



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

Maintenance & Professional Consulting Services

Division (FK)

11 Laurier St./ 11, rue Laurier

3C2, Place du Portage, Phase III

Gatineau

Québec

K1A 0S5

Title - Sujet TIMISKAMING GENERATOR MAINTENANCE	
Solicitation No. - N° de l'invitation EP168-172747/C	Amendment No. - N° modif. 001
Client Reference No. - N° de référence du client 20172747	Date 2018-03-21
GETS Reference No. - N° de référence de SEAG PW-\$\$FK-304-74437	
File No. - N° de dossier fk304.EP168-172747	CCC No./N° CCC - FMS No./N° VME
Solicitation Closes - L'invitation prend fin at - à 02:00 PM on - le 2018-04-06	
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: Dallaire, Maxime	Buyer Id - Id de l'acheteur fk304
Telephone No. - N° de téléphone (819) 420-1111 ()	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

This solicitation amendment 001 is issued to update Annex A & B; and to extend the bid closing date.

1/ At Annex A – Statement of Work

Delete: Annex "A" in its entirety

Insert: Attached Annex A – Statement of Work

2/ At Annex B – Pricing Schedules

Delete: Annex B in its entirety

Insert: Attached Annex B – Pricing Schedules

3/ On Page 1:

DELETE: Solicitation Closes AT 02:00 PM EDT on 2018-04-03

INSERT: Solicitation Closes AT 02:00 PM EDT on 2018-04-06

OTHER TERMS AND CONDITIONS REMAIN UNCHANGED

**ANNEX B
PRICING SCHEDULES**

PRICING SCHEDULES – FIRM PRICES

Bidders must provide firm all inclusive prices including all necessary tools, equipment (including personal protective equipment) and services, materials, transportation, labour, supervision and all related costs required to undertake the inspections and maintenance as detailed in the Annex "A", Statement of Work.

Bidders must propose pricing and complete all the tables below.

PRICING SCHEDULE 1 – FIRM PRICES

Table 1.1: Our fixed firm yearly prices shall be:

Location	Year 1	Year 2	Year 3	Option Year 4	Option Year 5	Option Year 6
Timiskaming Dam	\$	\$	\$	\$	\$	\$
Latchford Dam	\$	\$	\$	\$	\$	\$
Big Chaudière Dam	\$	\$	\$	\$	\$	\$
SUB TOTAL	\$	\$	\$	\$	\$	\$
Total for Years 1 to 6						\$

Summary of Table 1.1

Period	Firm Monthly Rate	Number of Months	Firm Annual Price
Year 1	\$	X 12	\$
Year 2	\$	X 12	\$
Year 3	\$	X 12	\$
Option Year 4	\$	X 12	\$
Option Year 5	\$	X 12	\$
Option Year 6	\$	X 12	\$
Total:			\$

***In the case of error in the extension of prices, the unit price will govern.

PRICING SCHEDULES -TASK AUTHORIZATIONS

PRICING SCHEDULE 2 – TASK AUTHORIZATIONS AT TIMISKAMING DAM

Table 2.1 LABOUR: Our fixed hourly rate per **Generator Technician** shall be:

Regular Time: <i>Monday to Friday 8.00 am until 4.00 pm</i>	Year 1	Year 2	Year 3	Option Year 4	Option Year 5	Option Year 6
Rate/Hour	\$ ____ /HR	\$ ____ /HR	\$ ____ /HR	\$ ____ /HR	\$ ____ /HR	\$ ____ /HR
Estimated quantity of hours per year	20	20	20	20	20	20
Extended Price	\$	\$	\$	\$	\$	\$
2.1(i) SUB-TOTAL:						\$

Overtime: Monday to Friday 4.00 pm until 8.00 am and Saturday - Time and a Half (1.5xReg.Hourly Rate)	Year 1	Year 2	Year 3	Option Year 4	Option Year 5	Option Year 6
Rate/Hour	\$ ____ /HR	\$ ____ /HR	\$ ____ /HR	\$ ____ /HR	\$ ____ /HR	\$ ____ /HR
Estimated quantity of	0	0	0	0	0	0

**ANNEX B
PRICING SCHEDULES**

hours per year						
Extended Price	\$	\$	\$	\$	\$	\$
2.1 (ii) SUB-TOTAL:						\$

Overtime: Sunday and Statutory Holidays DoubleTime (2.0 x Reg. Hourly Rate)	Year 1	Year 2	Year 3	Option Year 4	Option Year 5	Option Year 6
Rate/Hour	\$ ____/HR	\$ ____/HR	\$ ____/HR	\$ ____/HR	\$ ____/HR	\$ ____/HR
Estimated quantity of hours per year	0	0	0	0	0	0
Extended Price	\$	\$	\$	\$	\$	\$
2.1 (iii) SUB-TOTAL:						\$

Table 2.2 LABOUR: Our fixed hourly rate per Diesel Mechanic shall be::

Regular Time: Monday to Friday 8.00 am until 4.00 pm	Year 1	Year 2	Year 3	Option Year 4	Option Year 5	Option Year 6
Rate/Hour	\$ ____/HR	\$ ____/HR	\$ ____/HR	\$ ____/HR	\$ ____/HR	\$ ____/HR
Estimated quantity of hours per year	0	0	0	0	0	0
Extended Price	\$	\$	\$	\$	\$	\$
2.2 (i) SUB-TOTAL:						\$

Overtime: Monday to Friday 4.00 pm until 8.00 am and Saturday - Time and a Half (1.5xReg.Hourly Rate)	Year 1	Year 2	Year 3	Option Year 4	Option Year 5	Option Year 6
Rate/Hour	\$ ____/HR	\$ ____/HR	\$ ____/HR	\$ ____/HR	\$ ____/HR	\$ ____/HR
Estimated quantity of hours per year	0	0	0	0	0	0
Extended Price	\$	\$	\$	\$	\$	\$
2.2 (ii) SUB-TOTAL:						\$

Overtime: Sunday and Statutory Holidays Double Time (2.0 x Reg. Hourly Rate)	Year 1	Year 2	Year 3	Option Year 4	Option Year 5	Option Year 6
Rate/Hour	\$ ____/HR	\$ ____/HR	\$ ____/HR	\$ ____/HR	\$ ____/HR	\$ ____/HR
Estimated quantity of hours per year	0	0	0	0	0	0
Extended Price	\$	\$	\$	\$	\$	\$
2.2 (iii) SUB-TOTAL:						\$

Table 2.3 LABOUR: Our fixed hourly rate per Electrician shall be:

Regular Time: Monday to Friday 8.00 am until 4.00 pm	Year 1	Year 2	Year 3	Option Year 4	Option Year 5	Option Year 6
Rate/Hour	\$ ____/HR	\$ ____/HR	\$ ____/HR	\$ ____/HR	\$ ____/HR	\$ ____/HR
Estimated quantity of hours per year	10	10	10	10	10	10
Extended Price	\$	\$	\$	\$	\$	\$
2.3 (i) SUB-TOTAL:						\$

Overtime: Monday to Friday 4.00 pm until 8.00	Year 1	Year 2	Year 3	Option Year 4	Option Year 5	Option Year 6
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PRICING SCHEDULES**

<i>am and Saturday - Time and a Half 1.5xReg.Hourly Rate)</i>						
Rate/Hour	\$ _____/HR					
Estimated quantity of hours per year	0	0	0	0	0	0
Extended Price	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____
2.3 (i) SUB-TOTAL:						\$ _____

Overtime: Sunday and Statutory Holidays Double Time (2.0 x Reg. Hourly Rate)	Year 1	Year 2	Year 3	Option Year 4	Option Year 5	Option Year 6
Rate/Hour	\$ _____/HR	\$ _____/HR	\$ _____/HR	\$ _____/HR	\$ _____/HR	\$ _____/HR
Estimated quantity of hours per year	0	0	0	0	0	0
Extended Price	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____
2.3 (iii) SUB-TOTAL:						\$ _____

Table 2.4 LABOUR: Our fixed hourly rate per **Infrared Thermographer** shall be:

Regular Time: Monday to Friday 8.00 am until 4.00 pm	Year 1	Year 2	Year 3	Option Year 4	Option Year 5	Option Year 6
Rate/Hour	\$ _____/HR	\$ _____/HR	\$ _____/HR	\$ _____/HR	\$ _____/HR	\$ _____/HR
Estimated quantity of hours per year	10	10	10	10	10	10
Extended Price	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____
2.4 (i) SUB-TOTAL:						\$ _____

Overtime: Monday to Friday 4.00 pm until 8.00 am and Saturday - Time and a Half 1.5xReg.Hourly Rate)	Year 1	Year 2	Year 3	Option Year 4	Option Year 5	Option Year 6
Rate/Hour	\$ _____/HR	\$ _____/HR	\$ _____/HR	\$ _____/HR	\$ _____/HR	\$ _____/HR
Estimated quantity of hours per year	0	0	0	0	0	0
Extended Price	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____
2.4 (ii) SUB-TOTAL:						\$ _____

Overtime: Sunday and Statutory Holidays Double Time (2.0 x Reg. Hourly Rate)	Year 1	Year 2	Year 3	Option Year 4	Option Year 5	Option Year 6
Rate/Hour	\$ _____/HR	\$ _____/HR	\$ _____/HR	\$ _____/HR	\$ _____/HR	\$ _____/HR
Estimated quantity of hours per year	0	0	0	0	0	0
Extended Price	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____
2.4 (iii) SUB-TOTAL:						\$ _____

Table 2.5 LABOUR: Our fixed hourly rate per **Petroleum Mechanic** shall be:

Regular Time: Monday to Friday 8.00 am until 4.00 pm	Year 1	Year 2	Year 3	Option Year 4	Option Year 5	Option Year 6
Rate/Hour	\$ _____/HR	\$ _____/HR	\$ _____/HR	\$ _____/HR	\$ _____/HR	\$ _____/HR
Estimated quantity of hours per year	10	10	10	10	10	10

