



SPECIFICATIONS

GENERATORS MAINTENANCE AND REPAIR SERVICES



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The Correctional Service of Canada (CSC) is looking for one or more contractors to provide services concerning annual and five-year maintenance and repair of emergency generators according to CSA 282-19 standards in force for the various institution in the Quebec region.

1. **GENERAL REQUIREMENTS**

1.1. CONTEXTE

As part of its preventive maintenance system, CSC must ensure that the emergency generators are always maintained and are in very good working order to ensure the reliability of the generator set equipment.

1.2. OBJECTIFS

Perform preventive maintenance, repairs, and annual load bank tests to ensure optimal operation and proper maintenance of generator set equipment. (Appendix II List of generators)

1.3. TASKS

The main maintenance and repair tasks are listed in point 2.1 of this document. The contractor must ensure that the annual and five-yearly maintenance scheduled in according with Annex III (maintenance schedule).

1.4. DELIVERABLES

- 1.4.1. During annual and five-yearly maintenance, the contractor must submit to the technical authority on site, a detailed report including all the requirements specified in point 2 TECHNICAL REQUIREMENTS. The report must be submitted **no later than 30 days following the last day of work.**

NOTE: Canada will pay the Contractor when units have been completed and delivered in accordance with the payment provisions of the contract if:

- a) an accurate and complete invoice **as well as any other document required (detailed report)** by the contract have been submitted in accordance with the invoicing instructions provided for in the contract.
- b) all such documents have been verified by Canada.
- c) the work delivered has been accepted by Canada.

- 1.4.2. At the end of each day and/or intervention on one or more CSC equipment, the contractor must submit a work order signed by the technician and submit it to the site technical authority.

1.5. WORKPLACE

See Annex I for the concerned sites.

1.6. EQUIPMENT

See Annex II for the complete list of generators.

1.7. TRAVELLING

The contractor must go to the site (see Appendix I) to carry out the work under the contract. No travel expenses will be paid by CSC.



1.8. SERVICE CALL

1.8.1. The contractor must be available and provide an emergency telephone number on which he can be reached 24/7.

1.8.2. For service call work, the Contractor must contact the CSC representative who placed the service call within 90 minutes. The work will begin at the institution within a maximum of four (4) hours following this communication between the contractor's representative and CSC representative.

NOTE: For La Macaza and Port-Cartier Institution far from major urban centers, this delay will be a reasonable transport time and depending on the seriousness of the non-functioning of the generator. Transportation hours will be billed at the applicable hourly rates where applicable. No other fees (except hourly rates) will be authorized and paid by CSC.

1.8.3. The contractor, during an emergency service call, must submit at the end of the work, a work order including all the work performed.



2. TECHNICAL REQUIREMENTS

2.1. MANDATE

2.1.1. The scope of the mandate includes various works of inspection, maintenance, repair and disposal of all waste resulting from the work. These include but are not limited to:

1. Annual and/or five-year maintenance and annual load bank testing in accordance with CSA C282-19 including the following parts and services:

A. Oil change including supplies and installation as recommended by the manufacturer:

- Proper grade engine oil recommended by the manufacturer
- Oil filters, and if necessary other parts
- The fuel filters
- The air filters
- All materials, lubricants required for maintenance
- Disposal of oils, filters, and contaminated supplies

B. Testing and inspection according to the CSA C282-19 standards

- Tests with a 2-hour load bank including the electrical resistance device as well as the required electrical connections
- Starting devices
- Axillary fuel supply systems
- Protective devices
- Battery voltage
- Battery charging
- Measuring instruments (probes)
- Main temperature component
- Exhaust system
- Cooling and ventilation circuit

C. Analysis according to the CSA C282-19 standards

- Thermographic; included in the detailed report
- Coolant/antifreeze; included in the detailed report
- Oil included with laboratory compliance report
- Fuel included with laboratory compliance report

2. Annual and five-yearly maintenance includes full transfer switch servicing with electrical and thermographic report.

3. The five-year maintenance includes performing thermography imaging of all components and electrical connections. A report is required.

4. The annual inspection and maintenance tasks of the systems must include at least all the points mentioned in the tables of requirements. relating to inspections, tests, and maintenance work two (2) to five (5) of the CSA C282-19 standards.

NOTE: Tasks to be performed during an interview always include the tasks in the previous tables in addition to the tasks specific to this interview.

Example: The five-year maintenance, in addition to providing for the tasks described in table six (6), must also include all the tasks indicated in tables two (2) to five (5).



