

**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**  
**401 - 1230 Government Street**  
**Victoria, B.C.**  
**V8W 3X4**  
**Bid Fax: (250) 363-3344**

## **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**

<b>Title - Sujet</b> SUPPLY DC LOADBANK	
<b>Solicitation No. - N° de l'invitation</b> W3555-147058/C	<b>Date</b> 2015-02-17
<b>Client Reference No. - N° de référence du client</b> W3555-147058	
<b>GETS Reference No. - N° de référence de SEAG</b> PW-\$XLV-166-6672	
<b>File No. - N° de dossier</b> XLV-3-36034 (166)	<b>CCC No./N° CCC - FMS No./N° VME</b>
<b>Solicitation Closes - L'invitation prend fin at - à 02:00 PM on - le 2015-04-02</b>	<b>Time Zone Fuseau horaire</b> Pacific Standard Time PST
<b>F.O.B. - F.A.B.</b> Specified Herein - Précisé dans les présentes <b>Plant-Usine:</b> <input type="checkbox"/> <b>Destination:</b> <input type="checkbox"/> <b>Other-Autre:</b> <input checked="" type="checkbox"/>	
<b>Address Enquiries to: - Adresser toutes questions à:</b> Castle, David G.	<b>Buyer Id - Id de l'acheteur</b> xlvl66
<b>Telephone No. - N° de téléphone</b> (250) 363-0110 ( )	<b>FAX No. - N° de FAX</b> ( ) -
<b>Destination - of Goods, Services, and Construction:</b> <b>Destination - des biens, services et construction:</b> DEPARTMENT OF NATIONAL DEFENCE SEE HEREIN	

**Instructions: See Herein**

**Instructions: Voir aux présentes**

**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  
401 - 1230 Government Street  
Victoria, B. C.  
V8W 3X4

<b>Delivery Required - Livraison exigée</b> See Herein	<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 (type or print)</b> <b>Nom et titre de la personne autorisée à signer au nom du fournisseur/ de l'entrepreneur (taper ou écrire en caractères d'imprimerie)</b>	
<b>Signature</b>	<b>Date</b>

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Amd. No. - N° de la modif.

File No. - N° du dossier

XLV-3-36034

Buyer ID - Id de l'acheteur

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## **SUPPLY DC LOADBANK**

### **PART 1 - GENERAL INFORMATION**

#### **1-1 Security Requirement**

There is no security requirement associated with this bid solicitation.

#### **1-2 Requirements**

1. Fabricate, supply and deliver one (1) load bank for the Department of National Defence as described in Annex A and the attached Financial Presentation Sheet at Annex B.
2. Goods are requested to be delivered to Victoria, BC on or before 31 March 2016, as detailed in the resulting contract clauses.

#### **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 of receipt of the results of the bid solicitation process. The debriefing may be in writing, by telephone or in person.

## **PART 2 - BIDDER INSTRUCTIONS**

### **2-1 Standard Instructions, Clauses, and Conditions**

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>) 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 (2014-09-25) Standard Instructions - Goods or Services - Competitive Requirements are incorporated by reference into and form part of the bid solicitation.

### **2-2 Submission of Bids**

Bids must be submitted only to Public Works and Government Services Canada (PWGSC) Bid Receiving Unit by the date, time and place 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 five (5) working 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 questions or may request that the Bidder do so, so that the proprietary nature of the question is eliminated, and the enquiry can be answered with copies 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**

1. Any resulting contract must be interpreted and governed, and the relations between the parties determined, by the laws in force in British Columbia, (\_\_\_\_\_) Canada.
2. 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 Improvement of Requirement During Solicitation Period**

Should bidders consider that the specifications contained in the bid solicitation could be improved technically or technologically, bidders are invited to make suggestions, in writing, to the Contracting Authority named in the bid solicitation. Bidders must clearly outline the suggested improvement as well as the reason for the suggestion. Suggestions that do not restrict the level of competition nor favour a particular bidder will be given consideration provided they are submitted to the Contracting Authority at least five (5) calendar days before the bid closing date. Canada will have the right to accept or reject any or all suggestions.

## **2.6 Reissue of Bid Solicitation**

This bid solicitation cancels and supersedes previous bid solicitation number W3555-147058/B dated 2014-04-08 with a closing of 2014-04-30 at 02:00 PM (PST). A debriefing or feedback session will be provided upon request to bidders/offers/suppliers who bid on the previous solicitation.

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## **PART 3 - BID PREPARATION INSTRUCTIONS**

### **3-1 Bid Preparation Instructions**

Canada requests that bidders provide their bid in separately bound sections as follows:

- Section I:           Technical Bid (1 copy)  
Section II:           Financial Bid (1 copy)  
Section III:           Certifications (1 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-policy-eng.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.

#### **3-1.1 Section I: Technical Bid**

In their technical bid, bidders should explain and demonstrate how they propose to meet the requirements and how they will satisfy the Requirement.

Bidders should verify their capability and describe their approach in a thorough, and clear manner for carrying out the work.

The Technical Bid should be concise and address, but not necessarily be limited to, all the mandatory points in the specification 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 requirement and under the same headings. See Part 4, Article 1.2 for more detail.



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. If the Bidder is of the opinion that any of the required specification items cannot be achieved or the item, as written, would preclude them from submitting a bid, they are to inform the Contracting Authority as per Part 2, Article 3.

### 3-1.2 Section II: Financial Bid

Bidders must submit their financial bid in accordance with the Financial Bid Presentation Sheet at Annex B. The total amount of Applicable Taxes must be shown separately.

### 3-1.3 Section III: Certification Requirements

Bidders must submit the certifications required under Part 5.

## 3-2 Tables of Bid Deliverables

### 3-2.1 Mandatory Bid Deliverables

Regardless of requirements specified elsewhere in this bid solicitation and its associated Statement of Requirement, the following are the only mandatory documents that must be submitted with the response **at the time of bid closing**. The Bidder must be compliant on each item to be considered responsive.

Item	Description	Completed and Attached
<b>Section I Technical Bid</b>		
1	Solicitation document part 1 page 1, completed and signed	
2	Submit complete technical bid as per part 3, section 3-1.1 completed and Annex C, Tables C-1 clearly indicating compliance and Bid Ref # completed. All technical bid information must be received in a completed state as specified, by bid closing.	
<b>Section II Financial Bid</b>		
1	Annex B <u>Financial Bid Presentation Sheet</u> , completed	
<b>Section III Certifications</b>		
1	Submit the Canadian Contents certification as per Part 5, section 5-3.3	

## **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 specified below.
- (b) An evaluation team composed of representatives of Canada will evaluate the bids.
- (c) The evaluation team will determine first if there are two (2) or more bids with a valid Canadian Content certification. In that event, the evaluation process will be limited to the bids with the certification; otherwise, all bids will be evaluated. If some of the bids with a valid certification are declared non-responsive, or are withdrawn, and less than two responsive bids with a valid certification remain, the evaluation will continue among those bids with a valid certification. If all bids with a valid certification are subsequently declared non-responsive, or are withdrawn, then all the other bids received will be evaluated.

