



RETURN BIDS TO:

RETOURNER LES SOUMISSIONS À:

**Bid Receiving - PWGSC / Réception des soumissions
- TPSGC**

11 Laurier St. / 11, rue Laurier

Place du Portage, Phase III

Core 0B2 / Noyau 0B2

Gatineau

Québec

K1A 0S5

Bid Fax: (819) 997-9776

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

**Marine Machinery and Services / Machineries et
services maritimes**

11 Laurier St. / 11, rue Laurier

6C2, Place du Portage

Gatineau

Québec

K1A 0S5

Title - Sujet HVAC/Refrigeration Systems	
Solicitation No. - N° de l'invitation F7049-160161/A	Amendment No. - N° modif. 003
Client Reference No. - N° de référence du client F7049-160161	Date 2017-08-25
GETS Reference No. - N° de référence de SEAG PW-\$\$ML-043-26360	
File No. - N° de dossier 043ml.F7049-160161	CCC No./N° CCC - FMS No./N° VME
Solicitation Closes - L'invitation prend fin at - à 02:00 PM on - le 2017-09-07	Time Zone Fuseau horaire Eastern Daylight Saving Time EDT
F.O.B. - F.A.B. Plant-Usine: <input type="checkbox"/> Destination: <input type="checkbox"/> Other-Autre: <input type="checkbox"/>	
Address Enquiries to: - Adresser toutes questions à: Byron, Dan	Buyer Id - Id de l'acheteur 043ml
Telephone No. - N° de téléphone (819) 420-2898 ()	FAX No. - N° de FAX () -
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

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F7049-160161

Amd. No. 3 - N° de la modif. 3
File No. - N° du dossier
043ml.F7049-160161

Buyer ID - Id de l'acheteur
043ML
CCC No./N° CCC - FMS No./N° VME

Solicitation Amendment # 3 is issued to:

- 1) Introduce the minutes to the Bidders Conference into the Request for Proposal.

ADD:

CCGS Sir William Alexander/Cornwallis HVAC/Refrigeration
PSPC File Number: F7049-160161/A
Bidders Conference
1 PM, Thursday, August 17, 2017
MINUTES

OPENING REMARKS

PART 1

- 1- Documents issued to Bidders,
 - a. PSPC indicated that there has only been one Solicitation Amendment and the original RFP added to Buy and Sell.
- 2- Reminders on the procurement process,
 - a. PSPC mentioned that all bids must be sent directly to the Bid Receiving Unit in Gatineau Quebec (only).
- 3- Review of the Request for Proposal

PART 2

Review of Specifications (CCG)

3.2 Requirements for HVAC:

CCG: reviewed the Technical Statement of Requirement (TSOR) from Part 1 to Part 5.

Bidder: What is the steam pressure?

CCG: 3.2.22 "Steam supply available to each Air Handling Unit (AHU) is 7 BAR (244 kg/ht flow)

Bidder: Your indoor winter relative Humidity in the design parameter included in 3.2.5 of the TSOR is indicated at 30%, we usually see 50% in the winter. Do you have a limit on the power you feed to the humidifier?

CCG: Humidifier will still be steam. The humidity is an ISO requirement.

CCG (noted): as per 3.2.7 "The HVAC system must be designed to function properly without buildup of pressure or vacuum from weather, normally closed doors, hatches, or when other similar accesses are closed". The issue is that when the doors are closed, and we are recirculating, there is a vacuum on the door. The vacuum is so strong that a smaller person will have difficulty opening the door. We would like the suppliers to supply equipment that is sized correctly to avoid this vacuum and at the same time maintain acceptable temperatures and humidity when recirculating. This issue is partially related to the draw of air to the engine room when the engines are operating. Under normal operating, CCG would like to have enough air on the inlet, to relieve the vacuum when recirculating, and . We want to make sure that when we are recirculating that we have enough air coming in to relieve the vacuum.

Bidder: Are the dampers on the fresh air inlet closed?

CCG: This is part of the present issue, and we would like this addressed in the new equipment design. We are having to close off a lot of the fresh air to get our heating temperatures up (see the design parameters in 3.2.5). "The system must be capable of maintaining the conditions (in 3.2.5) when supplied with a minimum of 40% fresh air supplied to the accommodations". In our present system, we need to close off the dampers to maintain the temperatures.

CCG (noted) 3.3.10. The noise measurements included in the data package. The new HVAC unit must not exceed these noise levels.

CCG (noted) 3.3.18. The potable water entering the steam to steam humidifier must include a filtration unit to satisfy the requirements of the humidifier. Noted in 3.2.19, the filtration systems to remove residual chlorine of 1.5 mg/l before the water gets into the humidifier.

CCG (noted) 3.2.31 The present arrangement does not mix the air properly through the mixing plenum. Fresh air enters straight in, and recirculating air goes straight down at 90 degrees. The air remains stratified, it is not mixing, and it is freezing the coils. This is another reason why we shut off our fresh air in the winter. We would like this problem rectified with the proposed equipment in your bids. We want to make sure that there is a mixing plenum or a way to ensure that the fresh air, and recirculated air is properly mixed before it reaches the coils.

CCG (noted) 3.2.44 There is a Trihedral VTC alarm monitoring system installed on board. The supported protocols can be seen at <http://www.trihedral.com/device-driver-list>.

