THE DIMOCK CENTER, BOSTON, MASSACHUSETTS

ESPC generates $150,000 annually while meeting heating needs

"Since completion of the project, The Dimock Center has significantly reduced energy expenses, while improving efficiencies and the comfort of our employees and patients."

– Dr. Myechia Minter-Jordan, president and CEO of The Dimock Center.

THE DIMOCK CENTER

Project Facts

60%
of the central plant study costs reduced via utility rebates

30%
reduction in capital costs

1 year
schedule reduction

$1.2 million
project capital

Facilities

9-acre
historic campus

15.2 MMBTU/hr
steam plant

76,000
visits annually

Scope

As a vital, non-profit, community organization, The Dimock Center is tasked with providing critical health and human services to thousands of Boston residents each year. Veolia, through its energy consulting business, managed the replacement of the center's existing oil-fired central steam plant with natural gas-powered boilers under an Energy Savings Performance Contract (ESPC) agreement. Completed ahead of schedule and significantly under budget, this energy efficient upgrade improves occupant comfort and yields annual guaranteed savings valued at $150,000.

Challenge

Through its energy consulting business, Veolia has provided The Dimock Center with commodity procurement support services since 2009, helping the non-profit achieve significant savings in electricity costs. Following a campus-wide energy audit, Veolia identified the existing central steam plant as a strategic energy and cost saving opportunity. As a National Grid Technical Assistance (TA) partner, Veolia successfully secured 60% of the cost from the utility to finance a detailed study of the plant. The projected energy savings and efficiencies identified in Veolia's study persuaded Dimock to replace the central plant. In order to secure capital and advance the project, The Dimock Center chose to pursue an ESPC contract model, where the savings generated are used to fund the capital improvements.

Solution

As owner's representative of the ESPC, Veolia developed an Investment Grade Audit (IGA), which was integral to The Dimock Center obtaining 3rd-party financing. The IGA incorporated an advanced design, project costs, and an annual $150,000 guarantee on savings. This innovative financing model enabled The Dimock Center to leverage the future estimated savings resulting from the capital improvements, allowing the project to proceed. Veolia successfully managed a team of contractors to replace the existing oil-fired steam plant with natural gas fired point-of-use boilers. After completing the boiler project, Veolia also managed a full steam trap audit and replacement to correct distribution system inefficiencies and generate additional savings.

Result

By closely guiding the process, Veolia helped The Dimock Center meet its aggressive in-service deadline prior to the winter months, in addition to saving the non-profit 30 percent on the estimated project capital costs. In developing the IGA, Veolia worked closely with the local utility to significantly reduce the interconnection costs and the project schedule by a year. Also, by switching from number 4 fuel oil to natural gas, Veolia helped The Dimock Center to take advantage of the difference in commodity pricing. Following project completion in October 2013, The Dimock Center now benefits from guaranteed savings valued at $150,000 per year, greater energy efficiencies and improved employee and patient comfort.