**4-1.1** Responses to this Bid solicitation will first be examined to determine their compliance with the mandatory certifications, and the tables of deliverable requirements as detailed in Parts 2 & 5.

**4-1.2** The Bidder's Technical Bid will then be examined to determine compliance with Mandatory Technical Specification items. The Technical Bid must also include Annex C, Table 1, completed with verification that the bid meets each mandatory criteria listed and includes the required bid reference information. The technical bid will then be evaluated and points assigned in accordance with the point-rated evaluation criteria in Annex C.

### **4-1.3 Technical Evaluation**

#### **(a) Mandatory Technical Criteria**

Mandatory Technical Criteria are given in Table 1 of Annex

#### **C. (b) Point Rated Technical Criteria**

Technical Criteria subject to point rating are given in Table 2 of Annex C.

- (c) Details of the technical evaluation and point rating procedure are given in Annex C, Evaluation Plan.

### **4-1.4 Financial Evaluation**

The price of the bid will be evaluated in Canadian dollars in accordance with Annex B, Customs duties are included and the Goods and Services Tax or Harmonized Sales Tax is extra, if applicable.

## **4.2 Basis of Selection - Highest Compliant Combined Rating of Technical Merit and Price**

1. To be declared responsive, a bid must:
  - (a) comply with all the requirements of the bid solicitation;
  - (b) meet all mandatory technical evaluation criteria; and
  - (c) obtain the required minimum of **700 points (70 percent)** overall of the points for the technical evaluation criteria which are subject to point rating. The rating is performed on a scale of **1000** possible points.
2. Bids not meeting (a) or (b) or (c) will be declared non-responsive.
3. Neither the responsive bid that receives the highest number of technical merit points nor the one that proposed the lowest price will necessarily be accepted. The responsive bid with the highest compliant combined rating of technical merit (70%) and price (30%), as calculated at article 4.6 of the Annex C, Evaluation Plan, will be recommended for award of a contract.

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## **PART 5 - CERTIFICATIONS**

### **5-1 General**

Bidders must provide the required certifications and documentation to be awarded a contract

The certifications provided by bidders to Canada are subject to verification by Canada at all times. 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 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 with this request will also render the bid non-responsive or will constitute a default under the Contract.

### **5-2 Mandatory Certifications Required Precedent to Contract Award**

#### **5-2.1 Code of Conduct and Certifications - Related documentation**

By submitting a bid, the Bidder certifies that the Bidder and its affiliates are in compliance with the provisions as stated in Section 01 Code of Conduct and Certifications - Bid of Standard Instructions 2003. The related documentation therein required will assist Canada in confirming that the certifications are true.

#### **5-2.2 Federal Contractors Program for Employment Equity - Bid Certification**

By submitting a bid, the Bidder certifies that the Bidder, and any of the Bidder's members if the Bidder is a Joint Venture, is not named on the Federal Contractors Program (FCP) for employment equity "FCP Limited Eligibility to Bid" list ([http://www.labour.gc.ca/eng/standards\\_equity/eq/emp/fcp/list/inelig.shtml](http://www.labour.gc.ca/eng/standards_equity/eq/emp/fcp/list/inelig.shtml)) available from Human Resources and Skills Development Canada (HRSDC) - Labour's website.

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

**5-2.3 Additional Certifications Required Precedent to Contract Award**

The certifications listed below should be completed and submitted with the bid, but may be submitted afterwards. If any of these required certifications 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 comply with the request of the Contracting Authority and to provide the certifications within the time frame provided will render the bid non-responsive.

- a) Code of Conduct - Provide a complete list of names of all individuals who are currently directors of the Bidder per Annex D.
- b) Changes to Applicable Laws, if applicable as per article 2.4
- c) Signed Consent Form (Consent to a Criminal Record Verification form- PWGSC-TPSGC 229) (<http://www.tpsgc-pwgsc.gc.ca/app-acq/forms/formulaires-forms-eng.html>), as per articles 5-2.1

**5-2.4 Canadian Content Certification**

SACC Manual clause A3050T (2010-01-11) Canadian Content Definition

**5-2.5 Canadian Contents Certification**

This procurement is conditionally limited to Canadian goods.

Subject to the evaluation procedures contained in the bid solicitation, bidders acknowledge that only bids with a certification that the good(s) offered are Canadian goods, as defined in clause A3050T, may be considered.

Failure to provide this certification completed with the bid will result in the good(s) offered being treated as non-Canadian goods

The Bidder certifies that:

( ) the good(s) offered are Canadian goods as defined in paragraph 1 of clause A3050T.

## **PART 6 - RESULTING CONTRACT CLAUSES**

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

### **6-1 Security Requirement**

There is no security requirement applicable to this Contract.

### **6-2 Requirement**

- a. Supply and deliver one (1) load bank for the Department of National Defence in accordance with the associated Technical Specifications detailed in the Statement of Requirement attached as Annex A.

### **6-3 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>) issued by Public Works and Government Services Canada.

#### **6-3.1 General Conditions**

2010A, (2014-09-25) General Conditions - Medium Complexity - Goods and section 25 (Intellectual Property Infringement and Royalties) of 2035 (2014-09-25) General Conditions-Higher complexity -Services apply to and form part of the Contract.

#### **6-3.2 Supplemental General conditions**

4001 Hardware Purchase, Lease and Maintenance (2013-01-28)

4002 Licensed Software (2010-08-16)

### **6-4 Term of Contract**

#### **6-4.1 Delivery Date**

All the deliverables must be received on or before \_\_\_\_\_

**(To be completed by the contracting Authority at contract award)**

#### **6-4.2 Preparation for Delivery**

Preparation for delivery and packaging are to be to the highest manufacturer's standard for the mode of transportation utilized, to ensure safe arrival at final destination.

**6-4.3 Shipping Instructions**

1. Goods must be consigned to the destination specified below and delivered:  
DDP (Delivered Duty Paid) to the destination per article 6.14, Incoterms 2000 for shipments from commercial contractor.
2. The Contractor is responsible for all delivery charges, administration, costs and risk of transport and customs clearance, including the payment of customs duties and taxes.
3. The Contractor must inform the Contracting Authority when the shipment has been consigned for delivery and must provide shipping details in the form of traceable waybill numbers, or other applicable information.