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Extended Price	\$	\$	\$	\$	\$	\$
	2.5 (i) SUB-TOTAL:					\$

Overtime: Monday to Friday 4.00 pm until 8.00 am and Saturday - Time and a Half (1.5xReg.Hourly Rate)	Year 1	Year 2	Year 3	Option Year 4	Option Year 5	Option Year 6
Rate/Hour	\$ ____/HR	\$ ____/HR	\$ ____/HR	\$ ____/HR	\$ ____/HR	\$ ____/HR
Estimated quantity of hours per year	0	0	0	0	0	0
Extended Price	\$	\$	\$	\$	\$	\$
	2.5 (ii) SUB-TOTAL:					\$

Overtime: Sunday and Statutory Holidays Double Time (2.0 x Reg. Hourly Rate)	Year 1	Year 2	Year 3	Option Year 4	Option Year 5	Option Year 6
Rate/Hour	\$ ____/HR	\$ ____/HR	\$ ____/HR	\$ ____/HR	\$ ____/HR	\$ ____/HR
Estimated quantity of hours per year	0	0	0	0	0	0
Extended Price	\$	\$	\$	\$	\$	\$
	2.5 (iii) SUB-TOTAL:					\$

2.6 LABOUR: Our fixed hourly rate per **Gas Technician** shall be:

Regular Time: Monday to Friday 8.00 am until 4.00 pm	Year 1	Year 2	Year 3	Option Year 4	Option Year 5	Option Year 6
Rate/Hour	\$ ____/HR	\$ ____/HR	\$ ____/HR	\$ ____/HR	\$ ____/HR	\$ ____/HR
Estimated quantity of hours per year	10	10	10	10	10	10
Extended Price	\$	\$	\$	\$	\$	\$
	2.6(i) SUB-TOTAL:					\$

Overtime: Monday to Friday 4.00 pm until 8.00 am and Saturday - Time and a Half (1.5xReg.Hourly Rate)	Year 1	Year 2	Year 3	Option Year 4	Option Year 5	Option Year 6
Rate/Hour	\$ ____/HR	\$ ____/HR	\$ ____/HR	\$ ____/HR	\$ ____/HR	\$ ____/HR
Estimated quantity of hours per year	0	0	0	0	0	0
Extended Price	\$	\$	\$	\$	\$	\$
	2.6(ii) SUB-TOTAL:					\$

Overtime: Sunday and Statutory Holidays Double Time (2.0 x Reg. Hourly Rate)	Year 1	Year 2	Year 3	Option Year 4	Option Year 5	Option Year 6
Rate/Hour	\$ ____/HR	\$ ____/H R	\$ ____/H R	\$ ____/H R	\$ ____/H R	\$ ____/HR
Estimated quantity of hours per year	0	0	0	0	0	0
Extended Price	\$	\$	\$	\$	\$	\$
	2.6 (iii) SUB-TOTAL:					\$

2.7 LABOUR: Our fixed hourly rate per **welder** shall be:

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PRICING SCHEDULES**

Regular Time: <i>Monday to Friday 8.00 am until 4.00 pm</i>	Year 1	Year 2	Year 3	Option Year 4	Option Year 5	Option Year 6
Rate/Hour	\$ _____/HR	\$ _____/HR	\$ _____/HR	\$ _____/HR	\$ _____/HR	\$ _____/HR
Estimated quantity of hours per year	30	30	30	30	30	30
Extended Price	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____
2.7(i) SUB-TOTAL:						\$ _____

Overtime: Monday to Friday 4.00 pm until 8.00 am and Saturday - Time and a Half (1.5xReg.Hourly Rate)	Year 1	Year 2	Year 3	Option Year 4	Option Year 5	Option Year 6
Rate/Hour	\$ _____/HR	\$ _____/HR	\$ _____/HR	\$ _____/HR	\$ _____/HR	\$ _____/HR
Estimated quantity of hours per year	8	8	8	8	8	8
Extended Price	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____
2.7(ii) SUB-TOTAL:						\$ _____

Overtime: Sunday and Statutory Holidays Double Time (2.0 x Reg. Hourly Rate)	Year 1	Year 2	Year 3	Option Year 4	Option Year 5	Option Year 6
Rate/Hour	\$ _____/HR	\$ _____/HR	\$ _____/HR	\$ _____/HR	\$ _____/HR	\$ _____/HR
Estimated quantity of hours per year	4	4	4	4	4	4
Extended Price	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____
2.7(iii) SUB-TOTAL:						\$ _____

PRICING SCHEDULE 3 -TASK AUTHORIZATIONS AT LATCHFORD DAM

Table 3.1 LABOUR: Our fixed hourly rate per **Generator Technician** shall be:

Regular Time: <i>Monday to Friday 8.00 am until 4.00 pm</i>	Year 1	Year 2	Year 3	Option Year 4	Option Year 5	Option Year 6
Rate/Hour	\$ _____/HR	\$ _____/HR	\$ _____/HR	\$ _____/HR	\$ _____/HR	\$ _____/HR
Estimated quantity of hours per year	4	4	4	4	4	4
Extended Price	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____
3.1(i) SUB-TOTAL:						\$ _____

Overtime: Monday to Friday 4.00 pm until 8.00 am and Saturday - Time and a Half (1.5xReg.Hourly Rate)	Year 1	Year 2	Year 3	Option Year 4	Option Year 5	Option Year 6
Rate/Hour	\$ _____/HR	\$ _____/HR	\$ _____/HR	\$ _____/HR	\$ _____/HR	\$ _____/HR
Estimated quantity of hours per year	0	0	0	0	0	0
Extended Price	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____
3.1 (ii) SUB-TOTAL:						\$ _____

**ANNEX B
PRICING SCHEDULES**

Overtime: Sunday and Statutory Holidays DoubleTime (2.0 x Reg. Hourly Rate)	Year 1	Year 2	Year 3	Option Year 4	Option Year 5	Option Year 6
Rate/Hour	\$ _____/HR	\$ _____/HR	\$ _____/HR	\$ _____/HR	\$ _____/HR	\$ _____/HR
Estimated quantity of hours per year	0	0	0	0	0	0
Extended Price	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____
3.1(iii) SUB-TOTAL:						\$ _____

Table 3.2 LABOUR: Our fixed hourly rate per **Diesel Mechanic** shall be::

Regular Time: Monday to Friday 8.00 am until 4.00 pm	Year 1	Year 2	Year 3	Option Year 4	Option Year 5	Option Year 6
Rate/Hour	\$ _____/HR	\$ _____/HR	\$ _____/HR	\$ _____/HR	\$ _____/HR	\$ _____/HR
Estimated quantity of hours per year	4	4	4	4	4	4
Extended Price	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____
3.2(i) SUB-TOTAL:						\$ _____

Overtime: Monday to Friday 4.00 pm until 8.00 am and Saturday - Time and a Half 1.5xReg.Hourly Rate)	Year 1	Year 2	Year 3	Option Year 4	Option Year 5	Option Year 6
Rate/Hour	\$ _____/HR	\$ _____/HR	\$ _____/HR	\$ _____/HR	\$ _____/HR	\$ _____/HR
Estimated quantity of hours per year	0	0	0	0	0	0
Extended Price	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____
3.2(ii) SUB-TOTAL:						\$ _____

Overtime: Sunday and Statutory Holidays Double Time (2.0 x Reg. Hourly Rate)	Year 1	Year 2	Year 3	Option Year 4	Option Year 5	Option Year 6
Rate/Hour	\$ _____/HR	\$ _____/HR	\$ _____/HR	\$ _____/HR	\$ _____/HR	\$ _____/HR
Estimated quantity of hours per year	0	0	0	0	0	0
Extended Price	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____
3.2(iii) SUB-TOTAL:						\$ _____

Table 3.3 LABOUR: Our fixed hourly rate per **Electrician** shall be:

Regular Time: Monday to Friday 8.00 am until 4.00 pm	Year 1	Year 2	Year 3	Option Year 4	Option Year 5	Option Year 6
Rate/Hour	\$ _____/HR	\$ _____/HR	\$ _____/HR	\$ _____/HR	\$ _____/HR	\$ _____/HR
Estimated quantity of hours per year	4	4	4	4	4	4
Extended Price	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____
3.3 i) SUB-TOTAL:						\$ _____

Overtime: Monday to Friday 4.00 pm until 8.00 am and Saturday - Time and a Half 1.5xReg.Hourly Rate)	Year 1	Year 2	Year 3	Option Year 4	Option Year 5	Option Year 6
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Rate/Hour	\$ _____ /HR					
Estimated quantity of hours per year	0	0	0	0	0	0
Extended Price	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____
3.3(ii) SUB-TOTAL:						\$ _____

<i>Overtime: Sunday and Statutory Holidays Double Time (2.0 x Reg. Hourly Rate)</i>	Year 1	Year 2	Year 3	Option Year 4	Option Year 5	Option Year 6
Rate/Hour	\$ _____ /HR	\$ _____ /HR	\$ _____ /HR	\$ _____ /HR	\$ _____ /HR	\$ _____ /HR
Estimated quantity of hours per year	0	0	0	0	0	0
Extended Price	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____
3.3(iii) SUB-TOTAL:						\$ _____

Table 3.4 LABOUR: Our fixed hourly rate per **Infrared Thermographer** shall be:

<i>Regular Time: Monday to Friday 8.00 am until 4.00 pm</i>	Year 1	Year 2	Year 3	Option Year 4	Option Year 5	Option Year 6
Rate/Hour	\$ _____ /HR	\$ _____ /HR	\$ _____ /HR	\$ _____ /HR	\$ _____ /HR	\$ _____ /HR
Estimated quantity of hours per year	4	4	4	4	4	4
Extended Price	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____
3.4(i) SUB-TOTAL:						\$ _____