	Tableau 2 Table 2	Tableau 3 Table 3	Tableau 4 Table 4	Tableau 5 Table5	Tableau 6 Table 6
Hebdomadaire Weekly	Inclus Included				
Mensuelles Monthly	Inclus Included				
Semestrielles semi-annual	Inclus Included				
Annuelle Annual	Inclus Included				
Quinquennale Quinquennial	Inclus Included				

5. Complete the maintenance log book for each generator following the work.
6. Following the work, the contractor must produce a detailed report stating the points inspected, the work carried out, the parts replaced and the recommendations, when applicable.
7. See appendix II for the list of equipment on which interventions, maintenance and repairs are and could be requested, with their associated location.
8. CSC will monitor or inspect the work to ensure quality and compliance with the terms of reference. Any identified deficiencies must be corrected at no additional cost to CSC.

2.2. ENVIRONMENT

- 2.2.1. The contractor must be familiar with the environmental policies and standards and resource conservation practices established by the government for the delivery and handling (transportation) of diesel, engine oil and coolant and all contaminants and debris which are related thereto and must.
- 2.2.2. The contractor is responsible for transportation and selection of waste treatment sites. CSC reserves the right to request disposal manifests as required.
- 2.2.3. For exceptions, when mentioned by the technical authority, CSC waste containers can be made available to the contractor.



3. **HEALTH AND SAFETY**

3.1. GENERALITY

The contractor must manage his activities so that the health and safety of people and the protection of the environment always take precedence over issues related to costs and the work schedule.

3.2. APPLICABLES MEASURES

3.2.1. At all times, the contractor must appoint a competent person to apply the applicable health and safety measures.

3.2.2. Take all necessary measures to ensure the application and compliance with health and safety requirements according to all applicable regulations

3.3. LOCKOUT

3.3.1. CSC has a lockout program. The contractor must consult it and comply with it, in particular for work permit applications.

3.3.2. During work requiring padlocking, the contractor must provide the number of padlocks required free of charge.

3.4. ELECTRICAL SAFETY

3.4.1. In connection with the CAN/CSA Z462 Electrical Safety at Work Standard, the CSC – Quebec Region has developed its Regional Policy – Electrical Safety at Work (Arc Flash). The contractor must comply with this. CSC has an electrical work policy. The contractor must consult it and comply with it, in particular for off-line work, risk analysis and marking on the job.

3.4.2. All electrical, mechanical, or other work on electrically driven and/or powered equipment must, without exception, be performed at zero energy. Lockout procedures are required.



4. **CSC SECURITY REQUIREMENTS**

4.1. SEARCHES

- 4.1.1. Normal working hours are Monday through Friday between 7:00 a.m. and 5:00 p.m. Any person and vehicle arriving at the facility may be searched.
- 4.1.2. If there are reasonable grounds to believe that a contractor employee is in possession of contraband, CSC may order that the person be searched.
- 4.1.3. The personal effects of all employees and visitors arriving at the establishment may be subject to checks for residues of prohibited drugs.

4.2. TOOLS AND EQUIPMENT

- 4.2.1. Keep a complete list of tools and equipment used during the work. Submit the list for inspection when required. Keep the list of tools and equipment up to date throughout the work. Immediately notify the Technical Authority of any loss or disappearance of tools or equipment

4.3. PROHIBITED ITEMS

- 4.3.1. The contractor must be vigilant with regard to its employees and the employees of sub-contractors. If contraband is found, the person who introduced it may have their security clearance revoked. If the offense is serious, the company concerned may be expelled from the institution for the duration of the work.

4.4. MONITORING AND INSPECTION

- 4.4.1. Activities and movement of workers and vehicles are monitored and inspected by CSC security personnel to ensure compliance with institution security standards.
- 4.4.2. At the beginning and throughout the work, CSC staff must ensure that the need for monitoring and inspections is understood by the contractor's employees.



ANNEXE I

CONCERNED SITES

LAVAL COMPLEX - 2 different addresses

- Centre fédéral de formation – site 600 : 600, Montée Saint-François, Laval, QC, H7C 1S5
- Centre fédéral de formation – site 6099 : 6099, boulevard Lévesque, Laval, QC, H7C 1P1

SAINTE-ANNE-DES-PLAINES COMPLEX - 3 different addresses

- Archambault (médium) : 242 Gibson, Sainte-Anne-des-Plaines, QC, J0N 1H0
- Centre régional de réception : 246 Gibson, Sainte-Anne-des-Plaines QC, J0N 1H0
- Établissement Archambault (minimum) : 244, Gibson, Sainte-Anne-des-Plaines, QC, J0N 1H0

COWANSVILLE INSTITUTION : 400, avenue Fordyce, Cowansville, QC, J2K 3N7

DONNACONA INSTITUTION : 1537, Route 138, Donnacona, QC, G3M 1C9

DRUMMOND INSTITUTION : 2025 boulevard Jean de Brébeuf, Drummondville, Qc, J2B 7Z6