**6-4.4 Inspection and Acceptance**

Goods will be inspected and accepted by the Inspection Authority upon delivery at destination.

**6-5 Authorities****6-5.1 Contracting Authority**

The Contracting Authority for the Contract is:

Name: Dave Castle,

Title: Supply Specialist

Address: Public Works and Government Services Canada

Pacific Region, Acquisitions, Marine

401 - 1230 Government Street, Victoria, BC, Canada, V8W 3X4.

Telephone: 250-363-0110

Facsimile: 250-363-3960

E-mail address:

[david.castle@pwgsc-tpsgc.gc.ca](mailto:david.castle@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.

**6-5.2 Technical Authority**

The Technical Authority for the Contract is:

Name: Justin Aiyadurai  
Title: Industrial Engineering Technologist  
Address: Department of National Defence  
Fleet Maintenance Facility Cape Breton  
Contracts Office  
PO Box 17000 STN FORCES  
Victoria, BC V9A 7N2  
Telephone: 250-363-7674; Facsimile: 250-363-5015  
E-mail address: [Justin.Aiyadurai@forces.gc.ca](mailto:Justin.Aiyadurai@forces.gc.ca)

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

**6-5.3 Inspection Authority (IA)**

The Technical Authority is the Inspection Authority. All reports, deliverable items, documents, goods and all services rendered under the Contract are subject to inspection by the Inspection Authority or his representative. Should any report, document, good or service not be in accordance with the Requirements at Annex A and to the satisfaction of the Inspection Authority, as submitted, the Inspection Authority will have the right to reject it or require its correction at the sole expense of the Contractor before recommending payment. Any communication with a Contractor regarding the quality of the Work performed pursuant to this Contract shall be undertaken by official correspondence through the Contracting Authority.

The Inspection Authority may designate, and be represented by, an Inspector (TI), Quality Assurance Representative (QAR) or Designated Engineering Authority (DEA).



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#### 6-5.4 Contractor's Representative

Name and telephone numbers of the person responsible for production	
Name:	Telephone No:
Facsimile No:	Email:
Name and telephone numbers of the person responsible for delivery	
Name:	Telephone No:
Facsimile No:	Email:

#### 6-6 Payment

##### 6-6.1 Basis of Payment - Firm Price, Firm Unit Price(s) or Firm Lot Price(s)

In consideration of the Contractor satisfactorily completing all of its obligations under the Contract, the Contractor will be paid a firm price as specified in Annex B.

Customs duties are included and Goods and Services Tax or Harmonized Sales Tax is extra, Canada will not pay the Contractor for any design changes, modifications or interpretations of the Work, unless they have been approved, in writing, by the Contracting Authority before their incorporation into the Work.

##### 6-6.2 Method of Payment

SACC Manual Clause

H1000C	Single Payment	2008-05-12
C6000C	Limitation of Price	2011-05-16
A2001C	Foreign Nationals ( Foreign Contractors)	2001-06-16
C2000C	Taxes-Foreign-based contractor	2007-11-30
C2604C	Customs Duties, Excise Taxes and Applicable Taxes - Non-resident	2013-04-25
C2611C	Customs Duties - Contractor Importer	2007-11-30

**6-7 Invoicing Instructions**

The Contractor must submit invoices in accordance with the section of the General Conditions titled "Invoice Submission". Invoices cannot be submitted until all work identified in the invoice is completed. Invoice is to be addressed to:

**Invoice is to be made out to:**

Department of National Defence  
Fleet Maintenance Facility Cape Breton  
Contracts Office  
PO Box 17000 STN FORCES  
Victoria, BC V9A 7N2      Attention: Mike Godin

**Original invoice is to be sent for verification to:**

Public Works and Government Services Canada  
Acquisitions, Marine  
401 - 1230 Government Street  
Victoria, B.C. V8W 3X4      Attention: Dave Castle

**6-8 Certifications****6-8.1 Compliance**

Compliance with the certifications provided by the Contractor in its bid is a condition of the Contract and subject to verification by Canada during the term of the Contract. If the Contractor does not comply with any certification or it is determined that any certification made by the Contractor in its bid is untrue, whether made knowingly or unknowingly, Canada has the right, pursuant to the default provision of the Contract, to terminate the Contract for default.

**6-8.2 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 HRSDC-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 HRSDC will constitute the Contractor in default as per the terms of the Contract.

**6-9 Applicable Laws**

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

**(To be completed by the Contracting Authority at Contract Award)**

**6-10 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 conditions:
  - 4001 ( Hardware Purchase, Lease and Maintenance ( 2013-01-28)
  - 4002 (Licesed Sotware) (2010-08-16
- c. the General Conditions 2010A (2013-04-25) Medium Complexity - Goods;
- d. section 25 (Intellectual Property Infringement and Royalties) of 2035 ( 2014-03-01)  
General Conditions-Higher complexity -Services
- e. Annex A, Requirement;
- f. Annex B, Basis of Payment; and
- g. the Contractor's bid dated

*Insert date of bid, if bid was clarified or amended, insert at the time of contract award, as clarified on \_\_\_\_\_ or as amended \_\_\_\_\_ and insert dates of clarifications and amendments*

**6.10.1 SACC Manual Clauses**

A9062C	Canadian Forces Site regulations	2011-05-16
G1005C	Insurance	2008-05-12

**6.11 Defence Contract**

The Contract is a defence contract within the meaning of the Defence Production Act, R.S.C. 1985, c. D-1, and must be governed accordingly. Title to the Work or to any materials, parts, work-in-process or finished work must belong to Canada free and clear of all claims, liens, attachments, charges or encumbrances. Canada is entitled, at any time, to remove, sell or dispose of the Work or any part of the Work in accordance with section 20 of the Defence Production Act.

**6.12 Delivery Preparation**

Preparation for delivery and packaging are to be to the highest manufacturer's standard for the mode of transportation utilized, to ensure safe arrival at final destination.

**6.13 Shipping Instructions**

1. Goods must be consigned to the destination specified below and delivered:

CIP (Carriage Insurance Paid) to the destination per article 6.14, Incoterms 2000 for shipments from commercial contractor.

2. The Contractor is responsible for all delivery charges, administration, costs and risk of transport and customs clearance, including the payment of customs duties and taxes.
3. The Contractor must inform the Contracting Authority when the shipment has been consigned for delivery and must provide shipping details in the form of traceable waybill numbers, or other applicable information.

