

**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 0A1 / Noyau 0A1**  
**Gatineau**  
**Quebec**  
**K1A 0S5**  
**Bid Fax: (819) 997-9776**

**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**  
Frigate Life Extension (FELEX) Project / Bureau de  
projet de prolongation de la vie des frégates (BP  
FELEX)  
455 Blvd de la Carriere  
Gatineau  
Quebec  
K1A 0K2

<b>Title - Sujet</b> CHILLED WATER PLANTS AND PUMPS	
<b>Solicitation No. - N° de l'invitation</b> W8472-135497/A	<b>Amendment No. - N° modif.</b> 005
<b>Client Reference No. - N° de référence du client</b> W8472-135497	<b>Date</b> 2013-05-16
<b>GETS Reference No. - N° de référence de SEAG</b> PW-\$\$FX-003-23683	
<b>File No. - N° de dossier</b> 003fx.W8472-135497	<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 2013-05-27</b>	<b>Time Zone</b> <b>Fuseau horaire</b> Eastern Daylight Saving Time EDT
<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> Passmore, Russ	<b>Buyer Id - Id de l'acheteur</b> 003fx
<b>Telephone No. - N° de téléphone</b> (819) 939-3234 ( )	<b>FAX No. - N° de FAX</b> (819) 994-9127
<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>

## Amendment 005

Amendment 005 is raised to answer the following Bidder questions:

### **Question #51:**

During the on board visit, we noticed that each chiller is connected to a power panel. On the chiller, there is only a control panel. The power panel is not included in the volume given in the specification. Could we use the volume of this power panel to place our equipment? Could we have the exact dimensions?

### **Answer #51:**

The power panel that is shown in the picture is the "motor controller" or "motor starter" for the current chiller. See Appendix 2 to Annex A: A.2.1.7(h) for a description and dimensions of this panel.

This panel is located on the deck in front of the chillers in locations #1 (FAMR) and #4 (AAMR) and located on a nearby bulkhead in locations #2 and #3 (AER).

The current panel will be removed when the 85T chiller is removed. The panel footprint [73" (h) x 32" (w) x 18" (d)] and volume is available for the replacement motor controller (motor starter) if required.

The functional requirements of this panel can be found at A.1.2.5.6. This requirement does not dictate a location for the panel; it may be located on or off the skid.

For dimensions, see attachment "Panel-Dim."

For locations relative to chillers, see 4 attachments; "FAMR" (panel shown as item 26), "AER" (panel shown as item 65), "AER2" (panel shown as item 65), "AAMR" (panel shown as item 23).

Please see attached pictures.

### **Question #52:**

Do you require set to work of each chiller (once installed by others) to form part of our offer?

### **Answer#52:**

No, we do not require the Set to Work of the chillers to be part of this offer.

### **Question #53:**

With regard to the Water Regulation Control (Head Pressure Control): Reference Appendix 1 to Annex A, Section A1.1.9.3, paragraph k, states that, if required, the chiller must include a SW regulating valve. Question: Is the intention of this SW regulating valve to be of mechanical type (i.e. controlled directly by refrigerant pressure and spring action) or electronic actuator type (i.e. controlled by the chiller PLC) which allows for condenser self cleaning cycles, trending of the WRV performance, etc.

### **Answer #53:**

The current (legacy) SW regulating valve uses refrigerant pressure in the process of controlling the SW valve, but requires SW pressure to move the valve stem. Unfortunately SW system pressure is a too low to reliably move the stem, which is why the SOW states - it is not acceptable to use SW system pressure to power SW valve movement. That being said, whether the valve is mechanical or electronic, both types

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are controlled by refrigerant pressure (whether it is direct, or a signal through the PLC).

Therefore, to clarify A.1.1.9.3(k), as long as the proposed SW regulating valve does not use SW system pressure to power the valve, there is no constraint on valve type.

Bidder's should also note the requirement at A.1.1.5.2 when selecting their SW regulating valve.

**Question #54:**

With regard to the Oil Pressure Switch: Reference Appendix 1 to Annex A, Section A1.2.5.7, paragraph i, states that the PLC logic must include oil pressure switch functionality and be backed up by an actual Oil Pressure differential switch. Question: If the compressors offered are of electromagnetic bearing oil-free centrifugal type, can this requirement be lifted? If the compressors offered are of screw type without a positive displacement oil movement strategy, and therefore, no possibility to measure oil pressure, can this requirement be lifted?

**Answer #54:**

The purpose of the statement in Section A.1.2.5.7 is to ensure that the chiller is designed with protective interlocks. If the compressor is oil-free or impossible to measure oil pressure due to design, then there is no reason to have oil switches. Thus the oil switch requirement can be lifted in those cases.

**Question #55:**

With regard to the Local Compressor Motor Control: Reference Appendix 1 to Annex A, Section A1.2.5.6, paragraph a, point i, states the following: "Off/Remote switch which, when set to remote gives start/stop control to the CW Plant Control Units and lights up the respective Control Available Switch". Can you please clarify this requirement?

**Answer #55:**

The purpose of this statement is to ensure that the Compressor Motor Control has two options for startup. The first (labelled Off or Local) allows the compressor to be started only manually. The second (labelled Remote) allows the compressor to be started remotely via IPMS in the Machinery Control Room (MCR).

**ALL OTHER TERMS AND CONDITIONS REMAIN UNCHANGED.**









