



# Constellation NewEnergy's NYISO SCR Small Customer Aggregation Proposal

NYISO ICAP WG May 8, 2009



# **Constellation Energy Overview**

- Integrated energy merchant (NYSE: CEG)
- Owns a diversified fleet of 78 generating units located throughout the United States
- Approximately 8,700 megawatts of generating capacity
- Named to the 2007 FORTUNE list of Most Admired Energy Companies
- No. 39 on the 2008 BusinessWeek list of 50 Best Performing Companies in the U.S.







# **Constellation NewEnergy Overview**

- Leading North American energy cost manager and competitive supplier to commercial, industrial & public sector customers
- Supplies more than 16,000 megawatts of peak load
- Serves more than 14,000 customers including over two thirds of the Fortune 100 companies
- Active in 16 states and Washington DC
- Wholly-owned subsidiary of Constellation Energy
- Provide extensive Sustainable Energy Solutions including Load Response and Green E

# **Constellation NewResponse Programs**

- ERCOT
- ISO-NE: Small Customer Aggregation Approved
- PJM: Small Customer Aggregation Approved
- NYISO





# **Small Customer Aggregation**

- Multi-site retail chain stores
- Utilize customers' existing building automation system (BAS).
- Systems can be enhanced to provide load curtailing capabilities.
- BAS provides automation of demand response and access to interval data.
- 3-5 chains, 1 MW each throughout NY



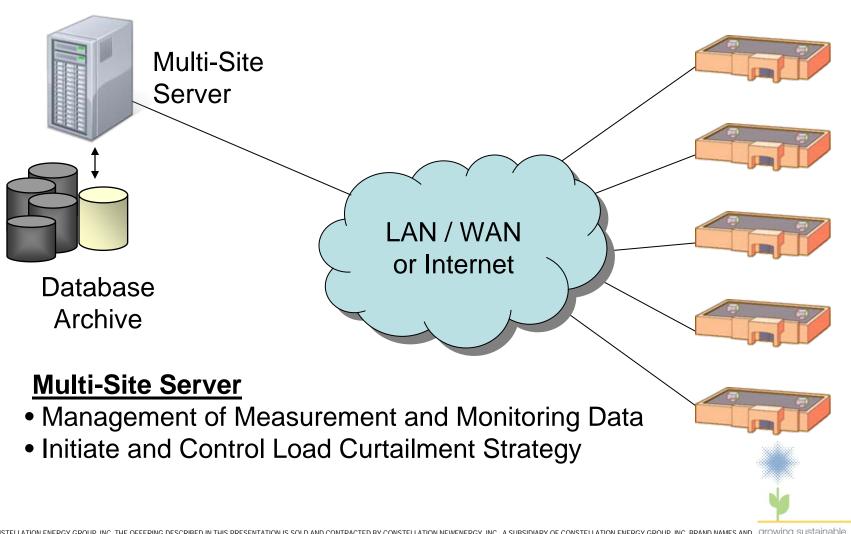
# **Load Reduction Strategies**

- HVAC Load Reduction
- Lighting Load Reduction
- Plug Load Reduction
- Potential interactive effects between sites (portfolio management)





#### **Multi-Site Architecture**



LAN /

WAN or

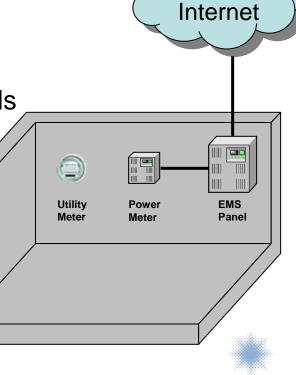


## **Measurement and Monitoring Strategy**

# Typical Site Architecture

**Site Data Uploaded Daily** 

• Electrical Demand (kW) in 15 minute intervals





#### **Customer-Owned Power Meters**

Power Meters in compliance with +/- 2% accuracy requirements

#### **Typical Power Meter**

- Veris Industries Model H8463
- Revenue Grade
- ANSI C12.16 compliant
- +/- 1% energy and power accuracy







## **Load Reduction Calculation Methodology**

- APMD will be calculated as the Coincident Peak for all sites in an aggregation zone (by Load Zone).
- For the initial Capability Period where historical interval data is not available, APMD based on engineering estimates.
- Once data is available, use actual interval data and aggregate.
- CMD will be calculated per site and aggregated.
- Performance will be aggregated per zone.
- Energy Payment by CBL.
- Aggregations will only consist of one company's sites