
SPECIFICATIONS

**GENERATORS MAINTENANCE AND
REPAIR SERVICES**

TABLE OF CONTENTS

1. GENERAL REQUIREMENTS.....	PAGE 3
1.1 Contexte	
1.2 Objectifs	
1.3 Tasks	
1.4 Deliverables	
1.5 Workplace	
1.6 Equipment	
1.7 Travelling	
1.8 Service call	
2. TECHNICAL REQUIREMENTS	PAGE 5
2.1 Mandate	
2.2 Environment	
3. HEALT AND SAFETY	PAGE 7
3.1 Generality	
3.2 Applicables measures	
3.3 Lockout	
3.4 Electrical safety	
4. CSC SECURITY REQUIREMENTS	PAGE 8
4.1 Searches	
4.2 Tools and equipment	
4.3 Prohibited items	
4.4 Monitoring and inspection	
ANNEX I Concerned sites	PAGE 9
ANNEX II List of generators.....	PAGE 10
ANNEX III Schedule for carrying out annual and five-year maintenance.....	PAGE 13

Correctional Service Canada is looking for one or more contractors for the delivery of services related to annual and five-year maintenance and the repair of emergency generators in accordance with current CSA 282-19 standards for various institutions in the Quebec Region.

1. **GENERAL REQUIREMENT**

1.1. CONTEXT

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

1.2. OBJECTIVES

Carry out preventive maintenance, repairs and annual charging rack testing to ensure optimal operation and adequate maintenance of generator unit equipment listed in Annex II. (list of generator units)

1.3. TASKS

The main maintenance and repair tasks are listed in section 2.1 of this document. The contractor shall carry out the planned annual and five-year maintenance in accordance with Annex III (maintenance schedule).

1.4. DELIVERABLES

- 1.4.1. During annual and five-year maintenance, the contractor shall submit to the technical authority at the site detailed reports containing all requirements set out in point 2, TECHNICAL REQUIREMENTS. These detailed reports shall be submitted **no later than 30 days after maintenance interventions.**

NOTE: Canada shall 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 and any other document required (detailed report) by the contract have been submitted in accordance with the invoicing instructions set out in the contract;
- b) all these documents have been verified by Canada; and
- c) all work delivered has been accepted by Canada.

- 1.4.2. At the end of each day and/or intervention on one or more pieces of CSC equipment, the contractor shall provide the technical authority at the site with a work order bearing the name of the company and signed by the technician.

1.5. WORKPLACE

See Annex I (sites concerned).

1.6. EQUIPMENT LIST

See Annex II for the equipment list.

1.7. TRAVEL

The contractor shall go to the site (see Appendix I, sites concerned) to perform the work required by the contract. No travel costs shall be reimbursed by CSC.

1.8. SERVICE CALLS

- 1.8.1. The contractor shall be available and provide a telephone number for service calls at which it can be reached 24/7.

- 1.8.2. For service calls, the contractor shall contact the CSC representative who has placed a service call within 90 minutes. Work shall begin at the institution within a maximum of four (4) hours of the

communication between the contractor's representative and the CSC representative.

NOTE: For the La Macaza and Port-Cartier institutions, which are far from urban centres, this time limit shall be a reasonable time for transportation and based on the degree of urgency. Transportation time shall be invoiced at the applicable hourly rate, if any. No other costs (apart from hourly rates) shall be approved or paid by CSC.

- 1.8.3. For a service call, the contractor shall submit a work order bearing the name of the company and indicating all the work carried out when the work is finished.

2. TECHNICAL REQUIREMENTS

2.1. MANDATE

2.1.1. The scope of the mandate includes various work related to inspection, repair and disposal of all waste resulting from the work. This includes but is not limited to:

