



RETURN BIDS TO:

RETOURNER LES SOUMISSIONS À:

Bid Receiving Public Works and Government
Services Canada/Réception des soumissions Travaux
publics et Services gouvernementaux Canada
1713 Bedford Row
Halifax, N.S./Halifax, (N.É.)
Halifax
Nova Scotia
B3J 1T3
Bid Fax: (902) 496-5016

**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
Atlantic Region Acquisitions/Région de l'Atlantique
Acquisitions
1713 Bedford Row
Halifax, N.S./Halifax, (N.É.)
Halifax
Nova Scot
B3J 1T3

| | |
|--|--|
| Title - Sujet Submarine Battery Chargers | |
| Solicitation No. - N° de l'invitation W355B-201768/A | Amendment No. - N° modif. 001 |
| Client Reference No. - N° de référence du client W355B-20-1768 | Date 2021-01-12 |
| GETS Reference No. - N° de référence de SEAG PW-\$HAL-218-11153 | |
| File No. - N° de dossier HAL-9-83254 (218) | CCC No./N° CCC - FMS No./N° VME |
| Solicitation Closes - L'invitation prend fin at - à 02:00 PM Atlantic Daylight Saving Time ADT on - le 2021-02-18 Heure Avancée de l'Atlantique HAA | |
| 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: Conrad, Darren | Buyer Id - Id de l'acheteur hal218 |
| Telephone No. - N° de téléphone (902) 403-8584 () | FAX No. - N° de FAX (902) 496-5016 |
| Destination - of Goods, Services, and Construction: Destination - des biens, services et construction: | |

Instructions: See Herein

Instructions: Voir aux présentes

| | |
|--|--|
| Delivery Required - Livraison exigée | 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 |

Amendment 001 is raised to extend the closing date of the solicitation to 18 February 2021 at 2:00 pm Atlantic and make the following correction to Annex B:

Item 4 b) should read Charger #2 not Charger #1. See below.

ANNEX B

CROSS REFERENCE

SUBMARINE SUPPORT BATTERY CHARGING SYSTEM

Instructions: Bidders should include two (2) copies of descriptive literature; if available, for the item(s) offered in sufficient detail to clearly indicate compliance with each of the individual requirements from the Statement of Requirement (SOR) detailed herein.

Bidders should cross reference the page number and highlight the specification in your technical data sheets or brochure to demonstrate and support your compliance for each of the Mandatory Technical Criteria within the SOR. You may add any comments to support your bid.

It will be to your advantage to furnish as much detail as possible to support your comments and your claims of compliance for each specification.

NOTE: The Crown is under NO obligation to seek clarification of the bid(s) or the supporting technical documentation provided. Failure to meet any of the following will render your proposal non-compliant and will be given no further consideration.

| NO. | SPECIFICATIONS | PAGE NUMBER OR CROSS REFERENCE | COMMENT(S) |
|-----|--|--------------------------------|------------|
| 2 | a) Quantity = three (3) chargers in total | | |
| | b) The charger must be solid state based as rotary based equipment will not be accepted. | | |
| | c) The charger will be of constant current/constant voltage design. | | |
| | d) All controls, connection points, and electrical connections will be located within the perimeter of the chargers frame. | | |
| | e) The charger will have all the operator controls located on one side of the unit. Controls will be ergonomically located and within easy reach without requiring the operator to move to multiple locations on the unit. | | |
| | f) Soft Start with batteries disconnected | | |

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|------|--|--------------------------------|------------|
| | g) Modular Design to facilitate troubleshooting, maintenance, and reduce downtime. | | |
| | h) Automatic Restart to Float Mode after loss and restoration of AC input power | | |
| | i) Easily replaceable printed circuit boards | | |
| | j) Manual selection of float or equalize charge mode | | |
| | k) Must be suitable for continuous operation | | |
| | l) System efficiency must be ninety percent (90%) or greater | | |
| 3 a) | Charger #1: High Capacity up to 240 Cells | | |
| | i) Voltage: 4160Vac | | |
| | ii) Number of Phases: 3 ϕ | | |
| | iii) Frequency: 60 Hz | | |
| | iv) Current: 300Aac - maximum, | | |
| 3 b) | Charger #2: High Capacity up to 240 Cells | | |
| | i) Voltage: 4160Vac | | |
| | ii) Number of Phases: 3 ϕ | | |
| | iii) Frequency: 60 Hz | | |
| | iv) Current: 200Aac – maximum. | | |
| 3 c) | Charger #3: Low Capacity up to 10 Cells. | | |
| | i) Voltage: 208Vac, | | |
| | ii) Number of Phases: 3 ϕ | | |
| | iii) Frequency: 60 Hz | | |
| | iv) Current 125Aac maximum | | |
| 4 a) | Charger #1: High Capacity up to 240 Cells | | |
| | i) Voltage: zero to 750Vdc variable | | |
| | ii) Current: zero to 2500Adc variable | | |
| | iii) Current Limit Adjust: 90% to 115% of Full Load, rated output to be maintained | | |
| | iv) Ripple: <2.5% | | |
| 4 b) | Charger #2: High Capacity up to 240 Cells | | |
| | i) Voltage: zero to 750Vdc variable | | |
| | ii) Current: zero to 2500Adc variable | | |
| | iii) Current Limit Adjust: 90% to 115% of Full Load, rated output to be maintained | | |
| | iv) Ripple: <2.5% | | |