<i>Overtime: Monday to Friday 4.00 pm until 8.00 am and Saturday - Time and a Half 1.5xReg.Hourly Rate)</i>	Year 1	Year 2	Year 3	Option Year 4	Option Year 5	Option Year 6
Rate/Hour	\$ _____ /HR	\$ _____ /HR	\$ _____ /HR	\$ _____ /HR	\$ _____ /HR	\$ _____ /HR
Estimated quantity of hours per year	0	0	0	0	0	0
Extended Price	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____
3.4(ii) SUB-TOTAL:						\$ _____

<i>Overtime: Sunday and Statutory Holidays Double Time (2.0 x Reg. Hourly Rate)</i>	Year 1	Year 2	Year 3	Option Year 4	Option Year 5	Option Year 6
Rate/Hour	\$ _____ /HR	\$ _____ /HR	\$ _____ /HR	\$ _____ /HR	\$ _____ /HR	\$ _____ /HR
Estimated quantity of hours per year	0	0	0	0	0	0
Extended Price	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____
3.4(iii) SUB-TOTAL:						\$ _____

Table 3.5 LABOUR: Our fixed hourly rate per **Petroleum Mechanic** shall be:

<i>Regular Time: Monday to Friday 8.00 am until 4.00 pm</i>	Year 1	Year 2	Year 3	Option Year 4	Option Year 5	Option Year 6
Rate/Hour	\$ _____ /HR	\$ _____ /HR	\$ _____ /HR	\$ _____ /HR	\$ _____ /HR	\$ _____ /HR
Estimated quantity of hours per year	4	4	4	4	4	4
Extended Price	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____
3.5(i) SUB-TOTAL:						\$ _____

**ANNEX B
PRICING SCHEDULES**

Overtime: Monday to Friday 4.00 pm until 8.00 am and Saturday - Time and a Half 1.5xReg.Hourly Rate)	Year 1	Year 2	Year 3	Option Year 4	Option Year 5	Option Year 6
Rate/Hour	\$ _____ /HR	\$ _____ /HR	\$ _____ /HR	\$ _____ /HR	\$ _____ /HR	\$ _____ /HR
Estimated quantity of hours per year	0	0	0	0	0	0
Extended Price	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____
3.5(ii) SUB-TOTAL:						\$ _____

Overtime: Sunday and Statutory Holidays Double Time (2.0 x Reg. Hourly Rate)	Year 1	Year 2	Year 3	Option Year 4	Option Year 5	Option Year 6
Rate/Hour	\$ _____ /HR	\$ _____ /HR	\$ _____ /HR	\$ _____ /HR	\$ _____ /HR	\$ _____ /HR
Estimated quantity of hours per year	0	0	0	0	0	0
Extended Price	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____
3.5(iii) SUB-TOTAL:						\$ _____

3.6 LABOUR: Our fixed hourly rate per **Gas Technician** shall be:

Regular Time: Monday to Friday 8.00 am until 4.00 pm	Year 1	Year 2	Year 3	Option Year 4	Option Year 5	Option Year 6
Rate/Hour	\$ _____ /HR	\$ _____ /HR	\$ _____ /HR	\$ _____ /HR	\$ _____ /HR	\$ _____ /HR
Estimated quantity of hours per year	0	0	0	0	0	0
Extended Price	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____
3.6(i) SUB-TOTAL:						\$ _____

Overtime: Monday to Friday 4.00 pm until 8.00 am and Saturday - Time and a Half 1.5xReg.Hourly Rate)	Year 1	Year 2	Year 3	Option Year 4	Option Year 5	Option Year 6
Rate/Hour	\$ _____ /HR	\$ _____ /HR	\$ _____ /HR	\$ _____ /HR	\$ _____ /HR	\$ _____ /HR
Estimated quantity of hours per year	0	0	0	0	0	0
Extended Price	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____
3.6(ii) SUB-TOTAL:						\$ _____

Overtime: Sunday and Statutory Holidays Double Time (2.0 x Reg. Hourly Rate)	Year 1	Year 2	Year 3	Option Year 4	Option Year 5	Option Year 6
Rate/Hour	\$ _____ /HR	\$ _____ /HR	\$ _____ /HR	\$ _____ /HR	\$ _____ /HR	\$ _____ /HR
Estimated quantity of hours per year	0	0	0	0	0	0
Extended Price	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____
3.6(iii) SUB-TOTAL:						\$ _____

3.7 LABOUR: Our fixed hourly rate per **welder** shall be:

Regular Time: Monday to Friday 8.00 am until 4.00	Year 1	Year 2	Year 3	Option Year 4	Option Year 5	Option Year 6
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PRICING SCHEDULES**

<i>pm</i>						
Rate/Hour	\$ ____/HR	\$ ____/HR	\$ ____/H R	\$ ____/HR	\$ ____/HR	\$ ____/H R
Estimated quantity of hours per year	30	30	30	30	30	30
Extended Price	\$	\$		\$	\$	\$
3.7(i) SUB-TOTAL:						\$

Overtime: Monday to Friday 4.00 pm until 8.00 am and Saturday - Time and a Half (1.5xReg.Hourly Rate)	Year 1	Year 2	Year 3	Option Year 4	Option Year 5	Option Year 6
Rate/Hour	\$ ____/H R	\$ ____/H R	\$ ____/H R	\$ ____/H R	\$ ____/HR	\$ ____/HR
Estimated quantity of hours per year	8	8	8	8	8	8
Extended Price	\$	\$		\$	\$	\$
3.7(ii) SUB-TOTAL:						\$

Overtime: Sunday and Statutory Holidays Double Time (2.0 x Reg. Hourly Rate)	Year 1	Year 2	Year 3	Option Year 4	Option Year 5	Option Year 6
Rate/Hour	\$ ____/HR	\$ ____/H R	\$ ____/H R	\$ ____/H R	\$ ____/H R	\$ ____/HR
Estimated quantity of hours per year	4	4	4	4	4	4
Extended Price	\$	\$	\$	\$	\$	\$
3.7(iii) SUB-TOTAL:						\$

PRICING SCHEDULE 4 -TASK AUTHORIZATIONS AT BIG CHAUDIERE DAM

Table 4.1 LABOUR: Our fixed hourly rate per **Generator Technician** shall be:

Regular Time: Monday to Friday 8.00 am until 4.00 pm	Year 1	Year 2	Year 3	Option Year 4	Option Year 5	Option Year 6
Rate/Hour	\$ ____/HR	\$ ____/HR	\$ ____/HR	\$ ____/HR	\$ ____/HR	\$ ____/HR
Estimated quantity of hours per year	4	4	4	4	4	4
Extended Price	\$	\$	\$	\$	\$	\$
4.1(i) SUB-TOTAL:						\$

Overtime: Monday to Friday 4.00 pm until 8.00 am and Saturday - Time and a Half (1.5xReg.Hourly Rate)	Year 1	Year 2	Year 3	Option Year 4	Option Year 5	Option Year 6
Rate/Hour	\$ ____/HR	\$ ____/HR	\$ ____/HR	\$ ____/HR	\$ ____/HR	\$ ____/HR
Estimated quantity of hours per year	0	0	0	0	0	0
Extended Price	\$	\$	\$	\$	\$	\$
4.1 (ii) SUB-TOTAL:						\$

Overtime: Sunday and	Year 1	Year 2	Year 3	Option	Option	Option
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**ANNEX B
PRICING SCHEDULES**

<i>Statutory Holidays DoubleTime (2.0 x Reg. Hourly Rate)</i>				Year 4	Year 5	Year 6
Rate/Hour	\$ _____/HR	\$ _____/HR	\$ _____/HR	\$ _____/HR	\$ _____/HR	\$ _____/HR
Estimated quantity of hours per year	0	0	0	0	0	0
Extended Price	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____
4.1(iii) SUB-TOTAL:						\$ _____

Table 4.2 LABOUR: Our fixed hourly rate per **Diesel Mechanic** shall be::

Regular Time: <i>Monday to Friday 8.00 am until 4.00 pm</i>	Year 1	Year 2	Year 3	Option Year 4	Option Year 5	Option Year 6
Rate/Hour	\$ _____/HR	\$ _____/HR	\$ _____/HR	\$ _____/HR	\$ _____/HR	\$ _____/HR
Estimated quantity of hours per year	4	4	4	4	4	4
Extended Price	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____
4.2(i) SUB-TOTAL:						\$ _____

Overtime: <i>Monday to Friday 4.00 pm until 8.00 am and Saturday - Time and a Half 1.5xReg.Hourly Rate)</i>	Year 1	Year 2	Year 3	Option Year 4	Option Year 5	Option Year 6
Rate/Hour	\$ _____/HR	\$ _____/HR	\$ _____/HR	\$ _____/HR	\$ _____/HR	\$ _____/HR
Estimated quantity of hours per year	0	0	0	0	0	0
Extended Price	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____
4.2(ii) SUB-TOTAL:						\$ _____

Overtime: <i>Sunday and Statutory Holidays Double Time (2.0 x Reg. Hourly Rate)</i>	Year 1	Year 2	Year 3	Option Year 4	Option Year 5	Option Year 6
Rate/Hour	\$ _____/HR	\$ _____/HR	\$ _____/HR	\$ _____/HR	\$ _____/HR	\$ _____/HR
Estimated quantity of hours per year	0	0	0	0	0	0
Extended Price	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____
4.2(iii) SUB-TOTAL:						\$ _____

Table 4.3 LABOUR: Our fixed hourly rate per **Electrician** shall be:

Regular Time: <i>Monday to Friday 8.00 am until 4.00 pm</i>	Year 1	Year 2	Year 3	Option Year 4	Option Year 5	Option Year 6
Rate/Hour	\$ _____/HR	\$ _____/HR	\$ _____/HR	\$ _____/HR	\$ _____/HR	\$ _____/HR
Estimated quantity of hours per year	4	4	4	4	4	4
Extended Price	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____
4.3(i) SUB-TOTAL:						\$ _____

