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11 Laurier St. / 11, rue Laurier  
Place du Portage, Phase III  
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Gatineau, Québec K1A 0S5  
Bid Fax: (819) 997-9776

**REQUEST FOR PRICE AND  
AVAILABILITY  
DEMANDE DE PRIX ET DE  
DISPONIBILITÉ**

This is not a bid solicitation but an inquiry for the purpose of obtaining price and availability information for the goods, services, and construction specified herein. The information requested herein is for budgeting and planning purposes only. Contracts will not be entered into on the basis of suppliers' responses.

Il ne s'agit pas d'une invitation à soumissionner mais d'une demande de renseignements sur les prix et la disponibilité des biens, services et construction spécifiés aux présentes. Les renseignements demandés aux présentes sont nécessaires uniquement à l'établissement du budget et à la planification. Les marchés ne seront pas attribués suite aux réponses des fournisseurs/entrepreneurs.

**Comments - Commentaires**

<b>Title - Sujet</b> TACTICAL QUIET POWER UNITS	
<b>Solicitation No. - N° de l'invitation</b> W8476-12CPDS/A	<b>Date</b> 2012-04-03
<b>Client Reference No. - N° de référence du client</b> W8476-12CPDS	<b>GETS Ref. No. - N° de réf. de SEAG</b> PW-\$\$HN-446-60221
<b>File No. - N° de dossier</b> hn446.W8476-12CPDS	<b>CCC No./N° CCC - FMS No./N° VME</b>
<b>Solicitation Closes - L'invitation prend fin</b> <b>at - à 02:00 PM</b> <b>on - le 2012-04-26</b>	
<b>Time Zone</b> Fuseau horaire Eastern Daylight Saving Time EDT	
<b>F.O.B. - F.A.B.</b> <b>Plant-Usine:</b> <input type="checkbox"/> <b>Destination:</b> <input type="checkbox"/> <b>Other-Autre:</b> <input type="checkbox"/>	
<b>Address Enquiries to: - Adresser toutes questions à:</b> Garcia Lozano, Quiterie	<b>Buyer Id - Id de l'acheteur</b> hn446
<b>Telephone No. - N° de téléphone</b> (819) 956-3594 ( )	<b>FAX No. - N° de FAX</b> (819) 953-4944
<b>Destination - of Goods, Services, and Construction:</b> <b>Destination - des biens, services et construction:</b> DEPARTMENT OF NATIONAL DEFENCE CFSD MONTREAL 6363 RUE NOTRE DAME ST E. MONTREAL Quebec H1N2E9 Canada	

**Instructions: See Herein**

**Instructions: Voir aux présentes**

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

<b>Delivery Required - Livraison exigée</b> See Herein	<b>Delivery Offered - Livraison proposée</b>
<b>Vendor/Firm Name and Address</b> <b>Raison sociale et adresse du fournisseur/de l'entrepreneur</b>	
<b>Telephone No. - N° de téléphone</b> <b>Facsimile No. - N° de télécopieur</b>	
<b>Name and title of person authorized to sign on behalf of Vendor/Firm</b> <b>(type or print)</b> <b>Nom et titre de la personne autorisée à signer au nom du fournisseur/ de l'entrepreneur (taper ou écrire en caractères d'imprimerie)</b>	
<b>Signature</b>	<b>Date</b>

**Issuing Office - Bureau de distribution**  
Electrical & Electronics Products Division  
11 Laurier St./11, rue Laurier  
6B1, Place du Portage, Phase III  
Gatineau, Québec K1A 0S5



Item Article	Description	Dest. Code Dest.	Inv. Code Fact.	Qty Qté	U. of I. U. de D.	Unit Price/Prix unitaire FOB/FAM Destination	Plant/Usine	Del. Offered Liv. offerte
1	TACTICAL QUIET POWER UNITS	WB941	I - 1	30	Each	\$	See Herein	

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The Department of National Defence is gathering price and availability data for the procurement of thirty (30) tactical quiet power units to be delivered in Montreal, QC.

