

Worker Electrocuted by Live Utility Bus

Incident Date: September 8, 2022 / Location: Near Fort McMurray, AB / Industry: Electrical Wiring



AI Teaching Illustration. Conceptual exposed switchgear before contact; red highlighting identifies the electrical hazard. The incident was unwitnessed.

What Happened

An apprentice electrician was testing pump equipment at Algar pump station. The switchgear had two power routes, each at 4,160 volts. A toolbox meeting, hazard assessments and permits were completed. Specific equipment was locked out and de-energized.

Rear panels were removed from both de-energized and live equipment. The planned flagging of live equipment was absent. With no direct witness, OHS concluded the worker likely contacted the live utility bus and switchgear frame, completing a circuit through their body. The contact was fatal.

Why This Became Fatal

Isolating part of the switchgear did not remove the live utility-bus hazard. Removed panels exposed energized equipment, and planned flagging was absent. The worker was not wearing arc-rated PPE. PPE does not replace isolation, verification and safeguards against contact with live parts.

NEVER FORGET.

LET THEIR STORY PREVENT RECURRENCE.

What Safe Looks Like

Identify every supply and verify the work boundary before access.



1 Identify and Isolate

Confirm all sources and the exact work scope; isolate and lock out.

2 Verify Before Touch

Have qualified workers test with suitable equipment and task-specific PPE.

3 Protect the Boundary

Secure covers and barriers around live parts; stop if the work scope changes.

AI Teaching Illustration. Planning hold point, before access or voltage testing. Diagram is schematic. **LSR link:** Energy Isolation.

Investigation Outcome

OHS reviewed enforcement on **February 1, 2024; no charges were laid**. Pembina added diagrams, labels, isolation checks and handovers. Magna IV added refresher training, leadership checks and field reviews. Stratus required returning personnel to complete that training before Magna work. The report records no employer or supervisor conviction or fine.

Talk It Through with Your Crew

- 1 Could our equipment have a second supply, interconnected bus or stored electrical energy?
- 2 How do we confirm the exact section we are authorized to open and test?
- 3 What protects us from adjacent parts that remain energized?
- 4 Would you stop or refuse work if the isolation boundary was unclear?

SAFETY COMES FIRST.

Your Right to Refuse – Alberta. You may refuse work you reasonably believe presents an undue hazard: a serious and immediate threat. Promptly report the refusal and reasons to your employer or supervisor. They must investigate. Contact Alberta OHS if unresolved. Take reasonable care not to endanger others. You are protected from reprisal.

Sources: [Alberta OHS investigation OHS-284187](#), pp. 2-10; summary completed July 24, 2024. [Alberta refusal guidance](#). Prepared October 20, 2026. LSR links are learning associations, not findings of a breach.

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