**6.14 Delivery Address**

All components are to be delivered to the final destination address:

Canadian Forces Base Esquimalt  
Fleet Maintenance Facility-Cape Breton,  
Building 250 CFB Esquimalt  
Victoria, BC CANADA V9A 7N2

**6-15 Electrical Equipment**

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

**6-16 Travel and Living Expenses**

The Contractor will be reimbursed its authorized travel and living expenses reasonably and properly incurred in the performance of the Work, at cost, without any allowance for profit and/or administrative overhead, in accordance with the meal, private vehicle and incidental expenses provided in Appendices B, C and D of the National Joint Council Travel Directive and with the other provisions of the directive referring to "travellers", rather than those referring to "employees".

All travel must have the prior authorization of the "Technical" Authority.

All payments are subject to government audit.

## 6-17 Canadian Content Certification

The Contractor warrants that the certification of Canadian Content submitted by the Contractor is accurate and complete, and that the goods, services or both to be provided under the Contract are in accordance with the definition contained in clause A3050T.

The Contractor must keep proper records and documentation relating to the origin of the goods, services or both provided to Canada. The Contractor must not, without obtaining before the written consent of the Contracting Authority, dispose of any such records or documentation until the expiration of six (6) years after final payment under the Contract, or until settlement of all outstanding claims and disputes under the Contract, whichever is later. All such records and documentation must at all times during the retention period be open to audit, inspection and examination by the representatives of Canada, who may make copies and take extracts. The Contractor must provide all facilities for such audits, inspections and examinations, and must furnish all such information as the representatives of Canada may from time to time require with respect to such records and documentation.

Nothing in this clause must be interpreted as limiting the rights and remedies which Canada may otherwise have pursuant to the Contract.

## **ANNEX A - REQUIREMENT**

### **Statement of Requirements (SOR) – Solicitation C**

#### **Overview;**

The following is the minimum Government of Canada requirements for one (1) fully self contained DC load bank unit to be employed in support of the Victoria Class Submarines. Fleet Maintenance Facility CAPE BRETON (FMF CB) requires equipment suitable for the testing of DC generators for the Victoria Class Submarines. The resistive load bank must be designed to simulate electrical loads for testing high power electrical sources.

#### **Specifications;**

**For design and engineering the following information is to be utilized and assumed.**

Unit will be used and stored 100% of the time outdoors in a marine environment. Unit will be exposed to extreme salt water environments.

<b>Item</b>	<b>Minimum Mandatory Requirements</b>
<b>Regulatory Requirements</b>	
1.0	Unit must be electrically certified by an approved Canadian agency. On site field certification is acceptable.
1.1	Unit's electrical design must be approved by a licensed/certified professional electrical engineer.
<b>System Operating Requirements</b>	
1.2	Unit must be designed to produce a constant current/power load with the following minimum capacities: <ul style="list-style-type: none"> <li>• 1800 kW at 480 VDC (3750 Amps)</li> <li>• 1800 kW at 720 VDC (2500 Amps)</li> <li>• 1800 kW at 1000 VDC (1800 Amps)</li> </ul>
1.3	Unit must have a minimum load step resolution of 2.5kW, and a maximum load step of 250kW. Unit must be able to achieve any load from 0-1800 kW with a minimum resolution of 2.5 kW. Each load step must have branch circuit fuse protection. The fuse must be 200K Amp Interrupting Capacity (AIC) type.
1.4	Unit must be fitted with a cooling system rated for a minimum ambient temperature of 40°C (104°F). Resistive load elements must be entirely exposed to the airflow generated by the cooling fan(s).
1.5	Unit must be fitted with the following protective shutoff devices: <ul style="list-style-type: none"> <li>• Automatic fan and airflow failure shutoff</li> <li>• Automatic overheating shutoff</li> <li>• Manual emergency stop self-locking button on remote control panel and on load bank to shut down all loads instantly</li> </ul>
<b>Physical Requirements</b>	
1.6	Unit must be designed to operate in ambient temperatures between -40°C to +40°C in a marine saltwater environment.

Item	Minimum Mandatory Requirements
1.7	<p>Entire unit must not exceed the following:</p> <ul style="list-style-type: none"> <li>Length: 6100 mm (20 ft.)</li> <li>Width: 2440 mm (8 ft.)</li> <li>Weight: 9090 kg (20,000 lbs)</li> </ul> <p>This footprint and weight must include storage requirements for the control panel, control cable, tarp cover, and auxiliary power cable.</p>
1.8	Load bank enclosure must have an IP22 rating when in operation, and an IP44 rating when not in operation, at a minimum. Electrical enclosures and junction boxes must have an NEMA 3R rating, at a minimum. Circuit boards and control circuits must be mounted in a NEMA 3R enclosure, at a minimum.
1.9	All exposed surfaces must be coated and protected from corrosion.
1.10	Enclosure must be fitted with fork lifting pockets and crane lifting lugs. Safe lifting points and center of gravity for the unit must be identified on the unit. Unit must have securing points for shipment on road, rail, air, and sea. Unit must be designed to withstand shock and vibration to the unit during transportation.
1.11	Resistive load elements inside the unit must be manufactured from a corrosion resistant nickel/chromium alloy wire.
1.12	Resistive load elements inside the unit must be fully supported across their entire length. Materials in direct contact with resistors must be ceramic insulators. Resistor supports must be designed to prevent a short circuit to adjacent resistors or to the ground.
<b>Connection Requirements</b>	
1.13	Unit must be fitted with a load connection box with sufficient spacing to connect ten (10) 444 MCM DLO 1000 V cables to the positive busbar using lugs (0.5 in. bolt size) and ten (10) 444 MCM DLO 1000 V cables to the negative busbar using lugs (0.5 in. bolt size). Provisions must be made to route these cables to busbars through the enclosure.
1.14	Unit must be fitted with Duraline female receptacles, item no. M154506-FLSI-BRN (connected to negative busbar) and M154506-FLSI-BLU (connected to positive busbar), 4-gang interlocking quick connector receptacles to connect submarine electrical system to load bank for testing. The quantity of these receptacles should be a minimum of 3 sets each. Each connection should be limited to 400 Amp maximum capacity.
1.15	Unit must be equipped with a common grounding point to electrically ground the entire system.
<b>Control Panel Requirements</b>	
1.16	Unit must have a portable/remote control panel to control the load bank via control cables from a distance of 60 m. Control cable must be supplied with the unit. Control cable must be replaceable.
1.17	Portable control panel must have an NEMA 3R rating, at a minimum. Control panel must have a carrying handle. It is acceptable for control panel can be stored in minimum NEMA 3R case with a carrying handle.

