operating window of +/- 12V and +/- 1A or +/- 6V and +/- 5A." Do you accept the window +/-10 V and +/-5 A operating window and +/-14 V and +/-2 A operating window?

**Answer #3**

Yes.

- The +/- 10V and +/-5A would cover our requirement of +/-6V and +/-5A.
- The +/- 14V and +/-2A would cover our requirement of +/-12V and +/-1A.

**Question #4**

Regarding to Mandatory Specifications line item A5"must have small form factor for a variety of installation locations." Could you define what a small form factor is for you?

**Answer #4**

Maximum size of 30cm by 30cm by 30cm.

**Question #5**

Regarding to Mandatory Specifications line item A4"compatibility with existing software for no user retraining and use of existing software licenses"

This is difficult to achieve. Our software is very easy to use and it's rare that customers ever visit us for training. However compatibility with existing software is going to be restricted to products from the original manufacturer, and even then, this may vary across their product range. I assume some level of compromise is included in this? We need to know what the existing software is and what level of compatibility is required.

**Answer #5**

This requirement can be deleted.

**Question #6**

Obviously only the original manufacturer can offer extended licenses for their software but we supply ours on an unlimited site basis. You are free to install the software on as many PCs as you wish.

**Answer #6**

This is acceptable

**Question #7**

Regarding to Mandatory Specifications line item A6"provide data in excel format" Our software can export data in CSV / TSV format which can be imported into Excel and a wide range of other software. Would this be considered as an Excel format for your purposes?

**Answer #7**

Yes. Excel can read CSV, TSV files directly.

**Question #8**

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In reference to Annex B table B "Two Years of System Assurance and Manufacturers Two Year Warranty on Hardware." Could you please expand on the difference between these two in particular what was meant by system assurance. We supply our instruments with a 2 year return to base warranty but in order to know whether we fulfil the requirements for System Assurance, we would need to know what is envisaged in system assurance that wouldn't be covered by our warranty.

**Answer #8**

Please *delete* "Two Years of System Assurance and".

Please *keep* "Manufacturers Two Year Warranty on Hardware".

**Question #9**

Regarding mandatory requirements A2 the requested voltage for potentiostat is +/- 12 V and current +/- 1 A. There is only one manufacturer can meet this requirement and it will limited the competition. Please confirm you will accept the voltage range +/-14 v or +/- 10 v.

**Answer #9**

We will accept "+/-14v and 1A"

We will **not** accept "+/-10v and 1A"

**Question #10**

Regarding mandatory requirements A7 (provide raw data (time, voltage, current) so we can plot lissajous graphs and do analysis of harmonics.). Our instrument will show lissajous graph in real time, but raw data is not recorded. (You can see only the shape of the graph, but not the values.) In EIS data, there are no raw data of voltage and current. Please confirm it will be acceptable.

**Answer #10**

This is **not** acceptable. We want the raw time, voltage, current data. We intend to do analysis of the raw data.

**All other terms and conditions remain unchanged.**

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## ANNEX "A" - REQUIREMENT

### Potentiostats (dated May 14, 2020)

#### General

The Department of National Research Council Canada has a requirement for the supply of the following:

Two potentiostats and two additional cell cables

The potentiostats are for National Research Council Canada – EME Vancouver. This equipment will be used to perform potentiostatic, galvanostatic and electrochemical impedance response experiments. These experiments will enable NRC to continue to meet current and future project deliverables for PEM, SOFC, battery and catalyst development projects based on the functionality of these potentiostats as well as the need to replace the existing ageing potentiostats and FRAs.

#### Equipment - Mandatory Specifications

The potentiostats must meet the following mandatory requirements:

- A1. EIS measurements up to 2MHz (EIS up to at least 1 MHz for the first potentiostat and EIS up to at least 2 MHz for the second potentiostat)
- A2. Minimum potential and current operating window of **+/- 14V** and +/- 1A or +/- 6V and +/- 5A
- A3. License free software to install on multiple lab and office computers must be provided.
- A4. **Delete**
- A5. Small form factor for a variety of installation locations, **maximum size of 30cm by 30cm by 30cm.**
- A6. Must provide data in excel format.
- A7. Must provide raw data (time, voltage, current) so we can plot lissajous graphs and do analysis of harmonics
- A8. A user manual must be included with the machine in English language.

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**ANNEX "B"**  
**BASIS OF PAYMENT**  
**(dated May 14, 2020)**

All prices must be in Canadian Funds, Delivered Duty Paid (DDP) to

National Research Council Canada  
4250 Wesbrook Mall  
Vancouver, B.C. V6T 1W5  
Canada

Incoterms 2000, inclusive of all delivery costs, customs and duty charges, and applicable sales tax are extra.