1. Annual and/or five-year maintenance and annual charging rack tests in accordance with standard CSA C282-19, including parts and the following services:
 - a. Oil change, including the supply and installation of the following as recommended by the manufacturer:
 - Motor oil of the appropriate grade and recommended by the manufacturer
 - Oil filters and required parts, as needed
 - Fuel filters (with each maintenance)
 - Air filters (with each maintenance)
 - All materials and lubricants required for maintenance
 - Disposal of contaminated oils, filters and supplies
 - b. Testing and inspection in accordance with standard CSA C282-19
 - Two-hour charging rack test, including the electrical resistance device and all necessary electrical connections:
 - Startup
 - Auxiliary fuel supply systems
 - Protection devices
 - Battery voltage
 - Battery charge
 - Measurement instruments (probes)
 - Temperature of the main components
 - Exhaust system
 - Cooling and ventilation system
 - c. Analysis in accordance with standard CSA C282-19
 - Thermography (Level 1); included in the detailed report
 - Verification by refractometer of the coolant/antifreeze; included in the detailed report
 - Oil included in the laboratory compliance report
 - Fuel included in the laboratory compliance report
2. Annual and five-year maintenance includes full maintenance on transfer switches with a mandatory electrical and thermography report. A written report is required.
3. Five-year maintenance shall include at least all the points mentioned in the requirement tables two (2) to six (6) for inspections, tests, and maintenance in standard CSA C282-19. Maintenance also includes thermal imaging of all critical elements and electrical connections on the entire generator group. A written report is required.
4. The inspection and annual maintenance tasks shall include at least all the points mentioned in the requirement tables two (2) to five (5) for inspections, tests, and maintenance in standard CSA C282-19.

NOTE: **The tasks to be carried out during maintenance include the tasks in the previous tables, in addition to tasks specific to that maintenance.**

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

	Table 2	Table 3	Table 4	Table 5	Table 6
Weekly	Included				
Monthly	Included				
Semi-annual	Included				
Annual	Included				
Five-year	Included				

5. Provide and complete the maintenance log for each generator following the work.
6. Following the work, the contractor shall prepare a detailed report indicating the points inspected, the work carried out, the parts replaced and recommendations, as applicable.
7. See Annex II for the list of equipment on which interventions, maintenance and repairs are or may be requested, with their respective location.
8. CSC shall monitor or inspect the work to ensure its quality and compliance with the mandate statement. Any gaps identified shall be corrected with no additional cost to CSC.

2.2. ENVIRONMENT

- 2.2.1. The contractor shall be familiar with, apply and comply with the environmental policies and standards and resource conservation practices established by the government in relation to the delivery and handling (transportation) of diesel, engine oil and coolant and all related contaminants and debris.
- 2.2.2. The contractor shall be responsible for the transportation and selection of waste treatment sites. CSC reserves the right to request and obtain copies of disposal manifests, as applicable.

3. **WORKPLACE HEALTH AND SAFETY**

3.1. GENERAL

The contractor shall manage its operations in such a way that the health and safety of persons and the protection of the environment always take precedence over issues related to costs and the work schedule.

3.2. APPLICABLE MEASURES

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

3.2.2. All necessary measures shall be taken to ensure that health and safety requirements are applied and met in accordance with all applicable regulations.

3.3. LOCKOUT

3.3.1. CSC has a lockout program. The contractor shall consult and comply with it, including for work permit requests.

3.3.2. For work requiring a lock, the contractor shall provide the necessary number of padlocks at no cost.

3.4. ELECTRICAL SAFETY

3.4.1. In connection with Standard CAN / CSA Z462 Safety in electricity at work, the CSC – Quebec Region has developed its Regional Policy – Safety in electricity at work (Electric arcs). The contractor shall comply with it. The contractor shall consult and comply with it, especially for de-energization, risk analysis and field marking.

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

4. **CSC SECURITY REQUIREMENTS**

4.1. SEARCHES

- 4.1.1. Regular working hours are from Monday to Friday, 07:00 to 17:00. All vehicles arriving at the institution may be subject to a search.
- 4.1.2. If there are reasonable grounds to believe that an employee of the contractor is in possession of contraband, CSC may order that the person to be searched.
- 4.1.3. Personal effects of any employee and visitor arriving at the institution may be subject to verification to identify residues of prohibited drugs.

4.2. TOOLS AND EQUIPMENT

- 4.2.1. Keep an updated list of tools and equipment used during the work. Submit the list for inspection when required. Keep an updated list of tools and equipment throughout the work. Immediately notify the technical authority of any loss or disappearance of tools or equipment.

