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RELIABILITY
INTEGRITY
CUSTOMER FOCUSED
A PANELMATIC COMPANY

PROJECT MARKET:
Utility

CUSTOMER NAME:
New York Power Authority

PROJECT NAME:
Robert Moses Dam

PROJECT LOCATION:
Niagra Falls, NY

PROJECT SUMMARY:

Eaton Electrical & Engineering Services & Systems (EESS) secured and executed a New York Power Authority (NYPA) retrofit project for the Robert Moses Dam by partnering with RIC Power for custom switchgear manufacturing. The successful project, involving a mandatory inspection of RICp facilities and complex installations, established RIC Power as an approved vendor for future NYPA initiatives. Read the full case study on the Eaton website.

PROJECT DETAILS:

- (3) separate 'Walk-in Aisle' Modular E-Houses
- 13.8kV Arc-Resistant 42kA design
- Arc-Chute integral with insulated roof structure
- (17) Cell, single high circuit breaker (CB) design
- Breaker roll-on-floor design (no lift cart req'd)
- 9' (3m) wide walk-in aisle in front of SWGR
- 16' control & LV distribution area at far end
- Climate controlled HVAC unit for Niagara region
- Certified to NY State building code
- Modular base / building design, shipping splits to a maximum of 12' wide, conforming to nationwide transport regulations of single pilot car requirements
- Easily reassembled with minimal control harness re-wiring
- Base design for 'Pile' mounting (lowest foundation costs)

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PROJECT MARKET:
Utility

CUSTOMER NAME:
BC Hydro

PROJECT NAME:
Ruskin Dam

PROJECT LOCATION:
Pitt Meadows, British Columbia

PROJECT SUMMARY:

Long delayed, the upgrade to the Ruskin Dam was in urgent need of replacing legacy switchgear. The fifty plus year old dam required new equipment to replace the original install. Issues with tight tolerances and site restrictions meant the gear needed to be not only custom, but also be able to assembled to accommodate transportation and installation requirements. After many bidders on the project bowed out, RIC Power stepped up and delivered the project on budget and on time. The first cells delivered in only 14 weeks.

PROJECT DETAILS:

- 3 cell 15kV 3000AMP GEN BRKR (3 MW)
- BCH requested 3 sets 'fixed' PT's
- CT's C800 (3) Sets
- Dual output with (2) Sets of CT's for Station Service TX's
- Arc Resistant Metal Clad Indoor Switchgear
- 15kV, 3000A, 50kAIC
- Nine cells total (3 lines of 3) with Eaton VCP-W breaker
- Custom Arc plenum

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PROJECT MARKET:
Ports and Terminals

CUSTOMER NAME:
Deltaport

PROJECT NAME:
Outdoor Power Supply

PROJECT LOCATION:
Delta, British Columbia

PROJECT SUMMARY:

The customer had originally put out an RFQ for a standard E-House solution. After looking at the RFQ, RIC Power went in a different direction for our response. Instead of an E-House, we redesigned a the solution to be a Nema 3R Outdoor substation. This solution offers a streamlined, single-vendor procurement approach by integrating medium voltage, low voltage, and essential accessories like battery chargers and heaters into a single unit. By utilizing a corrosion-proof NEMA 3R enclosure instead of a traditional E-house, the design significantly reduces the overall footprint and space requirements. The system is engineered for efficiency with a "drop and connect" installation that eliminates on-site re-assembly, while a specialized half-cell provides full integration of distribution components and a high-capacity 480V receptacle for immediate, usable power.

PROJECT DETAILS:

- 15kV VCP-W breaker c/w isolation switch (ABB NAL)
- 2MVA oil filled, close-coupled transformer
- 600V, 2400A main with 2000A feeder and station service distribution
- RIC Electronics Battery Charger and Eaton low voltage switchgear incorporated into RIC Power NEMA 3R enclosure
- 30ft skid shipped as single piece

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PROJECT MARKET:
Ports and Terminals

CUSTOMER NAME:
Hebron

PROJECT NAME:
Floating Cement Platform Power Supply

PROJECT LOCATION:
Halifax, Nova Scotia

PROJECT SUMMARY:

When the customer required 25kV switchgear with GL and marine certifications—a standard that did not yet exist—RIC Power Corp. stepped in to fill the gap. By collaborating directly with GL, RIC Power not only achieved the necessary certifications but also helped define the industry standards themselves. Leveraging expert custom engineering and a flexible design featuring fixed and withdrawable breakers, RIC Power delivered a solution with a smaller footprint and reduced lead times, successfully navigating the complex requirements that other manufacturers typically avoid.

