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NA

Québec

NA

**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
TPSGC/PWGSC
601-1550, Avenue d'Estimauville
Québec
Québec
G1J 0C7

Title - Sujet North Warning System Hybrid Power S North Warning System Hybrid Power System	
Solicitation No. - N° de l'invitation 23332-220150/A	Amendment No. - N° modif. 007
Client Reference No. - N° de référence du client 23332-22-0150	Date 2022-03-17
GETS Reference No. - N° de référence de SEAG PW-\$QCL-056-18266	
File No. - N° de dossier MTA-1-44079 (056)	CCC No./N° CCC - FMS No./N° VME
Solicitation Closes - L'invitation prend fin at - à 02:00 PM Eastern Daylight Saving Time EDT on - le 2022-05-06 Heure Avancée de l'Est HAE	
F.O.B. - F.A.B.	
Plant-Usine: <input type="checkbox"/> Destination: <input checked="" type="checkbox"/> Other-Autre: <input type="checkbox"/>	
Address Enquiries to: - Adresser toutes questions à: Mohammed-Azizi, Samia	Buyer Id - Id de l'acheteur qcl056
Telephone No. - N° de téléphone (418) 576-9803 ()	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

AMENDMENT 007

The purpose of this amendment is to answer industry questions, to amend the statement of work accordingly and to modify the bid closing time.

AMENDMENTS

1) On the cover page of the request for proposals:

DELETE:

Solicitation Close at 02:00 PM EST on April 1, 2022.

INSERT:

Solicitation Close at 02:00 PM EDT on May 6, 2022.

2) Throughout the request for proposals, where it is mentioned:

DELETE:

“Deep Sea Electronics” OR “Deep Sea Electronics DSE 7310 MKII”

REPLACE BY:

“Deep Sea Electronics or equivalent”

3) In the Annex A, Statement of Work: in Table 2: Required Battery Energy Storage System Specifications

DELETE:

Specifications	Value
Mounting/Enclosure	Batteries must be installed on a common steel skid base with the following dimensions: Maximum Length: ≤ 4.00 m Maximum Width: ≤ 0.65 m Maximum Height: ≤ 2.13 m The skid base must have openings to secure cables for lifting by crane or hoist. System can be comprised of multiple skid bases with the total dimensions meeting those listed above.

INSERT:

Specifications	Value
Mounting/Enclosure	Batteries must be installed on a common steel skid base with the following dimensions: Maximum Length: ≤ 4.00 m

	<p>Maximum Width: ≤ 1.20 m Maximum Height: ≤ 2.13 m</p> <p>The skid base must have openings to secure cables for lifting by crane or hoist.</p> <p>System can be comprised of multiple skid bases with the total dimensions meeting those listed above.</p>
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4) In the Annex A, Statement of Work: in Table 3: Additional Battery Energy Storage System Specifications for Optional Procurement

DELETE:

Table 3 in its entirety

REPLACE BY:

Specifications	Value
Mounting/Enclosure	<p>Batteries must be installed in a rugged, NEMA3 rated insulated enclosure mounted on a common steel skid base with the following dimensions</p> <p>Maximum Length: ≤ 6.10 m Maximum Width: ≤ 2.44 m Maximum Height: ≤ 2.59 m</p> <p>The skid base must have openings to secure cables for lifting by crane or hoist.</p> <p>Enclosure to be insulated to minimize system losses due to conditioning.</p> <p>Minimum Insulation Level: ≥ 4.0 m²C/W</p>
Enclosure Heating/Cooling	<p>Able to maintain battery operating temperatures at the following ambient temperature conditions: Minimum: ≤ -10°C Maximum: ≥ 30°C</p>

5) In the Annex A, Statement of Work, in section 4.5.2. Microgrid Controller

DELETE:

“The microgrid controller must be a commercial off-the-shelf control platform that is industry accepted and has been deployed in real-world applications.”

REPLACE BY:

“The microgrid controller must be a commercial off-the-shelf control platform that is industry accepted and has been deployed in real-world applications. Microgrid Controller must meet IEC 61131-3 programming standard or higher.”

