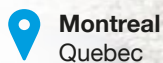




Critical Repair of Generator Radiator in a Large Building in Montreal

A critical intervention
to ensure business
continuity in a sensitive
environment



Montreal
Quebec

The Challenge

One of the iconic buildings located in the heart of downtown Montreal, this is a strategic site housing leading financial, technological, and commercial institutions. As a skyscraper operating 24/7, it is crucial that its backup systems, particularly its generators, be flawless. These generators power critical loads, including sensitive IT infrastructure, and any malfunction could cause major disruptions with significant financial and operational consequences.

In this context, the customer encountered a major problem: one of the building's generators was no longer able to provide the power needed to supply emergency loads. After several diagnostic attempts by another supplier, the source of the problem remained unresolved, compromising the safety and continuity of the building's operations.



The LM Solution



Faced with this challenge, LM deployed a team of experts to identify and resolve the issues quickly and efficiently. Here are the key steps we took:

- » **Thorough inspection and testing:** Our team conducted a detailed analysis of the systems to understand the nature of the malfunction.
- » **Consultation of the technical manual and identification of faulty components:** After a thorough examination, we were able to locate the defective components and begin diagnostics.
- » **Installation of a mobile generator:** A mobile generator was installed immediately to ensure power to the building while repairs were pending.
- » **Installation of load banks for full load testing:** These tests simulated failures and analyzed the system's performance under real conditions.
- » **Fuel supply problem:** Dirt was detected in the fuel supply system and the injection pump. A thorough cleaning was performed to remove the obstruction.
- » **Air pockets in the cooling system:** During testing, a pre-ignition problem was observed. After further investigation, air pockets in the cooling system were identified and eliminated by purging the system.
- » **Rocker arm adjustment:** Misalignments were found and corrected to restore proper engine operation.
- » **Radiator problem:** Coolant was leaking from the radiator cap. After further diagnosis, it was found that the radiator was partially blocked and unable to handle the flow of coolant due to high temperatures. A custom expansion tank was temporarily installed to remedy this problem.
- » **Successful testing:** Tests carried out after the temporary solution was installed restored the generator to its rated power, resolving the problem in the short term.



Customer Benefits

Thanks to LM's intervention, the customer now has a fully functional and reliable backup system, avoiding any risk of overheating. Several key benefits emerged from this intervention:

- » **Compliance and performance of the backup system:** The system now complies with requirements and is fully operational.
- » **Uninterrupted service continuity:** The intervention was carried out without disrupting building operations or affecting tenants, ensuring a smooth transition.
- » **Risk reduction:** Thanks to our expertise, we eliminated the risk of failure and overheating, thereby enhancing the building's safety.
- » **Renewal of the mandate:** Customer satisfaction led to the renewal of the mandate for the coming years, including comprehensive preventive maintenance of the generators.
- » **Trust-based relationship:** Constant communication, a proactive approach, and customized solutions have helped build a strong relationship of trust with the customer, strengthening our long-term partnership.

These benefits not only met the customer's immediate needs, but also laid the foundation for ongoing and fruitful collaboration.

Contact us today to discover how LM can transform your technical challenges into lasting success.



Pumps
» Energy
Control
Maritime
Electromechanical
Mechanical Service

514.657.5853

Montreal • Quebec