PROJECT DETAILS:

- 11 cell, 25kV utilizing ABB NAL switch and fixed breaker limit depth of cell to just 68”
- Marine spec (GL) E-house
- GL certified 25kV switchgear
- In house testing (22 degree running tilt test)
- Complex delivery logistics

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PROJECT MARKET:
Oil & Gas

CUSTOMER NAME:
Pembina

PROJECT NAME:
eHouse Switchgear Replacement

PROJECT LOCATION:
Multiple Locations, Northern Canada

PROJECT DETAILS:

- NEMA 3R Enclosure
- External Battery Charger
- Skid Mounted
- Utilized Eaton VCP-W Breakers
- ABB NAL Load Break Switch

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PROJECT MARKET:
OEM

CUSTOMER NAME:
Finning Canada

PROJECT NAME:
Generator Switchgear and Control

PROJECT LOCATION:
Edmonton, AB

PROJECT SUMMARY:

To address the customer's need for a reduced height and footprint alongside an expedited delivery schedule, we implemented a custom design that successfully minimized the equipment's physical impact. This tailored approach allowed us to deliver the first unit exactly on time, while our streamlined processes enabled the subsequent three units to be completed weeks ahead of schedule. By prioritizing both spatial efficiency and logistical speed, we provided a solution that exceeded the client's original performance and timeline expectations.

PROJECT DETAILS:

- Custom Switchgear design, dimensions and interior
- Integrated Protection and Control Cabinet (Indoor)
- 2.4 kV, 1200A, 29kAIC
- Accelerated delivery
- Re-occurring order

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PROJECT MARKET:
Government and Defense

CUSTOMER NAME:
Department of Defense, Canadian Military

PROJECT NAME:
B-Jetty, Shore Power

LOCATION:
Esquimalt, British Columbia

PROJECT SUMMARY:

To address the unique demands of the Canadian Department of National Defence, we provided a high-trust, specialized solution that standard manufacturers could not offer. Leveraging our in-house electrical and custom design engineering, we developed custom marine power kiosks featuring a custom-painted, stainless steel Nema 3RX enclosure. Our expertise in DC power was critical in delivering reliable shore power, all while maintaining the strict confidentiality required for such a sensitive project. The result was a successful, high-quality delivery that fully met the customer's complex technical and security requirements.

PROJECT DETAILS:

- 1x 15kv Metal Clad indoor switchgear with Arc Flash Detection features for main substation
- 6 x 15kv-460v Shore Power marine Kiosk.

  a.Each Kiosk consisted of a 2500kva Liquid filled transformer with independent 1250kva 460v secondary windings.
  b.2 Independent 1600-amp 460v secondary systems, complete with ground fault and fire alarm systems to interact with the ship's system.
  c.Also included were a variety of shore and ship power connections.
  d.The external housing was made of ½" 316 stainless steel Total weight of each piece 70,000lbs

- 6 x 13.8 KV Voltage regulators to provide constant voltage on the long cable runs from Substation
- 6 x 13.8.kv 3 way Bypass switchgear

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PROJECT MARKET:
Data Center

CUSTOMER NAME:
Spencer Buildings

PROJECT NAME:
Spence Data Center

LOCATION:
Vancouver, British Columbia

PROJECT SUMMARY:

Providing products for a High-Powered Data Center is challenging enough, to provide this equipment in an existing building was a challenge the RIC Power team was ready for. Using our previous experience and catalog of custom designs our engineers went to work. The result was a successful, high-quality delivery that fully met the customer's complex technical and security requirements.

PROJECT DETAILS:

- 5mVA Unit Substation 25kv-4160v
- Two 5mVA Unit substations 4160v-480/277v
- 6000 amp 480v 100kaic M-T-M draw out switch gear
- 4160v Metal Enclosed Generator switchgear, with transfer schemes
- 4160v Temp Generator Connection cabinet