LA MACAZA INSTITUTION : 321, chemin de l'Aéroport, La Macaza, QC, J0T 1R0

PORT-CARTIER INSTITUTION : 1 chemin de l'Aéroport, Port-Cartier, QC, G5B 2W2

JOLIETTE INSTITUTION : 400 rue Marsolais, Joliette, QC, J6E 8V4



ANNEX II

LIST OF GENERATORS

LAVAL COMPLEX								
Identification	Generator	Model	Power	Voltage	Engine	Engine serial number	Length of cables for load bench in feet	Transfer switch quantity
600-1-GEN01	KOHLER	600REOZVB	600 KW	600 V	JOHN DEERE	33HHGMGF0002	150	1
600-C27-GEN01	KOHLER	400RE0ZJB	400 KW	600 V	JOHN DEERE	33FHGMGF0007	150	1
600-EW2-GEN01	KOHLER	80REOZJF	81 KW	600 V	JOHN DEERE	33JVGMGG0002	50	1
6099- C15-GEN01	Marathon	1000NXC6DT2	1000 KW	600 V	MARATHON	374403-1-1-0614	150	1
6099-C28-GEN01	Kohler	200REOZJB91	200 KW	600 V	JOHN DEERE	2031812	150	1
6099-C28-MOBILE	STAMFORD	C504D	375 KW	600 V	JOHN DEERE	41999/2	50	1
SAINTE-ANNE-DES-PLAINES COMPLEX								
Identification	Generator	Model	Power	Voltage	Engine	Engine serial number	Length of cables for load bench in feet	Transfer switch quantity
341-Z-GEN01	SENECA	1600DMMN	1500KW	600V	mitsubishi	17688	50	1
342-A39-GEN01	MTU	CD1750-Y672	2000KW	600V	mitsubishi	14180	100	1
343-K-GEN01	Kohler	1000RE0ZM	1140KW	600V	mitsubishi	2033772	50	2
342-A41-GEN01	SENECA	800DMMN	800KW	600V	mitsubishi	27114	50	1
343--U9-GEN01	SENECA	500DMMN	540KW	600V	DOOSAN INFRACORE	EASOA100845	50	1
342-000-GEN01	SENECA	500DMMN	500KW	600V	DOOSAN INFRACORE	101081	50	0
342-000-GEN02	SENECA	500DMMN	500KW	600V	DOOSAN INFRACORE	101080	50	0
342-A44-GEN01	ONSITE ENERGY	MTU 6R0113 DS150	150KW	600V	JOHN DEERE	PE6068L274627	100	1
342-000-GEN03	CUMMINS	PGDB-547203	100KW	600V	CUMMINS	D090242248	50	0



<u>COWANSVILLE INSTITUTION</u>								
Identification	Generator	Model	Power	Voltage	Engine	Engine serial number	Length of cables for load bench in feet	Transfer switch quantity
350-A16-GEN1	KHOLER	800ROZD4	800 KW	600 V	DETROIT	0666307	50	1
350-A16-GEN2	KHOLER	800ROZD4	800 KW	600 V	DETROIT	0666308	50	1
350-A5-GEN01	ONAN	100DGDB	100 KW	600 V	CUMMINS	45453050	50	1
<u>DRUMMOND INSTITUTION</u>								
Identification	Generator	Model	Power	Voltage	Engine	Engine serial number	Length of cables for load bench in feet	Transfer switch quantity
345-0000-GEN-1	KHOLER	1000RE0ZDB91	1000 KW	600 V	DETROIT	2011777	50	1
345-0000-GEN-2	VOLVO	TAD1631GE	500 KW	600 V	VOLVO	2160035673	50	0
345-1N119.5-GEN-3	FAGUY	55,0I3ELSP2-9XRR	55 KW	600 V	FIAT 8000	32726	50	1
<u>DONNACONA INSTITUTION</u>								
Identification	Generator	Model	Power	Voltage	Engine	Engine serial number	Length of cables for load bench in feet	Transfer switch quantity
321-02-B-138-GEN01	CATERPILAR	3512	1040 KW	600 V	CATERPILAR	24Z01179	50	1
<u>PORT-CARTIER INSTITUTION</u>								
Identification	Generator	Model	Power	Voltage	Engine	Engine serial number	Length of cables for load bench in feet	Transfer switch quantity
368-02-B-138-GEN01	FAGUY	1000.0C36R-LSP2-9XRR	1040 KW	600 V	CUMMINS	33111899	100	1