Overtime: <i>Monday to Friday 4.00 pm until 8.00 am and Saturday - Time and a Half 1.5xReg.Hourly Rate)</i>	Year 1	Year 2	Year 3	Option Year 4	Option Year 5	Option Year 6
Rate/Hour	\$ _____/HR	\$ _____/HR	\$ _____/HR	\$ _____/HR	\$ _____/HR	\$ _____/HR

**ANNEX B
PRICING SCHEDULES**

Estimated quantity of hours per year	0	0	0	0	0	0
Extended Price	\$	\$	\$	\$	\$	\$
4.3(ii) SUB-TOTAL:						\$

Overtime: Sunday and Statutory Holidays Double Time (2.0 x Reg. Hourly Rate)	Year 1	Year 2	Year 3	Option Year 4	Option Year 5	Option Year 6
Rate/Hour	\$ _____ /HR	\$ _____ /HR	\$ _____ /HR	\$ _____ /HR	\$ _____ /HR	\$ _____ /HR
Estimated quantity of hours per year	0	0	0	0	0	0
Extended Price	\$	\$	\$	\$	\$	\$
4.3(iii) SUB-TOTAL:						\$

Table 4.4 LABOUR: Our fixed hourly rate per Infrared Thermographer shall be:

Regular Time: Monday to Friday 8.00 am until 4.00 pm	Year 1	Year 2	Year 3	Option Year 4	Option Year 5	Option Year 6
Rate/Hour	\$ _____ /HR	\$ _____ /HR	\$ _____ /HR	\$ _____ /HR	\$ _____ /HR	\$ _____ /HR
Estimated quantity of hours per year	4	4	4	4	4	4
Extended Price	\$	\$	\$	\$	\$	\$
4.4(i) SUB-TOTAL:						\$

Overtime: Monday to Friday 4.00 pm until 8.00 am and Saturday - Time and a Half (1.5xReg.Hourly Rate)	Year 1	Year 2	Year 3	Option Year 4	Option Year 5	Option Year 6
Rate/Hour	\$ _____ /HR	\$ _____ /HR	\$ _____ /HR	\$ _____ /HR	\$ _____ /HR	\$ _____ /HR
Estimated quantity of hours per year	0	0	0	0	0	0
Extended Price	\$	\$	\$	\$	\$	\$
4.4(ii) SUB-TOTAL:						\$

Overtime: Sunday and Statutory Holidays Double Time (2.0 x Reg. Hourly Rate)	Year 1	Year 2	Year 3	Option Year 4	Option Year 5	Option Year 6
Rate/Hour	\$ _____ /HR	\$ _____ /HR	\$ _____ /HR	\$ _____ /HR	\$ _____ /HR	\$ _____ /HR
Estimated quantity of hours per year	0	0	0	0	0	0
Extended Price	\$	\$	\$	\$	\$	\$
4.4(iii) SUB-TOTAL:						\$

Table 4.5 LABOUR: Our fixed hourly rate per Petroleum Mechanic shall be:

Regular Time: Monday to Friday 8.00 am until 4.00 pm	Year 1	Year 2	Year 3	Option Year 4	Option Year 5	Option Year 6
Rate/Hour	\$ _____ /HR	\$ _____ /HR	\$ _____ /HR	\$ _____ /HR	\$ _____ /HR	\$ _____ /HR
Estimated quantity of hours per year	4	4	4	4	4	4
Extended Price	\$	\$	\$	\$	\$	\$
4.5(i) SUB-TOTAL:						\$

**ANNEX B
PRICING SCHEDULES**

Overtime: Monday to Friday 4.00 pm until 8.00 am and Saturday - Time and a Half 1.5xReg.Hourly Rate)	Year 1	Year 2	Year 3	Option Year 4	Option Year 5	Option Year 6
Rate/Hour	\$ _____ /HR	\$ _____ /HR	\$ _____ /HR	\$ _____ /HR	\$ _____ /HR	\$ _____ /HR
Estimated quantity of hours per year	0	0	0	0	0	0
Extended Price	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____
4.5(ii) SUB-TOTAL:						\$ _____

Overtime: Sunday and Statutory Holidays Double Time (2.0 x Reg. Hourly Rate)	Year 1	Year 2	Year 3	Option Year 4	Option Year 5	Option Year 6
Rate/Hour	\$ _____ /HR	\$ _____ /HR	\$ _____ /HR	\$ _____ /HR	\$ _____ /HR	\$ _____ /HR
Estimated quantity of hours per year	0	0	0	0	0	0
Extended Price	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____
4.5(ii) SUB-TOTAL:						\$ _____

4.6 LABOUR: Our fixed hourly rate per Gas Technician shall be:

Regular Time: Monday to Friday 8.00 am until 4.00 pm	Year 1	Year 2	Year 3	Option Year 4	Option Year 5	Option Year 6
Rate/Hour	\$ _____ /HR	\$ _____ /HR	\$ _____ /HR	\$ _____ /HR	\$ _____ /HR	\$ _____ /HR
Estimated quantity of hours per year	0	0	0	0	0	0
Extended Price	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____
4.6(i) SUB-TOTAL:						\$ _____

Overtime: Monday to Friday 4.00 pm until 8.00 am and Saturday - Time and a Half 1.5xReg.Hourly Rate)	Year 1	Year 2	Year 3	Option Year 4	Option Year 5	Option Year 6
Rate/Hour	\$ _____ /HR	\$ _____ /HR	\$ _____ /HR	\$ _____ /HR	\$ _____ /HR	\$ _____ /HR
Estimated quantity of hours per year	0	0	0	0	0	0
Extended Price	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____
4.6(ii) SUB-TOTAL:						\$ _____

Overtime: Sunday and Statutory Holidays Double Time (2.0 x Reg. Hourly Rate)	Year 1	Year 2	Year 3	Option Year 4	Option Year 5	Option Year 6
Rate/Hour	\$ _____ /HR	\$ _____ /HR	\$ _____ /HR	\$ _____ /HR	\$ _____ /HR	\$ _____ /HR
Estimated quantity of hours per year	0	0	0	0	0	0
Extended Price	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____
4.6(iii) SUB-TOTAL:						\$ _____

4.7 LABOUR: Our fixed hourly rate per welder shall be:

Regular Time: Monday to Friday 8.00 am until 4.00 pm	Year 1	Year 2	Year 3	Option Year 4	Option Year 5	Option Year 6
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**ANNEX B
PRICING SCHEDULES**

Rate/Hour	\$ _____/HR	\$ _____/HR	\$ _____/H R	\$ _____/HR	\$ _____/HR	\$ _____/H R
Estimated quantity of hours per year	30	30	30	30	30	30
Extended Price	\$	\$		\$	\$	\$
4.7(i) SUB-TOTAL:						\$

Overtime: Monday to Friday 4.00 pm until 8.00 am and Saturday - Time and a Half 1.5xReg.Hourly Rate)	Year 1	Year 2	Year 3	Option Year 4	Option Year 5	Option Year 6
Rate/Hour	\$ _____/H R	\$ _____/H R	\$ _____/H R	\$ _____/H R	\$ _____/HR	\$ _____/HR
Estimated quantity of hours per year	8	8	8	8	8	8
Extended Price	\$	\$		\$	\$	\$
4.7(ii) SUB-TOTAL:						\$

Overtime: Sunday and Statutory Holidays Double Time (2.0 x Reg. Hourly Rate)	Year 1	Year 2	Year 3	Option Year 4	Option Year 5	Option Year 6
Rate/Hour	\$ _____/HR	\$ _____/H R	\$ _____/H R	\$ _____/H R	\$ _____/H R	\$ _____/HR
Estimated quantity of hours per year	4	4	4	4	4	4
Extended Price	\$	\$	\$	\$	\$	\$
4.7(iii) SUB-TOTAL:						\$

PRICING SCHEDULE 5 – MATERIALS

The below table applies to all three dam locations: Timiskaming, Latchford and Big Chaudière

Table 5.1 MATERIALS: Materials will be charged at our laid-down cost plus a mark-up of:

	Year 1	Year 2	Year 3	Option Year 4	Option Year 5	Option Year 6
Percentage Mark Up	_____%	_____%	_____%	_____%	_____%	_____%
Estimated Expenditure	3000	1500	1500	1500	1500	1500
Extended Price:	\$	\$	\$	\$	\$	\$
5.1 SUB-TOTAL:						\$

* **The Extended Price** for materials is calculated by adding the mark-up quoted to the total estimated expenditure (Example: Year 1, \$500.00 estimated expenditure; 10% mark-up quoted = \$500.00 + (\$500.00 x 10%) = \$550.00).

Parts will be supplied FOB Destination including all delivery charges. The following definitions have been used to arrive at the figures as noted:

- i) **MARK-UP** - The difference between the Contractors's laid-down cost for product and resale price to Canada. Mark-up includes applicable internal cost allocation by the Contractor such as material handling and general and administrative (G&A) expenses plus profit.

ANNEX B
PRICING SCHEDULES

ii) LAID-DOWN COST - The cost incurred by a vendor to acquire a specific product or service for resale to the government. This includes but is not limited to the supplier's invoice price (less trade discounts), plus any applicable charges for incoming transportation, foreign exchange, customs duty and brokerage.

iii) AUTHORIZATION FOR DELIVERY: The consignee shall request delivery of goods/services identified in Pricing Schedule 2., 2.1 (i), (ii), (iii) to 4.7 (i), (ii) (iii) and 5.1 on an authorization form provided by the Technical Authority.