| NO. | SPECIFICATIONS | PAGE NUMBER OR CROSS REFERENCE | COMMENT(S) |
|------|--|--------------------------------|------------|
| 4 c) | Charger #3: Low Capacity up to 10 Cells | | |
| | i) Voltage: zero to 28Vdc variable | | |
| | ii) Current: zero to 700Adc variable | | |
| | iii) Current Limit Adjust: 90% to 115% of Full Load, rated output to be maintained | | |
| | iv) Ripple: <1.5% | | |
| 5 | a) The front panel on the DC Charger must provide for full manual control of the charger | | |
| | b) DC Output circuit breaker must be rated at 25kAIC at minimum | | |
| | c) Digital DC Voltmeter | | |
| | d) Digital DC Ammeter | | |
| | e) Current trim adjust | | |
| | f) Voltage trim adjust | | |
| | g) Float Level Control Potentiometer | | |
| | h) Equalize Level Control Potentiometer | | |
| | i) Equalizing Timer (0 to 100 hours minimum) operable in the manual equalize mode | | |
| | j) Float/Equalize Selector Switch | | |
| | k) Auto-Equalize Timer | | |
| | l) Input Source Circuit Breaker | | |
| | m) Power On Pushbutton/Switch | | |
| | n) Run indicator | | |
| | o) Power Off Pushbutton/Switch | | |
| | p) Emergency Stop function | | |
| | q) Reset Pushbutton | | |
| | r) Float/Equalize Push Buttons | | |
| | s) AC Power Available Indicator | | |
| | t) Float Charge Selected Indicator | | |
| | u) Equalize Charge Selected Indicator | | |
| | v) Over Current indicator | | |
| | w) DC Overvoltage Alarm Indicator | | |
| | x) DC Under voltage Alarm Indicator | | |
| | y) Fault Indicator | | |
| | z) Fault Summary/history | | |
| | aa) Alarms must be audible and visual | | |
| | bb) Over temperature Indicator | | |

| NO. | SPECIFICATIONS | PAGE NUMBER OR CROSS REFERENCE | COMMENT(S) |
|-----|--|--------------------------------|------------|
| 6 | a) Remote control can be implemented using a portable control panel manufactured by the vendor or a software system installed on a portable pc based system. | | |
| | b) Must have at minimum, the same functionality as on the front panel of the battery charger. | | |
| | c) Must have an emergency stop function | | |
| | d) Remote control must provide data logging of charge parameters and charging curves and allow programming of charge profiles. | | |
| | e) Remote control device must be connected to the charger using a control cable 50m long. Control cable must be: | | |
| | i) supplied with the control device | | |
| | ii) removable for storage | | |
| | iii) replaceable | | |
| | f) Remote Control must display the following parameters: | | |
| | i) Output Voltage Set Point | | |
| | ii) Output Voltage Actual | | |
| | iii) Output Current Set Point | | |
| | iv) Output Current Actual | | |
| | v) Float Level Control | | |
| | vi) Equalize Level Control | | |
| | vii) Equalizing Timer (0 to 100 hours minimum) operable in the manual equalize mode | | |
| | viii) Float/Equalize Selection | | |
| | ix) Auto-Equalize Timing | | |
| | x) Input Source Status | | |
| | xi) Fault Conditions | | |
| | xii) Alarm Conditions | | |
| | 7 a) AC Supply Circuit Breaker rated at 25kAIC minimum | | |
| | b) AC and DC transient voltage protection in accordance with IEEE C37.90.1 | | |

| NO. | SPECIFICATIONS | PAGE NUMBER OR CROSS REFERENCE | COMMENT(S) |
|-----|--|--------------------------------|------------|
| | c) Automatic restart to float mode after input voltage interruption | | |
| | d) Over current/Overload : up to 125% for ten minutes | | |
| | e) Over voltage | | |
| | f) Over temperature | | |
| | g) Reverse current limited to 0.1% of the charger rating | | |
| | h) Blocking diodes must be provided to block back-feed through charger if an AC power failure were to occur | | |
| | i) Ground fault detection and indication | | |
| 8 | a) Enclosure Type: - NEMA 12, indoor, freestanding | | |
| | b) Audible Noise Level: - Less than 80 dB at 1.5 m | | |
| | c) Cooling to be done through forced air convection | | |
| | i) If additional cooling is required, chiller unit must be provided by vendor and included in pricing. | | |
| | ii) Chilling unit specification must be provided to FMFCS with tender submission package, and must be approved by FMFCS | | |
| | iii) 3 Connections for Negative | | |
| 9 | a) The vendor must size all equipment such that it can be moved through a double door with dimensions: of 2100mm high and 1775 mm wide | | |
| | b) The maximum available footprint for the equipment is located against a wall and has dimensions of 4470mm wide and 2285mm deep | | |
| | c) All electrical connections must be accessible from the front or top of the equipment as all equipment will be placed against a wall. | | |
| 10 | Electrical Certification | | |
| 15 | Warranty | | |
| 16 | a) Bidder must be capable of providing a service response time of 3 business days after receiving a service request from DND. Bidder is required to provide a contact number and location for their approved service provider. | | |

Solicitation No. - N° de l'invitation
W355B-201768/A
Client Ref. No. - N° de réf. du client
W355B-20-1768

Amd. No. - N° de la modif.
001
File No. - N° du dossier
HAL-9-83254

Buyer ID - Id de l'acheteur
HAL218
CCC No./N° CCC - FMS No./N° VME

| NO. | SPECIFICATIONS | PAGE NUMBER OR CROSS REFERENCE | COMMENT(S) |
|-----|---|--------------------------------|------------|
| | b) Bidder must provide a list of recommended spare parts and the current cost to DND. The list of spare parts must include: | | |
| | i) Bidders part number | | |
| | ii) Manufacturers name | | |
| | iii) Manufacturers Part Number | | |
| 16 | References/Previous Experience | | |

ALL OTHER TERMS AND CONDITIONS REMAIN UNCHANGED.