Canada is requesting the following:

1. Suppliers should provide prices in Canadian dollars; and provide their best estimate of equipment price escalations;
2. Suppliers should comment on the proposed Statement of Work (SOW). Suppliers are also requested to quote available off-the-shelf products in compliance with the SOW;
3. Suppliers should provide technical brochures, test reports, and technical data sheets with their responses to substantiate their product compliance with the SOW; and
4. Suppliers should provide a project schedule.

Canada does not intend to award a contract on the basis of this notice or otherwise pay for the information solicited. Respondents may submit commercial-in-confidence documents / information / data collected and the Government of Canada reserves the right to use the information submitted to assist in preparing technical requirements and budgetary estimates for the Department of National Defence.

In an effort to encourage Respondents to be as forthcoming as possible, it is understood and agreed that DND shall, during and after the period of the Request for Price and Availability (P&A), treat as confidential and not divulge, unless authorized in writing by the Respondent, any information obtained from the Respondent that has been identified by Respondents as "confidential" or "proprietary", within their written response to this P&A.

Response to this Request for Price and Availability should be sent by mail, email or fax to :

Quiterie García Lozano - Supply Officer  
Public Works and Government Services Canada - Acquisitions Branch  
Logistics, Electrical, Fuel and Transportation Directorate - "HN" Division  
7B3, Place du Portage, Phase III, 11 Laurier Street, Gatineau, QC, K1A 0S5

E-mail address: Quiterie.GarciaLozano@pwgsc-tpsgc.gc.ca

Facsimile: (819) 953-4944

## **STATEMENT OF WORK**

### **60 KW TACTICAL QUIET POWER UNIT**

## **1. Scope**

### **1.1. Purpose**

This Statement Of Work (SOW) defines the general performance requirement, qualification, and delivery of a commercial off the shelf (COTS) 60 KW power unit. The power unit shall consist of a 60 KW tactical quiet generator (TQG) mounted on a trailer to support the Canadian Forces (CF) during tactical deployments.

### **1.2. Background**

The Department of National Defence requires a safe, reliable and efficient diesel electric power TQG (60 kW 120/ 208 V AC, 3Phase, 60 Hz) to satisfy the electrical needs of the CF during tactical deployments. The COTS generator is intended to work with sensitive and tactical quiet equipment.

### **1.3 Publications**

Mil-Std-705C	GENERATOR SETS, ENGINE DRIVEN METHODS OF TESTS AND INSTRUCTIONS
Mil-Std-810G	ENVIRONMENTAL ENGINEERING CONSIDERATIONS AND LABORATORY TESTS
Mil-Std-461	REQUIREMENTS FOR THE CONTROL OF ELECTROMAGNETIC INTERFERENCE CHARACTERISTICS OF SUBSYSTEMS AND EQUIPMENT
EPA Tier IV	Environment Protection Act, Tier IV Engines
CSA 22.2 No. 100	Canadian Standards Association for Generators.
NEMA Standard	National Electrical Manufacturers Association

## 2. Requirements

### 2.1. Equipment Description

The generators shall be diesel generators with a rated output of not less than 60 KW continuous operation.

### 2.2. Physical Characteristics

#### 2.2.1. Generator

- a. The generator shall be a brushless type AC generator 120/208 VAC, 3 Phase, 60 Hz, and capable to be configured to 240/416 VAC 3 Phase, 50 Hz. The winding shall be class F insulation and rated for 60 kw continuous operation.
- b. The generator shall have an automatic voltage regulator (AVR) with regulation of +/- 1% and capability for manual output adjustment with increments of +/- 1%. The generator shall meet the stability and transient response test as per Mil-Std-705C, test method 608.1b for frequency and voltage regulation.
- c. The generator shall have electronic governor with dual speed setting at 1800 and 1500 rpm, with a regulation of 0.25%.
- d. The Generator Transient Characteristics should comply with STANAG 4135, a summary of which follows:
 

- Manual voltage adjustment capability	+ 15% and - 5%
- Steady State Voltage deviation (max)	4%
- Steady State Voltage tolerance band	2%
- Ripple (max) peak to peak	7%
- Harmonics	< 3%
- Variation (max) caused by application of full load	< 30%
- Recovery time (max) following application of load	1 sec.
- Max variation caused by removal of the load	40%
- Recover time after removal of the load	0.5 sec.