**Table B.1 Deliverables**

**Best Delivery Date - Bid**

While delivery is requested by 1 June 2020, the best delivery that could be offered is \_\_\_\_\_.

Item No.	Description	OEM Brand name and part number	Unit of Measure	Qty	Firm Unit Price	Firm Price (Quantity x Price)
1.	Potentiostat with: -Potentiostat/Galvanostat/ZRA -5Aamps, 6Volts, Potentiostat with EIS up to at least 1 MHz -Comprehensive Suite of electrochemical Software -Manufacturers Two Year Warranty on Hardware  All-inclusive price for the supply and delivery of the Requirement as described in Annex "A", Statement of Requirements		Per unit	1	\$_____	\$_____(a)

Item No.	Description	OEM Brand name and part number	Unit of Measure	Qty	Firm Unit Price	Firm Price (Quantity x Price)
2.	Potentiostat with: -Potentiostat/Galvanostat/ZRA -1Amp, 12 Volts, Potentiostat with EIS up to at least 2 MHz -Comprehensive Suite of electrochemical Software -Manufacturers Two Year Warranty on Hardware		Per unit	1	\$_____	\$_____(b)

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	All-inclusive price for the supply and delivery of the Requirement as described in Annex "A", Statement of Requirements					
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Item No.	Description	OEM Brand name and part number	Unit of Measure	Qty	Firm Unit Price	Firm Price (Quantity x Price)
3.	Additional Cell Cable Kit for Item no. 1. 2.5m to 3.5m in length.  All-inclusive price for the supply and delivery of the Requirement as described in Annex "A", Statement of Requirements		Per unit	1	\$_____	\$_____(c)

Item No.	Description	OEM Brand name and part number	Unit of Measure	Qty	Firm Unit Price	Firm Price (Quantity x Price)
4.	Additional Cell Cable Kit for Item no. 2. 2.5m to 3.5m in length.  All-inclusive price for the supply and delivery of the Requirement as described in Annex "A", Statement of Requirements		Per unit	1	\$_____	\$_____(d)

**Total Evaluated Price** = \$\_\_\_\_\_(a) + \$\_\_\_\_\_(b) + \$\_\_\_\_\_(c) + \$\_\_\_\_\_(d) = \$\_\_\_\_\_

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## FORM B: Substantiation of Technical Compliance Form (dated May 14, 2020)

### GENERAL INSTRUCTION

All items listed in this FORM B are mandatory requirements or specification.

- 1) Bidders are requested to:
  - a) provide the proposed make and model of the items listed herein;
  - b) opposite each specification under **MANDATORY CRITERIA**, in the right hand margin "**Comply Yes/No**", indicate whether or not the proposed system being offered meets or does not meet the requirements;
  - c) opposite each specification under **MANDATORY CRITERIA**, in the right hand margin under **Substantiation**, provide technical literature or documentation to support this Mandatory Criteria. OR If Technical and descriptive literature is not available to substantiate a Mandatory Criteria, the bidder must provide an explanation or demonstrate how they propose to meet this criteria and
  - d) opposite each specification under **MANDATORY CRITERIA**, in the right hand margin under **Reference**, provide the reference page number(s) in the provided Technical literature and in the Technical literature, highlight the technical information that supports your compliance with the mandatory criteria.
- 2) It will be to your advantage to furnish as much detail as possible to support the specifications your comments or claims of compliance for each specification.
- 3) Canada is under NO obligation to seek clarification of the bid(s) or the supporting technical documentation provided. Bidders should note that failure to demonstrate any capability to which they claim compliance will result in their proposal being considered non-responsive. Any deviation is to be clearly identified and supported with full details.

N°	Equipment – Mandatory Criteria	Proposed Make and Model
1	Potentiostats	



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FORM B - SUBSTANTIATION OF TECHNICAL COMPLIANCE FORM

NO #	Mandatory Criteria	Comply (yes/no)	Substantiation	Reference
A1.	The potentiostats must have EIS measurements up to 2MHz (EIS up to 1 MHz for the first potentiostat and EIS up to 2 MHz for the second potentiostat)			
A2.	The potentiostats must have a minimum potential and current operating window of +/- <b>14V</b> and +/- 1A or +/- 6V and +/- 5A.			
A3.	The potentiostats must have License free software to install on multiple lab and office computers.			
A4.	<b>Delete</b>			
A5.	The potentiostats must have small form factor for a variety of installation locations, <b>maximum size of 30cm by 30cm by 30cm</b> .			
A6.	The potentiostats must provide data in excel format.			
A7.	The potentiostats must provide raw data (time, voltage, current) so we can plot lissajous graphs and do analysis of harmonics.			
A8.	A user manual must be included with the machine in English language.			