4.3. CONTRABAND

- 4.3.1. Weapons, ammunition, explosives, alcoholic beverages, drugs and narcotics will be prohibited on the property of the institution. If weapons or ammunition are found in the vehicle of a contractor, subcontractor, supplier or its employee, the security clearance of the vehicle's driver shall be revoked immediately.
- 4.3.2. The contractor shall be vigilant with respect to its employees and subcontractor employees. If contraband is found, the security clearance of the individual who brought it in may be revoked. If the offence is serious, the company in question may be expelled from the institution for the duration of the work.

4.4. MONITORING AND INSPECTION

- 4.4.1. The activities and circulation of workers and vehicles shall be monitored and inspected by CSC security personnel to ensure that established safety standards are met.
- 4.4.2. At the start and throughout the work, CSC staff shall 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

Complexe Laval / Laval Complex											
Identification / Identification	Générateur / Generator	Model	# de serie / Serial number	Puissance / Power	Voltage	Moteur / Engine	Modele moteur / Engine motor	No de série du moteur / Engine serial number	Longueur des cables pour banc de charge en pieds / Length of cables for load bench in feet	Quantité de commutateur de transfert / Transfer switch quantity	Installation intérieur ou conteneur / Indoor or container
600-1-GEN01	KOHLER	600REOZVB	33HHGMGF0002	600 KW	600 V	JOHN DEERE	5M4272	MT-0080581-0319	150	1	intérieur / indoor
600-C27-GEN01	KOHLER	400REOZJB	33FHGMGF0007	400 KW	600 V	JOHN DEERE	4M4266	MT-0080552-0419	150	1	Conteneur /Container
600-EW2-GEN01	KOHLER	80REOZJF	33JVGMGG0002	81 KW	600 V	JOHN DEERE	n/a	n/a	50	1	Conteneur /Container
6099- C15-GEN01	Marathon	1000NXC6DT2	374403-1-1-0614	1000 KW	600 V	MARATHON	741RSS4284	WA-6000380-0614	150	1	Conteneur /Container
6099-C28-GEN01	Kohler	200REOZJB91	2031812	200 KW	600 V	JOHN DEERE	n/a	n/a	150	1	Conteneur /Container
Complexe SADP Complex											
Identification / Identification	Générateur / Generator	Model	# de serie / Serial number	Puissance / Power	Voltage	Moteur / Engine	Modele moteur / Engine motor	No de série du moteur / Engine serial number	Longueur des cables pour banc de charge en pieds / Length of cables for load bench in feet	Quantité de commutateur de transfert / Transfer switch quantity	Installation intérieur ou conteneur / Indoor or container
341-Z-GEN01	SENECA	1600DMMN	235112	1500KW	600V	mitsubishi	516R-Y1PTA-2	17688	50	1	Conteneur /Container
342-A39-GEN01	MTU	CD1750-Y672	XFG801285E316291-1-1-021	2000KW	600V	MITSUBISHI	S16R-Y2PTAW2-2	14180	100	1	Conteneur /Container
343-K-GEN01	Kohler	1000RE0ZM	20337772	1140KW	600V	MITSUBISHI	GM31617-MA17	2033772	50	2	Conteneur /Container
342-A41-GEN01	SENECA	800DMMN	235212	800KW	600V	MITSUBISHI	512AZ-Y1PTA-1	27114	50	1	Conteneur /Container
343--U9-GEN01	SENECA	500DMMN	235312	540KW	600V	DOOSAN INFRACORE	P180LE	EASOA100845	50	1	Conteneur /Container
342-000-GEN01	SENECA	500DMMN	2350212	500KW	600V	DOOSAN INFRACORE	P180FE	101081	50	0	Conteneur /Container
342-000-GEN02	SENECA	500DMMN	2350212	500KW	600V	DOOSAN INFRACORE	P180FE	101080	50	0	Conteneur /Container
342-A44-GEN01	ONSITE ENERGY	MTU 6R0113 DS150	95090601880	150KW	600V	JOHN DEERE	6068HF285	PE6068L274627	100	1	Conteneur /Container
342-000-GEN03	CUMMINS	PGDB-547203	n/a	100KW	600V	CUMMINS	n/a	D090242248	50	0	Conteneur /Container