PRICING SCHEDULES 1 - 5
TOTAL ASSESSED PROPOSAL PRICE

Sum of Basis of Pricing

Table 1.1:	= Subtotal \$ _____ +
Tables 2.1 to 2.7	= Subtotal \$ _____ +
Table 3.1 to 3.7	= Subtotal \$ _____ +
Table 4.1 to 4.7	= Subtotal \$ _____ +
Table 5.1	= Subtotal \$ _____ +
Total assessed proposal price	= \$ _____

IN THE CASE OF ERROR IN THE EXTENSION OF PRICES, THE UNIT PRICE WILL GOVERN. CANADA MAY ENTER INTO CONTRACT WITHOUT NEGOTIATION.

ANNEX A - STATEMENT OF WORK
GENERATOR SERVICE AT THREE DAM SITES

Project # R.088010.010
Version of: March 9, 2018

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A1 REQUIREMENT

Canada requires a Contractor to supply labour, supervision, tools, materials, and equipment necessary for a program of inspection, maintenance, and repairs of three generator sets and their transfer switches.

The generator sets are located one at each at Timiskaming Dam, Latchford Dam, and Big Chaudière Dam in northern Ontario.

In all cases, the generator sets provide standby power for flow control equipment on the dams (i.e. stoplog lifters, vertical lift gates). The generator set at Timiskaming also provides emergency power to the buildings at the dam site.

A2 APPLICABLE DOCUMENTS

The prescribed versions of the following documents are to form a part of this specification to the extent specified herein. These documents are available only in the languages indicated.

A2.1 Internal Documents

Table 1: List of Internal Documents

Document Number	Document Title
n/a	Generac manual for Timiskaming Dam generator (English)
n/a.	Kohler manual for Latchford Dam generator (English and French)
n/a.	Generac manual for Big Chaudière Dam generator (English)
EO-510-HP1	Timiskaming Dam, Site Plan Electrical Distribution, January 2014, by PWGSC (bilingual drawing)
EO-510-1	Timiskaming Dam, Single Line Diagram, Electrical Distribution. December 2013, by PWGSC (bilingual drawing)
E003e	Single Line Diagram, Timiskaming Ontario Dam Replacement by Hatch (bilingual drawing)
E003	Latchford Dam Reconstruction, Single Line Diagram (Design Drawing), by Dessau/HydroSys (bilingual drawing)
E001	Big Chaudière Dam Reconstruction, Single Line Diagram (Design Drawing), by Hatch (bilingual drawing)
EO-520-1	Portage Dam, Single Line Diagram Electrical Distribution, by PWGSC (bilingual drawing)
EO-521-1	French River Dams, Single Line Diagram Electrical Distribution, showing office, shop, and boathouse by PWGSC (bilingual drawing)

A2.2 Codes, Standards, and Best Practice Documents

Where Standards are referenced in this document, the whole standard must normally apply unless specific tailoring is indicated herein.

If any referenced standard has been superseded by a new revision, or it has become obsolete and it has been replaced by a new standard, or it has not been replaced, then the Contractor must use the latest revision or replaced standard or an equivalent standard respectively.

American standards are only available in English.

Table 2: List of Codes, Standards, and Best Practice Documents

Document Number	Document Title
ANSI/NETA MTS-2011	Standard for Maintenance Testing Specifications for Electrical Power Equipment and Systems
ASTM E1934 - 99a(2014)	Standard Guide for Examining Electrical and Mechanical Equipment with Infrared Thermography
CAN/CSA B139-09 (R2014)	Installation code for oil-burning equipment
CAN/CSA B149.1-10 (R2015)	Natural gas and propane installation code
CAN/CSA C282-15	Emergency electrical power supply for buildings
CAN/CSA Z460-13	Control of hazardous energy - Lockout and other methods
CAN/CSA Z462-15	Workplace electrical safety
NFPA 70 B	Recommended practice for electrical equipment maintenance

A3 DESCRIPTION OF EQUIPMENT

The following is the list of equipment to be inspected, maintained, and repaired in this Contract. Data in this inventory is deemed as accurate as possible on the basis of documentation on hand at time of writing this Statement of Work (SOW). The Contractor must inform the Technical Authority of errors noted to allow for corrections in the future.

A3.1 Timiskaming Dam

The generator at Timiskaming Dam is a natural gas generator with an automatic transfer switch to be left set in automatic mode. The equipment was installed in 2012. The electrical distribution drawing and single line drawing are attached in Appendix 2. The maintenance manuals for the generator and transfer switch will be provided electronically to the Contractor.

A3.1.1 Generator

Generac Type #SG130, Model #13866910100, Serial #2114028, 130kW, with the following key components:

- *Controller:* Generac Quiet-Test™ H-100
- *Alternator:* Generac Model 130 GENprotect, 4-pole revolving field, brushless excitation, 600V, 0.8 PF, 3Φ 4-wire, 175A, 600V, 60Hz, 130kW, 163kVA.
- *Engine:* Generac/Ford G6.8.1, Model #CGNX806.82C3, 189hp, 10 cylinders, engine displacement 6.8L, 23.9L coolant capacity, 5.7L crankcase oil capacity
- *Block heater:* 1.5kW, 120V
- *Battery:* Generac B-12 Group 31 925CCA 12V battery with Generac charger model #OF1740, Serial #OF6138
- *Fuel:* Natural gas

A3.1.2 Transfer Switch

Thomson Technology Automatic Transfer Switch, with bypass isolation mode, Type #TS870, Model #TS873B0250A1BN3CKKAA, Serial #W-076127, 250A, 347/600V, 3Φ (4 wire), 60Hz, with the following key components:

- *Controller:* TSC80e microprocessor switch controller c/w LED display

A3.1.3 Generator Ventilation Louvers

Nailor louver-dampers, 2 units, Model #1606CDAF, 6-inch louvers, aluminum. Controlled by Belimo NFBUP damper controller.

A3.1.4 Electric Unit Heater

In generator shed, thermostatically controlled by a wall-mounted thermostat. Dimplex Model EUH-B.

A3.2 Latchford Dam

The generator at Latchford Dam is a diesel generator with an automatic transfer switch. The generator was installed and commissioned in 2016. The design single line diagram is included in Appendix 2. Maintenance manuals for the generator and transfer switch will be provided electronically to the Contractor.

A3.2.1 Generator

Kohler Model #150REOZJF with the following key components:

- *Controller*: Kohler Decision-Maker DEC-3000 with integral voltage regulator
- *Alternator*: Kohler 4S12X, brushless 4-pole rotating field rare-earth permanent-magnet, 154kW/193kVA, 347/600V, 185A, 3 phase, 60 Hz, PF 0.8, wye connected.
- *Diesel engine*: John Deere Model #6068HF285, 6-cylinder inline turbocharged air cooled, 6.8L displacement, with JDEC Electronic L16 Denso HP3 governor. Oil pan capacity 27L.
- *Engine pre-heat*: HotStart TPS, 1800W, 120V
- *Fuel*: #2 diesel, tank within generator base.

A3.2.2 Transfer Switch

Cutler-Hammer 600V AC Heavy Duty Double Throw Non-Fusible 3-pole catalogue #1DT364NF

A3.2.3 In-Line Circuit Breakers

15-2250kW thermal magnetic trip, frame size JD (80%).

A3.3 Big Chaudière Dam

The generator at Big Chaudière Dam is a diesel generator with an automatic transfer switch set in manual mode. The equipment was installed and commissioned in 2016. The design single line diagram is attached in Appendix 2. Maintenance manuals for the generator and transfer switch will be provided electronically to the Contractor.

A3.3.1 Generator

Generac SD50 Model #SDOO5OAG163.4D18HBNL3, Serial # 3000002089, 50kW, 50kVA, with the following key components:

- *Controller*: Generac Quiet-Test™ H-100
- *Alternator*: Generac Model 390, 208A, 120/240VAC, 1.0 PF, single phase
- *Engine*: Diesel, Generac 4-cylinder, 3.4L
- *Engine heater*: Coolant heater, 1500W, 120VAC
- *Fuel*: Diesel, tank within generator base, capacity actual 65 gal., capacity useable 55 gal.

A3.3.2 Transfer Switch

ASCO Series 300 Group G 3ATS, Model #D03ATSB20200FG0C Serial #1315134BR, 200A, 120/240V, LCD Control pane with microprocessor control.

A3.3.3 Suspended Unit Heaters

Located in electrical building.

A4 INITIAL SUBMITTALS

1. Within three (3) weeks of Award, and before going on site for the first time, the Contractor must submit the following:
 - a. *Schedule* showing intended inspections for each dam over the period of the contract as well as over the option years. See A5.6 *Scheduling* for schedule requirements.
 - b. *Electrical Work Plan* which must include:
 - i. Lock-out/Tag-out procedures, including use of PWGSC "Form 13" request for electrical isolation and re-energization are attached in Appendix 1, as well as Contractor-developed forms. (Note that

- Damkeepers will witness and sign Lock-out/Tag-out forms on Canada’s behalf whenever lock-out/tag-out work is being performed.)
- ii. Site-specific electrical inspection procedures
 - iii. Isolation & energization procedures (Note PWGSC does not permit “live work” except for diagnostics and investigation).
- c. The *names, responsibilities, and proof of qualifications* of the personnel to be assigned to the project, demonstrating compliance with the requirements listed in Section *A7 Qualification and Availability of Resources*. The same person can one or more of the required skills qualifications. Identify which resources will be provided through the use of subcontractors.
 - d. *Health and Safety* submittals described in *A8.4 Health and Safety*.
 - e. *Environmental Protection Plan* described in *A8.5 Environmental Protection*.
 - f. Samples of proposed *Inspection Checklists* which will be used for each type of inspection; these must detail the requirements as described in Table 3 of *A5 Inspection and Maintenance*.
 - g. *Table of Contents* and *outline* of proposed Infrared Inspection Reports.
2. The Technical Authority will review these submittals and provide comments to the Contractor within ten (10) working days after the receipt of plan. The Contractor must revise the submittals where required and resubmit the plan to the Technical Authority within ten working days after receipt of comments. This process must continue until acceptable submittals have been delivered.
 3. Technical Authority’s review of submittals does not reduce the Contractor’s overall responsibility for the work.
 4. The Contractor must follow the procedures described in the reviewed and accepted documents during the course of the contract.