Item	Minimum Mandatory Requirements
1.18	<p>Portable control panel must be able to be brought onboard a Victoria Class submarine.</p> <p>Portable control panel must not exceed the following:</p> <ul style="list-style-type: none"> <li>• Dimensions (while being transported/stored): 508 mm x 508 mm x 254 mm (20 in x 20 in x 10 in)</li> <li>• Weight (including carrying case): 15 kg (33 lbs)</li> </ul>
1.19	<p>Portable control panel must have separate displays and data acquisition for the following parameters:</p> <ul style="list-style-type: none"> <li>• DC current</li> <li>• Voltage</li> <li>• Kilowatts</li> <li>• Maximum voltage</li> <li>• Transient load response time of voltage, recorded at each load change</li> </ul> <p>These parameters must be measured at the load bank busbars, with a minimum displayed accuracy of 0.5%.</p>
1.20	<p>Portable control panel must have the following switches/buttons:</p> <ul style="list-style-type: none"> <li>• Main Power ON/OFF</li> <li>• Master Load ON/OFF</li> <li>• Emergency Stop self-locking button</li> </ul>
1.21	<p>Portable control panel must have the following indicator lights:</p> <ul style="list-style-type: none"> <li>• Main Power On</li> <li>• Blower On</li> <li>• Airflow Failure</li> <li>• Overheating</li> <li>• Power On for each individual load step</li> </ul>
1.22	<p>Portable control panel must operate on and come installed with Windows 7 operating system if the control panel is a laptop or PC type computer.</p>
<b>Auxiliary System Requirements</b>	
1.23	<p>Unit must have an auxiliary heater/dehumidifier to prevent build-up of condensation while not in operation. Heater/dehumidifier should operate on 120 V, 60 Hz, 1 phase power.</p>
1.24	<p>Heater/dehumidified must be equipped with dedicated power cable(s) with a NEMA 5-15 connector. Each cable should be able to connect to a standard 120 V, 1 Phase, 15 Amp outlet.</p>
1.25	<p>Unit's cooling system must use auxiliary power supply of 460 V, 3 phase, 60 Hz. Up to four (4) 100 A receptacles are available at FMF CB for cooling system to be plugged into.</p>
1.26	<p>Unit must have a 35 m SOOW (Service cord, Oil Resistant Outer Jacket and Insulation, Weather and Water Resistant) type cable(s) to connect to auxiliary power. Russellstoll connector catalogue #DS1404MP must be installed on the supply end of cable.</p>
<b>Testing Requirements</b>	
1.27	<p>Unit must have factory testing/acceptance completed prior to delivery to DND.</p>
<b>Miscellaneous Requirements</b>	
1.28	<p>Operating instruction labels must be clearly identified and printed in English.</p>



Item	Minimum Mandatory Requirements
1.29	The supplied unit must include maintenance and operation manuals for the as built unit. Manuals should be provided in both hard copy and digital format. Manuals must be printed in English. A minimum of three (3) hard copies of the manual must be provided. Manuals must include vendor recommended maintenance schedules, electrical schematics, mechanical schematics, recommended spare parts list, and full parts list.
1.30	Vendor must provide operator and maintenance training for a minimum of 3 days for 8 hours per day between 8:00 AM and 4:30 PM PST. Training will be onsite at FMF CB part of CFB Esquimalt located in Victoria, British Columbia, Canada. Training must cover operation, set-up, user calibration parameters, and maintenance and service requirements.
1.31	The supplied unit must include full parts and labour warranty for a minimum of 12 months. Warranty period must begin following training and commissioning.

Item	Additional Requirements
2.0	Enclosure should be manufactured with corrosion resistant materials such as stainless steel, nickel alloy, or aluminized steel.
2.1	Exposed surfaces should be prepped to SSPC-SP 10 standard, coated with a minimum of two (2) coats of primer, and then coated with two (2) coats of either industrial polyurethane or marine enamel. All coatings must be applied as per their manufacturer instructions.
2.2	Unit should have one (1) heavy-duty waterproof tarp cover with tie-down provisions for use during shipping and outdoor storage. Tarp material should be a PVC coated vinyl with a minimum weight of 600 g/m <sup>2</sup> (18 oz./sq. yard).
2.3	Provisions should be made to store auxiliary power supply SOOW cable on load bank unit.
2.4	Portable control panel should have mechanical toggle switches to control each individual load step. Combinations of load steps should be able to achieve any load between 0-1800 kW with a minimum load resolution of 2.5 kW. Ideal control panel should have the following load step switches (15 switches total): <ul style="list-style-type: none"> <li>• 250 kW – Qty. 6</li> <li>• 100 kW – Qty. 2</li> <li>• 50 kW – Qty. 1</li> <li>• 20 kW – Qty. 1</li> <li>• 10 kW – Qty. 2</li> <li>• 5 kW – Qty. 1</li> <li>• 2.5 kW – Qty. 2</li> </ul>
2.5	Unit should have readily available recommended spare parts. Price list of recommended

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Item	Additional Requirements
	spare parts should be submitted with the bid package. These parts should be available in North American. These parts should have a lead time of 72 hours or less. These parts should be 'off the shelf' generic parts that are available from multiple vendors.
2.6	A training proposal plan should be submitted with the bid package.
2.7	A general layout drawing of the unit should be submitted with the bid package. Layout drawing should include the unit's overall dimensions, and locations of connections.
2.8	A detailed factory testing/acceptance plan for the supplied unit should be submitted with the bid package.
2.9	Manufacturer should have experience designing and building at least ten (10) DC load banks with a capacity ranging from 1200 kW to 1800 kW, at minimum. References to the customer and the load bank capacity must be provided.

Item	Optional Requirements
3.0	<p>The supplied unit should come with the following spare parts, if applicable. Quantities of these spare parts will be negotiated after contract is awarded:</p> <ul style="list-style-type: none"> <li>• Resistor elements</li> <li>• Relays</li> <li>• Contactors</li> <li>• Fuses</li> <li>• Breakers</li> <li>• Air-flow switches</li> <li>• Control cable</li> <li>• Complete programmable logic controller (PLC)</li> </ul>
3.1	DND to be able to exercise option to buy a second DC load bank unit within 12 months of contract award.

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**ANNEX B - FINANCIAL BID PRESENTATION SHEET****B1 Price for Evaluation**

The price of the bid will be evaluated in Canadian Funds, the Goods and Services Tax included, DDP "Delivered Duty Paid" to Destination, Victoria, BC (Incoterms 2000) for Goods.

