

Contract Details

Contract Type:

Energy Savings Performance Contract;
Energy Efficiency; Guaranteed Energy
Savings; Solar Thermal; Renewable
Energy; Water Conservation

Facility Size:

11 buildings
967,000 sq. feet

Energy Project Size:

Phase 1: \$18 million
Phase 2: \$11.5 million
Phase 3: in development

Energy Savings:

Phase 1: \$2.2 million
Phase 2: \$1.5 million
Phase 3: in development

Summary

Lake County and Ameresco worked together to design a comprehensive energy efficiency plan that would yield cost savings and have a positive benefit on the community. Ameresco hired local contractors and the County approved extensive measures to update its facilities, which would make those spaces more comfortable and efficient, as well as reduce energy and water consumption. Tax payers were not asked to help finance the project, but they have benefitted from the multi-phase undertaking.



East Chicago Courthouse



The lighting improvement plan Ameresco designed for Lake County facilities is a combination of a retrofit and replacement of the fixtures, lamps, and/or ballasts. Above, the Lake County Government Center.

Customer Benefits

The Lake County Commissioners and Council unanimously selected Ameresco due to the thorough and detailed proposal presented during the competitive bid process. The County entered a multi-phase partnership with Ameresco to lower energy and water consumption, reduce unfunded liabilities, as well as increase local jobs and set the County on a path of sustainability. Enhanced lighting and air quality rendered the facilities safer and more comfortable, and the water conservation measures significantly reduced the County's sewer fees.

Before working with Ameresco, the County Council was facing a high amount of unexpected maintenance costs due to emergency expenditures. After the success of Phase 1, the County saw less emergency repairs and significant utility savings. The strategically planned upgrades mitigated the County's risk for high-priced emergency measures. To set the project in motion, Ameresco established a building committee—which included a commissioner, three council members, facility staff and financial planners—to provide input from elected officials for preferred contractors and equipment. The committee's cooperation also aided in prioritizing the large project and implementing critical Energy Conservation Measures (ECM).

Accolades

"Ameresco has been instrumental in the successful implementation of a large facility renewal and energy efficiency project for Lake County. This project was a success because Ameresco took the time to listen and understand our needs. We needed local Lake

County Contractors working on our project to help us develop jobs and new skills for our community. In addition, we had aggressive MBE/WBE goals and a requirement to include Union labor on this project. This is the first large project in recent memory that has exceeded goals for all these initiatives. We would recommend Ameresco to any customer looking to implement an energy or facility renewal project. They have been an outstanding partner for Lake County."
- Christine Cid, Lake County Council President

Environmental Benefits

Through the County's partnership with Ameresco, Lake County reduced its carbon footprint. The annual carbon reduction benefits are equal to the following:

- ▶ the reduction of 17,377 tons of CO₂
- ▶ the removal of 3,407 cars off the road
- ▶ the powering of 1,476 average size homes

The project helps reduce the need for energy from traditional power plants fueled by fossil fuels.

Services Provided

Additional work on the main electrical supply was completed to enhance sustainability and reliability. The lighting improvement plan was a combination of retrofit and replacement of the fixtures, lamps, and/or ballasts. The electrical boxes were not labeled and maintenance was constantly guessing what they were turning on and off; Ameresco took the guesswork out of the lighting system and made it safer. Ameresco also undertook an electrical study to determine additional electrical metering at substations and

About Lake County

You will find that Lake County is more than the home of giant steelmakers. Located next to Chicago, Lake County is linked to its own history, written in the vision, energy and confidence of early businessmen. Lake County is a place where diverse tastes and abilities are blended into a setting that invites continuity, permanence and loyalty. It's a place that works. People here are proud of their schools and neighborhoods, and why they like to live and work here. Lake County is serious about business and about amenities that make the living friendly and rewarding.

Learn more at www.lakecountyin.com.

About Ameresco

Ameresco, Inc. (NYSE:AMRC) is one of the leading energy efficiency and renewable energy services providers. Our energy experts deliver long-term customer value, environmental stewardship, and sustainability through energy efficiency services, alternative energy, supply management, and innovative facility renewal all with practical financial solutions. Ameresco and its predecessors have constructed billions in projects throughout North America.

For more information about Ameresco and our full-range of energy efficiency and renewable energy solutions, please visit www.ameresco.com.



The Hammond Courthouse

Services Provided (cont.)

switchboards. Metering captured the peak loads and current loads of the existing equipment and stored the data to determine how the system was operating and where savings improvements could be made; a number of substations were expanded. New smoke detection devices were connected and an improved lighting system for the main electrical substation room was installed.

Additional cooling was installed for the newly created electrical switchgear room and elevator equipment room, and Ameresco provided an improved grounding system. Ameresco replaced the existing chiller with an energy efficient centrifugal chiller and non-CFC refrigerant chiller with a capacity that is equivalent to the existing equipment. In addition, Ameresco provided all necessary piping, flex connectors, fittings, etc. as necessary to reconnect new equipment to the chilled water system and condenser water system. Ameresco installed additional safety precautions.

At the Gary Courthouse, Westwind and Parramore buildings, Ameresco upgraded all single-pane glass to tinted thermal, double-pane windows for improved retention. Ameresco replaced the inefficient boiler serving the domestic hot water needs at Parramore and terminated steam supply from an existing boiler room located at the north end of a tunnel extending from the Parramore building. Ameresco installed dedicated high efficiency hot water boilers to serve the Westwind complex.

A full service laundry facility is a necessity for the Lake County sheriff's department, which processes clothing and bedding for well over 1,000 inmates daily. Hot water was originally supplied to the facility by a steam conversion tank located 230 feet away via an underground tunnel. A twelve panel thermal solar system was installed to pre-heat water for newly installed high efficiency water heaters to serve the laundry. The newly installed collector array is performing well. It produced 150 degree Fahrenheit water on some of the coldest winter days in February of 2011, saving hundreds in hot water costs.

At the Parramore building, Ameresco replaced multiple older, standard efficiency cooling rooftop units with high efficiency ones, as well as replaced the existing 15 rooftop units and 30 exhaust fans. As part of chiller plant optimization, Ameresco installed actuators on the chiller isolation valves between the chilled water pump header and the chillers to prevent water flowing through a non-energized chiller, as well as ones to direct the condenser water only to the tower cells required for optimal heat rejection. A master controller was installed, as well as variable frequency drivers (VFD) on the existing central plant constant speed primary chilled water pumps and DP transmitters.

Ameresco relocated an existing main gas service line currently located in the natural gas room on the tunnel level serving Westwind Manor, Westwind Manor tunnel boiler room, laundry building, and Parramore building. The new main piping was routed into the existing boiler room and the three pressure regulators, associated venting and associated piping modifications to reconnect into the existing mains serving the Westwind Manor tunnel boiler room, laundry building, and Parramore building.

As part of the water conservation program, standard flow faucets and toilets were replaced with low flow models, control devices and/or flush valves as appropriate. Ameresco also completed an Americans with Disabilities Act (ADA) compliance report and limited asbestos abatement services.