

Credit Suisse First Boston



11 Madison Avenue Takes Part in Two New York Energy SmartSM Programs

New York, New York

Background

Built in 1932, 11 Madison Avenue in New York City is a 2.2 million square foot office building that houses the national headquarters of Credit Suisse First Boston. A total of seven 800-ton chillers are used to cool the building and data center. During the summer season, the building can peak close to 10 MW of energy use.

Recommendations

Realizing that the peak electric load as the facility had increased significantly over the past few years and is expected to continue to grow due the high energy demands of the data center, the owners of 11 Madison Avenue contacted the New York State Energy Research and Development Authority (NYSERDA) for assistance.

A project team from the Trane Company and Energy Management Services, ECM, engineered a technical and financial solution that involved upgrading three chillers and installing an ice storage system.

An integral part of the financial solution was participation in the **New York Energy SmartSM Peak-Load Reduction Program** and the **New York Energy SmartSM Commercial and Industrial Performance Program**, administered by NYSERDA.

Incentives and Results

CALMAC, a leader in the production, design, and manufacturing of Off-Peak Cooling systems was brought in to design an ice storage system. As a result, one of the three replacement units was fitted with ice storage tanks and used to produce ice during the evening hours. The ice helps generate chilled water for the building during the peak daytime hours. Shifting the energy load to off-peak hours reduces the maximum energy demand of the building.

The three energy-efficient replacement chillers and ice storage system enable 11 Madison to save 2,153,200 kWh per year and lower the peak energy usage by over 900kW.

NYSERDA provided more than **\$820,000** in incentives towards the project cost to implement the recommended measures. The Commercial and Industrial Performance Program provided more than \$620,000 and the Peak-Load Reduction Program provided approximately \$200,000.

The **New York Energy SmartSM Peak-Load Reduction Program** is designed to reduce energy costs and improve the reliability of the electric system by providing incentives that encourage summer-peak electricity demand reduction in New York State.

The **New York Energy SmartSM Commercial and Industrial Performance Program** seeks to promote comprehensive energy efficiency projects in the commercial, industrial, institutional, and government sectors.



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