Spec Item	Description	Qty	Unit Price	Extended Price
a.	Load Bank per Annex "A".	1	\$ _____	\$ _____
b.	Total Shipping Cost a FIRM PRICE of:			\$ _____
c.	Training cost as per Annex "A"	Lot	\$ _____	\$ _____
d.	<b>Total Price for Evaluation</b> <b>GST/HST Excluded</b> [a + b + c ]: a FIRM PRICE of:			\$ _____

**B2 Delivery**

a. While delivery is requested by **31 March 2016**, the best delivery that could be offered is \_\_\_\_ weeks (ARO) after receipt of order.

## **ANNEX C - EVALUATION PLAN**

### **C-1 GENERAL**

- C-1.1** The general requirement for the Bidder's *Technical Bid* is stated at Articles 1-2 para 1 & 3-1.1 of the Bid Solicitation.
- C-1.2** The *Evaluation Procedure* is stated at Part 4 of the Bid Solicitation. The evaluation procedure indicates the composition of the *evaluation team*. This Annex gives the detailed *Evaluation Criteria* and *Scoring Procedure*.
- C-1.3** In order that a complete technical evaluation of the Bid can be conducted, the Bid must be compliant with all of the bid deliverable requirements, which are summarized under Article 3-2 of the Bid Solicitation. It is the Bidder's responsibility to clearly demonstrate their capabilities and capacity to complete all of the Work and other requirements stated in the Bid Solicitation, the Statement of Work and other attachments. Bidders should describe their capabilities, how they will comply with mandatory requirements, and how they will deliver any other requested goods and/or services.
- C-1.4** It is requested at Article 3-1.1 that the Bidder present topics in the order of these evaluation criteria and under the same headings and numbering scheme. Alternatively, the Bidder should include in their Technical Bid an applicability matrix wherein they identify, by page number, where each of the criterion is addressed in their Bid.

### **C-2 MANDATORY TECHNICAL CRITERIA**

- C-2.1** The Mandatory Technical Criteria are detailed in Table 1.
- C-2.2** Mandatory Criteria will be assigned either a pass or fail by the evaluation team. Any Bid which fails to comply with any one Mandatory Criterion will be declared non-responsive.
- C-2.3** Some (or all) of the Mandatory Criteria may also be point rated, for their technical merit, in accordance with *Scoring Procedure* given under Article C-4 of Annex C.

### **C-3 POINT-RATED TECHNICAL CRITERIA**

- C-3.1** The Point-Rated Technical Criteria are detailed in Table 2.
- C-3.2** Point rating of Criteria, for their technical merit, will be conducted in accordance with *Scoring Procedure* given under Article C-4 of Annex C.

## C-4 SCORING PROCEDURE

**C-4.1** Each of the criterion to be point rated will be assigned a *Raw Score [RS]* by the evaluation team. Scores are assigned from a range of 0 to 10, as defined below, unless otherwise noted on the Evaluation Criteria Table:

a. Score 0

Unacceptable: Zero (0) points are awarded to Bids in any category in which they fail either to provide any information or provide information which cannot be understood.

b. Score 3, 4

Marginal: 3 or 4 points are awarded to responses considered to be marginally acceptable. The Bidder has not fully established the capability to perform the requirement and has marginally described its approach. For example:

- The proposal reiterated a requirement, but offered no explanation of how or what was to be accomplished in the Technical Scope of Work.
- The proposal offered an explanation of how or what was to be accomplished in the Technical Scope of Work but may have contained inaccurate statements or references which impacted their approach but did not fully negate the technical approach.
- The proposal referred to the quality of their organization but the proposer did not supply adequate descriptions of his/her past experience/personnel or provided resumes of people or case histories of work experience that was not relevant.

c. Score 6, 7, 8

Adequate to Good: Varying amounts of points are awarded if the technical proposal satisfies the requirement(s) and describes specifically how and /or what is to be accomplished in clear detail. For example:

- The organizational, personnel and experience section of the proposal satisfies the requirement and provided information on the company's capabilities, personal resumes, and case history reports on prior similar type of efforts in clear detail including job names, job responsibilities and types of assignment and the organization people and experience are adequate to good for the job.
- The technical proposal satisfies the requirement and describes specifically how and/or what is to be accomplished, including sample products and illustrative materials (i.e. diagrams, charts, graphs, etc.) where appropriate.

d. Score 10

Outstanding: 10 points are awarded if the proposal satisfies the requirements and describes specifically how and what will be accomplished in a superior manner, both quantitatively and qualitatively for their technical approach and the quantity and

quality of their previous similar jobs and the experience and training of their personnel. For example:

- The proposal provided an innovative, detailed, cost-saving approach or established by references and presentation of material far superior capability in this area.

Note that 1, 2, 5 or 9 points are not used. The purpose is to create sufficient differences among the awarded scores in order to separate the proposals and help create meaningful rankings. Fractional values are not used for the same reason.

**C-4.2** Each rated criterion has been assigned a *Weight Factor [WF]*, indicated on Table 2, generally from a range of 1 to 10, depending of the importance of that criterion.

**C-4.3** The Bidder's *Score* in each Criterion is determined by multiplication, as follows:

$$Score = RS \times WF$$

**C-4.4** The *Total Points [TPts]* for the Bid will be determined by addition of the column under the heading "*Score*", averaged between all evaluators. The required minimum *TPts* is as stated (by percentage) at Part 4 of the Bid Solicitation, and as demonstrated at the foot of Table 2.

**C-4.5** The *Evaluation Price [EP]*, at Article B-1 (of the Financial Bid Presentation Sheet) will be determined by the Contracting Authority.

**C-4.6 Best Value Determination.** The highest compliant combined rating of Technical Merit (70%) and Price (30%) will be determined using a prorated score system as follows:

a. For each compliant bid received, the Technical Points achieved in from Annex C Evaluation Tables will be divided by 1000 potential points and multiplied by 70% resulting in a **Technical Point figure**.

b. For each compliant bid received, the Evaluation Price (EP) will form the denominator under the lowest evaluated price offered of all compliant bids received in a prorated fraction multiplied by 30% resulting in a **Price Point figure**.

c. For each compliant bid received, the resulting Technical Points figure and Price Point figure will be added to produce a **Total Point figure** which will be compared to the other bid results.

d. The bidder with the highest Total Point figure will determine the **Best Value for Canada**.