LA MACAZA INSTITUTION								
Identification	Generator	Model	Power	Voltage	Engine	Engine serial number	Length of cables for load bench in feet	Transfer switch quantity
352-M03A-GEN01	KHOLER	1000REOZMB91	1000 KW	600 V	MITSUBISHI	2326659	50	1
352-D12A-GEN01	KHOLER	150REOZJE91	150 KW	600 V	JOHN DEERE	2316967	50	1
352-D32-GEN01	KHOLER	100REOZJE91	100 KW	600 V	JOHN DEERE	2316449	50	0
352-D29-GEN01	ONSITE ENERGY	743RSS4288	1250 KW	600 V	MTU	95020500241	50	2
JOLIETTE INSTITUTION								
Identification	Generator	Model	Power	Voltage	Engine	Engine serial number	Length of cables for load bench in feet	Transfer switch quantity
325-000-GEN01	GÉNÉRAC	SD0600LG05220D18 HPNN	600 KW	600 V	DOSSAN	0G9363	50	1



ANNEXE III

SCHEDULE FOR CARRYING OUT ANNUAL AND FIVE-YEAR MAINTENANCE

NOTE : The contractor must perform preventive maintenance according with this schedule, any change to this schedule has to be approved by the CSC project authority.

LAVAL COMPLEX			Annual maintenance				Five-year maintenance			
Identification	Generator	Model	2024	2025	2026	2027	2024	2025	2026	2027
600-1-GEN01	KOHLER	600REOZVB	September		September	September		September		
600-C27-GEN01	KOHLER	400RE0ZJB	September		September	September		September		
600-EW2-GEN01	KOHLER	80REOZJF	September		September	September		September		
6099- C15-GEN01	Marathon	1000NXC6DT2		September	September	September	September			
6099-C28-GEN01	Kohler	200REOZJB91		September	September	September	September			
6099-C28-MOBILE	STAMFORD	C504D	September	September		September			September	
SAINTE-ANNE-DES-PLAINES COMPLEX			Annual maintenance				Five-year maintenance			
Identification	Générateur	Modèle	2024	2025	2026	2027	2024	2025	2026	2027
341-Z-GEN01	SENECA	1600DMMN	July	July		July			July	
342-A39-GEN01	MTU	CD1750-Y672	July	July		July			July	
343-K-GEN01	Kohler	1000RE0ZM	July	July		July			July	
342-A41-GEN01	SENECA	800DMMN	July	July	July					July
343--U9-GEN01	SENECA	500DMMN	June	June		June			June	
342-000-GEN01	SENECA	500DMMN	June	June	June	June				
342-000-GEN02	SENECA	500DMMN	June	June	June	June				
342-A44-GEN01	ONSITE ENERGY	MTU 6R0113 DS150	June	June	June					June
342-000-GEN03	CUMMINS	PGDB-547203	June	June	June					June



ÉTABLISSEMENT COWANSVILLE			Annual maintenance				Five-year maintenance			
Identification	Générateur	Modèle	2024	2025	2026	2027	2024	2025	2026	2027
350-A16-GEN1	KHOLER	800ROZD4		September	September	September	September			
350-A16-GEN2	KHOLER	800ROZD4		September	September	September	September			
350-A5-GEN01	ONAN	100DGDB		September	September	September	September			
ÉTABLISSEMENT DRUMMOND			Annual maintenance				Five-year maintenance			
Identification	Générateur	Modèle	2024	2025	2026	2027	2024	2025	2026	2027
345-0000-GEN-1	KHOLER	1000RE0ZDB91	June	June		June			June	
345-0000-GEN-2	VOLVO	TAD1631GE	June	June		June			June	
345-1N119.5-GEN-3	FAGUY	55,0I3ELSP2-9XRR	June	June		June			June	
ÉTABLISSEMENT DONNACONA			Annual maintenance				Five-year maintenance			
Identification	Générateur	Modèle	2024	2025	2026	2027	2024	2025	2026	2027
321-02-B-138-GEN01	CATERPILAR	3512		July	July	July	July			
ÉTABLISSEMENT PORT-CARTIER			Annual maintenance				Five-year maintenance			
Identification	Générateur	Modèle	2024	2025	2026	2027	2024	2025	2026	2027
368-02-B-138-GEN01	FAGUY	1000.0C36R-LSP2-9XRR	August		August	August		August		
ÉTABLISSEMENT LA MACAZA			Annual maintenance				Five-year maintenance			
Identification	Générateur	Modèle	2024	2025	2026	2027	2024	2025	2026	2027
352-M03A-GEN01	KHOLER	1000REOZMB91	October		October	October		October		
352-D12A-GEN01	KHOLER	150REOZJE91	N/A	October		October	N/A		October	
352-D32-GEN01	KHOLER	100REOZJE91	October	October		October			October	
352-D29-GEN01	ONSITE ENERGY	743RSS4288 1250KW	N/A	October	October	October	N/A			



ÉTABLISSEMENT JOLIETTE			Annual maintenance				Five-year maintenance			
Identification	Générateur	Modèle	2024	2025	2026	2027	2024	2025	2026	2027
325-000-GEN01	GÉNÉRAC	SD0600LG05220D18HPNN	June	June	June					June