Bidder: Question relating to loading of equipment. Will holes be cut for all the HVAC equipment to be installed?

CCG: The units will be assembled, FAT tested and placed on skid for delivery. The plan is that the bidders will provide 2 skid for each vessel. They will be built as complete units. We can cut one hole on either side, slide one unit in, then the other. The units will be installed as they are (totally assembled). CCG (noted) CCG crew will also needs to have room to work on the steam lines, filters, and to work on the units themselves.

Bidder: Question relating to the foundations for the HVAC's. Are the air handling units to come with their own foundation, or are they to fit on the existing foundation?

CCG: Engineering will be completed (by CCG) to step up the to the successful bidders equipment. The bidder is responsible for the resilient mounts to the engineered structure/frame to get the noise down.

Bidder: Is the frame to be supplied.

CCG: No, just the resilient mounts.

Bidder (clarified): CCG will supply the supporting structure, and vender to supply the resilient mounts only.

CCG: correct, the vender will be responsible to meet the noise level requirements in the specification.

3.3 Requirements for Domestic Refrigeration:

Bidder: 3.3.6 Does CCG Have any preference for gas?

CCG: the only requirement in the specification is for a modern supportable gas.

Bidder: Would you like the systems to use the same gas?

CCG: It would be preferred, but it is not necessary. The only requirement is for a modern supportable gas for either one.

Bidder: 3.3.10 Loss of oil pressure is to be included in the controls and incorporated into the alarm monitoring system for each unit. Do you want the safety controls to run it off of oil pressure?

CCG: To answer your question, yes, we would like the controls to run off oil pressure. We presently use a site glass to check oil levels, and we would still like to have the site glass on the equipment.

Bidder: 3.3.13 Do you want CuNi condensers (even if you are running fresh water)? Tombstone data shows 90/10 CuNi.

CCG: yes, CuNi condensers to be included.

Bidder: There are two cages in the cold room with mechanical controls. The electrical controls requested in the specification will these cages be replaced by panels?

CCG: Yes, this space will be available for bidders to put their electrical controls.

Bidder: Does CCG have a plan to bring the condensing/refrigeration units down to the engine room?

CCG: Soft patch on the main deck, drop through the helicopter deck, through the water tight doors, moved horizontally to the engine room. The smaller refrigeration units can also be move to the space from the soft patch or they may be brought down the normal way (stairs). The condensing units may require that the sealed motor be removed from the compressor unit and re-assembled in the engine room.

Bidder: In regard to the controls, should the controls integrate into the current system, and be operable from a remote location.

CCG: no the controls should not integrate into the current system, but alarm monitoring should!

Bidder: Do you require a Freon detection system?

CCG: No, not at this time.

Bidder: Compressor selection – will CCG accept something other than open drive?

CCG: Yes, as long as it is marine.

Bidder: Are you planning on keeping the same unit coolers?

CCG: Yes, but the successful bidder is to supply new evaporators.

Bidder (commented): We noticed that you have redundant refrigeration units.

CCG: One refrigeration units is a standby. CCG rotates them every 6 months to a year (it is not a parallel system).

Bidder: Do you require proactive dehumidification (dehumidify air without cooling)?

CCG: No bidders not to include this in their bids. We will look at it at a later date.

Bidder: Does CCG want pneumatic actuators or electronic actuators?

CCG: Electronic actuators are required in the specification, include electronic actuators your bids.

Bidder: Are you planning on reusing the space temperature sensors in the freezer room.

CCG: These sensors are outside of the scope of this requirement.

Bidder: In the Motor Control Room (MCR), if you get a general alarm, do you have to go to the controller to see what the alarm is, or is there a screen/display in the MCR describing what the alarm is?

CCG: The two vessels are set up differently. On the Sir William Alexander, an alarm is indicated, trips the unit, and you are forced to go down to the unit to see what is going on. On the Cornwallis, the alarm monitor gives a little more information.

POST MEETING NOTE: On the HVAC and refrigeration systems we get a general alarm if there is a trip on the condensing units. For the refrigeration system we also have alarms for the cold room air temperature, and on the HVAC there is an alarm for the fresh air intake.

Bidder: Defrost – do you want electric in the freezer and air defrost everywhere else, or do you want electric everywhere?

CCG: in the SOW it states that the refrigeration system must include auto-defrosting evaporators properly sized for every cooled space (3.3.4). I did not specify electric or air.

Bidder: Do you heat it or not? It is no problem to put in a heater.

CCG: If you think that it is needed in the cooling space

POST MEETING NOTE: It has to be an auto defrosting evaporator.

Bidder: We do not usually do it.

CCG: I don't think it is needed either, but you have seen the space, and what we are exposed to. It is your call (**POST MEETING NOTE: as long as it is an auto defrosting evaporator.**)

Bidder: Can we fax the bids.

PSPC: electronic files need to be submitted with the hard copies of the bids at the bid receiving unit.

Bidder (read) from section 2.2 in the RFP, "Due to the nature of the bid solicitation, bids transmitted by fax to PSPC will not be accepted"

POST MEETING NOTE: Faxed bids will not be accepted.

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PART 3

a. Closing comments

Dan Byron
Contracting Authority
PSPC
819-420-2898

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End of Solicitation Amendment #3