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Example of Best Value Determination				
	Bidder 1	Bidder 2	Bidder 3	
Technical Points	880/1000	820/1000	760/1000	
Price Quoted	\$60,000	\$55,000	\$50,000	
Calculation	Technical Points	Price Points	Total Points	Global Evaluation
Bidder 1	$\frac{880}{1000} \times 70 = 61.6$	$\frac{50,000}{60,000} \times 30 = 24.99$	86.59	First
Bidder 2	$\frac{820}{1000} \times 70 = 57.4$	$\frac{50,000}{55,000} \times 30 = 27.27$	84.67	Second
Bidder 3	$\frac{760}{1000} \times 70 = 53.2$	$\frac{50,000}{50,000} \times 30 = 30$	83.2	Third

**C-4.7** The *Basis of Selection* is as stated at Article 4-3 of the Bid Solicitation.

## C 5 – Evaluation Tables

Item	Minimum Mandatory Requirements	Comments	Bid Ref. Page #	Pass Fail
Regulatory Requirements				
1.0	Unit must be electrically certified by an approved Canadian agency. On site field certification is acceptable.			For evaluators only
1.1	Unit's electrical design must be approved by a licensed/certified professional electrical engineer.			

Item	Minimum Mandatory Requirements	Comments	Bid Ref. Page #	Pass Fail
<b>System Operating Requirements</b>				
1.2	Unit must be designed to produce a constant current/power load with the following minimum capacities: <ul style="list-style-type: none"> <li>• 1800 kW at 480 VDC (3750 Amps)</li> <li>• 1800 kW at 720 VDC (2500 Amps)</li> <li>• 1800 kW at 1000 VDC (1800 Amps)</li> </ul>			
1.3	Unit must have a minimum load step resolution of 2.5kW, and a maximum load step of 250kW. Unit must be able to achieve any load from 0-1800 kW with a minimum resolution of 2.5 kW. Each load step must have branch circuit fuse protection. The fuse must be 200K Amp Interrupting Capacity (AIC) type.			
1.4	Unit must be fitted with a cooling system rated for a minimum ambient temperature of 40°C (104°F). Resistive load elements must be entirely exposed to the airflow generated by the cooling fan(s).			
1.5	Unit must be fitted with the following protective shutoff devices: <ul style="list-style-type: none"> <li>• Automatic fan and airflow failure shutoff</li> <li>• Automatic overheating shutoff</li> <li>• Manual emergency stop self-locking button on remote control panel and on load bank to shut down all loads instantly</li> </ul>			
<b>Physical Requirements</b>				
1.6	Unit must be designed to operate in ambient temperatures between -40°C to +40°C in a marine saltwater environment.			



Item	Minimum Mandatory Requirements	Comments	Bid Ref. Page #	Pass Fail
1.7	<p>Entire unit must not exceed the following:</p> <ul style="list-style-type: none"> <li>Length: 6100 mm (20 ft.)</li> <li>Width: 2440 mm (8 ft.)</li> <li>Weight: 9090 kg (20,000 lbs)</li> </ul> <p>This footprint and weight must include storage requirements for the control panel, control cable, tarp cover, and auxiliary power cable.</p>			
1.8	<p>Load bank enclosure must have an IP22 rating when in operation, and an IP44 rating when not in operation, at a minimum. Electrical enclosures and junction boxes must have an NEMA 3R rating, at a minimum. Circuit boards and control circuits must be mounted in a NEMA 3R enclosure, at a minimum.</p>			
1.9	<p>All exposed surfaces must be coated and protected from corrosion.</p>			
1.10	<p>Enclosure must be fitted with fork lifting pockets and crane lifting lugs. Safe lifting points and center of gravity for the unit must be identified on the unit. Unit must have securing points for shipment on road, rail, air, and sea. Unit must be designed to withstand shock and vibration to the unit during transportation.</p>			
1.11	<p>Resistive load elements inside the unit must be manufactured from a corrosion resistant nickel/chromium alloy wire.</p>			
1.12	<p>Resistive load elements inside the unit must be fully supported across their entire length. Materials in direct contact with resistors must be ceramic insulators. Resistor supports must be designed to prevent a short circuit to adjacent resistors or to the ground.</p>			

Item	Minimum Mandatory Requirements	Comments	Bid Ref. Page #	Pass Fail
<b>Connection Requirements</b>				
1.13	Unit must be fitted with a load connection box with sufficient spacing to connect ten (10) 444 MCM DLO 1000 V cables to the positive busbar using lugs (0.5 in. bolt size) and ten (10) 444 MCM DLO 1000 V cables to the negative busbar using lugs (0.5 in. bolt size). Provisions must be made to route these cables to busbars through the enclosure.			
1.14	Unit must be fitted with Duraline female receptacles, item no. M154506-FLSI-BRN (connected to negative busbar) and M154506-FLSI-BLU (connected to positive busbar), 4-gang interlocking quick connector receptacles to connect submarine electrical system to load bank for testing. The quantity of these receptacles should be a minimum of 3 sets each. Each connection should be limited to 400 Amp maximum capacity.			
1.15	Unit must be equipped with a common grounding point to electrically ground the entire system.			
<b>Control Panel Requirements</b>				
1.16	Unit must have a portable/remote control panel to control the load bank via control cables from a distance of 60 m. Control cable must be supplied with the unit. Control cable must be replaceable.			
1.17	Portable control panel must have an NEMA 3R rating, at a minimum. Control panel must have a carrying handle. It is acceptable for control panel can be stored in minimum NEMA 3R case with a carrying handle.			

Item	Minimum Mandatory Requirements	Comments	Bid Ref. Page #	Pass Fail
1.18	<p>Portable control panel must be able to be brought onboard a Victoria Class submarine. Portable control panel must not exceed the following:</p> <ul style="list-style-type: none"> <li>• Dimensions (while being transported/stored): 508 mm x 508 mm x 254 mm (20 in x 20 in x 10 in)</li> <li>• Weight (including carrying case): 15 kg (33 lbs)</li> </ul>			
1.19	<p>Portable control panel must have separate displays and data acquisition for the following parameters:</p> <ul style="list-style-type: none"> <li>• DC current</li> <li>• Voltage</li> <li>• Kilowatts</li> <li>• Maximum voltage</li> <li>• Transient load response time of voltage, recorded at each load change</li> </ul> <p>These parameters must be measured at the load bank busbars, with a minimum displayed accuracy of 0.5%.</p>			
1.20	<p>Portable control panel must have the following switches/buttons:</p> <ul style="list-style-type: none"> <li>• Main Power ON/OFF</li> <li>• Master Load ON/OFF</li> <li>• Emergency Stop self-locking button</li> </ul>			
1.21	<p>Portable control panel must have the following indicator lights:</p> <ul style="list-style-type: none"> <li>• Main Power On</li> <li>• Blower On</li> <li>• Airflow Failure</li> <li>• Overheating</li> <li>• Power On for each individual load step</li> </ul>			

