PROJECT PROFILE: *King Street Center | Burlington VT, USA*

Northern Reliability

THE PROBLEM & SOLUTION

The King Street Center was experiencing high, monthly demand charges. The center approached Northern Reliability to engineer a cost effective solution to reduce electricity costs. After analyzing their electric load profile, NRI's team determined that a 30kW/76.9kWh solution would be the optimum size to reduce daily peak demand. The result was then paired with an environmentally controlled cabinet that tied in with the building management system. NRI performed all aspects of the project including design, fabrication, installation and commissioning. The system also has space for an extra battery bank as the facility grows.

OVERVIEW

APPLICATION: *Peak Demand Reduction*

SYSTEM TYPE: *Grid-Tied, Distributed Energy Storage System*

BATTERY SIZE: *76.9kWh*

LOCATION: *Burlington VT, USA*

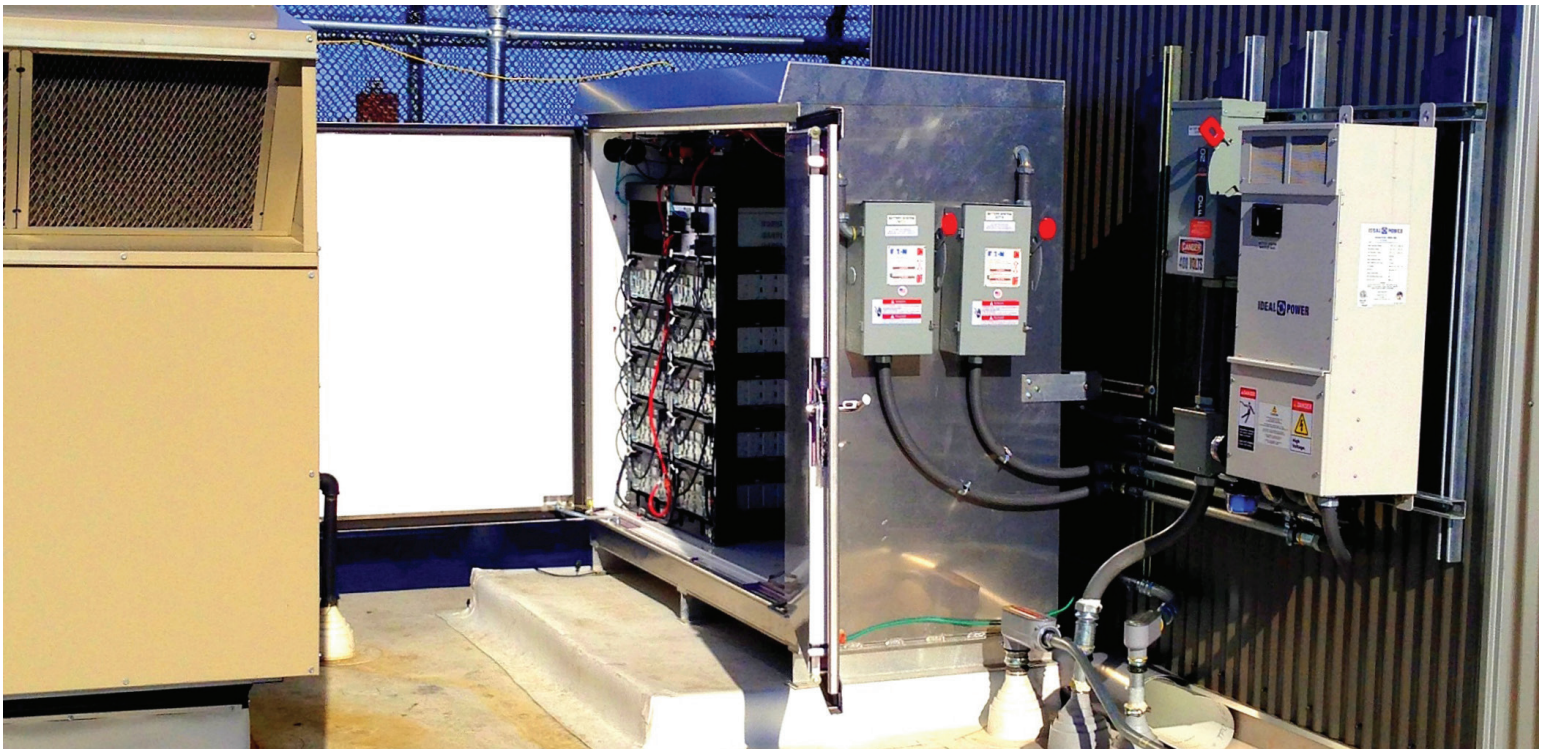
YEAR: *2017*

BATTERY TYPE: *Lithium-Ion*

CONTROLLER: *SC-100*

ENCLOSURE TYPE: *Customized, NEMA 3R, Outdoor Cabinet*

SYSTEM DIMENSIONS: *63"H X 76"W X 32"D*



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FEATURES + BENEFITS

- *Environmentally Controlled Shelter+ Battery Management System*
- *Estimated 20 year battery life*
- *On-site data logging + hard-wired alarm system*
- *30kW I 480 V 3-Phase inverter*
- **REDUCTION IN ENERGY COSTS:** *Significant annual savings*
- **SMART MANAGEMENT:** *BMS integration + NRI SC-100 Controller*
- **MODULAR SIZING:** *Can accept future loads for facility expansion*

OPERATION

The NRI Energy Storage System reduces overall daily Peak Demand by supplementing the load with energy stored within the battery. Although there is no localized generation available, NRI's intelligent SC-100 controller adjusts to fluctuating grid costs and charges the battery when prices are at their lowest. In addition, this "added" consumption used for recharge is offset by the methods mentioned above while peak shaving and/or demand flattening reduce overall tariffs for the facility.

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