Établissement Cowansville Institution

Identification / ID	Générateur / Generator	Model	# de serie / Serial number	Puissance / Power	Voltage	Moteur / Engine	Modele moteur / Engine motor	No de série du moteur / Engine serial number	Longueur des cables pour banc de charge en pieds / Length of cables for load bench in feet	Quantité de commutateur de transfert / Transfer switch quantity	Installation intérieur ou conteneur / Indoor or container
350-A16-GEN1	KHOLER	800ROZD4-91	666307	800 KW	600 V	DETROIT	L10086	5362000894	50	1	Conteneur /Container
350-A16-GEN2	KHOLER	800ROZD-491	666308	800 KW	600 V	DETROIT	L 10086	5362000890	50	1	Conteneur /Container
350-A5-GEN01	ONAN	100DGDB	L960625731	100 KW	600 V	CUMMINS	N/A	45453050	50	1	Conteneur /Container

Établissement Drummond Institution

Identification / Identification	Générateur / Generator	Model	# de serie / Serial number	Puissance / Power	Voltage	Moteur / Engine	Modele moteur / Engine motor	No de série du moteur / Engine serial number	Longueur des cables pour banc de charge en pieds / Length of cables for load bench in feet	Quantité de commutateur de transfert / Transfer switch quantity	Installation intérieur ou conteneur / Indoor or container
345-0000-GEN-1	KHOLER	1000RE0ZDB91	2011777	1000 KW	600 V	DETROIT	2000MEDC	2011777	50	1	Conteneur /Container
345-0000-GEN-2	VOLVO	TAD1631GE	n/a	500 KW	600 V	VOLVO	TAD1631GE	2160035673	50	0	Conteneur /Container
345-1N119.5-GEN-3	FAGUY	55,0I3ELSP2-9XRR	66111/1	55 KW	600 V	FIAT 8000	8061 I 05	32726	50	1	intérieur / indoor

Établissement Donnacona Institution

Identification / Identification	Générateur / Generator	Model	# de serie / Serial number	Puissance / Power	Voltage	Moteur / Engine	Modele moteur / Engine motor	No de série du moteur / Engine serial number	Longueur des cables pour banc de charge en pieds / Length of cables for load bench in feet	Quantité de commutateur de transfert / Transfer switch quantity	Installation intérieur ou conteneur / Indoor or container
321-02-B-138-GEN01	CATERPILAR	3512	24Z01179	1040 KW	600 V	CATERPILAR	8N5806	24Z01179	50	1	intérieur / indoor

Établissement Port-Cartier Institution

Identification / Identification	Générateur / Generator	Model	# de serie / Serial number	Puissance / Power	Voltage	Moteur / Engine	Modele moteur / Engine motor	No de série du moteur / Engine serial number	Longueur des cables pour banc de charge en pieds / Length of cables for load bench in feet	Quantité de commutateur de transfert / Transfer switch quantity	Installation intérieur ou conteneur / Indoor or container
368-02-B-138-GEN01	FAGUY	1000.0C36R-LSP2-9XRR	52664-1	1040 KW	600 V	CUMMINS	KTA-50-G1	33111899	100	1	intérieur / indoor

Établissement La Macaza Institution

Identification / Identification	Générateur / Generator	Model	# de serie / Serial number	Puissance / Power	Voltage	Moteur / Engine	Modele moteur / Engine motor	No de série du moteur / Engine serial number	Longueur des cables pour banc de charge en pieds / Length of cables for load bench in feet	Quantité de commutateur de transfert / Transfer switch quantity	Installation intérieur ou conteneur / Indoor or container
352-M03A-GEN01	KHOLER	1000REOZMB91	2326659	1000 KW	600 V	MITSUBISHI	S12H-Y2PTAW-1	32837	50	1	Conteneur /Container
352-D12A-GEN01	KHOLER	150REOZJE91	2316967	150 KW	600 V	JOHN DEERE	n/a	PE6068L134906	50	1	Conteneur /Container
352-D32-GEN01	KHOLER	100REOZJE91	2316449	100 KW	600 V	JOHN DEERE	4045HF	PE4045L132070	50	0	Conteneur /Container
352-D29-GEN01	ONSITE ENERGY	743RSS4288	95020500241	1250 KW	600 V	MTU	18V 2000 G76S	546 100 215	50	2	Conteneur /Container

Établissement Joliette Institution

Identification / Identification	Générateur / Generator	Model	# de serie / Serial number	Puissance / Power	Voltage	Moteur / Engine	Modele moteur / Engine motor	No de série du moteur / Engine serial number	Longueur des cables pour banc de charge en pieds / Length of cables for load bench in feet	Quantité de commutateur de transfert / Transfer switch quantity	Installation intérieur ou conteneur / Indoor or container
325-000-GEN01	GÉNÉRAC	SD0600LG05220D18HPNN	2110126	600 KW	600 V	PERKINS	P222FE	001955EUYOB	50	1	Conteneur /Container

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.