Item	Minimum Mandatory Requirements	Comments	Bid Ref. Page #	Pass Fail
1.22	Portable control panel must operate on and come installed with Windows 7 operating system if the control panel is a laptop or PC type computer.			
<b>Auxiliary System Requirements</b>				
1.23	Unit must have an auxiliary heater/dehumidifier to prevent build-up of condensation while not in operation. Heater/dehumidifier should operate on 120 V, 60 Hz, 1 phase power.			
1.24	Heater/dehumidified must be equipped with dedicated power cable(s) with a NEMA 5-15 connector. Each cable should be able to connect to a standard 120 V, 1 Phase, 15 Amp outlet.			
1.25	Unit's cooling system must use auxiliary power supply of 460 V, 3 phase, 60 Hz. Up to four (4) 100 A receptacles are available at FMF CB for cooling system to be plugged into.			
1.26	Unit must have a 35 m SOOW (Service cord, Oil Resistant Outer Jacket and Insulation, Weather and Water Resistant) type cable(s) to connect to auxiliary power. Russellstoll connector catalogue #DS1404MP must be installed on the supply end of cable.			
<b>Testing Requirements</b>				
1.27	Unit must have factory testing/acceptance completed prior to delivery to DND.			
<b>Miscellaneous Requirements</b>				
1.28	Operating instruction labels must be clearly identified and printed in English.			

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W3555-147058

Amd. No. - N° de la modif.

File No. - N° du dossier

XLV-3-36034

Buyer ID - Id de l'acheteur

xlv166

CCC No./N° CCC - FMS No/ N° VME

Item	Minimum Mandatory Requirements	Comments	Bid Ref. Page #	Pass Fail
1.29	The supplied unit must include maintenance and operation manuals for the as built unit. Manuals should be provided in both hard copy and digital format. Manuals must be printed in English. A minimum of three (3) hard copies of the manual must be provided. Manuals must include vendor recommended maintenance schedules, electrical schematics, mechanical schematics, recommended spare parts list, and full parts list.			
1.30	Vendor must provide operator and maintenance training for a minimum of 3 days for 8 hours per day between 8:00 AM and 4:30 PM PST. Training will be onsite at FMF CB part of CFB Esquimalt located in Victoria, British Columbia, Canada. Training must cover operation, set-up, user calibration parameters, and maintenance and service requirements.			
1.31	The supplied unit must include full parts and labour warranty for a minimum of 12 months. Warranty period must begin following training and commissioning.			

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Item	Additional Requirements	Scoring and Evaluation Criteria	Bid Ref. Page#	Raw Score (0-10)	Weight Factor	Total Points
2.0	Enclosure should be manufactured with corrosion resistant materials such as stainless steel, nickel alloy, or aluminized steel.			For evaluators only	7	For evaluators only
2.1	Exposed surfaces should be prepped to SSPC-SP 10 standard, coated with a minimum of two (2) coats of primer, and then coated with two (2) coats of either industrial polyurethane or marine enamel. All coatings must be applied as per their manufacturer instructions.				7	
					7	
					7	
					7	
					7	
2.2	Unit should have one (1) heavy-duty waterproof tarp cover with tie-down provisions for use during shipping and outdoor storage. Tarp material should be a PVC coated vinyl with a minimum weight of 600 g/m <sup>2</sup> (18 oz./sq. yard).				4	
					4	
2.3	Provisions should be made to store auxiliary power supply SOOW cable on load bank unit.				4	

2.4	Portable control panel should have mechanical toggle switches to control each individual load step. Combinations of load steps should be able to achieve any load between 0-1800 kW with a minimum load resolution of 2.5 kW. Ideal control panel should have the following load step switches (15 switches total): <ul style="list-style-type: none"> <li>• 250 kW – Qty. 6</li> <li>• 100 kW – Qty. 2</li> <li>• 50 kW – Qty. 1</li> <li>• 20 kW – Qty. 1</li> <li>• 10 kW – Qty. 2</li> <li>• 5 kW – Qty. 1</li> <li>• 2.5 kW – Qty. 2</li> </ul>				5	
2.5	Unit should have readily available recommended spare parts. Price list of recommended spare parts should be submitted with the bid package. These parts should be available in North American. These parts should have a lead time of 72 hours or less. These parts should be 'off the shelf' generic parts that are available from multiple vendors.				4	
					4	
					4	
2.6	A training proposal plan should be submitted with the bid package.				4	
2.7	A general layout drawing of the unit should be submitted with the bid package. Layout drawing should include the unit's overall dimensions, and locations of connections.				4	

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2.8	A detailed factory testing/acceptance plan for the supplied unit should be submitted with the bid package.				4	
2.9	Manufacturer should have experience designing and building at least ten (10) DC load banks with a capacity ranging from 1200 kW to 1800 kW, at minimum. References to the customer and the load bank capacity must be provided.				6	
					7	
<b>Evaluator:</b>  <b>Signature:</b> _____ <b>Date:</b> _____			Total Points Awarded			
			Total Points to Award		<b>1000</b>	
			Required Minimum Points to Pass		<b>700</b>	
			Required Minimum Pass Percentage		<b>70%</b>	
			Percentage of Awarded Points			



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xlvl66

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Item	Optional Requirements
3.0	<p>The supplied unit should come with the following spare parts, if applicable. Quantities of these spare parts will be negotiated after contract is awarded:</p> <ul style="list-style-type: none"><li>• Resistor elements</li><li>• Relays</li><li>• Contactors</li><li>• Fuses</li><li>• Breakers</li><li>• Air-flow switches</li><li>• Control cable</li><li>• Complete programmable logic controller (PLC)</li></ul>
3.1	<p>DND to be able to exercise option to buy a second DC load bank unit within 12 months of contract award.</p>

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xlvl66

CCC No./N° CCC - FMS No/ N° VME

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**ANNEX D - INFORMATION REQUIRED FOR CODE OF CONDUCT  
VERIFICATION**

Please provide list of names of the following entities, according to the ownership nature of the company

1. For a Corporation - each current member of the Bidder's Board of Directors;

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2. For a Partnership, General Partnership or Limited Partnership - the names of all current partners;

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3. For a Sole Proprietorship or an individual doing business under a firm name - the name of the sole proprietor or individual;

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4. For a Joint Venture - the names of all current members of the Joint venture;

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5. For an individual - the full name of the person

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