

New York State - Energy Efficiency Portfolio Standard


Working Group 2 – Program Summaries

Program Name: Direct Load Control

Working Group Contact: Lou Cedrone

Administering Entity: Con Edison

Targeted Sector: Residential/Small Commercial Customers

| Funding years | Funding Source | Total Budget (Millions) | Cumulative Funds Spent (Millions) | Current Annual Expenditures (Year Millions) | Energy Savings | | Demand Savings | | Total Resource Cost (TRC) Results* |
|---------------|--------------------------------|-------------------------|-----------------------------------|---|------------------|----------------------------------|--|---|--|
| | | | | | Cumulative (MWh) | Current Annual (MWh) | Cumulative System Coincident Load Reduction (MW) | Current System Coincident Load Reduction (MW) | |
| 2002-on-going | Cost Recovered (not rate base) | \$26.6M (2008) | \$17.6M. (2007) | \$9.0M | N/A** | This a load management program . | 29MW | 29MW | 00-E-2054 9/28/2005 order concerning DLC  Order 2054.09.28.05.pdf (' |

*Or similar measure performance (e.g. TMET). Include description of cost test(s), identify if the analysis is retrospective or prospective and include any reference or links to on-line documents on evaluation as appropriate.

**Program called during NYISO or Local Utility system reliability events.

Program Description (include links to on-line documents as appropriate):

In March 2002, the NYS Public Service Commission (PSC) approved the implementation of the Company's Central Air Conditioning Direct Load Control Program (DLC). Residential customers with central air conditioning are offered, at no charge, a \$300 high-tech programmable thermostat. With this technology, customers are able to adjust their room temperature not only manually at home, but also away from home via the Internet.

By accepting this offer, a customer agrees to allow Con Edison to adjust the on-off cycles of their air-conditioner while their fan continues to operate. In addition to the thermostat, customers are given a financial incentive for signing up, which includes a one-year service warranty and a \$25 thank-you gift. Con Edison adjusts the thermostats during times of system stress. A customer has the ability to override the adjustment if it is not a convenient time. To date, the Company has installed more than 17,200 units capable of reducing load by 19MW.

In September 2005, the PSC approved the implementation of the Company's Small Business Direct Load Control Pilot Program. Similar to the residential direct load control program, the thermostats are used to control the business' central air conditioning during time of system stress. Small business customers were offered an incentive of \$50 to participate. To date, the Company has installed 7,200 thermostats capable of reducing load by 10MW.

Relationship to Staff Preliminary Proposal:

Program supports NYISO and Company Local Distribution load management through demand response; builds efficiency awareness and customer support.

Current status

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Con Edison is currently marketing and recruiting participation in the Direct Load Control Program. Con Edison project manages this program using contractor delivery system, which includes thermostat purchase, installation, service, and administrative functions that include customer enabled cost reductions. To date, the Company has installed over 22,000 thermostats for Peak Load Reduction of 29MW

Barriers, challenges, gaps:

This is a robust program. Potential barriers to increasing participation are age of existing central air-conditioning equipment and internal wiring

Ramp-up potential, limitations, where help is needed to fulfill potential:

Promoting program with central air conditioning up-grades can be done relatively quickly. Con Edison estimates less than 10% of available market has been penetrated.

Co-benefits (e.g. environmental, health & safety, economic development):

Energy efficiency benefit for managing customer energy costs with 7-day programmable thermostat. DLC reduces peak MWs when needed resulting in CO2 and other emissions reductions.

Other issues/considerations

Con Edison's Direct Load Control Program employs state of the art technology to control household and small commercial customer central air conditioning units. Potential exists for this to become the foundation with AMI for expansion of load control of other appliances that provide an opportunity to cross market central air conditioning efficiency up-grades with DLC.