



Solvay Gathers Steam

A cash-positive solution re-energizes their Marietta plant

Solvay Specialty Polymers had a problem. The production of polymers requires the generation of massive amounts of steam, a very energy-intensive process, and the obsolete local power plant had closed. They had installed temporary boilers to make steam, but the costs involved were unsustainable.

They turned to AEP Ohio to help them find a reliable, cost-effective solution. The result was a project that dramatically cut operating costs while generating a consistent flow of steam and power—all without an upfront capital investment.

The solution was the building of a cogeneration plant and distribution system. Cogeneration (COGEN) technology, also called Combined Heat and Power or CHP for short, involves the use of a heat engine or power station to generate electricity and useful heat simultaneously. The plant utilizes a natural gas-fired turbine generator, a heat recovery steam generator, two gas-fired boilers and a black start (recovery) generator.



DTE Marietta COGEN Facility

The upfront capital was zeroed out thanks to an alliance between DTE Energy Services, who operate, designed and built the cogeneration facility; and AEP Ohio, who pulled together a series of incentives.

“AEP Ohio’s incentives helped get the whole project off the ground,” said Alan Wanosky, the Marietta plant’s operations manager. “And, because DTE owns and operates the CHP system, we stay focused on what we do best, and it keeps us in a cash positive position,” he adds.

Since it was brought on line in February 2015, Solvay’s CHP system now provides 100% of Solvay’s steam needs, and 97 percent of their electrical requirements.

“We landed in a much better place than where we started.”

— Alan Wanosky
Operations Manager
Solvay Specialty Polymers Marietta

Project brief:

Upgrade:

CHP Technology

Program:

Custom, Combined Heat and Power

Projected annual energy savings:

57,000,000 kWh

Value added:

Reduced energy cost; Increase in reliability of steam and energy sources; Economic development

Note: The annual energy savings are calculated using an electric rate of \$0.08 per kilowatt hour (kWh).



An AEP Company