



TRANSFORMING ENERGY VOLATILITY INTO PREDICTABLE FINANCIAL PERFORMANCE

1 MW / 2 MWh Behind-the-Meter Battery Energy Storage System

THE STRATEGIC CASE

Ontario electricity costs are volatile and largely driven by Global Adjustment exposure.

A 1 MW / 2 MWh Battery Energy Storage System allows your facility to actively manage this risk while generating structured market revenue.

PRIMARY USE CASES



GLOBAL ADJUSTMENT PEAK SHAVING

Forecast and avoid the 5 highest-demand hours driving your GA charges



DEMAND RESPONSE REVENUE

Participate in IESO DR programs for structured annual payments



ENERGY ARBITRAGE OPTIMIZATION

Buy at off-peak HOEP rates, dispatch during high-price windows



CRITICAL LOAD BACKUP SUPPORT

Maintain operations during grid disturbances and events



DISCHARGE CAPACITY

1,000 kW

ENERGY STORAGE

2,000 kWh

INTEGRATION

Behind-the-Meter

FULLY AUTOMATED

INTELLIGENT CONTROL SYSTEM

NEURACHARGE™

NEURACHARGE™ is a proprietary Energy Management System developed by Edgcom Energy, Circuit Energy's sister company, built specifically for Ontario's electricity market.

It converts battery storage from hardware into a continuously optimized financial asset.

WHAT IT DOES

- Forecasts Ontario ICI peak events and auto-dispatches for peak shaving
- Optimizes revenue stacking between GA, DR, and arbitrage simultaneously
- Aggregates participation across all IESO programs automatically
- Real-time performance monitoring with executive-level reporting

WHAT IT MEANS FOR YOUR ORGANIZATION

- ✓ No internal dispatch management
- ✓ No energy trading expertise needed
- ✓ Automated market compliance
- ✓ Hands-off optimization
- ✓ Transparent financial visibility
- ✓ Zero added operational burden

This is not backup equipment. This is an energy cost control asset.

FINANCIAL PERFORMANCE SUMMARY

1 MW/2 MWh Battery Energy Storage System for Ontario Industrial Facilities

\$380K

Gross Annual Benefit

\$300K

Net Annual Cash Flow

2.55 Yr

Payback Period

ANNUAL GROSS BENEFIT

Global Adjustment Reduction \$294,120

Demand Response Revenue \$66,500

Energy Arbitrage Optimization \$20,000

TOTAL GROSS ANNUAL BENEFIT
\$380,620

ANNUAL OPERATING COSTS

NeuraCharge™ Subscription \$40,000

Maintenance Reserve \$27,436

Insurance Estimate \$12,346

TOTAL ANNUAL OPERATING COST
\$79,782

CAPITAL & INCENTIVE STRUCTURE

Total Installed Project Cost

\$1,371,823

Clean Technology ITC (20%)

-\$274,365

100% Accelerated CCA (26.5% corporate tax)

-\$290,826

Net Effective Capital Investment

\$806,631

EXECUTIVE SUMMARY

YOUR DECISION AT A GLANCE

A 1 MW / 2 MWh Battery Energy Storage System is a capital-efficient, revenue-generating infrastructure asset that reduces electricity expense and improves financial performance across multiple dimensions.

- ✓ **Reduces Electricity Expense**
Controllable cost reduction through GA peak avoidance
- ✓ **Generates Structured Revenue**
\$380,620 gross annual benefit from three streams
- ✓ **Improves EBITDA Performance**
\$300,837 net annual cash flow to the bottom line
- ✓ **Immediate Tax Efficiency**
ITC + CCA reduces net capital by ~\$565K
- ✓ **Fast Capital Recovery**
Full payback in approximately 2–3 years
- ✓ **Operational Resilience**
Backup support for critical loads at no added complexity

Ready to Unlock Incentives?

Book a no-obligation consultation with Circuit Energy's engineering team and discover your savings potential

[Schedule Consultation](#)