N° de l'invitation - Solicitation No.
23332-220150/A
N° de réf. du client - Client Ref. No.
23332-22-0150

N° de la modif - Amd. No.
007
File No. - N° du dossier
MTA-1-44079

Id de l'acheteur - Buyer ID
QCL056
N° CCC / CCC No./ N° VME - FMS

6) In the Annex A, Statement of Work, in Table 8: Required Low Voltage Power Supply Specifications

INSERT :

Specifications	Value
Arc-Flashing	Meets CSA Z462-2021 standard or higher

7) In the Annex A, Statement of Work, in Table 8: Required Low Voltage Power Supply Specifications

DELETE :

Specifications	Value
Mounting/Enclosure	Components must be installed in an electrical enclosure with or without the BESS. Enclosure mounted on a common steel skid base with the maximum dimensions listed below. Maximum Length: ≤ 1.2 m Maximum Width: ≤ 0.65 m Maximum Height: ≤ 2.13 m The skid base must have openings to secure cables for lifting by crane or hoist.

REPLACE:

Specifications	Value
Mounting/Enclosure	Components must be installed in an electrical enclosure with or without the BESS. Enclosure mounted on a common steel skid base with the maximum dimensions listed below. Maximum Length: ≤ 1.50 m Maximum Width: ≤ 1.2 m Maximum Height: ≤ 2.3 m The skid base must have openings to secure cables for lifting by crane or hoist.

ANSWERS TO INDUSTRY QUESTIONS

Enquiries - Bid Solicitation

To ensure consistency and quality of information provided to bidders, significant enquiries received and the replies to such enquiries will be provided simultaneously to bidders to which the bid solicitation has been sent, without revealing the sources of the enquiries.

Here are the questions which we have received:

<p>Question 1</p>	<p>In reference to the amendment 006 – Question and answer #1: We wish to advise that two cells should be provided for the number of breakers required by the spec. Our gear cell dimension are H 90" x W 29" x D 47", which the width of 2 cells will be about 58". Also our gear height is bigger. Spec requirements for the width now is W=48" and Height 84".</p> <p>To further clarify, the size of one cell will be H 90" x W 29" x D 47" and the total size of 2 cells will be H 90" x W 58" x D 47".</p> <p>The cells can be split for shipping purpose and we can connect them back when they are in the final destination. Please advise if this is acceptable.</p>
<p>Answer 1</p>	<p>This will be acceptable ensuring that the cells can be split in two as you propose. The dimensions in Table 8 have been updated in the statement of work to the following:</p> <p>Maximum Length: ≤ 1.50 m Maximum Width: ≤ 1.2 m Maximum Height: ≤ 2.3 m</p>
<p>Question 2</p>	<p>Is the Deep Sea Engine Controller a hard requirement of the system or can the vendor propose a retrofit for your existing diesel site infrastructure as part of the response?</p> <p>Our preferred generator controller delivers improved reliability and functionality over the deep sea equipment. Integration of this alternate generator controller would be required in order to advantage the overall hybrid system performance and reliability.</p>
<p>Answer 2</p>	<p>The Deep Sea Controller DSE 7310 MKII is implemented to monitor engine performance and mains power failure. The controllers are used as the engine controller with the Controllogix Platform being used as the plant controller. As the Deep Sea Controller is already able to communicate with the Controllogix Platform for remote monitoring, it is preferred to keep the DSE 7310 MKII controller in place.</p> <p>We will accept an alternative generator controller from another platform/brand. The vendor will need to ensure the controller can communicate with the Controllogix Platform.</p> <p>The controller will be trialled at CanmetENERGY and potentially at NRC if the BESS option is exercised.</p> <p>Use of the alternative generator controller must be indicated in the proposal ID C8 – System Concept, Design and Development.</p>

