

*Commercial/Industrial Standard Offer  
Exemplary Program*

***New York Energy Smart<sup>SM</sup> Commercial/Industrial Performance Program  
New York State Energy Research and Development Authority (NYSERDA)***

**PROGRAM OVERVIEW**

In 1998, NYSERDA created the New York Energy Smart<sup>SM</sup> Commercial/Industrial (C/I) Performance Program to support development of the energy service industry in New York State and to encourage consumers to invest in the installation of energy efficiency equipment. The C/I Performance Program provides performance-based incentives to energy services companies (ESCOs) and other contractors to promote energy efficiency capital improvement projects.

The C/I Performance Program is performance-based and offers incentive payments to energy service companies (ESCOs) or contractors that develop projects delivering verifiable annual electric energy savings. It is the verification of the electrical energy savings through a developed measurement and verification plan that distinguishes this program from traditional energy efficiency ones. The standard measurement and verification (M&V) period is up to two years. During that period, the ESCO must submit an annual M&V report that includes clear and verifiable data and describes the baseline assumptions and calculations used to calculate the energy savings. NYSERDA issues performance payments that coincide with the results achieved in the M&V report.

The program incentives are based upon the type of measure involved in the energy project and reflect the cumulative present value of energy and capacity savings over the useful life of the equipment. For lighting technologies such as T-8 lamps and occupancy controls, the program offers an incentive of 10.5 cents per kWh saved. For motors and cooling technologies, the program offers an incentive of 12.8 cents and 28.8 cents per kWh saved, respectively. To encourage activity for small facilities that consume less than 1 million kWh annually, an additional 20% of the incentives is made available. Modifications to the incentive structure occurred at various rounds in the program to address changing market conditions or program objectives. These include an additional electric chiller bonus of \$300/kW for summer peak reduction and incentives for nitrogen oxide emission reductions.

The C/I Performance Program process begins with an application submission by the ESCO. The application is the first step in a five-step process that includes execution of a Standard Performance Contract between NYSERDA and the ESCO, supporting energy engineering calculations, pre- and post-site inspections, and the development and implementation of the M&V plan. All steps of the process are verified by technical engineering consultants under contract with NYSERDA, which review incentive applications and provide verification services for incentive awards. This third party provides an objective review of the project, giving NYSERDA a stronger level of confidence in the potential savings. It also provides valuable assistance guiding the ESCO through the program's process and procedures.

## **PROGRAM PERFORMANCE**

In January 1999, when the initial round of the C/I Performance Program incentives (totaling \$14 million) was offered to the public, only seven ESCOs were active in New York State. By the end of the second round (which ended on June 30, 2000), 96 applications were received, totaling nearly \$27.5 million in awards. At that time, 39 different ESCOs were participating in the program, delivering an estimated savings of about 180 million kWh annually. After various modifications to the C/I Performance Program, it sustained steady growth and by the end of the fourth round (which ended on June 30, 2002), over \$70 million for performance-based incentives to 405 projects through 93 different ESCOs was committed. When fully implemented, these projects will reduce electricity use by 452 million kWh annually and reduce summer peak demand by more than 100 MW.

While the majority of the projects and their associated energy savings are in the commercial and industrial markets, strong activity has occurred across all sectors, including healthcare, schools, higher education, government and agricultural. The diversity of participants is illustrated in the following examples. In one project, 238 dairy farms across the state installed variable-speed drives on milking equipment resulting in average annual energy savings of \$2,300 per farm. In a second example, four different ESCOs implemented lighting retrofits at four supermarket chains (over 120 stores), reducing peak demand by more than 2.8 MW and 29 million kWh of savings annually.

The C/I Performance Program is also at the forefront of efforts to build recognition that energy efficiency can make significant contributions to improving air quality and reducing greenhouse gases. NYSERDA, in cooperation with the New York State Department of Environmental Conservation, established an energy efficiency set-aside as part of the state's Nitrogen Oxides (NOx) Emissions Budget and Allowance Program. To build awareness of the contribution energy efficiency makes to improved air quality and to help build an emerging market for NOx allowances, the C/I Performance Program allocates a portion of its overall incentive specifically for the NOx emissions reductions resulting from the efficiency improvements. To date, over \$1.5 million has been committed for this purpose, resulting in a NOx emissions reduction of more than 30 tons during the 2002 NOx season and by more than 100 tons in 2003.

## **LESSONS LEARNED**

After the C/I Performance Program was released to the public, NYSERDA conducted meetings with the ESCO community to provide feedback about the program. The meetings proved vital and were the impetus for many changes to the program that helped foster increased activity. These alterations included simple items such as the elimination of participation fees and a renaming of the program (formerly Standard Performance Contracting Program) for identity clarification. More substantive program design changes included increasing the incentive rates after the first year; reducing minimum project size from 200,000 kWh savings per year to 50,000 kWh; clarifying, modifying, and simplifying the M&V requirements; and accelerating the incentive payout to improve the project's cashflow. The C/I Performance Program has taken a broad view of the energy efficiency services industry and the goal of building a robust market. To be successful, it was essential

to respond rapidly to changing market conditions and remain open and flexible in the program design to implement these changes.

The C/I Performance Program is continuing to provide electrical energy and demand savings throughout various sectors in New York. Current funding for the 2002–2003 cycle is for \$20 million, and as of December 2002, over \$12 million was committed to 84 new energy projects. Most ESCOs use the program’s incentives in their marketing efforts and customers often write specific instructions in their request for proposals requiring participation in the C/I Performance Program. Activity will continue to grow and the program will continue to evolve to incorporate changes seen in the energy service industry.

## PROGRAM AT A GLANCE

**Program Name:** Commercial/Industrial Performance Program

**Targeted Customer Segments:** Commercial, industrial, institutional, schools, health care, municipalities, and government sectors

**Program Start Date:** January 1999

**Program Participants:** From program inception through June 2002, there were 405 active projects through 93 energy service companies/contractors. With a new round of awards in process, through December 2002, there are 505 projects through 110 energy service companies.

**Approximate Eligible Population:** All facilities located in New York State that pay into the System Benefits Charge.

**Participation Rate:** As of the latest round, which ended on June 30, 2002, the program has committed over \$70 million for performance-based incentives to 405 projects through 93 different ESCOs.

**Annual Energy Savings Achieved:** When fully implemented, the 405 projects included in the program (through the end of the latest round, which ended on June 30, 2002) will reduce electricity use by 452 million kWh annually. Estimated energy savings for additional savings to be achieved through the present round of awards are not available.

**Peak Demand (Summer) Savings:** If all projects are implemented, they will produce an estimated 130 MW of peak demand savings.

### Budget

Year	Program Costs (Incentives only)	Total Project Costs*
Cumulative to date from 1999 to June 2002	\$73,000,000	\$315,000,000
Cumulative through 2003 (projected)	\$100,000,000	\$400,000,000
2003 annual budget (projected)	\$30,000,000	\$120,000,000

\* The net costs to customers would be "total project costs" minus "incentives."

**Funding Sources:** System Benefits Charge

### Best Person to Contact for Information about the Program

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