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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

Title - Sujet HEATING BOILERS	
Solicitation No. - N° de l'invitation U6800-163691/A	**Amendment No. - N° modif.** 002
Client Reference No. - N° de référence du client U6800-163691	**Date** 2015-07-28
GETS Reference No. - N° de référence de SEAG PW-$$HL-659-67630	
File No. - N° de dossier hl659.U6800-163691	**CCC No./N° CCC - FMS No./N° VME**
Solicitation Closes - L'invitation prend fin at - à 02:00 PM on - le 2015-08-18	**Time Zone** **Fuseau horaire** Eastern Daylight Saving Time EDT
F.O.B. - F.A.B. **Plant-Usine:** ☐ **Destination:** ☑ **Other-Autre:** ☐	
Address Enquiries to: - Adresser toutes questions à: Van Tassel, Stella	**Buyer Id - Id de l'acheteur** hl659
Telephone No. - N° de téléphone (819) 956-4398 ( )	**FAX No. - N° de FAX** ( ) -
Destination - of Goods, Services, and Construction: **Destination - des biens, services et construction:**	

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

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**

Issuing Office - Bureau de distribution
Fuel & Construction Products Division
11 Laurier St./11, rue Laurier
7A2, Place du Portage, Phase III
Gatineau, Québec K1A 0S5

Amendment number 002 to Request for Proposal (RFP) U6800-163691/A which closes August 18, 2015 at 2:00 p.m. is raised to:

Respond to questions received from bidders.

Q. 1 – In the addendum, it is stated that the water temperatures will be 160°F/180°F. Those are water temperatures for conventional heating systems. Those temperatures will not allow the combustion gases to condense. Flue gases condense at approximately 130°F and therefore require much lower water temperatures (about 50°F lower than the flue gases).

A. 1- The 180/160°F temperatures in the specification (addendum) refer to the maximum supply return temperatures that the boilers have to be capable of providing to meet the maximum design criteria of the existing coils. The supply water temperature will vary inversely by an indoor/outdoor controller so that the supply water temperature is lowered as the outdoor temperature rises. The boiler will operate at maximum 180°F temperature only on the design day temperature (outdoor temperature). Condensing operation is anticipated at greater efficiency when outdoor temperatures allow for lower loop temperatures during the majority of the occupied hours of the heating season.

The heating system flow will also vary by demand by controlling the pump speed. This will maintain a greater temperature difference (TD) between supply and return water. The original system was equipped with constant flow pumps where the TD reduces as the load reduces and results in higher return water temperatures. Therefore it is estimated that during part of the heating season the return water temperature will be lower than 130°F and flue gas condensation will occur. At 130°F return water boiler efficiency will be 87% and the efficiency increases as the return water is reduced further. This efficiency is higher than a non-condensing boiler.

Q. 2 – In the specifications, you require 95% efficiency. This efficiency is impossible to achieve with water temperatures of 160°F/180°F. The flue gas temperatures will be approximately 230°F-250°F, which will give a combustion efficiency of approximately 85-87%, maximum. No boiler on the market (condenser or otherwise) can provide an efficiency of 95% with water temperatures of 160°F/180°F. Can you correct the specifications to specify efficiencies closer to those your system will permit?

A. 2- T he specification is modeled on high quality boilers that from our experience have a proven long and reliable life. Similar boilers, in our experience, are now over 20 years old and still in operation. The design is based on boilers first introduced in the late 1970s but there are more recent boilers built for a lower cost and with a corresponding quality. Boiler efficiency should be tested to ANSI Z21.13/CSA 4.9 : Gas Fired Low-Pressure Steam and Hot Water Boilers (180°F Hot water Supply/100°F Hot Water Return).

All other terms and conditions of the Request for Proposal remain unchanged.