	<p>Evaluation criteria referring to the “Deep Sea Controller” has been updated to “Deep Sea Controller or equivalent”.</p> <p>We have also amended in section 4.5.2 that the microgrid controller must meet the IEC 61131-3 programming standard or higher.</p>		
Question 3	<p>With regards to the delivery of four-quadrant power converters and transformers: There is no room neither on the ESS skid and nor on the 208 Vac power distribution skid for these two items.</p> <p>As per System block diagram Converter is shown as a part of the low-voltage distribution skid. Which is not possible based on the given dimensions.</p> <p>How do you want these two items to be delivered?</p>		
Answer 3	<p>We have increased the size tolerances for the 208 Vac power distribution skid (see Amendment 006 and Question 1 above).</p> <p>Alternatively, the maximum width of the ESS (BESS) skid could also be increased from 0.65 m to 1.2 m (see Table 2 amendment above).</p>		
Question 4	<p>Do you require an arc flash study and/or rating on the switchgear?</p>		
Answer 4	<p>For the arc flash, we presume you are referring to an arc flash rating for the equipment, which includes a listing of PPE required, energy hazard ratings, and a prescribed boundary around the machine specifying two regions, one for limited approach (users) and one for restricted approach (service). This would be required following CSA Z462-2021.</p> <p>Table 8 has been amended to include the following:</p> <table border="1" data-bbox="500 1192 1317 1255"> <tr> <td>Arc-Flash Rating</td> <td>Meets CSA Z462-2021 standard or higher</td> </tr> </table>	Arc-Flash Rating	Meets CSA Z462-2021 standard or higher
Arc-Flash Rating	Meets CSA Z462-2021 standard or higher		
Question 5	<p>Will you accept our battery chemistries? Only Lithium Iron Phosphate for the BESS?</p>		
Answer 5	<p>We are assuming, reference is being made to “other” battery chemistries. We will only consider Lithium Iron Phosphate batteries.</p>		
Question 6	<p>Can you provide more information on the “engineering and transient protection” study?</p>		
Answer 6	<p>The engineering study is to confirm how the hybrid power system will be integrated electrically at the North Bay deployment site.</p> <p>The transient protection study is to measure the harmonics and identify a suitable strategy to mitigate the transients to ensure the HMS meets the 98% reliability.</p> <p>Details of what the engineering and transient protection study should provide is outlined in Section 6.1. An expected output is a report on what upgrades need to be done to integrate the HMS system electrically to the site and what mitigation measures will be put in place to handle any transient loads.</p>		

Question 7	Is the expectation the protection and controls will be supplied by its own 24 or 125 Vdc supply or is there a supply available on site?
Answer 7	At the final deployment site, the HMS will be the primary power system. There is no grid connection, so the protection and controls must be supplied by its own 24 V or 125 V dc supply. The current control and monitoring system (CMS) is powered by a 24VDC at the site. For the BESS option for the NRC site, there will be a dedicated 120 VAC supply for the auxiliaries. If a 24VDC or 125VDC for the auxiliary circuits is required, then a suitable power converter (120VAC to 24VDC/125VDC) should be provided.
Question 8	What jurisdiction will engineering be required to be registered? Will the equipment be required to meet certification in Nunavut, NWT, YK?
Answer 8	Ontario - Equipment will not require certification in Nunavut, NWT or Yukon.
Question 9	As per SOW Table 3: Additional Battery Energy Storage System Specifications for Optional Procurement. Maximum Length: 6.10 m Maximum Width: 2.44 m Maximum Height: 2.13 m The standard ISO container has following dimensions: Height: 6.090 m Width: 2.440 m Height: 2.590 m If we use standard containers, the cost will be very much lower than the custom NEMA 3 enclosure. Please confirm if we can use the standard container with above dimensions.
Answer 9	Yes, this is acceptable. Table 3 has been amended accordingly.
Question 10	What is the rough timeline for Canada to award the contract? I looked through the RFP and SOW and there was no indication about relative timing for Contract Award.
Answer 10	There is no firm timeline stated in the RFP as the contract will be awarded as soon as the procurement process, including the required security screenings, is completed. This deadline will vary depending on the number of proposals received and a number of other factors.

**** ALL OTHER TERMS AND CONDITIONS REMAIN THE SAME ****