TARGETED SUBSTATIONS

BTM Storage as a Non-Wires Alternative in a Financeable Contract
Multiple Dispatchable Clusters

Aggregated Resource for Utility & Grid Services:

- Flexible
- Configurable
1. **DEMAND CHARGE REDUCTION**
   Forecasting software predicts demand spikes and seamlessly switches buildings from grid to battery power, thereby avoiding large peak charges

2. **TIME OF USE RATE ARBITRAGE**
   Battery storage systems charge overnight when the cost of grid power is low and discharge during peak hours when it’s more expensive, displacing costly on-peak electricity

ENERGY COST SAVINGS

- **DEMAND CHARGE REDUCTION**
  UP TO 40% REDUCTION IN DEMAND COSTS

- **TIME OF USE RATE ARBITRAGE**
  UP TO 15% REDUCTION IN ENERGY COSTS
One Customer:

- Hybrid Electric Buildings Branding
- 26 Commercial Office Buildings
- 25% Peak Demand Reduction
- $900,000 / year Energy Savings
- 10 MW Firm, Dispatchable Capacity
- Zero Emissions
- No Distribution Upgrades
CO-OPTIMIZATION: MULTI-BENEFIT & CONFIGURABLE

600 kW/2,400 kWh System – RA Capacity 433 kW / 1733 kWh – Peak Shaving: 23% savings

REAL-TIME OPTIMIZATION SOFTWARE
- FLEXIBLE, CONFIGURABLE, ADAPTABLE

SCHEDULED BATTERY DISPATCH FOR UTILITY RESOURCE ADEQUACY (RA)
OCT. 2015 WEEKDAYS – SOLAR SIMULATION

- Building Load
- New Peak
- Net Load
OCT. 2015 WEEKDAYS – SOLAR + STORAGE SIMULATION

Battery holds demand limit

Demand Management
Animating the NYS Storage Market:

- Identification of Full Locational Value
- Financeable Revenue Stream(s) for Development
  
  ✓ Long Term & Predictable
- Deploy Storage for Max. Renewable Hosting Capacity
- Leverage BTM Storage for Customer Engagement
- Value the Flexibility of Storage DERs
- Open NYISO to Aggregated, BTM Resources <1MW/site