



Consolidated Edison Interoperability of Demand Response Resources Demonstration in NY

Project Description

Increasing Con Edison's ability to harness demand response resources is a key to limiting system peak demand in one of the largest and most complex electric power systems in the world. This project demonstrates methods to enhance the integration of demand response resources into the distribution network to enhance its reliability and efficiency. This project demonstrates the required software, protocols and communication infrastructure required to enable distributed resources to improve load control, increase system efficiency and reliability, and optimize these resources in the distribution network. Interoperability is being demonstrated by the ability to integrate the operation of a variety of conventional and renewable demand response resources into the existing distribution network. A goal of this project is to develop standards that will excite non-participating distributed resources to consider being engaged in this kind of program.

Goals/Objectives

- Increase grid efficiency and reliability
- Develop safe, cost effective methods of interconnection of distributed generation units
- Achieve interoperability of grid connected generators, loads, and other grid resources
- Enhance the demand response (DR) of conventional and renewable delivery systems

Key Milestones

- Develop communication protocols and interconnection plan (September 2009)
- Demand Response Control Center (DRCC) commissioned (January 2011)
- Install a unique Thermal Storage unit in a Verizon building (Summer 2013)
- Use experience and data collected for an evaluation of technical and economic performance of installed systems (March 2014)

Benefits

- Defer Distribution Capacity Investments
- Reduce Ancillary Service Cost

CONTACTS

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PARTNERS

Innovative Power, LLC
Verizon

PROJECT DURATION

10/1/2008–9/30/2014

BUDGET

Total Project Value
\$12,973,215
DOE/Non-DOE Share
\$6,824,388/\$6,148,827

DEMONSTRATION STATES

New York City, NY

CID: NT02876

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