

Contract Details

Contract Type:

Energy Savings Performance
Contract; Power Purchase Agreement;
Energy Efficiency; Renewable Energy;
LFGTE; Cogeneration

Facility Size:

2 correction facilities;
1,071,000 sq. ft

Energy Project Size:

ESPC: \$8.4 million

Energy Savings:

\$500,000 annually

Capacity:

3.2 MW

Summary

Located in Jefferson City, MO, this complex renewable energy cogeneration project and energy savings performance contract was a partnership between the City, the State of Missouri Department of Corrections, Republic Services, Columbia Water & Light and Ameresco. Through the creative use of financing and investment, the project improved aging infrastructure, and makes better use of the landfill gas waste stream to protect the environment and create affordable power for the community.



Customer Benefits

The ESPC was designed to address the aging infrastructure of the Algoa Correction Center (Algoa) and capture both energy and operational cost efficiencies from the JCCC and the nearby LFGTE plant. Purchasing the power from this renewable energy project helps CW&L meet the City's renewable portfolio standard, and provides CW&L with 2% of their electric portfolio.

Accolades

"This project creates a clean, reliable and consistent source of energy from a naturally occurring by-product of our landfills. I commend this innovative partnership for the benefits it will bring our economy, environment and communities."

*- Jay Nixon
Governor of Missouri*

"Projects like these create a domino effect through the economy because they create jobs and require products and services. The construction and operation of Ameresco's renewable energy project in Jefferson City created and sustained about 80 jobs in Missouri and across the nation."

*- George Sakellaris
President and CEO, Ameresco*

Environmental Benefits

Through the project with Ameresco, the LFGTE plant will have the following annual carbon reduction equivalents:

- ▶ the heating of 1,500 homes
- ▶ the planting 1,300 acres of trees
- ▶ the removal of nearly 1,000 cars from the road

Services Provided

Landfill gas is created when organic material naturally decomposes in a landfill, and it consists of about 50% methane. It is a readily available, reliable local alternative energy source that offsets the need for fossil fuels. The gas can be converted and used in many ways: to generate electricity, heat or steam; or as an alternative vehicle fuel. Working in partnership with Republic Services (the landfill owner), Columbia Water & Light (CW&L) and the State of Missouri, Ameresco devised a creative plan to use the landfill gas to generate electricity for the local utility and utilize the waste heat generated from the engines for steam and hot water.

Ameresco designed, built, owns and operates the landfill gas to energy (LFGTE) cogeneration plant located next to the Jefferson City Correction Center (JCCC). The gas is used in three GE Jenbacher



About Jefferson City

The Missouri Department of Corrections supervises and provides rehabilitative services to adult offenders in correctional institutions and Missouri communities to enhance public safety. The Jefferson City Correctional Center (JCCC) is a maximum security prison in Jefferson City, Missouri, operated by the Missouri Department of Corrections. It houses up to 1,996 inmates, with a staff of 660. The current JCCC was opened on September 15, 2004, replacing the Missouri State Penitentiary, also of Jefferson City, an aging facility first opened in 1836.

Learn more at www.doc.mo.gov.

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.



Services Provided (cont.)

Engines to generate 3.2 MW of green power. The green power is purchased by Columbia Water & Light through a 20-year power purchase agreement.

Ameresco installed a steam piping system to transport excess steam capacity from the JCCC to the Algoa Correctional Center. The piping and mechanical systems also transfer used steam condensate back from Algoa to the JCCC heating plant for reuse. Serving the Algoa heating needs from the JCCC plant allows the JCCC boilers to operate at optimal efficiency. This also permitted the inefficient Algoa boiler plant to be taken out of service.

Ameresco also replaced portions of the existing buried steam and condensate piping serving several of the Algoa buildings. This buried piping had deteriorated and was leaking steam and condensate below grade. Additionally, Ameresco implemented lighting and electrical upgrades at Algoa and JCCC. Ameresco replaced and upgraded the primary

15 kv electrical distribution service, transformers and related systems.

At both correctional facilities and the nearby State Police Headquarters with related facilities, energy-efficient lighting upgrades were performed. Ameresco replaced 22 un-insulated overhead (OH) doors with new insulated doors at the Headquarters. New OH door openers and controls were also provided.

Ameresco is also working with the correctional facilities to improve efficiency, reduce energy demand and costs, and to combine Algoa's and JCCC's power plants, reducing overall operations costs and saving taxpayer money.

Additional Partners

Columbia Water & Light- www.gocolumbiamo.com/WaterandLight/
Northeast Energy Systems - <http://www.neesys.com/>

Republic Services, Inc., is a leading provider of services in the domestic, non-hazardous solid waste industry. The Company's various operating units are focused on providing environmentally sound and cost-effective service to commercial, industrial, residential and municipal customers. Headquartered in Phoenix, AZ, Republic Services has 35,000 employees serving more than 13 million customers in 40 states and Puerto Rico. Learn more at www.republicservices.com.