A5 INSPECTION AND MAINTENANCE

A5.1 Scope of Work

The Contractor must:

1. Provide all tools (e.g. hand tools, infrared equipment, megger, etc.), materials, labour, supervision, and personal protective equipment required to undertake inspections and maintenance.
2. Provide all consumables required for the work, including but not necessarily limited to: engine oil, lubricating oil, coolant, filters of various sorts, cleaning materials, etc. The Contractor is permitted to store consumables in the generator buildings if this is convenient; otherwise, bring them to site when required.
3. For all defects found during inspections, conduct extensive on-site electrical, mechanical and electronic troubleshooting to determine cause for equipment malfunction and establish the necessary repairs using visual inspection, test procedures and appropriate test equipment. Report to Technical Authority by telephone and email (if necessary, the email may follow up to twenty-four (24) hours after phone call) indicating the nature of the problem, how long it is expected to take to fix, the cost estimate for fixing the problem and delivery time estimate for parts. This information will be used to create Task Authorizations (TA) for the labour, materials, and equipment required to effect repair work),
4. After inspection and maintenance work is complete, restore the systems to its original operational state.
5. Dispose of hazardous waste as required by local authorities having jurisdiction. Hazardous waste includes but is not necessarily limited to engine oil, fuel oil, anti-freeze, oil filters, batteries, etc.
6. The following inspections are required at each of the three generators; The Contractor must elaborate on checklists to detail these inspections as part of the Initial Submittals (see *A4 Initial Submittals*):

Table 3: Inspection Requirements

Name	Description
Weekly	Not required (these are done by Damkeepers)
Monthly	<ul style="list-style-type: none"> • All generator tests in Table 3 of CSA C282-15 • Monthly tests in all OEM Manuals • Statutory and code requirements related to monthly fuel system inspections • Timiskaming: every 3rd month, do "3-month" generator checks from OEM manual (including exhaust checks) <p>Monthly checks, inspections, and tests must also include the applicable weekly requirements</p>
Semi-Annual	<ul style="list-style-type: none"> • All generator tests in Table 4 of CSA C282-15 • Semi-Annual tests in all OEM Manuals • Statutory and code requirements related to semi-annual fuel system inspections • Additional items for transfer switch inspection as described in A5.2 of this SOW. • Big Chaudière Dam: check for correct functioning of building unit heaters • Timiskaming Dam: check for correct functioning of building unit heaters <p>Semi-Annual checks, inspections, and tests must also include the applicable monthly and weekly requirements</p>
Annual	<ul style="list-style-type: none"> • All generator tests in Table 5 of CSA C282-15 • Annual tests specified in all OEM Manuals • Timiskaming: every 2nd year, do "every 2 year" and "every 1000 operating hour" checks from generator OEM manual • Statutory and code requirements related to annual fuel system inspections • Additional items for transfer switch inspection as described in A5.2 of this SOW. • Big Chaudière Dam: clean building unit heaters and check for correct functioning. • Timiskaming Dam: clean building unit heaters and check for correct functioning <p>Annual checks, inspections, and tests must also include the applicable semi-annual, monthly, and weekly requirements</p>
Quinquennial	<ul style="list-style-type: none"> • All tests in Table 6 of CSA C282-15 • Quinquennial tests specified in all OEM Manual <p>Quinquennial checks, inspections and tests must also include the applicable annual, semi-annual, monthly, and weekly requirements</p>

NOTE: OEM = "Original Equipment Manufacturer"

A5.2 Additional Items for Transfer Switch Inspection

In addition to the inspection items for transfer switches listed in the Tables of CSA C282-15, the Contractor must:

1. Operate all moving parts to ensure they move freely.
2. Remove all dust.
3. Inspect for corrosion.
4. Test all indicator bulbs and replace as necessary.
5. Check terminal connections, mountings, and terminal strips, and tighten as necessary.
6. Inspect insulation for degradation.
7. Inspect relay coils and contacts for evidence of arcing or other damage; dress or replace where necessary.
8. Replace internal batteries where required.
9. Inspect terminals (load, line) of bypass isolation for tightness, re-torquing all bolts, nuts, and other hardware.
10. Other checks and inspections described in OEM manuals or as per OEM's best practices for this type of equipment.
11. Re-set to initial operation mode.

A5.3 Load Bank Tests

The Contractor must:

1. Provide 30% and 100% external load banks for all load tests; dam flow control equipment cannot be used for this purpose.
2. Supply the load bank test unit complete with all cables needed to connect the load bank.
3. In all cases, load bank truck may be parked immediately outside the generator building.

A5.4 Infrared Thermographic Survey

The Contractor must:

1. Perform infrared thermographic survey of generator, transfer switch, and emergency power distribution equipment.
2. Wait a minimum of 90 minutes of the 120 minutes annual full load test before starting infrared thermographic survey of emergency power equipment.
3. At the same time as the generator's Annual Inspection at which thermographic inspection to CSA C282 will be performed, also perform a separate infrared thermographic survey of all other electrical power distribution equipment at dam facilities, specifically:
 - a. **Timiskaming.**—As shown on the following drawings:
 - EO-510-1 Single Line Diagram Electrical Distribution, Timiskaming Dam by PWGSC
 - E003e Single Line Diagram, Timiskaming Ontario Dam Replacement by Hatch
 - b. **Latchford.**—As shown on drawing E003 Single Line Diagram, Latchford Dam Replacement by Dessau/HydroSys.
 - c. **Big Chaudière.**—As shown on the following drawings:
 - E001 Electrical Single Line Diagram, Big Chaudière Dam Replacement by Hatch
 - EO-520-1 Single Line Diagram Electrical Distribution, Portage Dam by PWGSC
 - EO-521-1 Single Line Diagram Electrical Distribution, showing office, shop, and boathouse by PWGSC
4. Damkeepers will operate flow control equipment as necessary to create electrical loads.
5. Do infrared thermographic surveying to ASTM E1934, ANSI/NETA MTS-2011, and recognized industry practices for this work, and in compliance with SSHAHSP (see A8.4.3 item #4 for definition of SSHAHSP).

A5.5 Reporting Requirements

A5.5.1 Checklists and Logbook

1. Checklists must be typed or legibly handwritten. Inability of Technical Authority to actually read checklists will mean that Contractor has to re-do the test in its entirety.
2. After each inspection, the Contractor must:
 - a. Scan completed inspection checklist to PDF and submit via email to the Technical Authority.
 - b. File one copy of the completed checklist in a Contractor-supplied vinyl hard cover 3 -ring binder for letter-size paper forming a logbook compliant to CSA C282.
 - c. Keep logbooks in generator rooms. Record in the logbook all work performed at each visit and identify parts and materials used.
 - d. Completed original logbooks become property of Canada and must be submitted to the Technical Authority.
 - e. Submit one copy of the checklist to the Damkeeper on site.

A5.5.2 Generator Reports

The Contractor must:

1. Within 14 calendar days of on-site work, submit a signed detailed inspection report to the Technical Authority summarizing the results of the inspection and including all defects found, probable causes, and recommended repairs with their costs. Recommend modifications or improvements to the equipment that will enhance equipment serviceability, life expectancy, or efficiency.
2. Submit separate reports for each generator set, which would include information on all equipment inspected (generator and its auxiliary systems, transfer switch, etc.)
3. For reports on Annual Inspections, include Engine Oil Lab Report with results of laboratory tests for water, copper, bronze, etc. as described in CSA C282.

A5.5.3 Infrared Thermographic Reports

The Contractor must:

1. Organize to have one page per device inspected.
2. For each device inspected, indicate the volts and amps into and out of the device for each phase, the reference temperature, and the actual temperatures found.
3. Include images of all tested equipment as captured by the infrared instrument as well as view from same position in visible light.
4. Include prioritized recommendations complete with estimated costs.

A5.6 Scheduling

The Contractor must:

1. Submit a proposed schedule for inspections during the contract period before coming on site the first time: see requirements in *A4 Initial Submittals*.
2. Except in special cases to be identified by Technical Authority if any arise, all inspections are to take place between 9 AM and 3 PM Monday through Friday to suit normal hours of work for Damkeepers.
3. Aim, as far as possible, to have all inspections at each dam done the same week of the month and the same day of the week, e.g. Timiskaming every 2nd Tuesday, Big Chaudière every 3rd Monday, etc.
4. For the first inspection at Timiskaming Dam, which has the oldest generator, undertake the quinquennial inspection, then follow the monthly, semi-annual, and annual inspections
5. For the first inspection at the Big Chaudière and Latchford Dam, undertake a monthly inspection, then follow with other monthly, semi-annual, annual, and quinquennial inspections.
6. Ensure schedule leaves a true six months between the semi-annual and annual inspections.
7. NOTE: The Technical Authority reserves the right to amend the accepted schedule at any time during the Contract due to operational requirements (this is particularly likely to occur during spring freshet) to accommodate dam operations.

A5.6.1 Annual and Quinquennial Inspections

1. Annual and quinquennial inspections must take place between July and September so that the time required for the 2-hr load tests occurs at a time of minimal need for dam operations.
2. Confirm with Technical Authority a minimum five working days before each annual and quinquennial inspection so that generator work can be coordinated with Damkeepers' other water control work at dam.

A5.6.2 All Other Inspections

Provide Technical Authority with a minimum of three working days' notice before each inspection so that generator work can be coordinated with Damkeepers' other water control work at dam.

