

# Providing Innovative Power Solutions for a Resilient and Reliable Energy Transition

**MAKING POWER RELIABLE FOR:** 

ATCO

GROUP



Lambton College





#### **CASE STUDY**

### Largest Dynamic Voltage Restorer (DVR) Project

### **CUSTOMER**

Large Canadian Utility

DESCRIPTION

Turn-key project to provide uninterruptible power to large manufacturer

### THE PROBLEM

Several voltage sags each year on the utility network results in \$M lost in scrap products and downtime.

### THE SOLUTION

A high-efficient ultracapacitorbased UPS that can react within a few milliseconds to island the load, ensuring seamless power and operation.



### THE RESULTS

The projected payback period is < 5 years. The local regulator changed the PQ requirements to allow installations to transmission customers.

### CASE STUDY STATCOM Solution for Mining Equipment

#### **CUSTOMER**

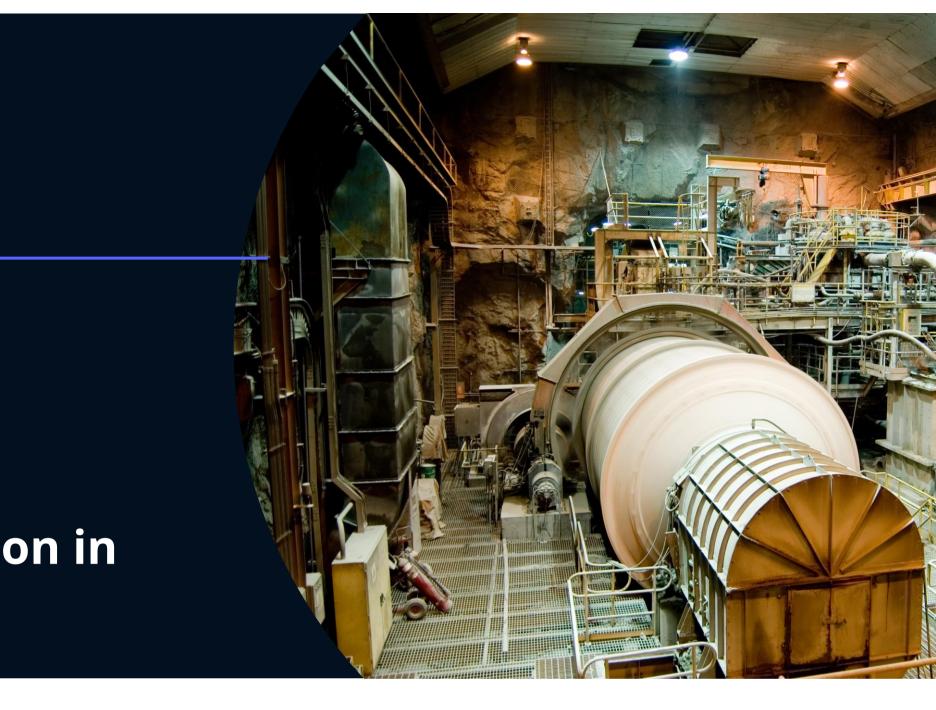
Large Canadian Mining Company DESCRIPTION Turn-key delivery for mobile STATCOM solution in difficult environment

### THE PROBLEM

Interruptions in operation oflarge mobile shovels used inopen pit mines. The loss of oreand sales due to downtime.Changing operationalparameter.

### THE SOLUTION

Highly dynamic 3MVA mobile STATCOM solution that is mounted on the shovel and automatically adapts to various network conditions.



### → THE RESULTS

Customer benefits are immediate. The mine operates 25 shovels in the area. The solution is intended to be used as a standard.

#### **CASE STUDY**

### **Fast-switching BESS Solution**

### **CUSTOMER**

Large Canadian automotive manufacturer with multiple locations DESCRIPTION **BESS** with ultra fast islanding capabilities

### **THE PROBLEM**

Requirements for ultra-fastswitching energy storage solutions due to the grid capacity constrains and need for continuous operations

### **THE SOLUTION**

Three turn-key energy storage solutions with thyristor transfer switch and MSC 6 MWh / 3 MW 3.5 MWh / 1.75 MW and 8 MWh / 4 MW



### **THE RESULTS**

The projected payback period is < 4 years and is based on peak avoidance, additional revenue through DR and OR.

### **CASE STUDY**

## **Charging Solutions for Large Industrial Equipment**

#### **CUSTOMER**

Large Canadian manufacturer of electric mining vehicles **DESCRIPTION** 

### **Custom MW DC-Fast Charging Solution**

#### $\rightarrow$ **THE PROBLEM**

Electrification of a mining vehicles and boring machines. The cost and hazards of ventilation systems for diesel exhaust in underground mining.

### **THE SOLUTION**

Complete DC charging network with above ground stations and multiple single 1.5 MW DC Fastchargers with integrated energy storage and solar for heavy duty equipment



### **THE RESULTS**

Partnering with vehicle manufacturer to deliver complete solution consisting of 35 Units Delivered in 2028. Turn-key project \$50M+