<u>LAVAL COMPLEX</u>			Annual maintenance			Five-year maintenance		
Identification	Generator	Model	2024	2025	2026	2024	2025	2026
600-1-GEN01	KOHLER	600REOZVB	N/A		September		September	
600-C27-GEN01	KOHLER	400RE0ZJB	N/A		September		September	
600-EW2-GEN01	KOHLER	80REOZJF	N/A		September		September	
6099- C15-GEN01	Marathon	1000NXC6DT2		September	September	September		
6099-C28-GEN01	Kohler	200REOZJB91		September	September	September		
<u>SAINTE-ANNE-DES-PLAINES COMPLEX</u>			Annual maintenance			Five-year maintenance		
Identification	Générateur	Modèle	2024	2025	2026	2024	2025	2026
341-Z-GEN01	SENECA	1600DMMN	October	July				July
342-A39-GEN01	MTU	CD1750-Y672	October	July				July
343-K-GEN01	Kohler	1000RE0ZM	October	July				July
342-A41-GEN01	SENECA	800DMMN	October	July	July			
343--U9-GEN01	SENECA	500DMMN	November	June				June
342-000-GEN01	SENECA	500DMMN	November	June	June			
342-000-GEN02	SENECA	500DMMN	November	June	June			
342-A44-GEN01	ONSITE ENERGY	MTU 6R0113 DS150	December	June	June			
342-000-GEN03	CUMMINS	PGDB-547203	December	June	June			
<u>ÉTABLISSEMENT COWANSVILLE</u>			Annual maintenance			Five-year maintenance		
Identification	Générateur	Modèle	2024	2025	2026	2024	2025	2026
350-A16-GEN1	KHOLER	800ROZD4	September	September	September			
350-A16-GEN2	KHOLER	800ROZD4	September	September	September			
350-A5-GEN01	ONAN	100DGDB	September	September	September			
<u>ÉTABLISSEMENT DRUMMOND</u>			Annual maintenance			Five-year maintenance		
Identification	Générateur	Modèle	2024	2025	2026	2024	2025	2026
345-0000-GEN-1	KHOLER	1000RE0ZDB91	October	June				June
345-0000-GEN-2	VOLVO	TAD1631GE	October	June				June
345-1N119.5-GEN-3	FAGUY	55,0I3ELSP2-9XRR	October	June				June
<u>ÉTABLISSEMENT DONNACONA</u>			Annual maintenance			Five-year maintenance		
Identification	Générateur	Modèle	2024	2025	2026	2024	2025	2026
321-02-B-138-GEN01	CATERPILAR	3512		July	July	July		

ÉTABLISSEMENT PORT-CARTIER			Annual maintenance			Five-year maintenance		
Identification	Générateur	Modèle	2024	2025	2026	2024	2025	2026
368-02-B-138-GEN01	FAGUY	1000.0C36R-LSP2-9XRR	September		August		August	
ÉTABLISSEMENT LA MACAZA			Annual maintenance			Five-year maintenance		
Identification	Générateur	Modèle	2024	2025	2026	2024	2025	2026
352-M03A-GEN01	KHOLER	1000REOZMB91	October		October		October	
352-D12A-GEN01	KHOLER	150REOZJE91	N/A	October		N/A		October
352-D32-GEN01	KHOLER	100REOZJE91	October	October				October
352-D29-GEN01	ONSITE ENERGY	743RSS4288 1250KW	N/A	October	October	N/A		
ÉTABLISSEMENT JOLIETTE			Annual maintenance			Five-year maintenance		
Identification	Générateur	Modèle	2024	2025	2026	2024	2025	2026
325-000-GEN01	GÉNÉRAC	SD0600LG05220D18HPNN	September	June	June			