A6 REPAIRS

The Contractor must:

1. Provide all tools, materials, labour, supervision, and personal protective equipment required to undertake repairs.
2. Parts and materials used in effecting repairs must be new and as recommended by the OEM for the equipment in question.
3. Repairs involving work to oil burner or gas burners must comply with CSA B139-09 (R2014) and CSA B149.1-10 (R2015) respectively.
4. Before starting welding fabrication work, submit copies of welding procedure data sheets that have been approved by the Canadian Welding Bureau.
5. Remove from the site and dispose of all damaged parts that have been removed from the equipment.
6. Do NOT try to repair faulty modules on-site if the equipment was designed for the complete replacement of modules.
7. OEMs may possess Proprietary Rights on some or all of the equipment or its firmware or software. Should a need arise which requires OEM involvement with such equipment, liaise with the OEM as required.
8. Upon completion of repairs, undertake at minimum whatever other tests are required to prove that the repair has been effective, which may include some of the tests described in CSA C282 section 10 *Initial installation performance tests*. Supply load banks and whatever other test equipment would be involved.
9. Record those electrical repairs which require Electrical Safety Authority (ESA) involvement in the electrical log book (a separate log book for this work), as well as in the main equipment log book.

A7 QUALIFICATIONS AND AVAILABILITY OF RESOURCES

A7.1 Qualifications

1. Have on staff, or provide under sub-contract, all the skills required to perform Work of this contract. Contractor is responsible for selecting exact mix of skills required to complete any given task, keeping in mind the need to comply with statutory and regulatory requirements. The skills set required for this contract are expected to include, but need not necessarily be limited to, the ones listed below.
2. As part of initial submittals described in *A4 Initial Submittals* submit to Technical Authority the names, responsibilities, qualifications, and skills of the personnel to be involved in the contract, proving compliance to the requirements listed below. A single individual may hold more than one skill qualification.
3. The need for substitute personnel may arise during the course of the Contract (e.g. in case of illness of original personnel, etc.). Substitute personnel must hold equivalent qualifications to the original personnel; submit proof thereof to Technical Authority as soon as need for substitute personnel is known.
4. **Generator Technician(s).**—Must hold:
 - EGSA Certification as a Generator Technician, Journeyman-Level; or,
 - Diploma as an Electrical Power Generation Technician from a Canadian college; or,
 - Manufacturer-specific training and certification in generator systems maintenance and repair.
5. **Electrician(s).**—Must hold:
 - Ontario Certificate of Qualification as 309A Construction and Maintenance Technician; or,
 - Interprovincial Red Seal as a Construction Electrician.
6. **Diesel Mechanic(s).**—Must hold:
 - Ontario Certificate of Qualification as a 310T Truck and Coach Technician; or,
 - Ontario Certificate of Qualification as a 435B Marine Engine Technician; or,
 - Ontario Certificate of Qualification as a 421A Heavy Duty Equipment Technician; or
 - Transport Canada Certificate of Competency as a Third Class (or better) Engineer, Motor Ship.
7. **Petroleum Mechanic(s).**—Must hold TSSA licence as a Petroleum Mechanic (PM 3) for above ground systems.

8. **Gas Technician(s).**—Must hold:
 - TSSA licence as a Gas Technician (G.1 or G.2); or,
 - TSSA licence as an Industrial Maintenance Technician - NG/P (IMT).
9. **Infrared Thermographer(s).**—Must hold Level II or Level III Infrared Thermography Certificate issued by the International Electrical Testing Association (NETA).
10. **Welding**
 - a. **Welding company(ies).**—Welding must be undertaken by companies certified by the Canadian Welding Bureau to the requirements of CSA W47.1-09 (R2014) Certification of Companies for Fusion Welding of Steel; any Division of that standard is acceptable.
 - b. **Welder(s).**—Welders must possess Welder Qualification Identification Documents (also known as Tickets) from Canadian Welding Bureau for the materials, positions, and processes that they will be expected to use to accomplish the work required. As this information cannot be known ahead of time, submit this paperwork along with the Contractor's Proposal whenever an additional work request (Task Authorizations) includes a need for welding work. For welding of stainless steel, the provisions of AWS D1.6/D1.6M may be used for the qualification of welding procedures and personnel. However, when the provisions of AWS D1.6/D1.6M and CSA W47.1-09 (R2014) conflict, then CSA W47.1-09 (R2014) takes precedence. Alternatively, TSSA or API 1104 certification for pipe welding may be required depending on the nature of the repair; in these cases, it will be detailed in the Request for Task Authorization.

A7.2 Availability

The Contractor must:

1. Maintain an on-call resource service at all times (24 hours a day, 7 days a week, 52 weeks per year) throughout the full contract period. On-call service is defined as ensuring that the Technical Authority can at any time, as required, contact the Contractor, or one of its designated resources, or a central emergency call service to report a malfunction or failure.
 - a. Response time to calls for service must be such that a technician is on-site at the dam within six (6) hours of the call.
2. As part of the initial submittals described in *A4 Initial Submittals*, provide the Technical Authority with telephone numbers of and the procedures for contacting the Contractor at all times.

A8 ADMINISTRATIVE REQUIREMENTS

A8.1 Access to Generator Buildings

1. Damkeepers will unlock and lock buildings for every visit. The Contractor will not be provided with a key.
2. Parking is available near the generator buildings at all dam sites. In all cases, the generator buildings are well off the main highways and hence there are no traffic control requirements.

A8.2 Communications & Language of Work

1. Communications with the Contracting Authority and the Technical Authority may be in either English or French.
2. Communications with the Chief Damkeeper at the Timiskaming Dam Office (headquarters for Timiskaming and Latchford Dams) is preferred to be in French but may be in English. Communications with the other Damkeepers at the Timiskaming Dam office must be in French only.
3. Communications with all Damkeepers at Big Chaudière Dam must be in English only.

A8.3 Crew Size

1. **No Working Alone.**—Provincial regulations allow for working alone with procedures in place to protect workers. Considering the remote location of the work, the Contractor is not permitted to work alone in this contract. Although Damkeepers will make initial contact and open up the building, they will not necessarily

remain at the generator building for the duration of the work. Therefore, the minimum crew must be two persons.

2. **Supervisor.**—If using subcontractors for any portion of the work, the Contractor must provide a Supervisor who is an employee of the Contractor to be on site at all times to supervise subcontracted personnel.

A8.4 Health and Safety

A8.4.1 Regulatory Requirements

The Contractor must:

1. Abide by all relevant Legislation, Regulations, Codes, and Standards and ensure that all work undertaken at the dam site on behalf of Canada is completed in a safe manner. Ensure that sub-contractors are equally compliant. Note that all equipment is located in Ontario.
2. Provide all necessary safety training and personnel protective equipment as required to effect the work.

A8.4.2 Safety Procedures

The Contractor must:

1. Immediately stop work and advise the Technical Authority verbally and in writing should any unforeseen or peculiar safety-related factor, hazard, or condition become evident during the performance of the work.
2. Immediately address health and safety non-compliance issues identified by the authority having jurisdiction or by the Technical Authority and provide the Technical Authority with a written report of action taken.
3. The Technical Authority may stop work if Contractor does not correct a non-compliance of health and safety regulations.

A8.4.3 Health and Safety Submittals

PWGSC requires a variety of submittals proving Contractor compliance with legislated requirements. The Contractor must submit the following to the Technical Authority within the time interval described in *A4 Initial Submittals*

1. **Subcontractor information.**—Provide company names and contact information of all subcontractors who will be working on site; include a description of the work that Contractor will assign to each subcontractor.
2. **Company information**
 - a. *Clearance Certificate* from the Ontario Workplace Safety Insurance Board (WSIB) which must be valid at all times during contract. Re-submit the certificate with each monthly request for payment;
 - b. The *Contractor's Health & Safety Policy Statement*, which must meet the requirement of the Ontario Occupational Health and Safety Act. Usually 1 page, this is a clear, concise policy statement reflecting management's commitment, support, and attitude to the health and safety program for the protection of their employees. The statement must be signed by the Contractor at the highest level of management at the workplace; and,
 - c. The Contractor's *Occupational Health and Safety Program* which must meet the requirements of the Ontario Occupational Health and Safety Act. The Program is usually five to fifteen (5 to 15) pages, describing, in a general way, how the Contractor handles health and safety.
3. **Employee Information.**—For all members of the Contractor's team (own staff or sub-contractor staff) who will be working on site for the duration of the contract, it is necessary to provide:
 - a. the *names* of all persons who will be present on the site during the duration of the contract, both employees and subcontractors;
 - b. *proof of health and safety training* for all team members in at least in the following areas:

Table 4: Minimum Health & Safety Training

Position	Health & Safety Training			
	Arc Flash	WHMIS	First Aid	CPR
Generator Technician(s)	✓	✓	✓	✓
Electrician(s)	✓	✓	✓	✓
Diesel Mechanic(s)		✓	✓	✓
Petroleum Mechanic(s)		✓	✓	✓
Gas Technician(s)		✓	✓	✓
Infrared Thermographer(s)	✓	✓	✓	✓
Welder(s)		✓	✓	✓

- c. Submit an *update* with each change of personnel during the contract.
4. **Site-Specific Hazard Assessment and Health and Safety Plan (SSHAHSP).**—The SSHAHSP must contain, but need not be limited to, the following:
- a. *Hazard identification, analysis, and mitigation measures.*—A list of Contract-specific activities to be undertaken at the site complete with the hazards associated with each activity and with a series of procedures to be used to mitigate the hazard. This section is usually presented in the form of a table.
 - i. Mitigation measures may include a range of engineering controls, work practices, and personal protective equipment. This section must include activities to be undertaken by sub-contractors. Include in this section arc fault calculations done from information on single line diagram and equipment data in order to select the appropriate arc flash protective equipment.
 - ii. Currently-known hazards involved in the work of this contract include: working in remote areas, electrical hazards, and slip-and-trips hazard.
 - iii. If work arises in the course of the contract where the hazards for performing the work are different than the hazards assumed in the SSHAHSP, then provide a one-off document pertaining to that work alone. If such cases arise, it is most likely to be in the course of an Additional Work Requirement (AWR) Task Authorization for repairs.
 - b. *Emergency contacts.*—Provide an organizational chart showing the specific chain-of-command and specify the overall responsibilities of the Contractor’s employees and sub-contractors at the work site in the case of emergencies. This is usually a 1-page list of names, roles, and phone numbers, and must include all sub-contractors.
 - c. *Emergency response plan.*—List emergencies that could perceivably occur during the course of the work and what steps you will take to respond. Note that there is no cell phone service available at the Big Chaudière Dam and that only Bell service is available in Latchford and Timiskaming. Where cell coverage is limited, the Contractor must provide satellite phone or whatever other means of communications that will be used.
 - d. *Hazard communication plan.*—Describe how the Contractor will inform workers, visitors, and other individuals about the hazards during work.
5. **Incident & Accident Reports.**—The Contractor must submit to the Technical Authority, within twenty-four hours of occurrence, reports of all accidents, incidents, and/or near-misses that occur during the term of the Contract.

