

Fordham's Lincoln Center Campus Upgrades Chilled Water Plant and Saves Big on Annual Operating Costs

New York – Fordham University's Lincoln Center Campus is home to over 800,000 SF of space which houses Fordham's prestigious Law School among other teaching institutions.

Their central chilled water plant consisted of three (3) 400 ton single-stage steam absorbers which used ConEdison steam as their prime mover. In 2004, Fordham realized that this plant was nearing the end of its useful life; the age of the equipment coupled with rising steam costs, gave Fordham the incentive to upgrade their chilled water plant.

Fordham's Director of Engineering, Douglas Mitchell contacted LC Associates (LCA) to help identify upgrades that would allow them to access incentives from NYSERDA to help offset some of the capital costs. LCA analyzed performance data over a period of thirty days and conducted a detailed energy analysis. Once collected, LCA used the data to analyze the current operating conditions of the plant and made the following recommendations:

- Replace the steam absorbers with electric centrifugal chillers.
- Conversion of 3-way valves to 2-way valves on thirteen air handlers



One of two 400 ton VSD-controlled electric chillers that will keep Fordham's student body cool this summer.

- Installation of VSD's on condenser pumps and new electric chillers.
- Re-pipe and control of an oversized cooling tower.
- Load curtailment controls for use of one remaining steam absorber during peak demand conditions.

"We are very pleased with LC Associates' services. We contacted LCA during the tail end of the design phase, and gave them 60 days to analyze the system and make recommendations before we issued contracts. In that time frame LCA provided a list of energy efficiency improvements, project costs, savings projections, and a grant from NYSERDA to help offset the costs. LCA helped Fordham substantially reduce our costs.".....*Douglas Mitchell, Director of Facilities, Fordham University – Lincoln Campus*

LCA applied to NYSERDA for financial incentives which totaled \$116,000 and reduced the simple payback of the additional measures to only 2 years. As a result of implementing these measures, Fordham's Lincoln Center Campus will realize approximately \$140,000 annually in reduced energy costs plus additional savings associated with reduced maintenance and operations.