



RIVERMOOR ENERGY

May 5, 2020

Town of Monson Consolidated Town Hall, Police Department and Emergency Operations Center: Energy Resiliency Solution

THE PROJECT

Energy resiliency strategy, solution development, design, engineering to plan a parking lot canopy solar system with backup battery storage to enable the mission-critical Town Hall – EOC – Police Department facility. Objectives:

- Operate independently during a ten-day electrical outage
- Increase the amount of clean energy powering Town facilities and
- Reduce the Town's monthly and annual electrical operating cost budget

The Monson Municipal Vulnerability Plan identifies as a high priority - *strengthening the Town's resiliency to storm-related and other utility outages that may impact the community of Monson in the future.*

ENERGY RESILIENCY SOLUTION DESIGN AND COMPONENTS

The rendering below envisions a part of the parking canopy system that will support the solar array. The system components have been designed as part of the current State Municipal Vulnerability Preparedness (MVP) Grant to develop a strategy and 50% engineering plans for the Monson Town Hall – EOC – Police Department Energy Resiliency system. The resiliency system solution components are

- 248 kW Solar Parking Canopy
- 300 kW Battery Storage
- 300 kW Stationary Backup Generator (existing)
- 600 Gallon Emergency Backup Diesel Fuel Tank (existing)
- Universal Power System for temporary power for building (existing)
- Energy Management System
- Storm water system upgrade using environmental approaches



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Photo of existing conditions



Photo of proposed parking canopy system with solar array