A8.5 Environmental Protection

A8.5.1 Objective

1. The work must not release any deleterious substance into the environment nor may it disturb habitat and/or individual of any species.
2. A "deleterious material" is any substance that, if added to a watercourse, could degrade water quality or impact fish, fish habitat and aquatic wildlife. This includes, but is not limited to grease, oil, diesel, antifreeze, or solvents.

A8.5.2 Site-Specific Environmental Protection Plan

As part of the submittals required by *A4 Initial Submittals*, the Contractor must prepare and submit a Site-Specific Environmental Protection Plan. This document must address topics at a level of detail commensurate with the environmental issue and required tasks. Divide the Site-Specific Environmental Protection Plan into sections as follows:

1. *Part 1 - Environmental Hazard Assessment.*—Examine operations required to complete the work of this contract and identify all types and sources of contaminating or polluting materials that will be present on site during the course of work. Currently known materials to be used in the course of the work include, but may not necessarily be limited to lubricants, fuel oil, motor oil, battery acid, antifreeze, solid wastes including used rags, cloths, etc., and other materials and hazards the Contractor foresees during the work.
2. *Part 2 - Environmental Mitigation Measures.*—For each hazard identified, describe measures and controls that will be used to prevent damage to surrounding environment and for ensuring compliance with Federal, Provincial, and Municipal laws and regulations. For example, discuss spill prevention measures to be used when topping up engine oil and describe rationale for selection of spill kits the Contractor will be providing.
3. *Part 3 - Environmental Emergency Measures.*—For example, describe procedures, to be used in event of unforeseen spill. Contact Manufacturers of products you will be using and ascertain hazards involved, precautions required, and measures used in spill clean-up or mitigating action.
4. *Part 4 - Waste Disposal.*—Identify methods and locations for hazardous and non-hazardous waste handling and disposal. Provide names and qualifications of persons responsible for manifesting hazardous waste to be removed from site.

A8.5.3 Spills

The Contractor must:

1. Take measures to prevent release of spills or leaks into environment during all operations where there is a risk of spill, such as handling of motor oil.
2. Be prepared to mitigate, intercept, clean up, and dispose of spills or releases that may occur during the work in conformance to Authorities Having Jurisdiction.
3. Spill Kits
 - a. Provide and keep at each site, a spill kit that conforms to the reviewed Site-Specific Environmental Protection Plan.
 - b. Locate this to be immediately handy at all times during work where spills are a risk.
 - c. Spill kits are the property of the Contractor and may be removed at the end of the contract.
 - d. Provide new spill kits whenever the existing ones are used during the course of the contract.
4. Follow accepted spill procedures described in reviewed Site-Specific Environmental Protection Plan.
5. Promptly report spills and releases potentially causing damage to environment to:
 - a. The Technical Authority;
 - b. The Ontario Ministry of the Environment SPILL Coordinator (Telephone No. 1-800-268-6060 website <http://www.ontario.ca/page/report-spill#!//>); and,
 - c. The Authority Having Jurisdiction or interest in spill or release including conservation authority, water supply authorities, drainage authority, road authority, and fire department.
6. Further information on dangerous goods emergency clean-up and precautions including a list of companies performing this work can be obtained from Transport Canada's 24-hour number (613) 996-6666 collect.

A8.5.4 WHMIS

The Contractor must manage all products used in the performance of the work in accordance with the requirements of the Workplace Hazardous Materials Information System 2015 (WHMIS 2015) Regulations and Chemical Substances of the Occupational Health and Safety Act and Regulations.

A8.6 Housekeeping

The Contractor must:

1. Each day, leave the dam and work areas in the generator shacks clean upon completion of the work.
2. In cases where tools or equipment must be left at the dam site overnight, the Contractor is authorized to store small items in generator shacks or in off-site storage that will be provided.
3. Dispose of rubbish and waste materials off-site in accordance with local requirements for waste disposal.

A8.7 Permits

The Contractor must:

1. Pay all fees and obtain all permits before starting the work. Provide authorities with plans and information for acceptance certificates. Submit certificates from Authority Having Jurisdiction as evidence that work done meets their requirements. (This is expected to apply to electrical work requiring electrical permits and ESA inspections.)
2. If an electrical inspection permit is not required, provide a letter from the Electrical Safety Authority (ESA) confirming that there is no requirement for electrical inspection permits for that specific work.

A8.8 Quality Control and Quality Assurance

The Contractor must:

1. Be responsible for Quality Control during the Contract, including but not limited to such things as ensuring the logbook is kept up-to-date and reviewing reports for completeness and accuracy before submitting them to the Technical Authority.
2. Quality Assurance are those actions taken by the Technical Authority to verify that the work performed by the Contractor meets the requirements contained herein. The Technical Authority will monitor timeliness of the Contractor's response, quality of the work performed (thorough, accurate, generator buildings left secure and in good condition), and the clearness, accuracy, and completeness of log book entries and other reports.

A9 IMAGES

A9.1 Location Maps



Figure 1: Location map showing three dam sites.

A9.2 Images of Timiskaming Dam



Figure 2: Building housing generator at Timiskaming Dam.



Figure 3: Natural gas generator at Timiskaming dam (installed 2012).

A9.3 Images of Latchford Dam



Figure 4: Service building at Latchford Dam. The generator is in the room closest to the foreground; the middle room is the main electrical room.

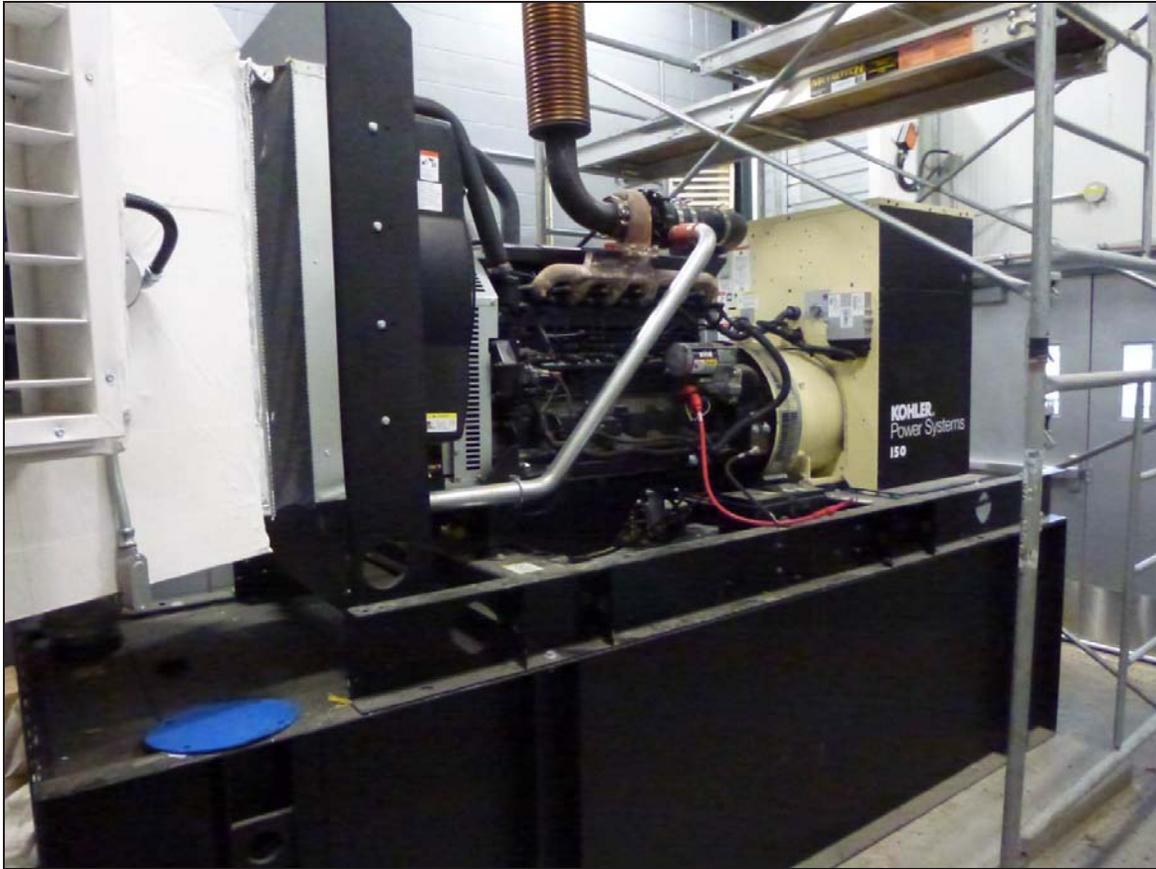


Figure 5: Diesel generator at Latchford Dam (photo October 2016).

A9.4 Images of Big Chaudière Dam



Figure 6: Building housing generator at Big Chaudière Dam.



Figure 7: Diesel generator at Big Chaudière Dam.

A10 APPENDIX 1 – PWGSC LOCKOUT/TAGOUT FORM 13

See attached.

A11 APPENDIX 2 – SINGLE LINE DIAGRAMS

See attached.