#### 2.2.2. Size and Weight

- a. The generator shall be optimal in its design to minimize its weight and size such that the complete system will be air-transportable by a C-130 aircraft, and towed by a Standard Military Pattern (SMP) Truck.

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- b. The size of the generator shall not exceed 90.17 cm (35.5") in width x 219.71 cm (86.5") in length x 148.59 cm (58.5") in height, mounted on M200A trailer 419.10 cm (165") long x 240.03 cm (94.5") wide x 96.02 cm (37.8") high, with a generator mounting base 110.49 cm (43.5") wide x 219.71 cm (86.5") long. The total height of the generator mounted on the trailer shall not exceed 219.71 cm (86.5") in height. The weight of the generator including the M200A trailer shall not exceed 3150kg (6930lbs).

### **2.2.3. Diesel Engine**

- a. The generator shall have an Environmental Protection Act (EPA), Tier IV compliant Engine.
- b. The engine shall be equipped with a low oil pressure switch, and over temperature switch with positive fuel shutdown.
- c. The engine shall be capable to operate without degradation to its performance on diesel fuels including DF1, DF2, JP4, JP5 and JP8.
- d. The generator shall be equipped with a built-in fuel tank capable to supply the engine with fuel for 10 hours duration at full load. The fuel tank should have a low level switch with built-in alarm circuit at 20% fuel and positive fuel shutdown at 10%.

### **2.2.4 Noise Level**

The generator noise level shall be < 71 db measured at 10m (23ft.) away from the centre of the source of noise as per Mil-Std-1474. The generator shall be tested as per Mil-Std-705C, method 661.2c for sound level test.

### **2.2.5 Enclosure**

The generator shall be designed for outdoor use. The enclosure protection level shall be NEMA-3X as per National Electrical Manufacturers Association (NEMA) for 3X protection level.

## **2.3 Operational Characteristics**

### **2.3.1 Environmental Operational Capability**

- a. The generator shall be capable to start at -40°C and shall be tested as per Mil-Std-705C, method 701.d for extreme cold weather starting and operating.
- b. The generator shall be capable to operate continuously in an ambient temperature of +49°C without any degradation to its rated output as per Mil-Std-705C, test method 710.d for high temperature operation.

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### **2.3.2 Shock and Vibration Capability**

The power unit (generator mounted on trailer) shall successfully pass shock and vibration testing according to MIL-STD 810E Method 514.4, Procedure I for Category 10. The power unit generator shall show no evidence of wire chafing, loose or broken parts, touching or shorting of electrical parts, component fatigue, cracking of material or permanent deformation that will make the equipment unsafe to operate, or other defects which are detrimental to the intended function. The power unit shall be sufficiently robust to remain undamaged when towed across rough terrain by a SMP truck.

### **2.3.3 Electromagnetic Interference (EMI)/ Electromagnetic Characteristics (EMC) Capability**

The power unit shall comply with MIL-STD-461G, RE 102 from 10 KHz to 18 GHz; CE 102 from 10 KHz to 10 MHz; and RS 103 from 2 MHz to 40 GHz applicable for Army ground equipment.

### **2.3.4 Environmental Impact**

The generator shall comply with all Canadian environmental regulations. The engine shall comply with the Environmental Protection Act (EPA) for Tier IV compliant engines.

2.3.5 Standardization. The generator shall be certified by the Canadian Standards Association (CSA) or an accredited organization approved by the CSA. The Power unit shall comply with CSA 22.2 No. 100.

### **3. Deliverables**

#### **3.1 Deliverable Items**

- a. The contractor shall deliver power units as described in section 2. above. The contractor shall ensure that all power units are delivered with all components correctly serviced to ensure the system is ready for use.
- b. The contractor shall provide English technical manuals with each generator at the time of delivery with unlimited intellectual property rights for DND to amend and translate the manuals for its use internally. One operating and maintenance manual shall be delivered and packaged individually together with each generator. The contractor shall provide the Technical Authority (TA) with one paper copy of the parts manual, operating and maintenance manual, and two electronic copies.