

CASE STUDY

Milton S. Hershey Medical Center

PPL Electric Utilities
Business Energy Efficiency Program



Project Overview

PPL Electric Utilities provided Hershey Medical Center with \$500,000 in incentives to help offset the cost of a combined heat and power (CHP) project, saving them an estimated \$4,028,497 annually.

JUST THE FACTS

\$500,000

Total incentives paid

62,737,572

Annual kWh savings

7,162

Annual kW savings

The opportunity

Penn State Health's Milton S. Hershey Medical Center's flagship 628-bed medical center enlisted PPL Electric Utilities to help them become more sustainable, energy efficient and fiscally sound to support their high-level, patient-focused medical care. As a part of their multiphase energy savings program, central Pennsylvania's only locally based academic medical center decided to move from the traditional system of providing heat and power to an efficient CHP system.

The project

Through incentives and technical expertise from the PPL Business Energy Efficiency Program, the campus was able to build an entire CHP plant, installing a 7.9 MW natural gas-fired combustion turbine manufactured by Solar Turbines, a heat recovery steam generator and a 10,000 sq. ft. CHP building to house the equipment. Not only can the combustion turbine generate over half of the campus' annual electrical use, but the waste heat from the electrical generation process is also collected and used to make steam.

The results

Heat and power generated from the new CHP system increased from approximately 45 percent efficiency to approximately 80 percent efficiency. It also provides 60 percent of the electricity and most of the steam required for cooking, hot water generation, climate control and sterilization of medical equipment. Not only does the new system increase efficiency by up to 80 percent, but it also reduces annual emissions, increases power reliability and security, and lowers operating costs long term, with an estimated annual savings of 7,162 kW.

Questions?

Visit ppl electric.com/businessrebates or call us at **1-866-432-5501** to learn how your business or organization can save.

The costs of energy efficiency programs are recovered through customer rates in accordance with Pennsylvania Act 129 of 2008. PPL Electric Utilities assumes no responsibility for the performance of the equipment or equipment warranty, the quality of the work, labor and/or materials supplied, and/or the acts or omissions of any contractor.

Annual savings equal to greenhouse gas emissions from:



110,361,386

miles driven by an average passenger vehicle



9,580

passenger vehicles driven for one year



15,384

tons of waste recycled instead of landfilled



2,198

garbage trucks of waste recycled instead of landfilled

Source: U.S. Environmental Protection Agency



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